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Second Edition



HOSPITALITY FINANCIAL ACCOUNTING



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Hospitality Financial Accounting

SECOND EDITION

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TO THE INSTRUCTOR

It is just as important for a hospitality manager to understand and manage financial resources as it is to manage human resources. Although accounting is not a simple subject, it is a much needed language in running any type of successful business. There is a reason why accounting is often referred to as the *language of business*. As instructors, it is important for us not only to teach this business language to our students but also to impart its importance in building and maintaining a healthy business. ***Hospitality Financial Accounting, Second Edition***, presents financial accounting through a foundation of solid theories and practical step-by-step hospitality examples. We want to simulate a learning environment by providing examples in all facets of the hospitality industry that the students can identify with, relate to, and use to understand the impact of financial decisions on the business.

STUDENTS ARE THE KEY

Our goal for this second edition of ***Hospitality Financial Accounting*** is to make it an even more useful and effective text. Information was solicited from professors and students who have used the text, as well as practitioners in the industry. All effort has been made to thoroughly illustrate concepts in every chapter to reinforce the principles being discussed. Additionally, extensive examples are given to assist students in understanding the concepts; and demonstration problems with answers are provided for students to check their own level of comprehension, applications, and knowledge transfers.

It is important in working with hospitality students to always bear in mind that each student needs to be in the driver's seat. The job of the professor is not to simply "profess" but to facilitate, to act as the conduit of knowledge, to present ideas and principles, and then to solicit students' viewpoints to either confirm if correct or to lead students to the correct solution if they have made a mistake. It is important for all students to be exposed to all facets of this wonderful industry and to learn to speak the language of business.

ORGANIZATION OF THE SECOND EDITION

Students and professors who used the first edition of ***Hospitality Financial Accounting*** commented very positively on the design and layout of the materials. There is always room for improvement; and based on feedback from the users of this text, there is now a dedicated chapter on financial statement analysis. The text remains organized so that the student learns the basics of financial accounting first. Students are taken through the entire accounting cycle, but now they put that information together to analyze a set of financial statements. In addition, it is important for students to know how to perform some basic analysis to determine the financial health of a business.

Hospitality Financial Accounting, Second Edition, also presents financial accounting in three major sections: the

accounting cycle, financial statements and analyses, and the use of financial accounting data. The first five chapters focus on understanding an accounting cycle, from analyzing transactions to recording, posting, trial balance, and adjustments, all the way to closing and postclosing trial balance. The second section focuses on the makeup and analyses of financial statements. These chapters are placed right after the accounting cycle in the first section in order to take accounting to the next logical step. The final section of the text stresses the various daily issues faced by the hospitality owner or operator, from how one should structure one's company to start a business, to cash and inventory controls, to paying bills and collecting receivables in a timely fashion.

The information on subsidiary ledgers and special journals is now presented in an appendix to the book. It is important for students to know about such journals in order to understand and use computer software to assist in their accounting work, as well as to understand the workings behind the scene. Most important, if a computerized system goes down, the knowledge base is there to recreate the transactions by following the paper trail.

HIGHLIGHTS OF THE NEW EDITION

New cases on ethics are included, and new Accounting in Action boxes from hospitality and online companies are presented as short vignettes to support the concepts that are being discussed.

The specimen financial statements for PepsiCo, Inc., have been chosen for this second edition of ***Hospitality Financial Accounting*** to reinforce the idea that the hospitality industry is not strictly restaurants and hotels. Often we narrow the focus of hospitality to concentrate only on hotels and restaurants. Yet there are also country clubs, city clubs, yacht clubs, and spas. There are resorts, travel agencies, cruise lines, and airlines. There are the Expedias and Hotel.coms of the world. Third-party bookings are everywhere and available around the clock. And then there is this "other" side—the purveyors and vendors from which traditional hospitality firms purchase many of their goods and services in order to resell and provide to their final consumers. PepsiCo provides many products for the hospitality industry. In fact, many hospitality graduates work for purveyors such as PepsiCo, Sysco Foods, Coca-Cola, Frito Lay, and many more. Without purveyors to supply the food and beverage, bread and dry goods, and office equipment and furniture, a hotel or restaurant will have nothing to offer its customers. Therefore, we decided it would be practical to introduce a multinational and multidimensional company such as PepsiCo as the feature company of this text.

CHAPTER 1 *Hospitality Accounting in Action*

- New Feature Story on the importance of accurate and ethical financial accounting in today's business world
- New international insight on Chinese accounting policies
- New insight feature on e-business

- Accounting cycle now introduced in this chapter
- New discussion of accounting and financial management in hotels, restaurants, clubs, and spas
- Detailed coverage on the Uniform Systems of Accounts
- Updated and revised end-of-chapter problems

CHAPTER 2 Accounting Principles

- New Feature Story on the matching principle and how it relates to stockholders' wealth
- New business insight on a gaming casino
- Step-by-step illustration of an expanded accounting equation
- Updated and revised end-of-chapter problems

CHAPTER 3 The Recording Process

- Feature Story on the real world of accounting
- Additional reinforcement of the accounting cycle
- Updated and revised end-of-chapter problems

CHAPTER 4 Adjusting the Accounts

- Feature Story on why adjustments are crucial in providing accurate accounting information
- New insight feature on exceptionally large outlays by companies on advertising
- New ethics insight on earnings reporting
- Updated and revised end-of-chapter problems

CHAPTER 5 Completion of the Accounting Cycle

- Updated Feature Story on Rhino's Foods, Inc., about educating employees on the financial health of the company as a motivational tool
- Transparency inlays illustrating the information flow of a worksheet
- Updated and revised end-of-chapter problems

CHAPTER 6 Financial Statements

- Feature Story on how adequate cash flow can make or break a business
- New illustration on the relationship between the income statement and the balance sheet
- New chart of net income and cash from operations from five restaurants and five hotel companies
- Updated and revised end-of-chapter problems

CHAPTER 7 Financial Statement Analysis

- A new chapter to the Second Edition, featuring Brinker International as an illustration of financial ratios
- An example of a small independent restaurant provided for statement analyses and ratio comparisons
- A summary of ratios table included to group important concepts together
- The data of Landry's Restaurants, Inc., used as a demonstration problem

CHAPTER 8 Accounting for Merchandising Operations in Hospitality

- New Feature Story on e-commerce
- New insight feature on sales returns
- New ethics insight in the wake of Enron
- Updated and revised end-of-chapter problems

CHAPTER 9 Inventories and Cost of Goods Calculation

- New Feature Story on inventory valuation
- Updated and detailed examples and calculations illustrating all methods of inventory valuation
- Extensive discussion on the effects of errors in the inventory valuation process
- Updated and revised end-of-chapter problems

CHAPTER 10 Internal Control and Cash

- Feature Story on cash control in a coffee shop
- New insight feature on fraud
- New insight feature on computer fraud
- New insight feature on results reported by the Association of Certified Fraud Examiners
- Updated and revised end-of-chapter problems

CHAPTER 11 Payroll

- New Feature Story on managing payroll
- New regulations in the Fair Labor Standards Act, including Web sites
- Now includes Sample Form 8027 Employer's Annual Information Return of Tip Income and Allocated Tips
- Now includes Sample Form 4070 Employee's Report of Tips to Employer
- Illustration of eight percent tip allocation calculation
- Updated and revised end-of-chapter problems

CHAPTER 12 Accounting for Receivables and Payables

- New Feature Story on credit-card financing
- New insight feature on guests and city ledgers
- New insight feature on credit-card usage by consumers
- New insight feature on the interest rate on notes
- New insight feature on hotels and notes receivables
- Updated and revised end-of-chapter problems

CHAPTER 13 Long-Term and Intangible Assets

- New Feature Story on the building of luxury spa Trellis at the Houstonian
- New insight feature of depreciation practices
- New illustrations of depreciation calculations
- New insight feature of Internet use in the hospitality industry and domain name disputes
- Updated and revised end-of-chapter problems

CHAPTER 14 Sole Proprietorships, Partnerships, and Corporations

- Updated Feature Story on McDonald's growth and its continued success in the quick-service industry

APPENDIX A Specimen Financial Statements: PepsiCo, Inc.

- PepsiCo financial statements are featured in this new edition.

APPENDIX B Subsidiary Ledgers and Special Journals

- The information on subsidiary ledgers and special journals is now an appendix to this text.

PEDAGOGICAL FRAMEWORK

Hospitality Financial Accounting, Second Edition, provides tools to help students learn accounting concepts and procedures and apply them to the real world. It places increased emphasis on the processes students undergo as they learn.

Learning How to Use the Text

- A **Student Owner's Manual** begins the text to help students understand the value of the text's learning aids and how to use them.
- Chapter 1 contains **notes** that explain each learning aid the first time it appears.
- Finally, **The Navigator** pulls all the learning aids together into a learning system designed to guide students through each chapter and help them succeed in learning the material. It consists of (1) a checklist at the beginning of the chapter, which outlines text features and study skills they will need, and (2) a series of check boxes that prompt students to use the learning aids in the chapter and set priorities as they study. At the end of the chapter, students are reminded to return to The Navigator to check off their completed work. An example of The Navigator is at the right.

Understanding the Context

- **Concepts for Review**, listed at the beginning of each chapter, identify concepts that will apply in the chapter to come. In this way, students see the relevance to the current chapter of concepts covered earlier.
- The **Feature Story** helps students picture how the chapter topic relates to the real world of accounting and business. It serves as a running example in the chapter and is the topic of a series of review questions called **A Look Back at Our Feature Story**, toward the end of the chapter.
- **Study Objectives** form a learning framework throughout the text, with each objective repeated in the margin at the appropriate place in the main body of the chapter and again in the **Summary**. Further, end-of-chapter assignment materials are linked to the Study Objectives.
- A chapter **Preview** links the chapter-opening Feature Story to the major topics of the chapter. First, an introductory paragraph explains how the Feature Story relates to the topic to be discussed; then, a graphic outline of the chapter provides a "visual road map" useful for seeing the big picture, as well as the connections between subtopics.

Learning the Material

- **Financial statements** appear regularly throughout the book. Often, numbers or categories are highlighted in colored type to draw attention to key information.
- **Key ratios**, using data from **PepsiCo, Inc., 2006 Annual Report**, are examined in appropriate spots throughout the text. Integration of ratios enables students to see in a single presentation two important pieces of information about financial data: how they are presented in financial

THE NAVIGATOR ✓

- Understand *Concepts for Review*
- Read *Feature Story*
- Scan *Study Objectives*
- Read *Preview*
- Read text and answer *Before You Go On*
p. 212 p. 222 p. 223
- Work *Demonstration Problem*
- Review *Summary of Study Objectives*
- Complete *Assignments*

statements and how users of financial information analyze them.

- **The Accounting Equation** appears in the margin next to key journal entries throughout the text. This feature reinforces the students' understanding of the impacts of an accounting transaction on the financial statements.
- **Key terms** and concepts are printed in blue where they are first explained in the text and are defined again in the end-of-chapter glossary.
- **Helpful Hints** boxes help clarify concepts being discussed.
- **Accounting in Action (AIA)** boxes give students insight into how real companies use accounting in practice. The AIA boxes, some of which are highlighted with striking photographs, cover business, ethics, and international issues. Of particular interest are the **e-Business Insight** boxes reporting on how business technology is expanding the service provided by accountants.
- **Technology in Action** boxes show how users of accounting information use computers.
- **Color illustrations** visually reinforce important concepts of the text.
- **Infographics**, a special type of illustration, help students visualize and apply accounting concepts to the real world. They provide entertaining and memorable visual reminders of key concepts.
- Marginal **Alternative Terminology** notes present synonymous terms, since terminology may differ in the business world.
- **Before You Go On** sections occur at the end of each key topic and often consist of two parts:
 - * **Review It** questions serve as a learning check by asking students to stop and answer questions about the material covered. **Review It** questions marked with the *Pepsi* icon (see right)



send students to find information in the PepsiCo 2006 Annual Report (excerpted in the Appendix at the end of the text). These exercises help cement students' understanding of how topics covered in the chapter are reported in real-world financial statements. Answers appear at the end of the chapter.

- * A mini-demonstration problem, in a section called **Do It**, gives immediate practice of the material just covered and is keyed to homework exercises. An **Action Plan** lists the steps necessary to complete the task, and a **Solution** is provided to help students understand the reasoning involved in reaching an answer.
- * The last **Before You Go On** exercise in the chapter takes students back for a critical look at the chapter-opening Feature Story.
- Marginal **International Notes** introduce international issues and problems in accounting.
- Marginal **Ethics Notes** help sensitize students to the real-world ethical dilemmas of accounting and business.

Putting It Together

- **Demonstration Problems** give students the opportunity to refer to a detailed solution to a representative problem as they do homework assignments. **Action Plans** list strategies to assist students in understanding similar types of problems.
- The **Summary of Study Objectives** relates the study objectives to the key points of the chapter. It gives students another opportunity to review, as well as to see how all the key topics within the chapter are related.
- The **Glossary** defines all the key terms and concepts introduced in the chapter.

Developing Skills through Practice

- **Exercises** build students' confidence and test their basic skills. Some take a little longer to complete and present more of a challenge. Several exercises stress the application of the concepts presented in the chapter. Each exercise is keyed to one or more study objective(s).

Expanding and Applying Knowledge

One or two exercises in each chapter offer a wealth of resources to help instructors and students pull together the learning for the chapter. These exercises offer projects for those instructors who want to broaden the learning experience by bringing in more real-world decision-making and critical-thinking activities. The exercises are described below:

- A **Financial Reporting Problem** directs students to study various aspects of the financial statements in Pepsi's 2006 Annual Report, which is excerpted in the Appendix at the end of the text.
- **Exploring the Web** exercises guide students to Internet Web sites where they can find and analyze information relating to the chapter topic.

- The **Group Decision Case** helps build decision-making skills by analyzing accounting information in a less-structured situation. These cases require evaluation of a manager's decision or lead to a decision among alternative courses of action. As group activities, they promote teamwork.
- **Ethics Cases** describe typical ethical dilemmas and ask students to analyze situations, identify the stakeholders and the ethical issues involved, and decide on appropriate courses of action.

SUPPLEMENTARY MATERIALS AND TEACHING AIDS

Hospitality Financial Accounting, Second Edition, features a full line of teaching and learning resources developed and revised to help you create a more dynamic and innovative learning environment.

Student success is a major theme of the supplements package. These resources—including print and Internet-based materials—also take an *active learning approach* to help build students' skills and analytical abilities.

- **Web site at www.wiley.com/college**. Recognizing that the Internet is a valuable resource for students and instructors, we have developed a Web site at www.wiley.com/college to provide a variety of additional resources.

Instructor's Resources

For the instructor, we have designed a support package to help you maximize your teaching effectiveness.

Instructor's Manual. The **Instructor's Manual** is a comprehensive resource guide designed to assist professors in preparing lectures and assignments, including sample syllabi for the hospitality financial accounting course; evaluating homework assignments; and preparing quizzes and exams. (Also available at www.wiley.com/college.) Each chapter contains the following information:

- **Chapter Review and Lecture Outline:** Chapter reviews cover the significant topics and points contained in each chapter. Teaching tips and references to text materials are in the enhanced lecture outlines. Further, a twenty-minute quiz in the form of ten true/false and five multiple-choice questions (with solutions) is provided.
- **Solutions:** These are detailed solutions to all exercises in the textbook. Suggested answers to the questions found on the Web site are also included. Each chapter includes a table to identify the difficulty level and estimated completion time of each exercise.
- **Test Bank:** The test bank allows instructors to tailor examinations according to study objectives and content. Each chapter includes exercises as well as multiple-choice, matching, and true/false questions.

PowerPoint Presentation Material. The PowerPoint lecture aid contains a combination of key concepts, illustrations, and

problems from the textbook for use in the classroom. Easily customizable for classroom use, the presentations are designed according to the organization of the material in the textbook to reinforce hospitality financial accounting principles visually and graphically. (Available at www.wiley.com/college.)

Additional Exercises and Solutions. Additional exercises similar to the end-of-chapter exercises are provided at www.wiley.com/college. These exercises can be used for additional homework assignments or for quizzing and testing purposes. Solutions for these exercise are also available online.

WebCT and Blackboard. WebCT and Blackboard online courses are available for this text. Visit www.wiley.com/college and click on Technology Solutions for more information, or contact your Wiley representative.

Student Active Learning Aids

In addition to innovative pedagogy included in the text, we offer a number of valuable learning aids for students. These are intended to enhance true understanding so that students will be able to apply hospitality financial accounting concepts.

Working Papers. **Working Papers** are accounting forms for all end-of-chapter exercises. A convenient resource for organizing and completing homework assignments, they demonstrate how

to correctly set up solution formats and are directly tied to textbook assignments.

Excel Working Papers. Available on CD-ROM, these Excel-formatted forms can be used for end-of-chapter exercises. The **Excel Working Papers** provide students with the option of printing forms and completing them manually or entering data electronically and then printing out a completed form. By entering data electronically, students can paste homework to a new file and e-mail the worksheet to their instructor.

Self-Study Questions. These online practice tests enable students to check their understanding of important concepts. Located at www.wiley.com/college, the **self-study questions** are keyed to the study objectives; and students can go back and review sections of the chapter in which they find they need further work. The quizzes are graded to give students immediate feedback.

Questions. These questions, located at www.wiley.com/college, provide a full online review of chapter content and help students prepare for class discussions and testing situations. Students answer the questions online; and then their work is e-mailed directly to their instructor. Instructors can find the answers to these questions in the Instructor's Manual and with the online instructor resources.



ACKNOWLEDGMENTS

During the development of this second edition of *Hospitality Financial Accounting*, I benefited greatly from the manuscript reviewers. The constructive suggestions and innovative ideas of the reviewers in trying to make the text material practical and applicable are greatly appreciated.

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Ancillary Author

The input of the ancillary author in her thoroughness and accuracy has created a valuable package of materials to support this text:

Tanya Venegas, University of Houston

A Final Note of Thanks

Just as in the first edition, Jerry Weygandt, Don Kieso, and Paul Kimmel provided the inspiration and foundation for this new text. Therefore, my deepest and most sincere thanks go to these three gentlemen. In addition, Frank Wolfe, executive vice president and chief executive officer of the Hospitality Financial and Technology Professionals, and Arlene Ramirez, of the Conrad N. Hilton College of the University of Houston, also made available resources and valuable advice to update this project with practical examples to complement the theories. Of course, it is a blessing to be able once again to work with my dear friend and editor, Julie Kerr—she makes this endeavor a true delight.

STUDENT OWNER'S MANUAL

HOW TO USE THE STUDY AIDS IN THIS BOOK

THE RECORDING PROCESS

THE NAVIGATOR ✓

- Understand *Concepts for Review*
- Read *Feature Story*
- Scan *Study Objectives*
- Read *Preview*
- Read text and answer *Before You Go On*
p. 74 p. 77 p. 87 p. 90
p. 91
- Work *Demonstration Problem*
- Review *Summary of Study Objectives*
- Complete *Assignments*

The Navigator is a learning system designed to guide you through each chapter and help you succeed in learning the material. It consists of (1) a checklist at the beginning of the chapter, which outlines text features and study skills you will need, and (2) a series of check boxes that prompt you to use the learning aids in the chapter and set priorities as you study.

The **Feature Story** helps you picture how the chapter topic relates to the real world of accounting and business. Throughout the chapter, references to the Feature Story will help you put new ideas in context, organize them, and remember them. The problem called **A Look Back at Our Feature Story** toward the end of the chapter helps you pull together the ideas learned in the chapter. Many Feature Stories end with the **URL** of the company cited in the story.

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. What assets, liabilities, stockholders' equity, retained earnings, dividends, revenues, and expenses are. (Ch. 1, pp. 11–12)
- b. Why assets equal liabilities plus stockholders' equity. (Ch. 1, p. 11)
- c. What transactions are and how they affect the basic accounting equation. (Ch. 2, pp. 44–51)



Concepts for Review, listed at the beginning of each chapter, are the accounting concepts you learned in previous chapters that you will need to know in order to understand the topics you are about to learn. Page references are provided if you need to review before reading the chapter.

FEATURE STORY

No Such Thing as a Perfect World

When she got a job doing the accounting for **Forster's Restaurants**, Tanis Anderson had almost finished her business administration degree at Simon Fraser University. But even after Tanis completed her degree requirements, her education still continued—this time, in the real world.

Tanis's responsibilities include paying the bills, tracking food and labor costs, and managing the payroll for **The Mug and Musket**, a popular destination restaurant in Surrey, British Columbia. "My title is Director of Finance," she laughs, "but really that means I take care of whatever needs doing!"

The use of judgment is a big part of the job. As Tanis says, "I learned all the fundamentals in my business classes, but school prepares you for a perfect world, and there is no such thing."

She feels fortunate that her boss understands that her job is a learning experience as well as a responsibility. "Sometimes he's let me do something he knew perfectly well was a mistake so I can learn something through experience," she admits.

To help others gain the benefits of her real-world learning, Tanis is



always happy to help students in the area who want to use Forster's as the subject of a project or a report. "It's the least I can do," she says.



Study Objectives at the beginning of each chapter give you a framework for learning the specific concepts and procedures covered in the chapter. Each study objective reappears in the margin at the point where the concept is discussed. Finally, you can review all the study objectives in the **Summary** at the end of the chapter.

STUDY OBJECTIVES

After studying this chapter, you should be able to

1. Explain what an account is and how it helps in the recording process.
2. Define debits and credits and explain how they are used to record business transactions.
3. Identify the basic steps in the recording process.
4. Explain what a journal is and how it helps in the recording process.
5. Explain what a ledger is and how it helps in the recording process.
6. Explain what posting is and how it helps in the recording process.
7. Prepare a trial balance and explain its purposes.
8. Identify the advantages of manual and computerized accounting systems.

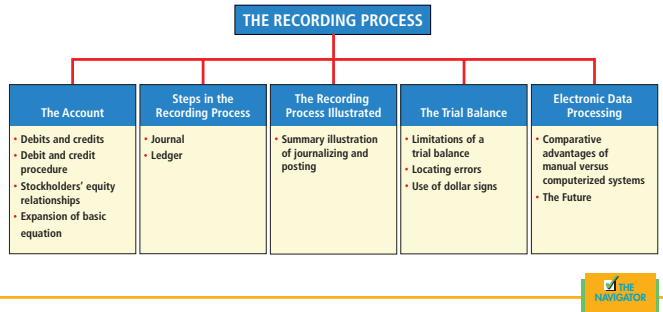


The Preview begins by linking the Feature Story with the major topics of the chapter. It is followed by a graphic outline of major topics and subtopics that will be discussed. This narrative and visual preview gives you a mental framework upon which to arrange the new information you are learning.

PREVIEW OF CHAPTER 3

In Chapter 2 we analyzed business transactions in terms of the accounting equation. The cumulative effects of these transactions were presented in tabular form. Imagine a restaurant and gift shop such as **The Mug and Musket** using the same tabular format as Best Caterers, Inc., to keep track of every one of its transactions. In a single day, this restaurant and gift shop engages in hundreds of business transactions. To record each transaction this way would be impractical, expensive, and unnecessary. Instead, procedures and records are used to keep track of transaction data more easily.

This chapter introduces and illustrates these basic procedures and records. The content and organization of Chapter 3 are as follows:



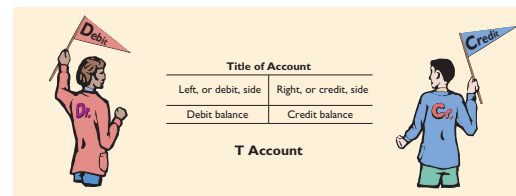
The Account

STUDY OBJECTIVE 1

Explain what an account is and how it helps in the recording process.

An **account** is an individual accounting record of increases and decreases in a specific asset, liability, or stockholders' equity item. For example, Best Caterers, Inc. (the company discussed in Chapter 2), would have separate accounts for Cash, Accounts Receivable, Accounts Payable, Service Revenue, Salaries Expense, and so on. In its simplest form, an account consists of three parts: (1) the title of the account, (2) a left, or debit, side, and (3) a right, or credit, side. Because the alignment of these parts of an account resembles the letter T, it is referred to as a **T account**. The basic form of an account is shown in Illustration 3-1.

Illustration 3-1
Basic form of account



Steps in the Recording Process 75

The basic steps in the recording process occur repeatedly. The analysis of transactions was illustrated in Chapter 1. Further examples will be given in this and later chapters. The other steps in the recording process are explained in the next sections.

TECHNOLOGY IN ACTION



Computerized and manual accounting systems basically parallel one another. Most of the procedures are handled by electronic circuitry in computerized systems. They seem to occur invisibly. But, to fully comprehend how computerized systems operate, you need to understand manual approaches for processing accounting data.

Technology in Action examples show how computer technology is used in accounting and business.



THE JOURNAL

Transactions are recorded initially in chronological order in a **journal** before being transferred to the accounts. Thus the journal is referred to as the book of original entry. For each transaction, the journal shows the debit and credit effects on specific accounts. Companies may use various kinds of journals, but every company has the most basic form of journal, a **general journal**. Typically, a general journal has spaces for dates, account titles and explanations, references, and two amount columns. Whenever we use the term *journal* in this textbook without a modifying adjective, we mean the general journal.

STUDY OBJECTIVE 4

Explain what a journal is and how it helps in the recording process.

- The journal makes several significant contributions to the recording process:
1. It discloses in one place the complete effects of a transaction.
 2. It provides a chronological record of transactions.
 3. It helps to prevent or locate errors because the debit and credit amounts for each entry can be readily compared.

Entering transaction data in the journal is known as **journalizing**. Separate journal entries are made for each transaction. A complete entry consists of (1) the date of the transaction, (2) the accounts and amounts to be debited and credited, and (3) a brief explanation of the transaction.

Technology in Action boxes show how computers are used by accountants and by users of accounting information.

Study Objectives reappear in the margins at the point where the topic is discussed. End-of-chapter assignments are keyed to study objectives.

Key terms and concepts are printed in blue where they are first explained in the text, and they are defined again in the end-of-chapter glossary.

The ledger provides management with the balances in various accounts. For example, the Cash account shows the amount of cash that is available to meet current obligations. Amounts due from customers can be found by examining Accounts Receivable, and amounts owed to creditors can be found by examining Accounts Payable.

ACCOUNTING IN ACTION *Business Insight*



In his autobiography, Sam Walton described the double-entry accounting system with which he began the **Wal-Mart** empire: "We kept a little pigeonhole on the wall for the cash receipts and paperwork of each [Wal-Mart] store. I had a blue binder ledger book for each store. When we added a store, we added a pigeonhole. We did this at least up to twenty stores. Then once a month, the bookkeeper and I would enter the merchandise, enter the sales, enter the cash, and balance it."

Why did Sam Walton keep separate pigeonholes and blue binders for each store? Why bother to keep separate records for each store?

SOURCE: Sam Walton, *Made in America* (New York: Doubleday, 1992), p. 53.

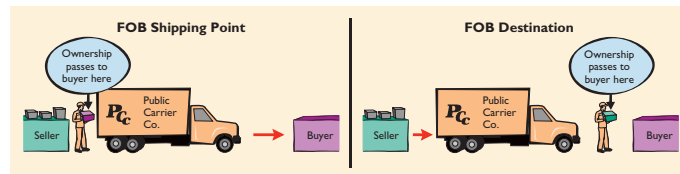
Accounting in Action boxes give you more glimpses into the real world of business. These high-interest boxes are classified by three types of issues—business, ethics, and international—each identified by its own icon. New in this edition, **e-Business Insights** describe how e-business technology is expanding the services provided by accountants.

Infographics, a special type of illustration, pictorially link concepts to the real world and provide visual reminders of key concepts.

Color illustrations visually reinforce important concepts and therefore often contain material that may appear on exams.

Before You Go On sections follow each key topic. **Review It** questions prompt you to stop and review the key points you have just studied. If you cannot answer these questions, you should go back and read the section again. **Review It** questions marked with the PepsiCo icon ask you to find information in the PepsiCo 2006 Annual Report, which is excerpted in the Appendix at the end of the text. Brief **Do It** exercises ask you to put your newly acquired knowledge to work. They outline an **Action Plan** necessary to complete the exercise, and the accompanying **Solution** helps you see how the problem should be solved. (The **Do It** exercises are keyed to similar homework exercises.)

Illustration 9-1
Terms of sale.



December 31, Hargrove has legal title to both the units sold and the units purchased. If units in transit are ignored, inventory quantities would be understated by 4,000 units (1,500 + 2,500).

Dividends. When a company is successful, it generates net income. **Net income** represents an increase in net assets, which are then available to distribute to stockholders. The distribution of cash or other assets to stockholders is called a **dividend**. Dividends reduce retained earnings. However, dividends are not an expense of a corporation. A corporation first determines its revenues and expenses and then computes net income or **net loss**. At this point, a corporation may decide to distribute a dividend.

In summary, the principal sources (increases) of stockholders' equity are (1) investments by stockholders and (2) revenues from business operations. In contrast, reductions (decreases) in stockholders' equity are a result of (1) expenses and (2) dividends. These relationships are shown in Illustration 1-6.

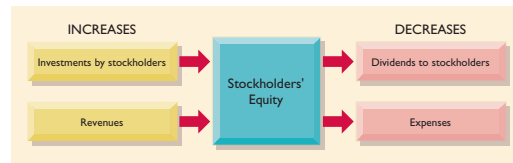


Illustration 1-6
Increases and decreases in stockholders' equity

BEFORE YOU GO ON...

REVIEW IT

1. Why is ethics a fundamental business concept?
2. What are generally accepted accounting principles? Give an example.
3. Explain the monetary unit and the economic entity assumptions.
4. The accounting equation is: Assets = Liabilities + Stockholders' equity. Replacing the words in that equation with dollar amounts, what is PepsiCo's accounting equation on December 31, 2006?
5. What are assets, liabilities, and stockholders' equity?

DO IT

Classify the following items as issuance of stock (I), dividends (D), revenues (R), or expenses (E). Then indicate whether the following items increase or decrease stockholders' equity: (1) rent expense, (2) service revenue, (3) dividends, and (4) salaries expense.

ACTION PLAN

- Review the rules for changes in stockholders' equity: Investments and revenues increase stockholders' equity. Expenses and dividends decrease stockholders' equity.
- Understand the sources of revenue: the sale of merchandise, performance of services, rental of property, and lending of money.
- Understand what causes expenses: the consumption of assets or services.
- Recognize that dividends are distributions of cash or other assets to stockholders.

SOLUTION

1. Rent expense is classified as an expense (E); it decreases stockholders' equity.
2. Service revenue is classified as revenue (R); it increases stockholders' equity.
3. Dividends is classified as dividends (D); it decreases stockholders' equity.
4. Salaries expense is classified as an expense (E); it decreases stockholders' equity.

Review It questions marked with this icon require that you use the PepsiCo 2006 Annual Report.



Do It exercises give you immediate practice of the material just covered.



The Basics of Adjusting Entries 117

Adjustments for accrued expenses are needed for two purposes: (1) to record the obligations that exist at the balance sheet date and (2) to recognize the expenses that apply to the current accounting period. Prior to adjustment, both liabilities and expenses are understated. Therefore, as shown in Illustration 4-13, the adjusting entry for accrued expenses results in a debit (increase) to an expense account and a credit (increase) to a liability account.

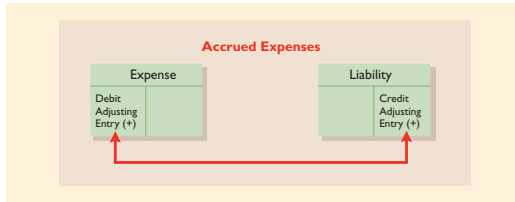


Illustration 4-13
Adjusting entries for accrued expenses.

ACCRUED INTEREST. Premier Staffing Agency, Inc., signed a \$5,000, three-month note payable on October 1. The note requires interest at an annual rate of 12 percent. The amount of the interest accumulation is determined by three factors: (1) the face value of the note; (2) the interest rate, which is always expressed as an annual rate; and (3) the length of time the note is outstanding. In this instance, the total interest due on the \$5,000 note at its due date three months hence is \$150 ($\$5,000 \times 12\% \times 3/12$); the interest for one month is \$50. The formula for computing interest² and its application to Premier Staffing Agency, Inc., for the month of October is shown in Illustration 4-14. Note that the time period is expressed as a fraction of a year.

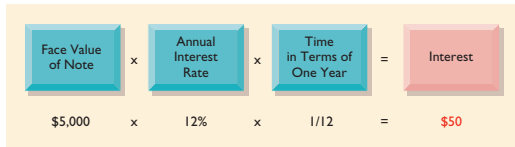


Illustration 4-14
Formula for computing interest

The accrued expense adjusting entry at October 31 is

Oct. 31	Interest Expense		50	
	Interest Payable			50
	(To record interest on notes payable)			

$$A = L + SE$$

$$+50 = +50 -50$$

After this adjusting entry is posted, the accounts look like Illustration 4-15.

Interest Expense		Interest Payable	
10/31 Adj.	50	10/31 Adj.	50

Illustration 4-15
Interest accounts after adjustment

²The computation of interest will be considered in more depth in later chapters.

Helpful Hints in the margins are like having an instructor with you as you read. They further clarify concepts being discussed.

HELPFUL HINT
Interest is a cost of borrowing money that accumulates with the passage of time.

Accounting equation analyses have been inserted in the margin next to key journal entries. They help you understand the impact of an accounting transaction on the financial statements.

Financial statements appear throughout the book. Often, numbers or categories are highlighted in colored type to draw your attention to key information.

sets: (1) cash, (2) short-term investments, such as U.S. government bonds, (3) receivables (notes receivable, accounts receivable, and interest receivable), and (4) prepaid expenses (insurance and supplies). **These items are listed in the order of liquidity**; that is, they are listed in the order in which they are expected to be converted into cash. This arrangement is illustrated in Illustration 5-17 in the presentation of **UAL, Inc. (United Airlines)**.

UAL, INC. (UNITED AIRLINES) Balance Sheet (partial) (in millions)	
Current assets	
Cash	\$1,348
Short-term investments	388
Receivables	788
Aircraft fuel, spare parts, and supplies	310
Prepaid expenses	219
Other current assets	254
Total current assets	\$3,307

Illustration 5-17
Current assets section

Many of the last **Before You Go On** exercises take you back for a critical look at the chapter-opening Feature Story.

BEFORE YOU GO ON . . .

- REVIEW IT**
1. What are the income statement, retained earnings statement, balance sheet, and statement of cash flows?
 2. How are the financial statements interrelated?

A LOOK BACK AT OUR FEATURE STORY

Refer back to the Feature Story about **PepsiCo** at the beginning of Chapter 1, and answer the following questions.

1. If you were interested in investing in **PepsiCo**, what would the balance sheet and income statement tell you?
2. Would you request audited financial statements? Explain.
3. Will the financial statements show the market value of the company? Explain.

- SOLUTION**
1. The balance sheet reports the assets, liabilities, and stockholders' equity of the company. The income statement presents the revenues and expenses and resulting net income (or net loss) for a specific period of time. The balance sheet is like a snapshot of the company's financial condition at a point in time. The income statement indicates the profitability of the company. Also, the sources of the company's revenues and its expenses are provided in the income statement.
 2. You should request **audited** financial statements—statements that a CPA has examined and expressed an opinion as to the fairness of presentation. You should not make decisions without having audited financial statements.
 3. The financial statements will not show the market value of the company. One important principle of accounting is the cost principle, which states that assets should be recorded at cost. Cost has an important advantage over other valuations: It is reliable.



A Look Back exercises refer to the chapter-opening Feature Story. These exercises help you to analyze that real-world situation in terms of the accounting topic of the chapter.



Demonstration Problems are a final review of the chapter. The **Action Plan** gives tips about how to approach the problem, and the **Solution** demonstrates both the form and the content of complete answers.

ACTION PLAN

- Remember that assets must equal liabilities plus stockholders' equity after each transaction.
- Investments and revenues increase stockholders' equity.
- Dividends and expenses decrease stockholders' equity.
- The income statement shows revenues and expenses for a period of time.
- The retained earnings statement shows the changes in retained earnings for a period of time.
- The balance sheet reports assets, liabilities, and stockholders' equity at a specific date.

DEMONSTRATION PROBLEM

Hospitality Legal Services, Inc., which provides contract services for caterers and their clients, was incorporated on July 1, 2008. During the first month of operations, the following transactions occurred:

1. Stockholders invested \$10,000 in cash in exchange for shares of stock.
2. Paid \$800 for July rent on office space.
3. Purchased office equipment on account, \$3,000.
4. Provided legal services to clients for cash, \$1,500 (use Service Revenue).
5. Borrowed \$700 cash from a bank on a note payable.
6. Performed legal services for client on account, \$2,000.
7. Paid monthly expenses: salaries \$500; utilities \$300; and telephone \$100.

Instructions

- (a) Prepare a tabular summary of the transactions.
- (b) Prepare the income statement, retained earnings statement, and balance sheet at July 31 for Hospitality Legal Services, Inc.

SOLUTION TO DEMONSTRATION PROBLEM

Trans- action	Assets			=	Liabilities		+	Stockholders' Equity	
	Cash	Receivable	Equipment	Notes Payable	Accounts Payable	Common Stock	Retained Earnings		
(1)	+10,000							+10,000	
(2)	-800								-800 Rent Expense
	9,200							10,000 +	-800
(3)			+3,000			+3,000			
	9,200			+ 3,000		3,000 +	10,000 +		-800
(4)	+1,500								+1,500 Service Revenue
	10,700					3,000 +	10,000 +		700
(5)	+700					+700			
	11,400			+ 3,000		700 +	3,000 +	10,000 +	700
(6)		+2,000							+2,000 Service Revenue
	+11,400 +	2,000 +				700 +	3,000 +	10,000 +	2,700
(7)	-900								-500 Salaries Expense
									-300 Utilities Expense
									-100 Telephone Expense
	<u>\$10,500</u> +	<u>\$2,000</u> +	<u>\$3,000</u> +	<u>\$700</u> +	<u>\$3,000</u> +	<u>\$10,000</u> +			<u>\$1,800</u>
		\$15,500				\$15,500			

(b)

HOSPITALITY LEGAL SERVICES, INC.
Income Statement
For the Month Ended July 31, 2008

Revenues		
Service revenue		\$3,500
Expenses		
Rent expense	\$800	
Salaries expense	500	
Utilities expense	300	
Telephone expense	100	
Total expenses		<u>1,700</u>
Net income		<u>\$1,800</u>

Demonstration Problems review the chapter material. These sample problems provide you with **Action Plans**, which list the strategies needed to solve the problem, and with **Solutions**.

The Summary of Study Objectives relates the study objectives to the key points in the chapter. It gives you another opportunity to review as well as to see how all the key topics within the chapter are related.

SUMMARY OF STUDY OBJECTIVES

- 1. Explain what accounting is.** Accounting is an information system that identifies, records, and communicates the economic events of an organization to interested users.
- 2. Identify the users and uses of accounting.** (a) Management uses accounting information in planning, controlling, and evaluating business operations. (b) Investors (owners) decide whether to buy, hold, or sell their financial interests on the basis of accounting data. (c) Creditors (suppliers and bankers) evaluate the risks of granting credit or lending money on the basis of accounting information. Other groups that use accounting information are taxing authorities, regulatory agencies, customers, labor unions, and economic planners.
- 3. Understand why ethics is a fundamental business concept.** Ethics is the standards of conduct by which actions are judged as right or wrong. If you cannot depend on the honesty of the individuals you deal with, effective communication and economic activity would be impossible, and information would have no credibility.
- 4. Explain the meaning of generally accepted accounting principles and the cost principle.** Generally accepted accounting principles are a common set of standards used by accountants. The cost principle states that assets should be recorded at their cost.
- 5. Explain the meaning of the monetary unit assumption and the economic entity assumption.** The monetary unit assumption requires that only transaction data capable of being expressed in terms of money be included in the accounting records. The economic entity assumption requires that the activities of each economic entity be kept separate from the activities of its owners and other economic entities.
- 6. State the basic accounting equation; and explain the meaning of assets, liabilities, and stockholders' equity.** The basic accounting equation is:

$$\text{Assets} = \text{Liabilities} + \text{Stockholders' Equity}$$

Assets are resources owned by a business. Liabilities are creditorship claims on total assets. Stockholders' equity is the ownership claim on total assets.

- 7. Explain the accounting cycle and flow of information.** The nine steps of the accounting cycle are transaction analysis, journalizing, posting, trial balance, adjustments, adjusted trial balance, closing, postclosing trial balance, and financial statements. Information flows from both the front and the back of the house, through point-of-sales systems, property management systems, and other means, to the accounting office.
- 8. Identify the various systems of accounting procedures used in the hospitality industry.** There are currently three systems: The Uniform System of Accounts for the Lodging Industry, The Uniform System of Accounts for Restaurants, and The Uniform System of Financial Reporting for Clubs. Each has a long history, and their purpose is to provide users of financial information with comparable data and meaningful analyses.
- 9. Understand accounting and financial management in a hotel.** Proper accounting and financial management of a hotel is crucial to its success. The chief accounting officer is known as the controller. The controller is part of the hotel's executive committee, which includes the general manager and all department heads. The controller interacts with all the department heads, assisting and consulting with them on all financial matters so each department head makes sound decisions.
- 10. Understand accounting and financial management in a foodservice operation and a club.** The controller of a foodservice operation focuses on food, beverage, and labor costs. Food and beverage cost analyses are of particular importance due to the amount of money spent and the perishable nature of the products. The club industry is unique in that its customers are all members of the club. Members pay dues to the club and in return have a decision-making role in club operations. Members also spend money on food and beverage, merchandising, and other amenities. Therefore, a club controller must account for revenues by looking at different cost centers such as golf, tennis, spa, and food and beverages to provide solid information for management.



Exercises 163

GLOSSARY

Classified balance sheet A balance sheet that contains a number of standard classifications or sections (p. 154).
Closing entries Entries made at the end of an accounting period to transfer the balances of temporary accounts to a permanent stockholders' equity account, Retained Earnings (p. 145).
Correcting entries Entries to correct errors made in recording transactions (p. 151).
Current assets Cash and other resources that are reasonably expected to be realized in cash or to be sold or consumed in the business within one year or the operating cycle, whichever is longer (p. 154).
Current liabilities Obligations reasonably expected to be paid from existing current assets or through the creation of other current liabilities within the next year or operating cycle, whichever is longer (p. 156).
Income summary A temporary account used in closing revenue and expense accounts (p. 145).
Intangible assets Noncurrent resources that do not have physical substance (p. 156).
Liquidity The ability of a company to pay obligations that are expected to become due within the next year or operating cycle (p. 157).

Long-term investments Resources not expected to be realized in cash within the next year or operating cycle (p. 155).
Long-term liabilities (long-term debt) Obligations expected to be paid after more than one year (p. 157).
Operating cycle The average time required to go from cash to cash in producing revenues (p. 155).
Permanent (real) accounts Balance sheet accounts whose balances are carried forward to the next accounting period (p. 144).
Postclosing trial balance A list of permanent accounts and their balances after closing entries have been journalized and posted (p. 149).
Property, plant, and equipment Assets of a relatively permanent nature that are being used in the business and not intended for resale (p. 156).
Stockholders' equity The ownership claim of shareholders on total assets (p. 158).
Temporary (nominal) accounts Revenue, expense, and dividends accounts whose balances are transferred to Retained Earnings at the end of an accounting period (p. 144).
Work sheet A multiple-column form that may be used in the adjustment process and in preparing financial statements (p. 138).

EXERCISES

- 5-1** Indicate which of the following statements are true or false regarding the work sheet. *Use of a work sheet. (SO 1)*
- ___ The work sheet is essentially a working tool of the accounting.
 - ___ The work sheet cannot be used as a basis for posting to ledgers.
 - ___ The work sheet is distributed to management and other interested parties.
 - ___ Financial statements can be prepared directly from the work sheet before journalizing and posting the adjusting entries.
- 5-2** The ledger of W. S. Juice Bar includes the following unadjusted balances: Service Revenue \$60,000; Salaries Expense \$28,950; and Prepaid Rent \$6,000. Adjusting entries are required for (a) services provided for \$1,000 but not yet billed and collected; (b) accrued salaries payable of \$1,350; and (c) expired rent of \$2,000. Enter the unadjusted balances and adjustments into a work sheet, and complete the work sheet for all accounts. (*Hint:* You will need to add the following accounts: Accounts Receivable, Salaries Payable, and Rent Expense.) *Prepare partial work sheet. (SO 1)*
- 5-3** The income statement of Health 24 City Club for the month ending August 31 shows Membership Dues Revenues of \$25,000; Salaries Expense of \$9,300; Repairs and Maintenance Expense of \$2,400; and Net Income of \$6,950. Prepare the entries to close the revenue and expense accounts, and complete the closing process for these accounts using the three-column form of account. *Journalize and post closing entries using the three-column form of account. (SO 2)*
- 5-4** Using the data in Exercise 5-3, identify the accounts that would be included in a post-closing trial balance. *Identify postclosing trial balance accounts. (SO 3)*
- 5-5** Sam Perroni, owner of Perroni's Harbor Cruise, found the following errors that his bookkeeper made after the transactions had been journalized and posted. Prepare the correcting entries. *Prepare correcting entries. (SO 5)*
- A collection on account from a customer for \$1,280 was recorded as a debit to Accounts Receivable of \$1,280 and a credit to Service Revenue of \$1,280.
 - The purchase of supplies for the boats on account for \$3,750 was recorded as a debit to Supplies of \$3,750 and credit to Accounts Payable of \$3,750.
- 5-6** At Fred's Fish Chips, the following errors were discovered after the transactions had been journalized and posted. Prepare the correcting entries. *Prepare correcting entries. (SO 5)*
- A collection on account from a customer for \$850 was recorded as a debit to Cash of \$850 and a credit to Service Revenue of \$850.

The Glossary defines all the key terms and concepts introduced in the chapter. Page references help you find any terms you need to study further.

Exercises range in difficulty, helping you focus on one study objective at a time. This will help you build confidence in your basic skills and knowledge to use the material learned in the chapter. More difficult exercises help you pull together several concepts from the chapter.

Group Decision Cases require teams of students to evaluate a manager's decision or choose from among alternative courses of action. They help prepare you for the business world by giving you practice in solving problems with colleagues.

Months	Number	Working Days per Month
January–March	2	20
April–May	3	25
June–October	2	18
November–December	3	23

Instructions

With the class divided into groups, answer the following:

- (a) Prepare a report showing the comparative payroll expense of continuing to employ permanent workers compared to adopting the Harrington Services, Inc., plan.
- (b) What other factors should Martha consider before finalizing her decision?

ETHICS CASE

11-13 Harry Smith owns and manages Harry's Restaurant, a twenty-four-hour restaurant near the city's medical complex. Harry employs nine full-time employees and sixteen part-time

FINANCIAL REPORTING PROBLEM: PepsiCo

6-14 Refer to the financial statements of PepsiCo, presented in Appendix A, and answer the following questions:

- (a) What was the amount of net cash provided by operating activities for the year ended December 30, 2006? For the year ended December 31, 2005?
- (b) What was the amount of increase or decrease in cash and cash equivalents for the year ended December 30 2006? For the year ended December 31, 2005?
- (c) Which method of computing net cash provided by operating activities does PepsiCo use?



Financial Reporting Exercises direct you to study various aspects of the financial statements in the PepsiCo 2006 Annual Report, which is excerpted in the Appendix at the end of the text.

EXPLORING THE WEB

9-11 A company's annual report usually will identify the inventory method used. Knowing that, you can analyze the effects of the inventory method on the income statement and the balance sheet.

Address: www.darden.com

Steps

1. From Darden Restaurants' home page, choose **Investor Relations**.
2. Choose **Annual Report & Financials**.
3. Choose **Annual Report 2006—HTML version**.
4. Click on **Financial Renew** under the Table of Contents.
5. Click on **Consolidated Balance Sheets**.

Instructions

Answer the following questions based on the 2006 Annual Report.

- (a) At Darden's fiscal year-end, what was the net inventory on the balance sheet?
- (b) How has this changed from the previous fiscal year-end?
- (c) What inventory method does Darden use (See notes to Consolidated Financial Statements)?

ETHICS CASE

9-12 J. K. Leask Wholesale Corp. uses the LIFO method of inventory costing. In the current year, profit at J. K. Leask is running unusually high. The corporate tax rate is also high this year, but it is scheduled to decline significantly next year. In an effort to lower the current year's net income and to take advantage of the changing income tax rate, the president of J. K. Leask Wholesale instructs the accountant to recommend to the purchasing department a large purchase of inventory for delivery three days before the end of the year. The price of the inventory to be purchased has doubled during the year, and the purchase will represent a major portion of the ending inventory value.

Instructions

- (a) What is the effect of this transaction on this year's and next year's income statement and income tax expense? Why?
- (b) If J. K. Leask Wholesale had been using the FIFO method of inventory costing, would the president give the same directive?
- (c) Should the plant accountant order the inventory purchase to lower income? What are the ethical implications of this order?

Exploring the Web exercises guide you to Internet sites where you can find and analyze information related to the chapter topic.

Through the Ethics Cases, you will reflect on typical ethical dilemmas, learn how to analyze such situations, and decide on an appropriate course of action.

After you complete your homework assignments, it's a good idea to go back to **The Navigator** checklist at the start of the chapter to see if you have used all the study aids of the chapter.



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

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HOSPITALITY ACCOUNTING IN ACTION



THE NAVIGATOR ✓

- Understand *Concepts for Review*
- Read *Feature Story*
- Scan *Study Objectives*
- Read *Preview*
- Read text and answer *Before You Go On*
p. 7 p. 13
- Review *Summary of Study Objectives*
- Complete *Assignments*

The Navigator is a learning system designed to prompt you to use the learning aids in the chapter and set priorities as you study.

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review

- a. How to use the study aids in this book. (Student Owner's Manual, pages xii–xviii)
- b. The nature of the special student supplements that accompany this textbook. (Student Owner's Manual, page xii)

Concepts for Review highlight concepts from your earlier reading that you need to understand before starting the new chapter.



The **Feature Story** helps you picture how the chapter topic relates to the real world of accounting and business. You will find references to the story throughout the chapter.

F E A T U R E S T O R Y

Financial Reporting: A Matter of Trust

In recent years the financial press has been full of articles about financial scandals and accounting misdeeds. It started with **Enron**, but then spread to **Xerox**, **Qwest**, **Global Crossing**, and **WorldCom**, among others. Many of the articles expressed concern that as an increasing number of misdeeds came to public attention, a mistrust of financial reporting in general was developing. These articles made clear just how important accounting and financial reporting are to the U.S. and world financial markets and to society as a whole. Without financial reports, managers would not be able to evaluate how well their company is doing or to make decisions about the best way to make their company grow in the future. Without financial reports, investors and lenders could not make informed decisions about how to allocate their funds. There is no doubt that a sound, well-functioning economy depends on accurate and dependable financial reporting—accounting matters!

In order to make financial decisions as either an investor or a

manager, you need to know how to read financial reports. In this book you will learn about financial reporting and some basic tools used to evaluate financial reports. In the first chapter we introduce you to the real financial statements of a company whose products most of you probably are familiar with—**PepsiCo, Inc.** We have chosen the financial statements of PepsiCo because they are a good example from the real world. Appendix A contains the statements in their entirety, and a copy of the PepsiCo, Inc., 2006 Annual Report accompanies this text.

PepsiCo manufactures Pepsi-Cola, the number two soft-drink beverage in the world. PepsiCo also manufactures the number one bottled water (Aquafina), the number one sports drink (Gatorade), the number one ready-to-drink tea (Lipton), and the number one ready-to-drink coffee (Frappuccino). In addition, PepsiCo is the largest manufacturer of snack foods in the



world. Its Frito-Lay chips dominate the U.S. market with 59% of all snack-chip sales and the world market with over 32%. In all, PepsiCo ranks among the world's largest packaged goods and beverage companies, with over \$25 billion in sales, \$23 billion in assets, and 140,000 employees. PepsiCo is not only large; it is also quite profitable, ranking twenty-eighth among all U.S. companies, with \$3.3 billion in net income.

Chapter-opening vignettes end with the **Internet address** of the companies cited in the story to help you connect with these real businesses and explore them further.



www.pepsico.com

S T U D Y O B J E C T I V E S

After studying this chapter, you should be able to

1. Explain what accounting is.
2. Identify the users and uses of accounting.
3. Understand why ethics is a fundamental business concept.
4. Explain the meaning of generally accepted accounting principles and the cost principle.

Study Objectives give you a framework for learning the specific concepts covered in the chapter.

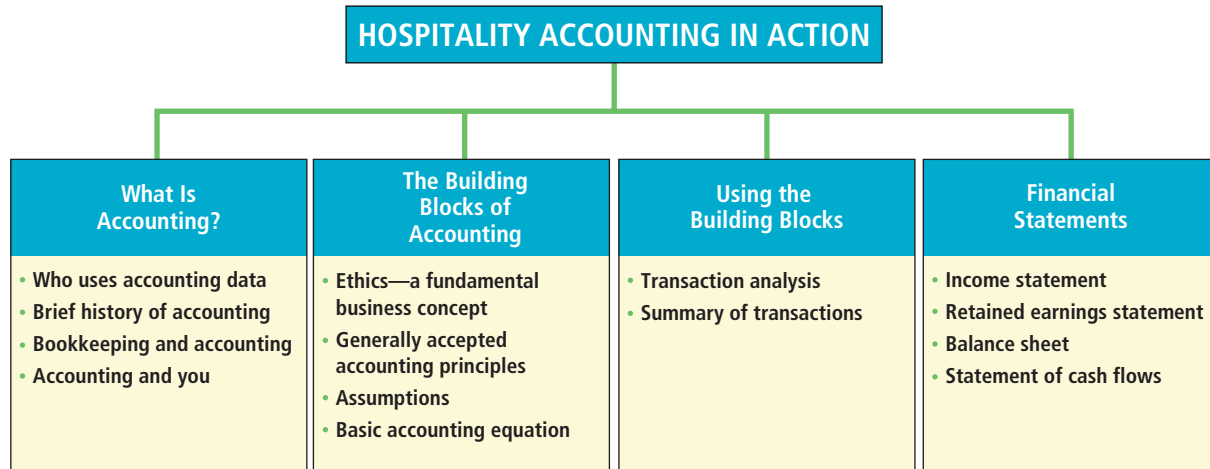


Continued

PREVIEW OF CHAPTER 1

The opening story about **PepsiCo, Inc.**, highlights the importance of having good financial information to make effective business decisions. Whatever one's pursuits or occupation, the need for financial information is inescapable. You cannot earn a living, spend money, buy on credit, make an investment, or pay taxes without receiving, using, or providing financial information. Good decision making depends on good information.

The purpose of this chapter is to show you that accounting is the system used to provide useful financial information. The content and organization of Chapter 1 are as follows:



The **Preview** describes and outlines the major topics and subtopics you will see in the chapter.

STUDY OBJECTIVES (CONTINUED)

5. Explain the meaning of the monetary unit assumption and the economic entity assumption.
6. State the basic accounting equation, and explain the meaning of assets, liabilities, and stockholders' equity.
7. Explain the accounting cycle and flow of information.
8. Identify the various systems of accounting procedures used in the hospitality industry.
9. Understand accounting and financial management in a hotel.
10. Understand accounting and financial management in a foodservice operation and a club.

WHAT IS ACCOUNTING?

STUDY OBJECTIVE 1

Explain what accounting is.

Essential terms are printed in blue when they first appear and are defined in the end-of-chapter glossary.

Accounting is an information system that **identifies, records, and communicates** the economic events of an organization to interested users. Let's take a closer look at these three activities.

1. **Identifying** economic events involves selecting the **economic activities relevant to a particular organization**. The sale of goods and services by **PepsiCo, Inc.**, the providing of services by **Disney**, the payment of wages by **The Club Corporation of America**, and the collection of ticket and broadcast money

and the payment of expenses by major league sports teams are examples of economic events.

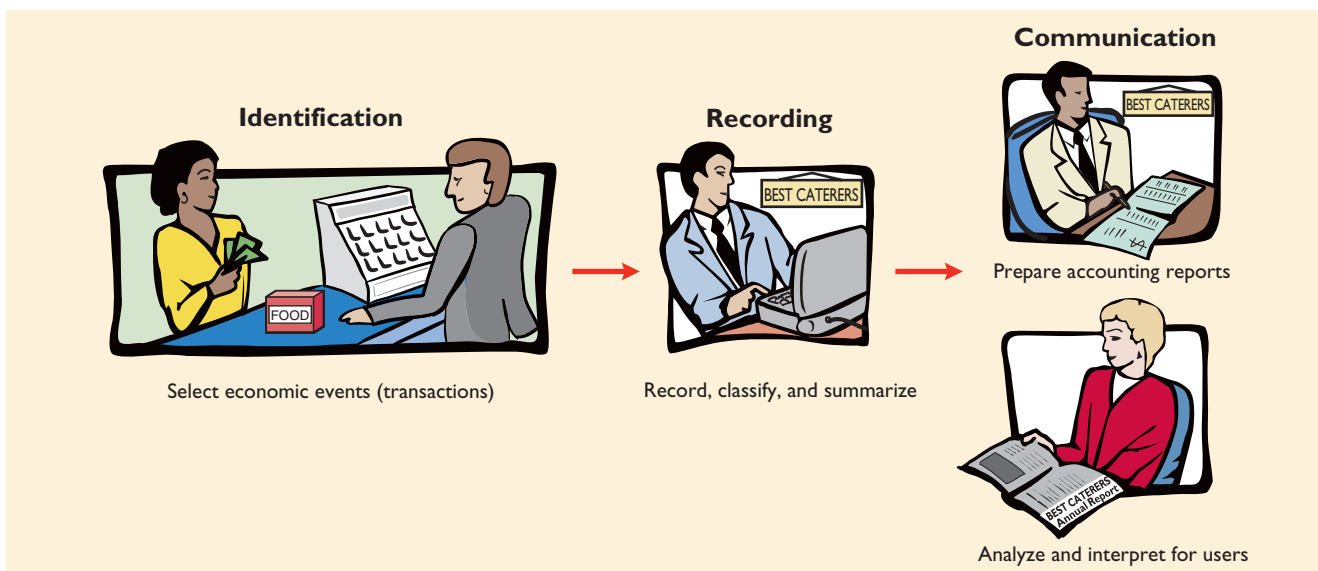
2. Once identified, economic events are **recorded** to provide a history of the organization’s financial activities. Recording consists of keeping a **systematic, chronological diary of events**, measured in dollars and cents. In recording, economic events are also classified and summarized.
3. The identifying and recording activities are of little use unless the information is **communicated** to interested users. Financial information is communicated through **accounting reports**, the most common of which are called **financial statements**. To make the reported financial information meaningful, accountants report the recorded data in a standardized way. Information resulting from similar transactions is accumulated and totaled. For example, all sales transactions of **PepsiCo** are accumulated over a certain period of time and reported as one amount in the company’s financial statements. Such data are said to be reported **in the aggregate**. By presenting the recorded data in the aggregate, the accounting process simplifies a multitude of transactions and makes a series of activities understandable and meaningful.

References throughout the chapter tie the accounting concepts you are learning to the story that opened the chapter.

A vital element in communicating economic events is the accountant’s ability to **analyze** and **interpret** the reported information. Analysis involves the use of ratios, percentages, graphs, and charts to highlight significant financial trends and relationships. Interpretation involves **explaining the uses, meaning, and limitations of reported data**. Appendix A at the end of this textbook illustrates the financial statements and accompanying notes and graphs from **PepsiCo**. We refer to these statements at various places throughout the text. At this point they probably strike you as complex and confusing. By the end of this course, you’ll be surprised at your ability to understand and interpret them.

The accounting process is summarized in Illustration 1-1.

Illustration 1-1
Accounting process



Accounting should consider the needs of the users of financial information. Therefore, you should know who those users are and something about their information needs.

STUDY OBJECTIVE 2

Identify the users and uses of accounting.

WHO USES ACCOUNTING DATA?

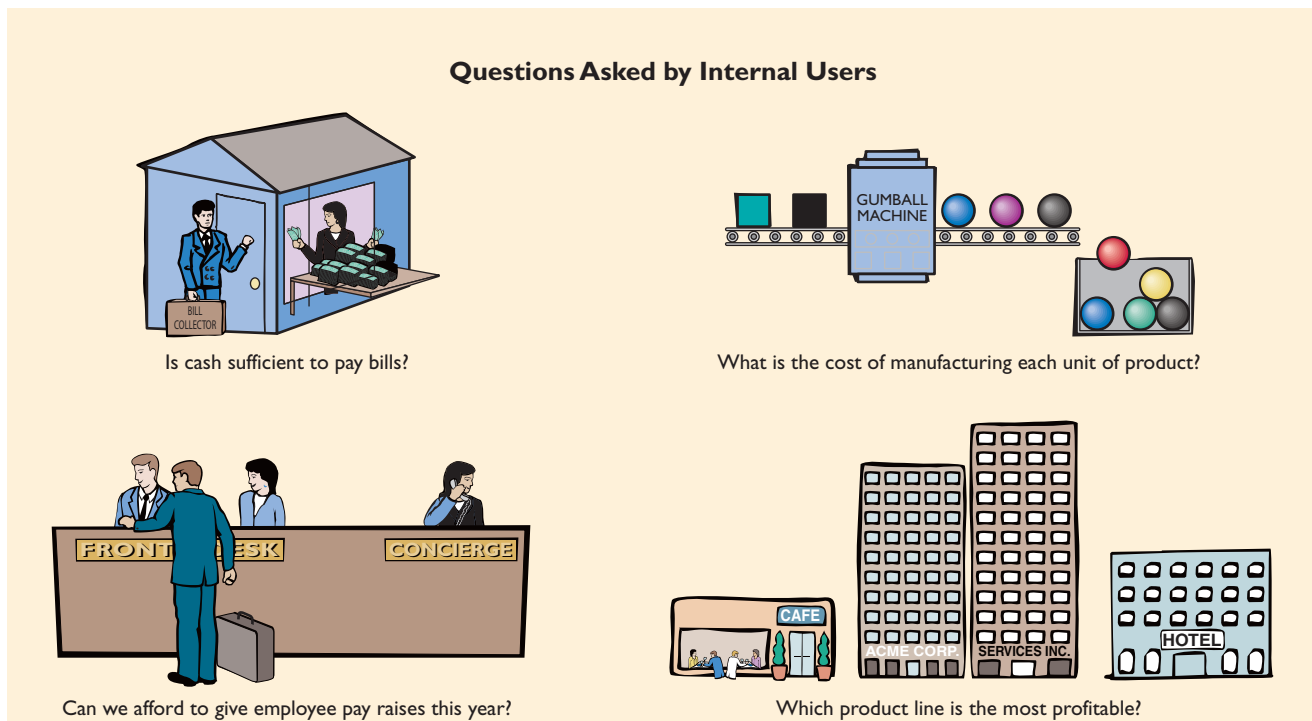
Because it communicates financial information, accounting is often called *the language of business*. The information that a user of financial information needs depends on the kinds of decisions the user makes. The differences in the decisions divide the users of financial information into two broad groups: internal users and external users.

Internal Users

Internal users of accounting information are managers who plan, organize, and run a business. These include **foodservice managers, housekeeping supervisors, rooms division managers, and others**. In running a business, managers must answer many important questions, as shown in Illustration 1-2.

Illustration 1-2

Questions asked by internal users



To answer these and other questions, users need detailed information on a timely basis. For internal users, accounting provides **internal reports**. Examples are financial comparisons of operating alternatives, projections of income from new sales campaigns, and forecasts of cash needs for the next year. In addition, summarized financial information is presented in the form of financial statements.

External Users

There are several types of **external users** of accounting information. **Investors** (owners) use accounting information to make decisions to buy, hold, or sell stock. **Creditors** such as suppliers and bankers use accounting information to evaluate the risks of granting credit or lending money. Some questions that may be asked by investors and creditors about a company are shown in Illustration 1-3.

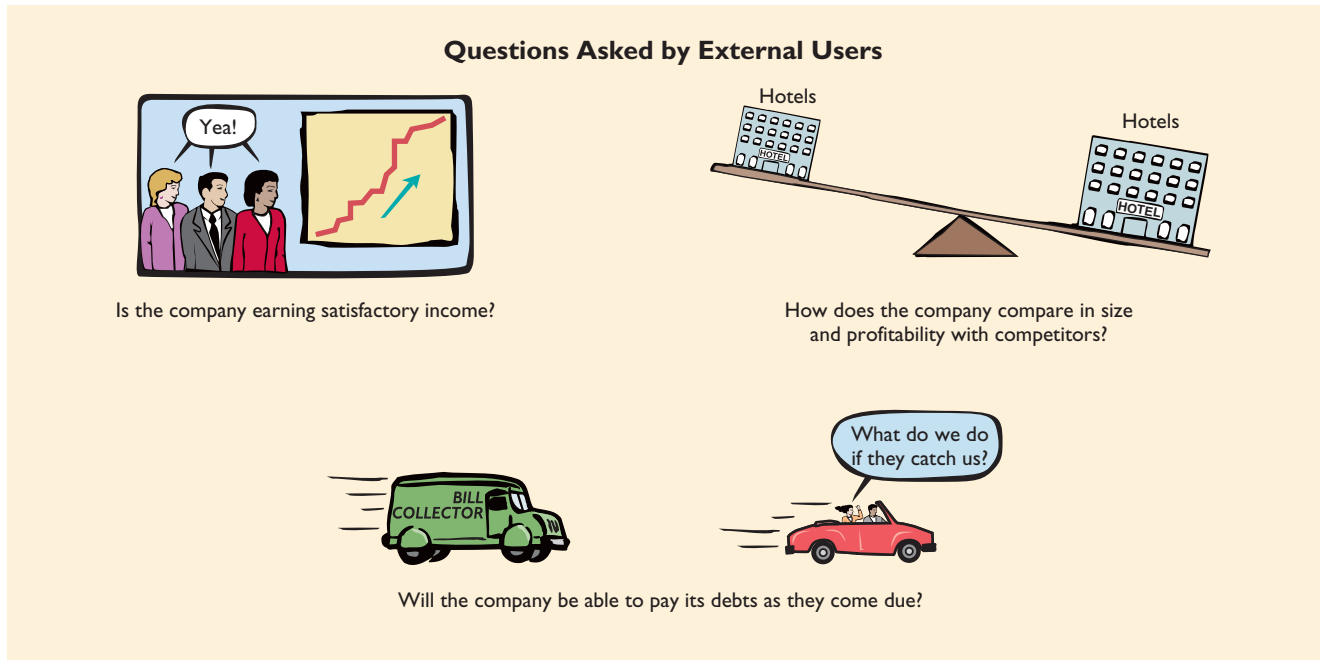
The information needs and questions of other external users vary considerably. **Taxing authorities**, such as the Internal Revenue Service (IRS), want to know whether the company complies with the tax laws. **Regulatory agencies**, such as the Securities and Exchange Commission and the Federal Trade Commission, want to

HELPFUL HINT

The IRS requires businesses to retain records that can be audited. Also, the Foreign Corrupt Practices Act requires public companies to keep records.

Illustration 1-3

Questions asked by external users



know whether the company is operating within prescribed rules. **Customers** are interested in whether a company will continue to honor product warranties and support its product lines. **Labor unions** want to know whether the owners can pay increased wages and benefits. **Economic planners** use accounting information to forecast economic activity.

ACCOUNTING IN ACTION *International Insight*



Concern over the quality and integrity of financial reporting is not limited to the United States. Recently, the Chinese Ministry of Finance reprimanded a large accounting firm for preparing fraudulent financial reports for a number of its publicly traded companies. Afterward, the state-run news agency noted that investors and analysts actually felt that the punishment of the firm was not adequate. In fact, a 2001 survey of investors in China found that fewer than 10% had full confidence in companies' annual reports. As a result of these concerns, the Chinese Institute of Certified Public Accountants vowed to strengthen its policing of its members.



BRIEF HISTORY OF ACCOUNTING

The **origins of accounting** are generally attributed to the work of Luca Pacioli, an Italian Renaissance mathematician. Pacioli was a close friend and tutor to Leonardo da Vinci and a contemporary of Christopher Columbus. In his text, *Summa de Arithmetica, Geometria, Proportione et Proportionalite*, Pacioli described a system to ensure that financial information was recorded efficiently and accurately.

With the advent of the **Industrial Age** in the nineteenth century and, later, the emergence of large corporations, a separation of the owners from the managers

Accounting in Action examples illustrate important and interesting accounting situations in business.

E-Business Insights provide examples of how e-business technology has influenced accounting and financial reporting.

of businesses took place. As a result, the need to report the financial status of the enterprise became more important, to ensure that managers acted in accord with owners' wishes. Also, transactions between businesses became more complex, making it necessary to improve approaches for reporting financial information.

Our economy has now evolved into a postindustrial age—the **information age**—in which many “products” are information services. The computer has been the driver of the information age.

ACCOUNTING IN ACTION Business Insight



The surge of Internet usage has affected the hotel industry tremendously—so much so that there are new revenue and expense items that hotels did not have before. On the one hand, revenues earned by hotels now include a fee that could either be charged separately or built into the room cost for use of the Internet, business center usage, and banquet facilities, which are associated with convention services and presentations. Other revenues also include rental and installation of equipment, computers, ethernet cards, hubs, patch cables, and even the setup of mini-LAN systems. Expenses, on the other hand, include the cost of leasing lines, Internet provider fees, telephone charges, equipment leases, and wages and salary of hotel and contract personnel, to name a few.

SOURCE: Henry A. Weeks, “Internet Revenue and Expense,” *Bottomline* 15(4) (2000): 73–74.

DISTINGUISHING BETWEEN BOOKKEEPING AND ACCOUNTING

Many individuals mistakenly consider bookkeeping and accounting to be the same. This confusion is understandable because the accounting process **includes the bookkeeping function**. However, accounting also includes much more. **Bookkeeping usually involves only the recording of economic events**. It is therefore just one part of the accounting process. In total, **accounting involves the entire process of identifying, recording, and communicating economic events**.

Accounting may be further divided into financial accounting and managerial accounting. **Financial accounting** is the field of accounting that provides economic and financial information for investors, creditors, and other external users. **Managerial accounting** provides economic and financial information for managers and other internal users. Financial accounting is covered in this textbook.

ACCOUNTING AND YOU

One question frequently asked by students of accounting is, “How will the study of accounting help me?” It should help you a great deal, because a working knowledge of accounting is desirable for virtually every field of endeavor. Some examples of how accounting is used in other careers include

General management: Imagine running a theme park, a major resort, a school, a foodservice facility, a **McDonald’s** franchise. All general managers need to understand accounting data in order to make wise business decisions.

Marketing: A marketing specialist develops strategies to help the sales force be successful. But making a sale is meaningless unless it is a profitable sale. Marketing people must be sensitive to costs and benefits, which accounting helps them quantify and understand.

Finance: Do you want to be a controller, a chief financial officer, a food and beverage controller, a purchasing analyst? These fields rely heavily on accounting. In all of them you will regularly examine and analyze financial statements. In fact, it is difficult to get a good job in a finance function without two or three courses in accounting.

Real estate: Have you ever considered hotel properties as real estate? When you decide to buy or sell properties, you will need to understand finance and real estate. Many hospitality programs, especially at the master's degree level, offer courses in real estate. Can the buyer afford to make the payments to the bank? Does the cash flow from an industrial property justify the purchase price? What are the tax benefits of the purchase? All these are questions that need answers.

Accounting is useful even for occupations you might think completely unrelated. If you become a doctor, a lawyer, a social worker, a teacher, an engineer, an architect, or an entrepreneur—you name it—a working knowledge of accounting is relevant. You will need to understand financial reports in any enterprise you are associated with.

ACCOUNTING IN ACTION *Business Insight*



Help Wanted: Forensic CPAs

Tom Taylor's job at the **FBI** has changed. He used to pack a .357 magnum; now he wields a no. 2 pencil and a notebook computer. Taylor, age 37, for two years an FBI agent, is a forensic accountant, somebody who sniffs through company books to ferret out white-collar crime. Demand for this service has surged in the past few years. In one recent year, a recruiter for San Diego's **Robert Half International**, a head-hunting firm, had requests for more than 1,000 such snoops.

Qualifications: A CPA with FBI, IRS, or similar government experience. Interestingly, despite its macho image, the FBI has long hired mostly accountants and lawyers as agents.



BEFORE YOU GO ON...

▶ REVIEW IT

1. What is accounting?
2. What is meant by analysis and interpretation?
3. Who uses accounting information? Identify specific internal and external users of accounting information.
4. To whom are the origins of accounting generally attributed?
5. What is the difference between bookkeeping and accounting?
6. How can you use your accounting knowledge?

Before You Go On questions at the end of major text sections offer an opportunity to stop and reexamine the key points you have studied.



THE BUILDING BLOCKS OF ACCOUNTING

Every profession develops a body of theory consisting of principles, assumptions, and standards. Accounting is no exception. Just as a doctor follows certain standards in treating a patient's illness, an accountant follows certain standards in

reporting financial information. For these standards to work, a fundamental business concept is followed—ethical behavior.

STUDY OBJECTIVE 3

Understand why ethics is a fundamental business concept.

ETHICS—A FUNDAMENTAL BUSINESS CONCEPT


Wherever you make your career—whether in accounting, marketing, hotel or food-service management, finance, or elsewhere—your actions will affect other people and organizations. The standards of conduct by which one's actions are judged as right or wrong, honest or dishonest, fair or not fair, are **ethics**. Imagine trying to carry on a business or invest money if you could not depend on the individuals you deal with to be honest. If managers, customers, investors, co-workers, and creditors all consistently lied, effective communication and economic activity would be impossible. Information would have no credibility.

Fortunately, most individuals in business are ethical. Their actions are both legal and responsible, and they consider the organization's interests in their decision making. However, sometimes public officials and business executives act unethically. For example, the **Enron** board waived Enron's code of ethics when an executive created questionable partnerships; a trader with **Salomon Brothers** improperly overbid in auctions of U.S. Treasury bonds; and **WorldCom** continued acquiring companies including MCI, MFS, and UUNET until the 75 acquisitions were unable to function well together.

To sensitize you to ethical situations and to give you practice at solving ethical dilemmas, we have included in this book three types of ethics materials in certain chapters: (1) marginal notes that provide helpful hints for developing ethical sensitivity, (2) Ethics in Accounting boxes that highlight ethics situations and issues, and (3) at the end of the chapter, an ethics case simulating a business situation. In the process of analyzing these ethics cases and your own ethical experiences, you should apply the three steps outlined in Illustration 1-4.

Illustration 1-4

Steps in analyzing ethics cases



Solving an Ethical Dilemma

- 1. Recognize an ethical situation and the ethical issues involved.**
Use your personal ethics to identify ethical situations and issues. Some businesses and professional organizations provide written codes of ethics for guidance in some business situations.
- 2. Identify and analyze the principal elements in the situation.**
Identify the *stakeholders*—persons or groups who may be harmed or benefited. Ask the question: What are the responsibilities and obligations of the parties involved?
- 3. Identify the alternatives, and weigh the impact of each alternative on various stakeholders.**
Select the most ethical alternative, considering all the consequences. Sometimes there will be one right answer. Other situations involve more than one right solution; these situations require an evaluation of each and a selection of the best alternative.

STUDY OBJECTIVE 4

Explain the meaning of generally accepted accounting principles and the cost principle.

GENERALLY ACCEPTED ACCOUNTING PRINCIPLES

The accounting profession has developed standards that are generally accepted and universally practiced. This common set of standards is called **generally accepted accounting principles (GAAP)**. These standards indicate how to report economic events.

Two organizations are primarily responsible for establishing generally accepted accounting principles. The first is the **Financial Accounting Standards Board (FASB)**. This private organization establishes broad reporting standards of general applicability as well as specific accounting rules. The second standards-setting group is the **Securities and Exchange Commission (SEC)**. The SEC is a governmental agency that requires companies to file financial reports following gener-

ally accepted accounting principles. In situations where no principles exist, the SEC often mandates that certain guidelines be used. In general, the FASB and the SEC work hand in hand to ensure that timely and useful accounting principles are developed.

One important principle is the **cost principle**, which states that assets should be recorded at their cost. **Cost is the value exchanged at the time something is acquired.** If you buy a house today, the cost is the amount you pay for it, say, \$200,000. If you sell the house in two years for \$230,000, the sales price is its **market value**—the value determined by the market for homes at that time. At the time of acquisition, cost and fair market value are the same. In subsequent periods, cost and fair market value may vary, **but the cost amount continues to be used in the accounting records.**

To see the importance of the cost principle, consider the following example. At one time **Greyhound Corporation** had 128 bus stations nationwide that cost approximately \$200 million. The current market value of the stations is now close to \$1 billion. But, until the bus stations are actually sold, estimates of their market values are subjective—they are informed estimates. So, under the cost principle, the bus stations are recorded and reported at \$200 million, not \$1 billion.

As the Greyhound example indicates, cost has an important advantage over other valuations: Cost is **reliable**. The values exchanged at the time something is acquired generally can be **objectively measured** and can be **verified**. Critics argue that cost is often not relevant and that market values provide more useful information. Despite this shortcoming, cost continues to be used in the financial statements because of its reliability.

ASSUMPTIONS

In developing generally accepted accounting principles, certain basic assumptions are made. These assumptions provide a foundation for the accounting process. Two main assumptions are the monetary unit assumption and the economic entity assumption.

Monetary Unit Assumption

The **monetary unit assumption** requires that only transaction data that can be expressed in terms of money be included in the accounting records. This assumption enables accounting to quantify (measure) economic events. The monetary unit assumption is vital to applying the cost principle discussed earlier. This assumption does prevent some relevant information from being included in the accounting records. For example, the health of the owner, the quality of service, and the morale of employees would not be included because they cannot be quantified in terms of money.

An important part of the monetary unit assumption is the added assumption that the unit of measure remains sufficiently constant over time. However, the assumption of a stable monetary unit has been challenged because of the significant decline in the purchasing power of the dollar. For example, what used to cost \$1.00 in 1960 cost more than \$4.00 in 2004. In such situations, adding, subtracting, or comparing 1960 dollars with 2004 dollars is highly questionable. The profession has recognized this problem and encourages companies to disclose the effects of changing prices.

Economic Entity Assumption

An economic entity can be any organization or unit in society. It may be a business enterprise (such as **Marriott International, Inc.**), a governmental unit (the state of Ohio), a municipality (Seattle), a school district (St. Louis District 48), or

INTERNATIONAL NOTE

The standards-setting processes in Canada, Mexico, and the United States are similar in most respects. All three have relatively open deliberations on new rules, and they support efforts to follow international standards. The use of similar accounting principles within North America has implications for the success of the North American Free Trade Agreement (NAFTA).

ALTERNATIVE TERMINOLOGY

The cost principle is often referred to as the *historical cost principle*.

STUDY OBJECTIVE 5

Explain the meaning of the monetary unit assumption and the economic entity assumption.

a church (Southern Baptist). The **economic entity assumption** requires that the activities of the entity be kept separate and distinct from the activities of its owner and all other economic entities. To illustrate, Sally Rider, owner of Sally's Boutique, should keep her personal living costs separate from the expenses of the boutique. **Disney's Parks and Resorts** and its Studio Entertainment are segregated into separate economic entities for accounting purposes.

ACCOUNTING IN ACTION *Ethics Insight*



E-business involves much more than simply selling goods over the Internet. The use of the Internet in hospitality-related areas has expanded from Priceline.com to Orbitz.com, Hotels.com, and many others. According to Lou Gerstner, IBM's CEO, "e-business is all about cycle time, speed, globalization, enhanced productivity, reaching new customers, and sharing knowledge across institutions for competitive advantage." Many accountants are involved in designing and implementing computer system, including systems for e-business. In fact, in recent years e-business consulting has been one of the largest areas of growth for large accounting firms.

We will generally discuss the economic entity assumption in relation to a business enterprise, which may be organized as a proprietorship, partnership, or corporation.

HELPFUL HINT

Approximately 70 percent of U.S. companies are proprietorships; however, they account for only 6.5 percent of gross revenues. Corporations are approximately 19 percent of all companies but account for 90 percent of the revenues. Obviously, proprietorships, though numerous, tend to be small.

PROPRIETORSHIP. A business owned by one person is generally a **proprietorship**. The owner is often the manager/operator of the business. Small service-type businesses (travel agencies, beauty salons, and interior decorators), farms, and small retail stores (cigar specialty shops, ice-cream parlors, and sandwich shops) are often sole proprietorships. **Usually only a relatively small amount of money (capital) is necessary to start in business as a proprietorship. The owner (proprietor) receives any profits, suffers any losses, and is personally liable for all debts of the business.** There is no legal distinction between the business as an economic unit and the owner, but the accounting records of the business activities are kept separate from the personal records and activities of the owner.

PARTNERSHIP. A business owned by two or more persons associated as partners is a **partnership**. In most respects a partnership is like a proprietorship except that more than one owner is involved. Typically, a partnership agreement (written or oral) sets forth such terms as initial investment, duties of each partner, division of net income (or net loss), and settlement to be made on death or withdrawal of a partner. Each partner generally has unlimited personal liability for the debts of the partnership. **Like a proprietorship, for accounting purposes the partnership affairs must be kept separate from the personal activities of the partners.** Partnerships are often used to organize retail and service-type businesses, including professional practices (lawyers, architects, and certified public accountants) that work especially with the hospitality industry, providing much-needed services.

CORPORATION. A business organized as a separate legal entity under state corporation law and having ownership divided into transferable shares of stock is a **corporation**. The holders of the shares (stockholders) enjoy **limited liability**; that is, they are not personally liable for the debts of the corporate entity. **Stockholders may transfer all or part of their shares to other investors at any time** (i.e., sell their shares). The ease with which ownership can change adds to the attractiveness of investing in a corporation. Because ownership can be transferred without dissolving the corporation, the corporation **enjoys an unlimited life**.

Although the combined number of proprietorships and partnerships in the United States is more than four times the number of corporations, the revenue produced by corporations is nine times greater. Most of the largest hospitality enterprises in the United States—for example, **Hilton Hotels**, **Starwood**, **Marriott**, and the **Walt Disney Company**—are corporations.

BASIC ACCOUNTING EQUATION

Other essential building blocks of accounting are the categories into which economic events are classified. The two basic elements of a business are what it owns and what it owes. **Assets** are the resources owned by a business. For example, the 2001 year-end figures showed **Marriott** having total assets of approximately \$9,116 million. Liabilities and stockholders' equity are the rights or claims against these resources. Thus a company such as **Marriott** that has \$9,116 million of assets also has \$9,116 million of claims against those assets. Claims of those to whom money is owed (creditors) are called **liabilities**. Claims of owners are called **stockholders' equity**. For example, **Marriott** has liabilities of \$5,629 million and stockholders' equity of \$3,487 million. This relationship of assets, liabilities, and stockholders' equity can be expressed as an equation, as shown in Illustration 1-5.



STUDY OBJECTIVE 6

State the basic accounting equation, and explain the meaning of assets, liabilities, and stockholders' equity.

Illustration 1-5

The basic accounting equation

This relationship is referred to as the **basic accounting equation**. Assets must equal the sum of liabilities and stockholders' equity. Because creditors' claims must be paid before ownership claims if a business is liquidated, liabilities are shown before stockholders' equity in the basic accounting equation.

The accounting equation applies to all **economic entities** regardless of size, nature of business, or form of business organization. It applies to a small proprietorship such as a corner delicatessen as well as to a giant corporation such as **Carlson Companies, Inc.**, which owns various hotel brands and also **TGI Friday's**. The equation provides the **underlying framework** for recording and summarizing the economic events of a business enterprise.

Let's look in more detail at the categories in the basic accounting equation.

Assets

As noted above, **assets** are resources owned by a business. They are used in carrying out such activities as production, consumption, and exchange. The common characteristic possessed by all assets is the capacity to provide future services or benefits. In a business enterprise, that service potential or future economic benefit eventually results in cash inflows (receipts) to the enterprise.

For example, the enterprise Campus Pizza owns a delivery truck that provides economic benefits from its use in delivering pizzas. Other assets of Campus Pizza are food inventory; furniture fixtures and equipment; such as tables, chairs, jukebox, cash register, oven, mugs, and silverware; and, of course, cash.

Liabilities

Liabilities are claims against assets. That is, **liabilities are existing debts and obligations**. For example, businesses of all sizes usually borrow money and purchase

merchandise on credit. Campus Pizza, for instance, purchases cheese, sausage, flour, and beverages on credit from suppliers. These obligations are called **accounts payable**. Campus Pizza also has a **note payable** to First National Bank for the money borrowed to purchase the delivery truck. Campus Pizza also may have **wages payable** to employees and **sales and real estate taxes payable** to the local government. All these persons or entities to whom Campus Pizza owes money are its **creditors**.

Most claims of creditors attach to the entity's **total assets** rather than to the specific assets provided by the creditor. Creditors may legally force the liquidation of a business that does not pay its debts. In that case, the law requires that creditor claims be paid before ownership claims.

Stockholders' Equity

The ownership claim on total assets is known as **stockholders' equity**. It is equal to total assets minus total liabilities. Here is why: The assets of a business are supplied or claimed by either creditors or stockholders. To determine what belongs to stockholders, we therefore subtract creditors' claims—the liabilities—from assets. The remainder—stockholders' equity—is the stockholders' claim on the assets of the business. It is often referred to as **residual equity** (i.e., the equity “left over” after creditors' claims are satisfied). The stockholders' equity section of a corporation's balance sheet consists of (1) paid-in (contributed) capital and (2) retained earnings (earned capital).

PAID-IN CAPITAL. **Paid-in capital** is the term used to describe the total amount paid in by stockholders. The principal source of paid-in capital is the investment of cash and other assets in the corporation by stockholders in exchange for capital stock. Corporations may issue several classes of stock, but the stock representing ownership interest is common stock.

RETAINED EARNINGS. The **retained earnings** section of the balance sheet is determined by three items: revenues, expenses, and dividends.

Revenues. **Revenues** are the gross increases in stockholders' equity resulting from business activities entered into for the purpose of earning income. Generally, revenues result from the sale of merchandise, the performance of services, the rental of property, and the lending of money.

Revenues usually result in an increase in an asset. They may arise from different sources and are identified by various names depending on the nature of the business. Campus Pizza, for instance, has two categories of sales revenues—pizza sales and beverage sales. Other titles for and sources of revenue common to many businesses are sales, fees, services, commissions, interest, dividends, royalties, and rent.

Expenses. **Expenses** are the decreases in stockholders' equity that result from operating the business. They are the cost of assets consumed or services used in the process of earning revenue. Expenses represent actual or expected cash outflows (payments). Like revenues, expenses take many forms and are identified by various names depending on the type of asset consumed or service used. For example, Campus Pizza recognizes the following types of expenses: cost of ingredients (meat, flour, cheese, tomato paste, mushrooms, etc.), cost of beverages, wages expense, utilities expense (electric, gas, and water expense), telephone expense, delivery expense (gasoline, repairs, licenses, etc.), supplies expense (napkins, detergents, aprons, etc.), rent expense, interest expense, and property tax expense. When revenues exceed expenses, **net income** results. When expenses exceed revenues, a **net loss** results.

HELPFUL HINT

The effect of revenues is positive—an increase in stockholders' equity coupled with an increase in assets or a decrease in liabilities.

HELPFUL HINT

The effect of expenses is negative—a decrease in stockholders' equity coupled with a decrease in assets or an increase in liabilities.

Dividends. When a company is successful, it generates net income. **Net income** represents an increase in net assets, which are then available to distribute to stockholders. The distribution of cash or other assets to stockholders is called a **dividend**. Dividends reduce retained earnings. However, dividends are not an expense of a corporation. A corporation first determines its revenues and expenses and then computes net income or **net loss**. At this point, a corporation may decide to distribute a dividend.

In summary, the principal sources (increases) of stockholders' equity are (1) investments by stockholders and (2) revenues from business operations. In contrast, reductions (decreases) in stockholders' equity are a result of (1) expenses and (2) dividends. These relationships are shown in Illustration 1-6.

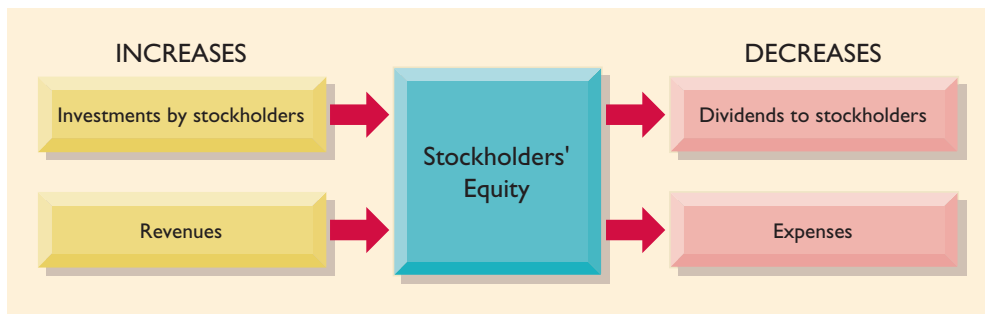


Illustration 1-6

Increases and decreases in stockholders' equity

BEFORE YOU GO ON...

REVIEW IT

1. Why is ethics a fundamental business concept?
2. What are generally accepted accounting principles? Give an example.
3. Explain the monetary unit and the economic entity assumptions.
4. The accounting equation is: Assets = liabilities + Istockholders' equity. Replacing the words in that equation with dollar amounts, what is **PepsiCo's** accounting equation on December 31, 2006?
5. What are assets, liabilities, and stockholders' equity?

DO IT

Classify the following items as issuance of stock (I), dividends (D), revenues (R), or expenses (E). Then indicate whether the following items increase or decrease stockholders' equity: (1) rent expense, (2) service revenue, (3) dividends, and (4) salaries expense.

ACTION PLAN

- Review the rules for changes in stockholders' equity: Investments and revenues increase stockholders' equity. Expenses and dividends decrease stockholders' equity.
- Understand the sources of revenue: the sale of merchandise, performance of services, rental of property, and lending of money.
- Understand what causes expenses: the consumption of assets or services.
- Recognize that dividends are distributions of cash or other assets to stockholders.

SOLUTION

1. Rent expense is classified as an expense (E); it decreases stockholders' equity.
2. Service revenue is classified as revenue (R); it increases stockholders' equity.
3. Dividends is classified as dividends (D); it decreases stockholders' equity.
4. Salaries expense is classified as an expense (E); it decreases stockholders' equity.

Review It questions marked with this icon require that you use **PepsiCo's** Annual Report.



Do It exercises give you immediate practice of the material just covered.

THE ACCOUNTING CYCLE AND THE FLOW OF INFORMATION

STUDY OBJECTIVE 7

Explain the accounting cycle and flow of information.

In financial accounting, there are basically nine steps from beginning to end. Although you will be learning all these steps in detail in the next few chapters, it may be a good time for you to get a sneak preview of what accounting is all about.

All accounting information starts with an economic event that affects the business financially, and therefore, such events will become transactions. Thus the first step in accounting is to **analyze transactions**. This means that you will need to decide what accounts this transaction affects and the amounts that will either increase or decrease the account balances.

Once this is decided, you will need to journalize this entry. This second step is called **journalizing** because you are now putting the information for the first time into the “books” or “journal” of the business. This is also where debits and credits of accounting come into play. Remember that debits and credits can mean both an increase and a decrease in an account. This is dictated by the type of account, whether it is an asset, a liability, revenues, expenses, withdrawal, equity or capital, and the like.

After journalizing comes the third step, **posting**. Posting is the transfer of the accounting information from the journal to the individual accounts, which is called the **ledger**. When this step is complete, all accounts will have a new balance. The debits and credits balances of all the accounts will be added together to form a **trial balance**, the fourth step of an accounting cycle. As the name of the trial balance suggests, this is when the accountant wants to make sure that all debits and credits do match and balance.

However, life is not always easy, and people do make mistakes; so adjustments are needed. This fifth step is discussed with many illustrations in Chapter 4. Even without mistakes, there are certain type of transactions that are known as **adjustments**, such as depreciation adjustments and recognition of expenses to match revenues; so these are normally made and entered into the journal and the ledger to then result in the sixth step, an **adjusted trial balance**. When the adjusted trial balance is achieved, the balances of the individual accounts now can be used to compile the **financial statements**. In this seventh step, the financial statements will include the income statement, the statement of owner’s equity or retained earnings, the balance sheet, and the statement of cash flows.

Once the statements are complete, we can close the books so that we can start counting for the next period. This eighth step is known as the **closing**, where closing entries will be performed. All the accounts that are period-based will be closed, whereas others will remain open and carry the new balances forward. This will be discussed in Chapter 5.

Finally, we reached the ninth and the last step, the **postclosing trial balance**. Once more, trial balance is compiled to ensure the accuracy of the data to be carried forward to the next period.

Now how does this translate in the hospitality environment? Well, a waiter rings up on a point-of-sale system a customer’s order; and when the customer pays his or her bill, whether by cash or using a credit card, that is an economic event that has a financial impact on the business and will trigger a transaction analysis. A restaurateur writing a check to pay the produce company for the fruits and vegetables delivered is also an economic event. A hotel guest checks out and the folio is closed on the property management system is another example. A country club member sending a check to pay for his or her monthly dues is another transaction. All the information then is taken to the controller’s office for analysis, journalizing, and posting to create trial balances, adjusted trial balances, and, eventually, financial statements. Illustration 1-7 shows this process.

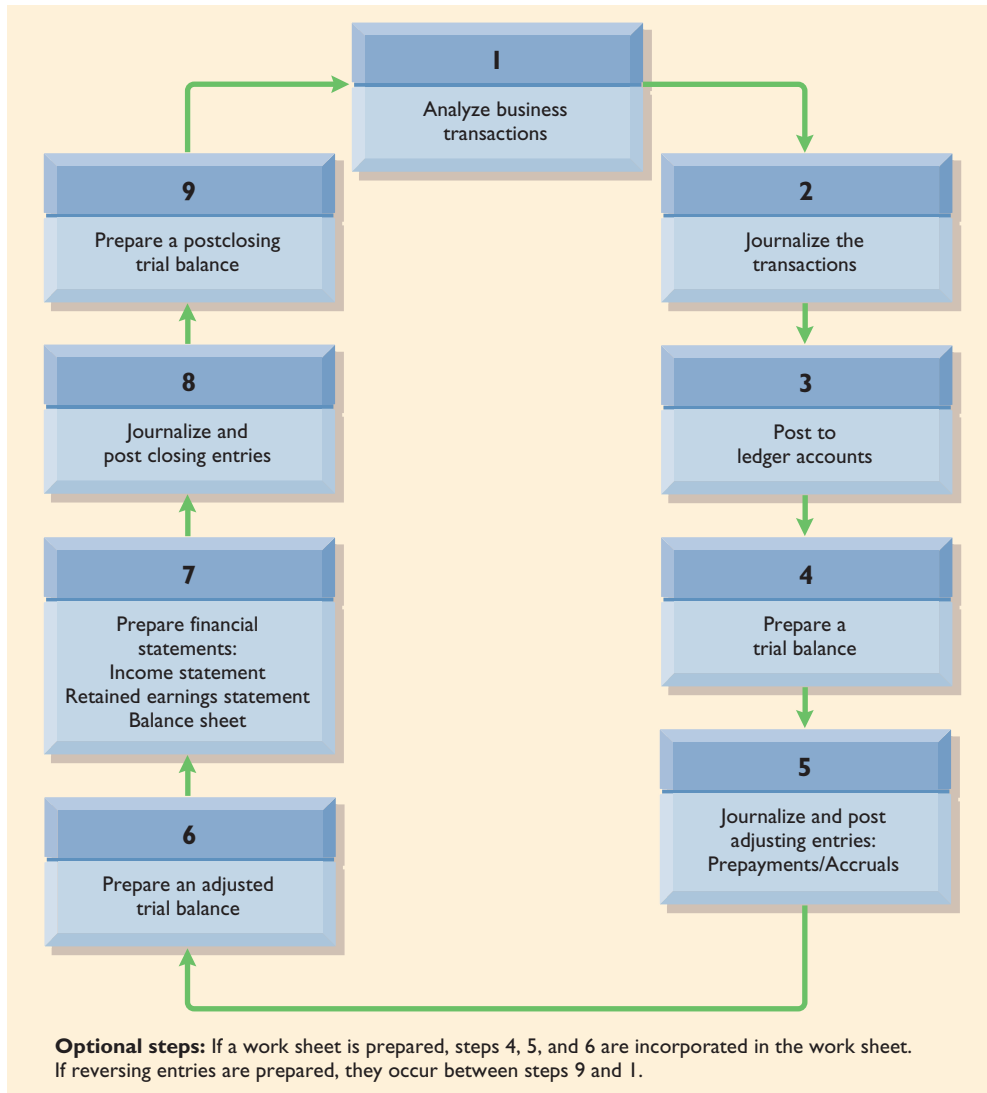


Illustration 1-7
Steps in the accounting cycle.

THE UNIFORM SYSTEMS OF ACCOUNTS AND FINANCIAL REPORTING

Although the Financial Accounting Standards Board (FASB) sets the rules by which the accounting profession must abide, the hospitality industry also sets procedures and guidelines for its various segments to ensure comparability, accountability, and meaningful usage of accounting data. For new operators, these systems even act as turnkey accounting systems. This means the system has everything included and is ready to be used in operations. The three most used and well-known systems in the industry are for the lodging, foodservice, and club areas. There is currently one under development for the gaming industry.

Why are such industry-specific systems needed? If every industry follows the FASB's rules, shouldn't each then have the correct accounting information? In theory, yes. However, FASB rules are written for the entire accounting profession. Hospitality has accounts other industries do not, and vice versa. For instance, a restaurant will not have a depletion account for an oil rig, but a restaurant does

STUDY OBJECTIVE 8

Identify the various systems of accounting procedures used in the hospitality industry.

need an accumulation depreciation account for furniture, fixtures, and equipment. Even within the hospitality industry there are differences. A hotel is different from a club, and a club is different from a theme park. Hotels have room revenues, country clubs have membership dues, and theme parks have admissions fees. There are recommended procedures to categorize certain expenses or naming of accounts. The accounting information provided is more useful not just for the companies themselves but also for investors, creditors, and even employees.

LODGING INDUSTRY

The **Uniform System of Accounts for the Lodging Industry** is currently in its ninth edition. Of the three systems, this is the oldest. It was first developed by the Hotel Association of New York in 1926 and was known as the Uniform System of Accounts for Hotels. From the 1930s to the 1970s, when most hotels were smaller and motor hotels (motels) were popular, there were actually two systems: the Uniform System of Accounts for Hotels and the Uniform System of Accounts for Smaller Hotels. There was also an expense dictionary where expenditures were categorized under specific accounts so that accountants and controllers could follow the allocation trail.

The ninth edition evolved with industry trends and combines all three books into a seamless system of accounts for the entire lodging industry. The **Hospitality Financial and Technology Professionals (HFTP)** is working with the American Hotel and Lodging Association on the next edition.

FOODSERVICE INDUSTRY

The **Uniform System of Accounts for Restaurants**, first published in 1927, is currently in its seventh edition. It provides sample statements, analysis blueprints, classification of accounts, and an expense dictionary. The aim of this publication, like that of the lodging and club industries, is to assist operators to interpret financial results in a more meaningful manner.

CLUB INDUSTRY

The club industry is a self-regulating industry. With its owners also being its members, accountability is of utmost importance. The **Club Managers Association of America (CMAA)** was formed in 1927 and published the Proposed Uniform System of Accounts for City Clubs in 1942. It was not until 1954 that the first Uniform System of Accounts for Clubs was published. The current fifth edition is known as the **Uniform System of Financial Reporting for Clubs**.

Similar to the hotel industry, the club industry has seen tremendous growth, especially in real estate developments. Many new residential developments also include a club, fully equipped with all amenities and services, including one and perhaps two golf courses for its residents.

SPA INDUSTRY

With the new millennium, where a 40-hour work week is very unusual for managerial and executive positions, the spa industry flourishes by providing comfort and relaxation for many people. In 2003, the International Spa Association and its foundation decided that it is time for the industry to set standards for financial reporting, and thus the **Uniform System of Financial Reporting for Spas** was published in late 2004. Similar to its counterparts, this system is divided into three major sections: financial statements, financial analysis, and financial tools. However, instead of departmental statements such as rooms or telecommunications, the spa industry's has massage, skin care, hair, nail, fitness, and health and wellness, which make the industry and its system distinct from the others.

GAMING INDUSTRY

You may feel that if any industry needs an accounting system, the casino industry should be the first one to have a set of procedures because there are such large amounts of money involved. However, the first edition of this system is still under development. Two reasons contribute to the late birth. First, both Nevada and New Jersey have strict laws governing the operations of casinos, including how money transactions should be documented. Many states with legalized gaming have adopted the rules of Nevada and New Jersey. In addition, casinos have been using parts of the system from the lodging industry. In the current ninth edition of the system of the lodging industry, there are also sections dedicated to the casino industry, suggesting statement presentation formats and guidelines.

ACCOUNTING AND FINANCIAL MANAGEMENT IN HOSPITALITY

HOTEL OPERATIONS

Operating a hotel is like being in charge of a small city. The hotel business is full of exciting moments, surprises, heartwarming stories, and also some tough workdays. If you can imagine a mayor taking care of a city, well, that is what a general manager has to do for his or her hotel. The general manager needs to have the hotel properly staffed, with the right equipment and supplies, so that guests can have a wonderful experience. *Hospitality* is not just the name that encompasses the industry but is also the key word to success.

As seen in the feature story in Chapter 1, whether it is a worldwide hospitality giant supplier like PepsiCo or a small mom-and-pop 40-room motel, planning and controls through prudent and ethical financial management are equally important.

The role of financial management in a hotel is crucial to its success. Reduced to the simplest terms, when the money is not there, the hotel cannot open. The hotel industry really offers a fascinating career. Visit the [American Hotel and Lodging Association \(AH&LA\)](http://www.ahla.com) Web site (www.ahla.com) for more information about the hotel industry from national to local levels.

Interactions with All Departments

A typical hotel is divided into departments. The bigger the hotel, the more departments it has. Most hotels have a front office that takes care of reservations and registration. There is also a housekeeping department and an engineering and maintenance department. If the hotel is a full-service property, it will have a food and beverage department, which may include restaurant, banquet, and in-room dining. Smaller properties may have their human resources and accounting functions centralized at a regional office. An accounting department at a 1,600-room convention property may have forty to fifty employees. Illustration 1-8 shows a sample organization chart for a full-service hotel.

Regardless of how many departments and how many employees, you can see the big picture. In the hotel business, it takes teamwork to provide the ultimate quality service and product to the guests. Five hundred convention attendees staying with the hotel expect to have their rooms ready for check-in and meeting rooms available for work. They will also expect their coffee and meal breaks served on time and the banquet room decorated with their association's banner and other materials. The group's convention organizer is not going to talk to the housekeeper, the restaurant manager, the banquet captain, or the front office separately regarding their needs. This organizer will have one point of contact with the hotel

STUDY OBJECTIVE 9

Understand accounting and financial management in a hotel.

sales and catering office, and this hotel manager will need to interact with all departments to communicate the pertinent information. Thus all departments need to interact and make decisions accordingly.

The General Manager and the Executive Committee

As mentioned, the **general manager** is like the mayor of the city. He or she will work closely with the members of the **executive committee** to manage the hotel. The executive committee is made up of all the department heads. This group comes together for meetings to make decisions and to ensure all information is relayed correctly.

The **controller**, the department head of the accounting department, is a member of the executive committee. Just like the general manager, the controller has to work not only with the employees in the accounting and business office but also with all department heads. At times, while certain department heads may not need to have constant communication with one another, the controller, as the head financial management person, is required to do so.

Controllers need to know how every department performs and whether each department is making or losing money. They can do so from a simple analysis of the departmental income statement. They can then consult with department heads to point out any concerns that are shown on the financial records. This allows departments to take appropriate actions to ensure the success of the hotel. In the career ladder of a hotel, it is highly possible that a controller can one day become the general manager.

The Casino Hotel

Financial management is important in any hotel. However, it is doubly important in a casino hotel. Think of all the cash that passes through a casino on a daily basis.

Illustration 1-8

Departmental structure in the hotel and lodging industry: (a) departments of a limited-service hotel; (b) departments of a full-service hotel with fewer than 500 rooms; (c) departments of a full-service hotel with 500 or more rooms.
 Source: Stutts, *Hotel and Lodging Management: An Introduction*, Second Edition (New York: Wiley, 2006).
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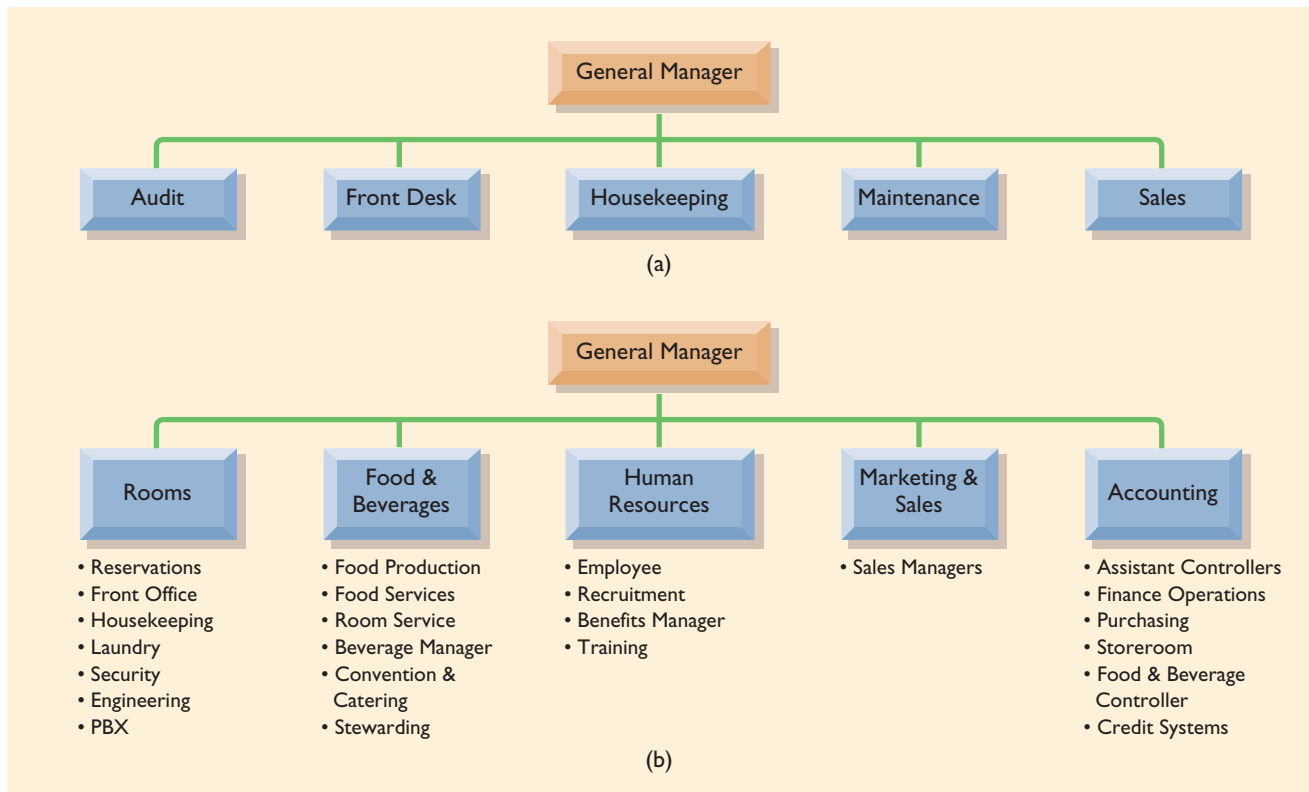
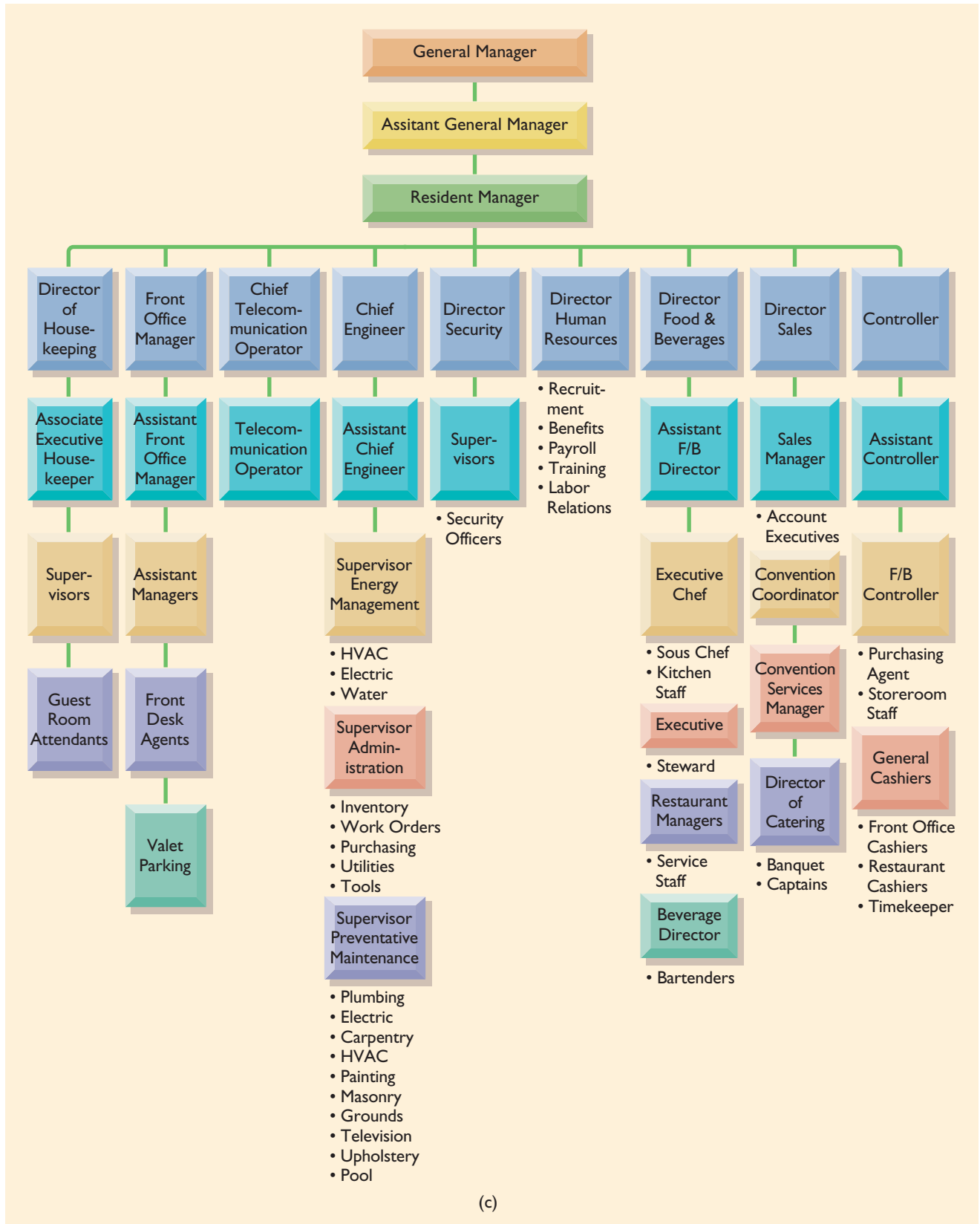


Illustration 1-8

Continued

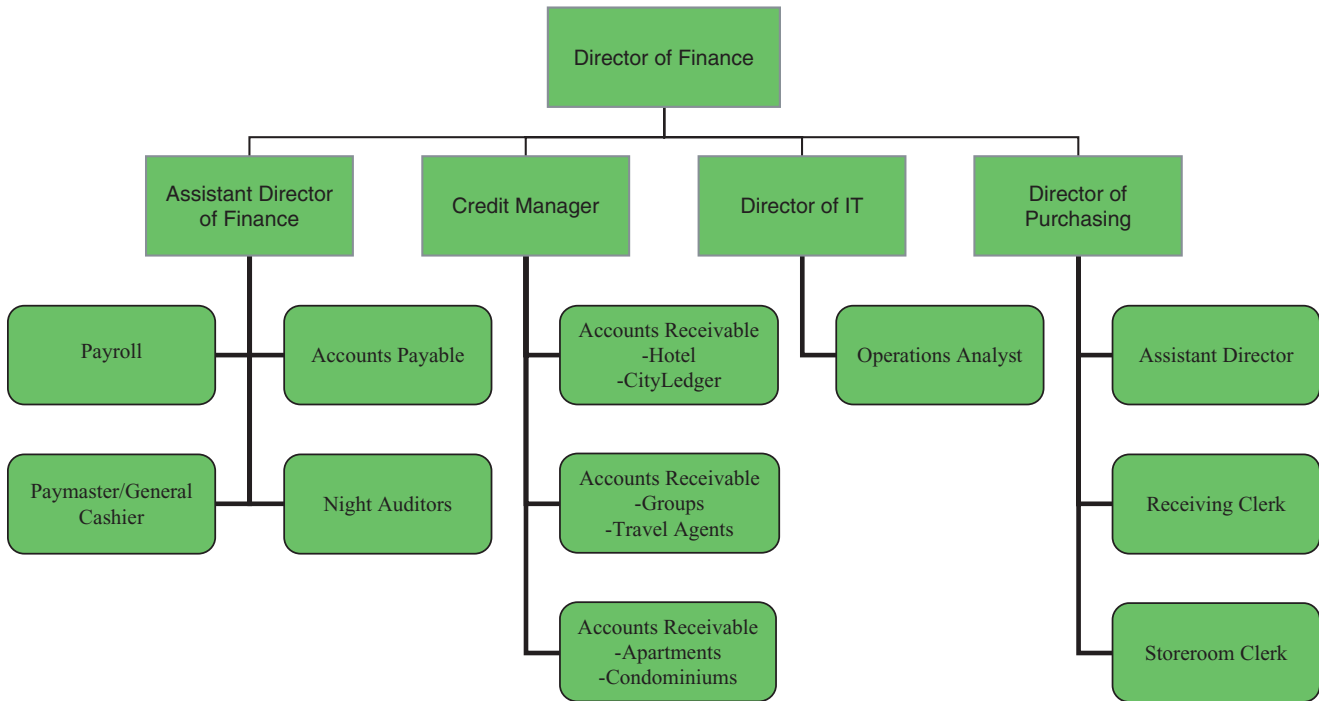


We are talking about thousands to millions of dollars. The exchange of cash for playing chips, the emptying of cash at slot machines and the table games, the issuing of credit to guests, and even the counting of coins and paper money have set procedures regulated by the hotels and by the law. Therefore, besides taking care of all the billing, cash, and payables of a regular hotel, the accounting functions in a casino hotel include managing all other revenue centers from all the games. This makes a controller’s function more interesting and challenging.

HOTEL ACCOUNTING DEPARTMENT ORGANIZATION

There are many users of accounting and financial information. It takes quite a bit of work to make sure that records are kept properly for all parties. Illustration 1-9 is an organizational chart of a full-service hotel. Some hotels may have a director of finance, whereas others may have a controller; some of the other functions may not exist in a hotel, such as a food and beverage department. For most limited-service hotels, the general manager may assume the function of the controller, or that function will be centralized at a district or regional office. Following is a short description of some of the accounting functions in a hotel.

Illustration 1-9
Accounting department organizational chart



Director of Finance

For some hotels, the position of controller has been elevated to director of finance, who is then also responsible not just for the accounting and purchasing functions but also for information technology. This individual sits on the executive committee of the hotel and works with the general manager and other executive committee members to make decisions for the operation.

Assistant Director of Finance

This is similar to the assistant controller. In a big hotel you may see one or a few assistant controllers. In smaller hotels, there may not be any. The controller divides the various functions to be performed so that the workload will be even. For ex-

ample, one assistant might be responsible for daily transactions, whereas another works on special projects, budgets, and the like.

Payroll

Payroll employees calculate the pay rate with the hours worked to generate the payroll register so that paychecks are released on time. Payroll functions also include filing all payroll taxes and tip credits for tipped employees, as well as keeping track of vacation pay, sick pay, and other payroll-related deductions.

Accounts Payable

A key area in accounting, accounts payable ensures that all bills are paid on time and that all discounts are taken, minimizing the costs of the hotel. Accounts payable clerks work closely with the purchasing department to verify that all invoices to be paid are indeed invoices of the hotel.

Paymaster/General Cashier

Pause for a minute and think how many cash banks there are in a large hotel: a few at the front office, at least one in each of the restaurant outlets, at least one in the gift shop, and so on. The general cashier, or the paymaster, is the person who is in charge of all the cash banks in the hotel. He or she also makes all deposits of checks and credit-card receipts.

Night Audits/Day Audits

Night auditors get their title because of the hours they work. At the end of the day, after most hotel guests have retired, these auditors begin recording charges to guests' accounts and verifying the revenue for the hotel. However, with computers and various technologies, the hotel industry can post charges instantaneously. Some hotels actually have changed night auditors to day auditors.

Credit Manager

A big hotel may have its own credit manager, whose function is to check and grant credit. In today's business world, many transactions are done on credit rather than cash or cashier checks. It is therefore the credit manager's responsibility to conduct investigations to ensure that a person or a company is creditworthy.

Accounts Receivable

Working under the credit manager are the accounts receivable (or A/R) clerks. Some A/R clerks are responsible for the guest ledger that is associated with the guests staying at the hotel, whereas other A/R clerks work with the city ledger, which contains all other billings. It is important that the accounting department have a person in accounts receivable working with the city ledger so that the hotel is able to bill and collect revenues due on a timely basis. Some hotels have a collection policy that states that for bills over a certain amount, for example, \$25,000, the invoice will be sent via express mail. In today's hotel industry, where mixed-used hotel development is becoming more common, there may be A/R clerks who work with the apartments and/or condominiums that are owned by the hotel.

Director of Information Technology

This position is still evolving in the hotel industry. While some information technology (IT) directors report to the director of finance, some report directly to the

general manager. They are in charge of all the property management systems and point-of-sales systems and their integration with call accounting or any other automated systems used in the hotel. Their scope of responsibility has grown in the past decade at the property level as the use of technology has become more prevalent. Especially in the past few years, when identity theft and data theft have crippled hotels in their operations and compromised the security of guests, the responsibility and importance of the IT directors also have increased. In smaller hotels, the controller or an assistant controller may take on this responsibility. Normally, this position is found at a district, regional, or corporate level.

Operations Analyst

This is a nice position to have in a hotel. An operations analyst performs analyses to help managers operate the hotel more effectively. From guests' statistics to revenue trends, the operations analyst does it all. However, not all hotels are able to afford an analyst on the payroll. If this is the case, an assistant controller often performs these duties. For smaller hotels that do not have an accounting office on the property, this function is done at the district or regional level.

Director of Purchasing

This person is often also known as the purchaser or the purchasing agent. He or she negotiates for and buys everything the hotel needs. Although on a daily basis it appears that all a hotel needs are food and beverage items, the fact is that there are many other items that need to be purchased new or replenished and replaced, from office supplies, to kitchen equipment, to bedding, furniture, decorative art items, and many more.

Receiving Clerk

When any purchased items come in, they should be delivered to the back dock area where the receiving clerks can check the delivered goods against the purchasing orders to ensure that only the proper items will be received and accounted for. More details of this function will be discussed in Chapters 9 and 10.

Storeroom Clerk

Once any goods are received, they are delivered either to the proper departments or to the storeroom to be kept until they are requisitioned by the departments. The storeroom clerk will ensure that the stock is being rotated. This is especially crucial for food items so that current products will be consumed first, before any new products that have just arrived.

FOODSERVICE OPERATIONS

The controller of an independent restaurant or a foodservice operation is similar to that of a food and beverage controller at a hotel. The difference is that the foodservice controller concentrates on only the food and beverage side, whereas a hotel controller oversees various departments of a hotel. Therefore, besides labor cost and overhead items, accounting and financial management in the foodservice business are focused on yield analysis, food and beverage cost control, and the purchasing function.

Purchasing and Yield Analysis

Foodservice operations purchase food, beverages, and other items on a day-to-day basis. In the case of food and beverage, because products are perishable, buying the

STUDY OBJECTIVE 10

Understand accounting and financial management in a foodservice operation and a club.

right amount of food, at the right quality, at the right time reduces the amount of cash tied in inventory. The extra cash then provides more liquidity to the business.

When buying food and beverage, yield is important. A good-quality piece of beef may have fewer trimmings, yielding the foodservice operation more meat products to be sold. A can of tomatoes may just look like another can. But if the controller performs a “can cutting” and compares the two brands, he or she might discover that one is better than the other, and the cost difference might work to the advantage of the operation.

Food and Beverage Cost Analysis

In general, for a restaurant or an operation that sells alcoholic beverages (liquor, beer, and wine), it is not unusual to have 15 to 30 percent of its total sales derived from beverages. This means that 70 to 85 percent of the sales are made from food items. For smaller restaurants and quick-service operations that do not sell alcoholic beverages, all revenue comes from food sales. Therefore, the accounting department spends a lot of time tracking food costs. This is especially important because foodservice operations use products where prices often fluctuate.

Restaurants and operations that sell alcoholic beverages also will track beverage costs and perform various analyses. Do not think for a minute that because beverage sales are only 15 percent of total sales they are not important. First, the restaurant business is a “penny” business. One needs to watch for any penny that is earned or spent; otherwise, the profit margin can easily disappear if the business is not managed wisely. More important, the markup of beverages is very high. A bottle of wine that can be purchased retail for \$15 can be sold at the restaurant for \$40 to \$60 depending on the type of restaurant.

Thus careful cost analysis provides foodservice operators with useful information for product purchasing and pricing to maximize profits while offering guests the products they prefer and enjoy. For those who are interested in the restaurant segment, please visit the [National Restaurant Association](http://www.restaurant.org) Web site at www.restaurant.org.

CLUB OPERATIONS

The club segment of the hospitality industry in North America is substantial. In every major city there are many country clubs. But clubs are not just country clubs. They also include city clubs, yacht clubs, racquet clubs, tennis clubs, other athletic clubs, military clubs, and university clubs. These private clubs are membership-only operations. In 2003, The Club Managers Association of America reported gross revenues of \$10.16 billion, employing over 260,000 people with a \$4 billion payroll. Since these clubs are restrictive of clientele, the way business is carried out, and thus the way accounting is performed, is quite different from the foodservice and hotel segments of the hospitality industry.

Membership Accounting

While hotels have rooms, food, beverage, and other miscellaneous revenues, and restaurants have food, beverage, and other revenues, clubs have all these and a unique revenue category—membership dues. Membership dues from country clubs often make up to 50 percent of a club’s revenue, whereas food and beverage percentage is about 35 percent, with other revenues of 15 percent or so rounding up the 100 percent. These other revenues can include athletic fees for guests, golf greens fees for guests, and sales of merchandise in pro shops and gift stores. In city clubs, food and beverage revenues often exceed that of membership, since golf membership is normally not provided in a city club environment. Membership revenues are the main source of funds needed for a club to run its operations.

Golf, Tennis, and Spas

Golf, tennis, and spas are three of the major athletic packages included in many club dues. Depending on the type of club, the initiation fees can run from \$10,000 to easily more than \$100,000. In certain clubs you need to be invited and sponsored by existing members before you are put on a waiting list to join. There are also various levels of membership. A full membership will entitle the member to play golf and tennis and use the athletic and spa facilities, whereas a social membership will permit the member to use only the food and beverage outlets.

The club accounting department needs to treat each of these outlets as a cost center, just like a gift shop or a restaurant in a hotel, determining the profit and loss of each area. This gives management the needed information to make sound operating decisions.

SUMMARY OF STUDY OBJECTIVES

1. Explain what accounting is. Accounting is an information system that identifies, records, and communicates the economic events of an organization to interested users.

2. Identify the users and uses of accounting. (a) Management uses accounting information in planning, controlling, and evaluating business operations. (b) Investors (owners) decide whether to buy, hold, or sell their financial interests on the basis of accounting data. (c) Creditors (suppliers and bankers) evaluate the risks of granting credit or lending money on the basis of accounting information. Other groups that use accounting information are taxing authorities, regulatory agencies, customers, labor unions, and economic planners.

3. Understand why ethics is a fundamental business concept. Ethics is the standards of conduct by which actions are judged as right or wrong. If you cannot depend on the honesty of the individuals you deal with, effective communication and economic activity would be impossible, and information would have no credibility.

4. Explain the meaning of generally accepted accounting principles and the cost principle. Generally accepted accounting principles are a common set of standards used by accountants. The cost principle states that assets should be recorded at their cost.

5. Explain the meaning of the monetary unit assumption and the economic entity assumption. The monetary unit assumption requires that only transaction data capable of being expressed in terms of money be included in the accounting records. The economic entity assumption requires that the activities of each economic entity be kept separate from the activities of its owners and other economic entities.

6. State the basic accounting equation; and explain the meaning of assets, liabilities, and stockholders' equity. The basic accounting equation is:

$$\text{Assets} = \text{liabilities} + \text{stockholders' equity}$$

Assets are resources owned by a business. Liabilities are creditorship claims on total assets. Stockholders' equity is the ownership claim on total assets.

7. Explain the accounting cycle and flow of information. The nine steps of the accounting cycle are transaction analysis, journalizing, posting, trial balance, adjustments, adjusted trial balance, closing, postclosing trial balance, and financial statements. Information flows from both the front and the back of the house, through point-of-sales systems, property management systems, and other means, to the accounting office.

8. Identify the various systems of accounting procedures used in the hospitality industry. There are currently three systems: The Uniform System of Accounts for the Lodging Industry, The Uniform System of Accounts for Restaurants, and The Uniform System of Financial Reporting for Clubs. Each has a long history, and their purpose is to provide users of financial information with comparable data and meaningful analyses.

9. Understand accounting and financial management in a hotel. Proper accounting and financial management of a hotel is crucial to its success. The chief accounting officer is known as the controller. The controller is part of the hotel's executive committee, which includes the general manager and all department heads. The controller interacts with all the department heads, assisting and consulting with them on all financial matters so each department head makes sound decisions.

10. Understand accounting and financial management in a foodservice operation and a club. The controller of a foodservice operation focuses on food, beverage, and labor costs. Food and beverage cost analyses are of particular importance due to the amount of money spent and the perishable nature of the products. The club industry is unique in that its customers are all members of the club. Members pay dues to the club and in return have a decision-making role in club operations. Members also spend money on food and beverage, merchandising, and other amenities. Therefore, a club controller must account for revenues by looking at different cost centers such as golf, tennis, spa, and food and beverages to provide solid information for management.



GLOSSARY

- Accounting** The information system that identifies, records, and communicates the economic events of an organization to interested users (p. 2).
- American Hotel and Lodging Association (AH&LA)** A trade association whose members are mostly hotels and lodging properties in the United States (p. 17).
- Assets** Resources owned by a business (p. 11).
- Basic accounting equation** $\text{Assets} = \text{liabilities} + \text{stockholders' equity}$ (p. 11).
- Bookkeeping** A part of accounting that involves only the recording of economic events (p. 6).
- Club Managers Association of America (CMAA)** A trade association whose members are mostly club managers in the United States (p. 16).
- Controller** The department head of the accounting department who has to work not only with the employees in the accounting and business office, but with all department heads (p. 18).
- Corporation** A business organized as a separate legal entity under state corporation law having ownership divided into transferable shares of stock (p. 10).
- Cost principle** An accounting principle that states that assets should be recorded at their cost (p. 9).
- Dividend** A distribution by a corporation to its stockholders on a pro rata (equal) basis (p. 13).
- Economic entity assumption** An assumption that requires that the activities of the entity be kept separate and distinct from the activities of its owners and all other economic entities (p. 10).
- Ethics** The standards of conduct by which one's actions are judged as right or wrong, honest or dishonest, fair or not fair (p. 8).
- Executive committee** The executive committee is made up of all the department heads of a hotel. This group comes together for meetings to make decisions and ensure all information is relayed correctly (p. 18).
- Expenses** The cost of assets consumed or services used in the process of earning revenue (p. 12).
- Financial accounting** The field of accounting that provides economic and financial information for investors, creditors, and other external users (p. 6).
- Financial Accounting Standards Board (FASB)** A private organization that establishes generally accepted accounting principles (p. 8).
- Generally accepted accounting principles (GAAP)** Common standards that indicate how to report economic events (p. 8).
- General manager** This person is the manager of the entire hotel. He or she manages the hotel through the various department heads (p. 18).
- Hospitality Financial and Technology Professionals (HFTP)** A membership-based organization for financial and technology professionals. Its aim is to provide continuing education, resources, certifications, information sharing, and networking opportunities for its membership. It also produces the HITEC trade show, the largest technology trade show for the hospitality industry worldwide (p. 16).
- Liabilities** Creditorship claims on total assets (p. 11).
- Managerial accounting** The field of accounting that provides economic and financial information for managers and other internal users (p. 6).
- Monetary unit assumption** An assumption stating that only transaction data that can be expressed in terms of money be included in the accounting records (p. 9).
- National Restaurant Association (NRA)** A trade association whose members are mostly restaurateurs and restaurant corporations in the United States (p. 23).
- Net income** The amount by which revenues exceed expenses (p. 13).
- Net loss** The amount by which expenses exceed revenues (p. 13).
- Partnership** An association of two or more persons to carry on as co-owners of a business for profit (p. 10).
- Proprietorship** A business owned by one person (p. 10).
- Revenues** The gross increase in stockholders' equity resulting from business activities entered into for the purpose of earning income (p. 12).
- Securities and Exchange Commission (SEC)** A governmental agency that requires companies to file financial reports in accordance with generally accepted accounting principles (p. 8).
- Stockholders' equity** The ownership claim on total assets of a corporation (p. 12).
- The Uniform System of Accounts for the Lodging Industry** A system of accounting guidelines and procedures developed for the use of hotel and lodging properties (p. 16).
- The Uniform System of Accounts for Restaurants** A system of accounting guidelines and procedures developed for the use of hotel and lodging properties (p. 16).
- The Uniform System of Financial Reporting for Clubs** A system of accounting guidelines and procedures developed for the use of various types of clubs (p. 16).

CHAPTER 1 APPENDIX *The Accounting Profession*

What would you do if you join the accounting profession? You probably would work in one of three major fields—public accounting, private accounting, or not-for-profit accounting.

PUBLIC ACCOUNTING

STUDY OBJECTIVE 11

Identify the three major fields of the accounting profession and potential accounting careers.

In **public accounting**, you would offer expert service to the general public in much the same way that a doctor serves patients and a lawyer serves clients. A major portion of public accounting practice involves **auditing**. In this area, a **certified public accountant (CPA)** examines the financial statements of companies and expresses an opinion as to the fairness of presentation. When the presentation is fair, users consider the statements to be **reliable**. For example, **PepsiCo** investors and creditors would demand audited financial statements before extending it financing.

Taxation is another major area of public accounting. The work performed by tax specialists includes tax advice and planning, preparing tax returns, and representing clients before governmental agencies such as the Internal Revenue Service.

A third area in public accounting is **management consulting**. It ranges from installing basic accounting systems to helping companies determine whether they should use the space shuttle for high-tech research and development projects.

PRIVATE ACCOUNTING

Instead of working in public accounting, you might choose to be an employee of a business enterprise. In **private (or managerial) accounting**, you would be involved in one of the following activities.

1. **General accounting**—recording daily transactions and preparing financial statements and related information.
2. **Cost accounting**—determining the cost of producing specific products.
3. **Budgeting**—assisting management in quantifying goals concerning revenues, costs of goods sold, and operating expenses.
4. **Accounting information systems**—designing both manual and computerized data processing systems.
5. **Tax accounting**—preparing tax returns and engaging in tax planning for the company.
6. **Internal auditing**—reviewing the company's operations to determine compliance with management policies and evaluating the efficiency of operations.

You can see that within a specific company, private accountants perform as wide a variety of duties as the public accountant.

Illustration 1A-1 presents the general career paths in public and private accounting.

NOT-FOR-PROFIT ACCOUNTING

Like businesses that exist to make a profit, not-for-profit organizations also need sound financial reporting and control. Donors to such organizations as the **Coca-Cola Foundation**, the **Conrad N. Hilton Foundation**, and the **Red Cross** want information about how well the organization has met its objectives and whether continued support is justified. Hospitals, colleges, and universities must make decisions about the allocation of funds. Local, state, and federal governmental units provide financial information to legislators, citizens, employees, and creditors. At the federal level, the largest employers of accountants are the **Internal Revenue Service**, the **General Accounting Office**, the **Federal Bureau of Investigation**, and the **Securities and Exchange Commission**.

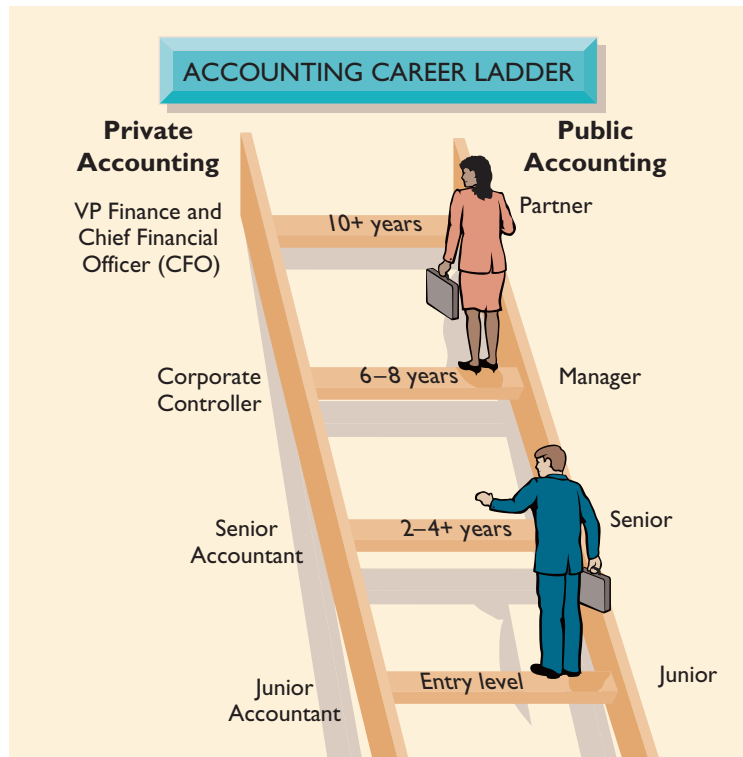


Illustration 1A-1

Career paths in public and private accounting

SUMMARY OF STUDY OBJECTIVE FOR APPENDIX

11. Identify the three major fields of the accounting profession and potential accounting careers. The accounting profession comprises three major fields: public accounting, private accounting, and not-for-profit accounting. In public accounting one may pursue a career in auditing, taxation, or management consulting. In private or managerial accounting,

one may pursue a career in cost accounting, budgeting, general accounting, accounting information systems, tax accounting, or internal auditing. In not-for-profit accounting one may pursue a career at hospitals, universities, and foundations or in local, state, and federal governmental units.

GLOSSARY FOR APPENDIX

Auditing The examination of financial statements by a certified public accountant in order to express an opinion as to the fairness of presentation (p. 26).

Management consulting An area of public accounting involving financial planning and control and the development of accounting and computer systems (p. 26).

Private (or managerial) accounting An area of accounting within a company that involves such activities as cost

accounting, budgeting, and accounting information systems (p. 26).

Public accounting An area of accounting in which the accountant offers expert service to the general public (p. 26).

Taxation An area of public accounting involving tax advice, tax planning, and preparation of tax returns (p. 26).

EXERCISES

1-1 Presented below is the basic accounting equation. Determine the missing amounts.

Use basic accounting equation.
(SO 6)

	<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Stockholders' Equity</u>
(a)	\$120,000		\$50,000		?
(b)	?		\$45,000		\$126,000
(c)	\$100,000		?		\$58,000

Use basic accounting equation. (SO 6)

- 1-2** Given the accounting equation, answer each of the following questions.
- The liabilities of Frank's Smoothies are \$120,000, and the stockholders' equity is \$325,000. What is the amount of Frank's total assets?
 - The total assets of Gina Pizza are \$360,000, and its stockholders' equity is \$210,000. What is the amount of its total liabilities?
 - The total assets of Ralph Salads Co. are \$700,000, and its liabilities are equal to one-half its total assets. What is the amount of Ralph Salads' stockholders' equity?

Use basic accounting equation. (SO 6)

- 1-3** At the beginning of the year, Rita Pasta Company had total assets of \$780,000 and total liabilities of \$400,000. Answer the following questions.
- If total assets increased \$125,000 during the year and total liabilities decreased \$50,000, what is the amount of stockholders' equity at the end of the year?
 - During the year, total liabilities increased \$100,000, and stockholders' equity decreased \$50,000. What is the amount of total assets at the end of the year?
 - If total assets decreased \$90,000 and stockholders' equity increased \$130,000 during the year, what is the amount of total liabilities at the end of the year?

Determine effect of transactions on basic accounting equation. (SO 7)

- 1-4** Classify each of the following items as asset (A), liability (L), revenue (R), or expense (E).
- | | |
|------------------------------------|--------------------------|
| ___ (a) Food inventory | ___ (e) Taxes payable |
| ___ (b) Rooms revenue | ___ (f) Rent expense |
| ___ (c) Salaries and wages expense | ___ (g) Beverage revenue |
| ___ (d) Property management system | ___ (h) Cash |

Classify various items. (SO 6, 7)

- 1-5** Sunny's Noodles has the following balance sheet items.
- | | |
|-------------------|---------------------|
| Accounts payable | Accounts receivable |
| Insurance expense | Taxes payable |
| Wages expense | Food inventory |
| Cash | Kitchen equipment |

Instructions

Classify each item as an asset, liability, or stockholders' equity.

List the steps of an accounting cycle. (SO 7)

- 1-6** From 1 to 9, arrange the following steps of the accounting cycle in order:
- ___ Posting
 - ___ Financial statements
 - ___ Transaction analysis
 - ___ Closing entries
 - ___ Postclosing trial balance
 - ___ Trial balance
 - ___ Adjusted trial balance
 - ___ Journalizing
 - ___ Adjustments

Understand the steps of an accounting cycle. (SO 7)

- 1-7** In which step of the accounting cycle will one compile the income statement, the retained earnings statement, and the balance sheet?

Understand the Uniform Systems of Accounts. (SO 8)

- 1-8** Indicate whether each of the following statements is true (T) or false (F).
- ___ The Uniform System of Accounts for the Gaming Industry is a joint effort of the Nevada and New Jersey governments.
 - ___ The Hospitality Financial and Technology Professionals is the sponsor for the first edition of the Uniform System of Financial Reporting for Spas.
 - ___ The Hospitality Financial and Technology Professionals is also the sponsor for the latest edition (10th) of the Uniform System of Accounts for the Lodging Industry.

Understand the organizational structure of a hotel accounting department. (SO 9)

- 1-9** Indicate whether each of the following statements is true (T) or false (F) in a hotel accounting department.
- ___ The night auditors get their name because of the long hours they work.
 - ___ There is no difference between a city ledger and a guest ledger.

_____ Smaller hotels may not have a credit manager on staff because that function may be at a district, regional, or even corporate level.

1-10 Indicate whether each of the following statements is true (T) or false (F) in the foodservice or club environment.

_____ Purchasing and yield analysis are the two most important items for a foodservice operations that are related to accounting.

_____ It is important to track food cost and beverage cost separately.

_____ In 2003, CMAA reported that the club industry employed over 260,000 employees.

Understand account classifications in the foodservice and club businesses. (SO 10)

FINANCIAL REPORTING PROBLEM: PepsiCo

1-11 The actual financial statements of **PepsiCo**, as presented in the company's 2006 Annual Report, are contained in Appendix A (at the back of the textbook).

Instructions

Refer to PepsiCo's financial statements and answer the following questions:

- What were PepsiCo's total assets on December 30, 2006? On December 31, 2005?
- How much cash (and cash equivalents) did PepsiCo have on December 30, 2006?
- What amount of accounts payable and other current liabilities did PepsiCo report on December 30, 2006? On December 31, 2005?
- What were PepsiCo net sales in 2004? In 2005? In 2006?
- What is the amount of the change in PepsiCo's net income from 2005 to 2006?



EXPLORING THE WEB

1-12 This exercise will familiarize you with skill requirements, job descriptions, and salaries for accounting careers.

Address: www.careers-in-accounting.com

Instructions

Go to the site shown above. Answer the following questions:

- What are the three broad areas of accounting (from "Skills and Talents")?
- List eight skills required in accounting.
- How do the three accounting areas differ in terms of these eight required skills?
- Explain one of the key job functions in accounting.
- Based on the *Smart Money* survey, what is the salary range for a junior staff accountant with Deloitte & Touche?



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

ACCOUNTING PRINCIPLES



THE NAVIGATOR

- Understand *Concepts for Review*

- Read *Feature Story*

- Scan *Study Objectives*

- Read *Preview*

- Read text and answer *Before You Go On*
p. 36 p. 43 p. 51 p. 55
p. 57

- Work *Demonstration Problems*

- Review *Summary of Study Objectives*

- Complete *Assignments*

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. The two organizations primarily responsible for setting accounting standards. (Ch. 1, pp. 8–9)
- b. The monetary unit assumption and the economic entity assumption. (Ch. 1, pp. 9–10)
- c. The cost principle. (Ch. 1, p. 9)

F E A T U R E S T O R Y

Certainly Worth Investigating!

It is often difficult to determine in what period some revenues and expenses should be reported. There are rules that give guidance; but occasionally, these rules are overlooked, misinterpreted, or even intentionally ignored. Consider the following examples.

- **Policy Management Systems**, which makes insurance software, said that it reported some sales before contracts were signed or products delivered.
- **Sunbeam Corporation**, while under the control of the (in)famous “Chainsaw” Al Dunlap, prematurely booked revenues and recorded overly large restructuring charges. Ultimately, the company was forced to restate its net income figures, and Mr. Dunlap lost his job.
- **Rent-Way, Inc.**, which owns a large chain of rent-to-own stores,

saw its share price plummet from \$23.44 down to \$5 within a week after it disclosed what the company termed “fictitious” accounting entries on its books. These entries included improper accounting for fixed-asset write-offs and understating the amount of damaged or missing merchandise.

Often in cases such as these, the company’s stockholders sue the company because of the decline in the stock price owing to disclosure of the misinformation. In light of this eventuality, why might management want to report revenues or expenses in the wrong period? Company managers are under intense pressure to report higher earnings every year. If

actual performance falls short of expectations, management might be tempted to bend the rules.

One analyst suggests that investors and auditors should be suspicious of sharp increases in monthly sales at the end of each quarter or big jumps in fourth-quarter sales. Such events don’t always mean management is cheating, but they are certainly worth investigating.



S T U D Y O B J E C T I V E S

After studying this chapter, you should be able to

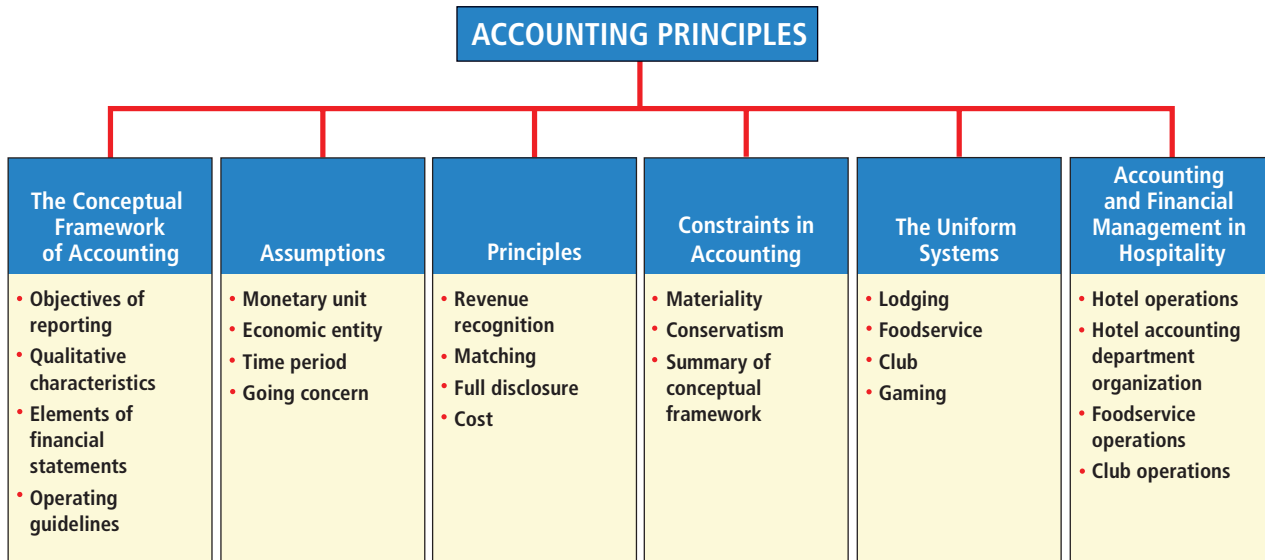
1. Explain the meaning of generally accepted accounting principles and identify the key items of the conceptual framework.
2. Describe the basic objectives of financial reporting.
3. Discuss the qualitative characteristics of accounting information and elements of financial statements.
4. Identify the basic assumptions used by accountants.
5. Identify the basic principles of accounting.
6. Identify the two constraints in accounting.
7. Explain the accounting principles used in international operations.
8. Analyze the effects of business transactions on the basic accounting equation.
9. Understand what the four financial statements are and how they are prepared.



PREVIEW OF CHAPTER 2

As indicated in the Feature Story, it is important that general guidelines be available to resolve accounting issues. Without these basic guidelines, each enterprise would have to develop its own set of accounting practices. If this happened, we would have to become familiar with every company's peculiar accounting and reporting rules in order to understand their financial statements. It would be difficult, if not impossible, to compare the financial statements of different companies. This chapter explores the basic accounting principles used in developing specific accounting guidelines. The Uniform Systems of Accounts used in hospitality accounting reporting is also discussed.

The content and organization of Chapter 2 are as follows:



THE CONCEPTUAL FRAMEWORK OF ACCOUNTING

STUDY OBJECTIVE 1

Explain the meaning of generally accepted accounting principles and identify the key items of the conceptual framework.

What you have learned up to this point in the book is a process that leads to the preparation of financial reports about a company. These are the company's financial statements. This area of accounting is called **financial accounting**. The accounting profession has established a set of standards and rules that are recognized as a general guide for financial reporting. This recognized set of standards is called **generally accepted accounting principles (GAAP)**. *Generally accepted* means that these principles must have "substantial authoritative support." Such support usually comes from two standard-setting bodies: the Financial Accounting Standards Board (FASB) and the Securities and Exchange Commission (SEC).¹

¹The SEC is an agency of the U.S. government that was established in 1933 to administer laws and regulations relating to the exchange of securities and the publication of financial information by U.S. businesses. The agency has the authority to mandate generally accepted accounting principles for companies under its jurisdiction. However, throughout its history, the SEC has been willing to accept the principles set forth by the FASB and similar bodies.

Since the early 1970s, the business and governmental communities have given the FASB the responsibility for developing accounting principles in the United States. This is an ongoing process; accounting principles change to reflect changes in the business environment and in the needs of users of accounting information.

Prior to the establishment of the FASB, accounting principles were developed on a problem-by-problem basis. Rule-making bodies developed accounting rules and methods to solve specific problems. Critics charged that the problem-by-problem approach led over time to inconsistent rules and practices. No clearly developed conceptual framework of accounting existed to refer to in solving new problems.

In response to these criticisms, the FASB developed a **conceptual framework**. It serves as the basis for resolving accounting and reporting problems. The FASB spent considerable time and effort on this project. The board views its conceptual framework as “a constitution, a coherent system of interrelated objectives and fundamentals.”²

The FASB’s conceptual framework consists of four items:

1. Objectives of financial reporting
2. Qualitative characteristics of accounting information
3. Elements of financial statements
4. Operating guidelines (assumptions, principles, and constraints)

We will discuss these items on the following pages.

HELPFUL HINT

Accounting principles are affected by economic and political conditions that change over time. As a result, accounting principles are not cut into stone like the periodic table in chemistry or a formula in math.

ACCOUNTING IN ACTION *International Insight*



Different political and cultural influences affect the accounting that occurs in foreign countries. For example, in Sweden, accounting is considered an instrument to be used to shape fiscal policy. In Europe, generally, more emphasis is given to social reporting (more information on employment statistics, health of workers, and so on) than in the United States. European labor organizations are strong and demand that type of information from management.



OBJECTIVES OF FINANCIAL REPORTING

The FASB began to work on the conceptual framework by looking at the objectives of financial reporting. Determining these objectives required answers to such basic questions as Who uses financial statements? Why? What information do they need? How knowledgeable about business and accounting are financial statement users? How should financial information be reported so that it is best understood?

In answering these questions, the FASB concluded that financial reporting should have three objectives:

1. The information is useful to those making investment and credit decisions.
2. The financial reports are helpful in assessing future cash flows.
3. The economic resources (assets), the claims to those resources (liabilities), and the changes in those resources and claims are clearly identified.

The FASB then undertook to describe the characteristics that make accounting information useful.

STUDY OBJECTIVE 2

Describe the basic objectives of financial reporting.

²“Conceptual Framework for Financial Accounting and Reporting: Elements of Financial Statements and Their Measurement,” *FASB Discussion Memorandum* (Stamford, CT: 1976), p. 1.

STUDY OBJECTIVE 3

Discuss the qualitative characteristics of accounting information and elements of financial statements.

HELPFUL HINT

What makes accounting information relevant? Answer: Relevant accounting information provides feedback, serves as a basis for predictions, and is timely (current).

HELPFUL HINT

What makes accounting information reliable? Answer: Reliable accounting information is free of error and bias and is factual, verifiable, and neutral.

QUALITATIVE CHARACTERISTICS OF ACCOUNTING INFORMATION

How does a company like the **Club Corporation of America** decide on the amount of financial information to disclose? In what format should its financial information be presented? How should assets, liabilities, revenues, and expenses be measured? The FASB concluded that the overriding criterion for such accounting choices is **decision usefulness**. The accounting practice selected should be the one that generates the most useful financial information for making a decision. To be useful, information should possess the following qualitative characteristics: relevance, reliability, comparability, and consistency.

Relevance

Accounting information has **relevance** if it makes a difference in a decision. Relevant information has either predictive or feedback value or both. **Predictive value** helps users forecast future events. For example, when **Four Seasons Hotels & Resorts** issues financial statements, the information in them is considered relevant because it provides a basis for predicting future earnings. **Feedback value** confirms or corrects prior expectations. When **Four Seasons** issues financial statements, it confirms or corrects prior expectations about the financial health of the company.

In addition, accounting information has relevance if it is **timely**. It must be available to decision makers before it loses its capacity to influence decisions. If **Four Seasons** reported its financial information only every five years, the information would be of limited use in decision making.

Reliability

Reliability of information means that the information is free of error and bias. In short, it can be depended on. To be reliable, accounting information must be **verifiable**: We must be able to prove that it is free of error and bias. It also must be a **faithful representation** of what it purports to be: It must be factual. If the **Felcor Lodging Trust** balance sheet reports assets of \$8 billion when it had assets of \$51 billion, then the statement is not a faithful representation. Finally, accounting information must be **neutral**: It cannot be selected, prepared, or presented to favor one set of interested users over another. To ensure reliability, certified public accountants audit financial statements.

Comparability

Accounting information about an enterprise is most useful when it can be compared with accounting information about other enterprises. **Comparability** results when different companies use the same accounting principles. For example, **Accor** and **Adam's Mark** use the cost principle in reporting plant assets on the balance sheet. Also, each company uses the revenue recognition and matching principles in determining its net income.

Conceptually, comparability also should extend to the methods used by companies in complying with an accounting principle. Accounting methods include the first-in, first-out (FIFO) and last-in, first-out (LIFO) methods of inventory costing and various depreciation methods. At this point, comparability of methods is not required, even for companies in the same industry. Thus **LaQuinta Inns and Suites** and **Choice Hotels International** may use different inventory costing and depreciation methods in their financial statements. The only accounting requirement is that each company **must disclose** the accounting methods used. From the

disclosures, the external user can determine whether the financial information is comparable.

Consistency

Consistency means that a company uses the same accounting principles and methods from year to year. If a company selects FIFO as the inventory costing method in the first year of operations, it is expected to use FIFO in succeeding years. When financial information has been reported on a consistent basis, the financial statements permit meaningful analysis of trends within a company.

A company *can* change to a new method of accounting. To do so, management must justify that the new method results in more meaningful financial information. In the year in which the change occurs, the change must be disclosed in the notes to the financial statements. Such disclosure makes users of the financial statements aware of the lack of consistency.

ACCOUNTING IN ACTION *Business Insight*



There is a classic story that professors often tell students about a company looking for an accountant. The company approached the first accountant and asked, “What do you believe our net income will be this year?” The accountant said, “Four million dollars.” The company asked the second accountant the same question, and the answer was, “What would you like it to be?” Guess who got the job?

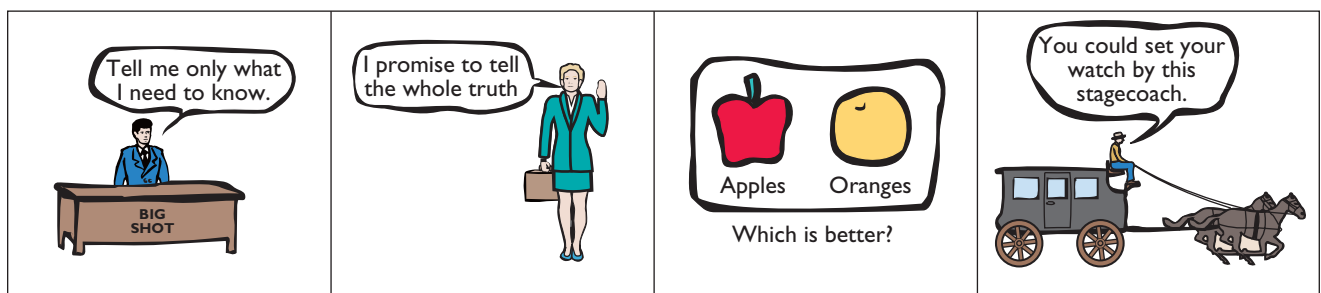
The reason we tell the story here is that because accounting principles offer flexibility, it is important that a consistent treatment be provided from period to period. Otherwise, it would be very difficult to interpret financial statements. Perhaps *no* alternative methods should be permitted in accounting. What do you think?

	Y.T.D.	%	SEPT. 02
NUMBER OF ROOMS	86		86
THIS MTHS AVAIL. OF ROOMS	8077		2224
ROOMS SOLD	4630		1298
PERCENT. OF OCCUPANCY	57.3%	57.3%	58.4%
NET AVERAGE ROOM RATE	85.73		82.03
REVENUE			
ROOMS	396,923	26.9%	105,470
FOOD	753,794	51.1%	185,152
BEVERAGES	52,743	4.3%	15,000
GIFT SHOP	23,045	1.6%	7,699
PUBLIC ROOM RENTALS	118,081	8.0%	34,103
AUDIO & VIDEO	40,604	2.8%	10,051
TELEPHONE	4,608		1,748
GARAGE	62,217		20,489
COPY, FAX	12,305		3,800
VALET, DECRTN, PIANO ETC	1,653		559
OTHER INCOME - TOTAL	80,783	5.5%	26,595
TOTAL NET INCOME	1,475,972	100.0%	396,070

The qualitative characteristics of accounting information are summarized in Illustration 2-1.

Illustration 2-1

Characteristics of useful information



Relevance

1. Provides a basis for forecasts
2. Confirms or corrects prior expectations
3. Is timely

Reliability

1. Is verifiable
2. Is a faithful representation
3. Is neutral

Comparability

Different companies use similar accounting principles

Consistency

Company uses same accounting methods from year to year

ELEMENTS OF FINANCIAL STATEMENTS

An important part of the accounting conceptual framework is a set of definitions that describe the basic terms used in accounting. The FASB refers to this set of definitions as the **elements of financial statements**. They include such terms as *assets, liabilities, equity, revenues, and expenses*.

Because these elements are so important, it is crucial that they be precisely defined and universally applied. Finding the appropriate definition for many of these elements is not easy. For example, should the value of a company's employees be reported as an asset on a balance sheet? Should the death of the company's president be reported as a loss? A good set of definitions should provide answers to these types of questions. Because you have already encountered most of these definitions in Chapter 1, they are not repeated here.

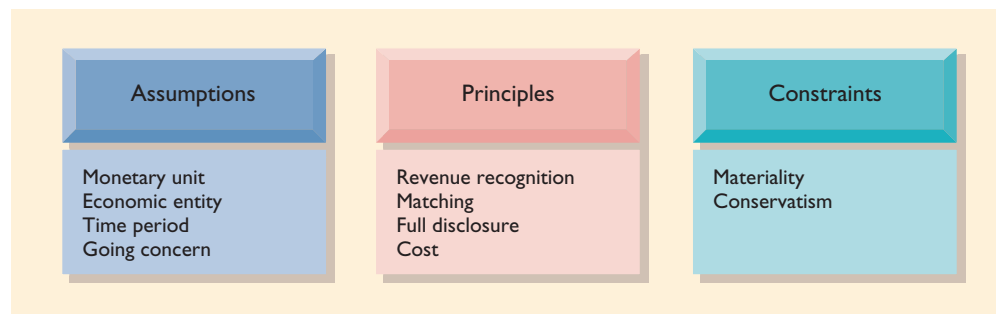
OPERATING GUIDELINES

The objectives of financial reporting, the qualitative characteristics of accounting information, and the elements of financial statements are very broad. Because practicing accountants must solve practical problems, more detailed guidelines are needed. In its conceptual framework, the FASB recognized the need for operating guidelines. We classify these guidelines as assumptions, principles, and constraints. These guidelines are well established and accepted in accounting.

Assumptions provide a foundation for the accounting process. **Principles** are specific rules that indicate how economic events should be reported in the accounting process. **Constraints** on the accounting process allow for a relaxation of the principles under certain circumstances. Illustration 2-2 provides a roadmap of the operating guidelines of accounting. These guidelines (some of which you know from Chapter 1) are discussed in more detail in the following sections.

Illustration 2-2

The operating guidelines of accounting



BEFORE YOU GO ON...

▶ REVIEW IT

1. What are generally accepted accounting principles?
2. What is stated about generally accepted accounting principles in the Report of Independent Public Accountants for **PepsiCo**?
3. What are the basic objectives of financial information?
4. What are the qualitative characteristics that make accounting information useful? Identify two elements of the financial statements.



STUDY OBJECTIVE 4

Identify the basic assumptions used by accountants.

ASSUMPTIONS

As noted earlier, assumptions provide a foundation for the accounting process. Following are definitions of four basic accounting assumptions.

MONETARY UNIT ASSUMPTION

The **monetary unit assumption** states that only transaction data that can be expressed in terms of money should be included in the accounting records. For example, the value of a company president is not reported in a company's financial records because it cannot be expressed easily in dollars.

An important corollary to the monetary unit assumption is the assumption that the unit of measure remains relatively constant over time. This point will be discussed in more detail later in this chapter.

ECONOMIC ENTITY ASSUMPTION

The **economic entity assumption** states that the activities of the entity should be kept separate and distinct from the activities of the owners and of all other economic entities. For example, it is assumed that the activities of **Peabody Hotel Group** can be distinguished from those of other companies, such as **Cendant, Forte Hotels**, and **John Q. Hammons Hotels**.

TIME PERIOD ASSUMPTION

The **time period assumption** states that the economic life of a business can be divided into artificial time periods. Thus it is assumed that the activities of business enterprises such as **MeriStar Hotels and Resorts, Ameri Suites, Carlson Hospitality**, or any enterprise can be subdivided into months, quarters, or a year for meaningful financial reporting purposes.

GOING CONCERN ASSUMPTION

The **going concern assumption** assumes that the enterprise will continue in operation long enough to carry out its existing objectives. Despite numerous business failures, companies have a fairly high continuance rate. It has proved useful to adopt a going concern assumption for accounting purposes.

The accounting implications of this assumption are critical. If a going concern assumption is not used, then plant assets should be stated at their liquidation value (selling price less cost of disposal)—not at their cost. In that case, depreciation and amortization of these assets would not be needed. Each period, these assets simply would be reported at their liquidation value. Also, without this assumption, the current–noncurrent classification of assets and liabilities would not matter. Labeling anything as “long term” would be difficult to justify.

Acceptance of the going concern assumption gives credibility to the cost principle. Only when liquidation appears imminent is the going concern assumption inapplicable. In that case, assets would be better stated at liquidation value than at cost.

These basic accounting assumptions are illustrated graphically in Illustration 2-3 on the next page.

INTERNATIONAL NOTE

In an action that sent shock waves through the French business community, the CEO of Alcatel-Alsthom was taken into custody for an apparent violation of the economic entity assumption. Allegedly, the executive improperly used company funds to install an expensive security system in his home.

HELPFUL HINT

(1) Which accounting assumption assumes that an enterprise will remain in business long enough to recover the cost of its assets? (2) Which accounting assumption is justification for the cost principle? Answers: (1) and (2) Going concern assumption.

PRINCIPLES

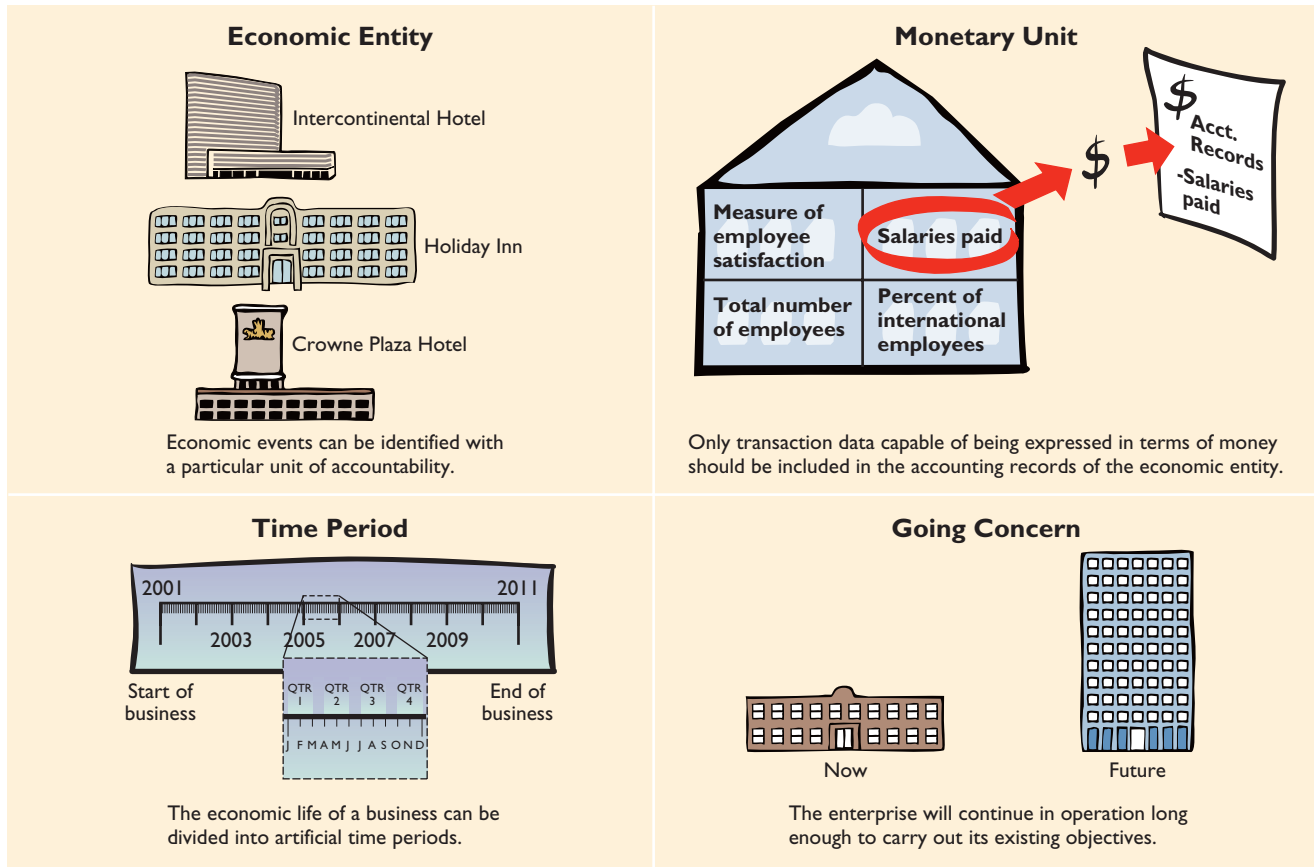
On the basis of the fundamental assumptions of accounting, the accounting profession has developed principles that dictate how economic events should be recorded and reported. In Chapter 1 we discussed the cost principle, and we will also discuss the revenue recognition and matching principles in Chapter 4. Here, we examine a number of reporting issues related to these principles. In addition, we introduce another principle, the full disclosure principle.

STUDY OBJECTIVE 5

Identify the basic principles of accounting.

Illustration 2-3

Assumptions used in accounting



REVENUE RECOGNITION PRINCIPLE

The **revenue recognition principle** dictates that revenue should be recognized in the accounting period in which it is earned. But applying this general principle in practice can be difficult. Some companies improperly recognize revenue on goods that have not been shipped to customers. Similarly, until recently, financial institutions immediately recorded a large portion of their loan fees as revenue rather than spreading those fees over the life of the loan.

When a sale is involved, revenue is recognized at the point of sale. This **sales basis** involves an exchange transaction between the seller and the buyer. The sales price is an objective measure of the amount of revenue realized. However, two exceptions to the sales basis for revenue recognition have become generally accepted—the percentage-of-completion method and the installment method. These methods are left for more advanced courses.

MATCHING PRINCIPLE (EXPENSE RECOGNITION)

Expense recognition traditionally is tied to revenue recognition: "Let the expense follow the revenue." As you will learn in Chapter 4, this practice is referred to as the **matching principle**. It dictates that expenses be matched with revenues in the period in which efforts are made to generate revenues. Expenses are not recognized when cash is paid, or when the work is performed, or when the product is produced. Rather, they are recognized when the labor (service) or the product actually makes its contribution to revenue.

HELPFUL HINT

Revenue should be recognized in the accounting period in which it is earned. This may not be the period in which the related cash is received. In a retail establishment, the point of sale is often the critical point in the process of earning revenue.

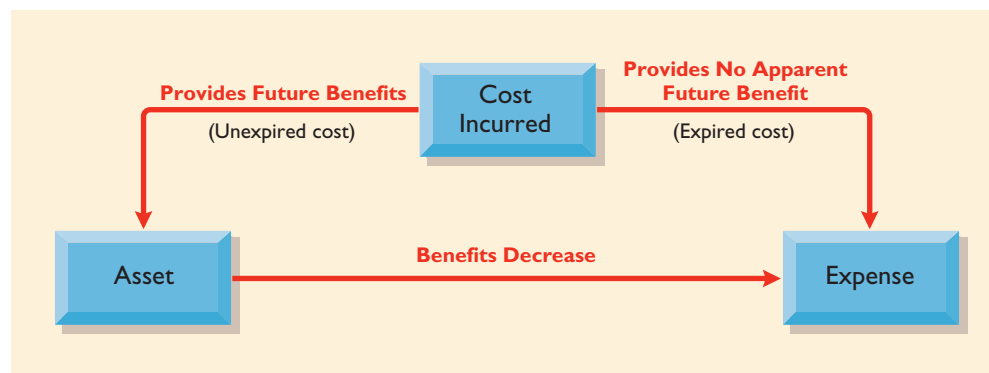
But, it is sometimes difficult to determine the accounting period in which the expense contributed to revenues. Several approaches have therefore been devised for matching expenses and revenues on the income statement.

To understand these approaches, you need to understand the nature of expenses. Costs are the source of expenses. Costs that will generate revenues only in the current accounting period are expensed immediately. They are reported as **operating expenses** in the income statement. Examples include costs for advertising, sales salaries, and repairs. These expenses are often called **expired costs**.

Costs that will generate revenues in future accounting periods are recognized as assets. Examples include merchandise inventory, prepaid expenses, and plant assets. These costs represent **unexpired costs**. Unexpired costs become expenses in two ways:

1. **Cost of goods sold.** Costs carried as merchandise inventory become expenses when the inventory is sold. They are expensed as cost of goods sold in the period when the sale occurs. Thus, there is a direct matching of expenses with revenues.
2. **Operating expenses.** Other unexpired costs become operating expenses through use or consumption (as in the case of store supplies) or through the passage of time (as in the case of prepaid insurance). The costs of plant assets and other long-lived resources are expensed through rational and systematic allocation methods—periodic depreciation or amortization. Operating expenses contribute to the revenues for the period, but their association with revenues is less direct than for cost of goods sold.

These points about expense recognition are illustrated in Illustration 2-4.



HELPFUL HINT

Costs become expenses when they are charged against revenue.

ETHICS NOTE

Many appear to do it, but few like to discuss it: It's earnings management, and it's a clear violation of the revenue recognition and matching principles. Banks sometimes time the sale of investments or the expensing of bad debts to accomplish earnings objectives. Prominent companies have been accused of matching one-time gains with one-time charge-offs so that current-period earnings are not so high that they can't be surpassed next period.

Illustration 2-4

Expense recognition pattern

ACCOUNTING IN ACTION *Business Insight*



Implementing expense recognition guidelines can be difficult. Consider, for example, **Harold's Club** (a gambling casino) in Reno, Nevada. How should it report expenses related to the payoff of its progressive slot machines? Progressive slot machines, which generally have no ceiling on their jackpots, provide a lucky winner with all the money that many losers had previously put in. Payoffs tend to be huge but infrequent. At Harold's, the progressive slots pay off on average every 4½ months.

The basic accounting question is: Can Harold's deduct the millions of dollars sitting in its progressive slot machines from the revenue recognized at the end of the accounting period? One might argue that no, you cannot deduct the money until the "winning handle pull." However, a winning handle pull might not occur for many months or even years. Although an estimate would have to be used, the better answer is to match these costs with the revenue recognized, assuming that an average 4½ months' payout is well documented.

What accounting principles are applicable to the Harold's Club progressive slot machines? If Harold's fails to use an estimate for expenses, what effect will this have on financial statements in a period when no payouts occur?



FULL DISCLOSURE PRINCIPLE

The **full disclosure principle** requires that circumstances and events that make a difference to financial statement users be disclosed. For example, most accountants would agree that hospitality companies should disclose any liability suits pending against them. Interested parties would want to be made aware of this contingent loss. Similarly, it is generally agreed that companies should disclose the major provisions of employee pension plans and long-term lease contracts.

Compliance with the full disclosure principle occurs through the data in the financial statements and the information in the notes that accompany the statements. The first note in most cases is a **summary of significant accounting policies**. It includes, among others, the methods used for inventory costing, depreciation of plant assets, and amortization of intangible assets.

Deciding how much disclosure is enough can be difficult. Accountants could disclose every financial event that occurs and every contingency that exists. But the benefits of providing additional information in some cases may be less than the costs of doing so. Many companies complain of an accounting standards overload. They also object to requirements that force them to disclose confidential information. Determining where to draw the line on disclosure is not easy.

One thing is certain: Financial statements were much simpler years ago. In 1930, **General Electric** had no notes to its financial statements. Today, it has more than twenty pages of notes! Why this change? A major reason is that the objectives of financial statements have changed. In the past, information was generally presented on what the business had done. Today, the objectives of financial reporting are more future-oriented. The goal is to provide information that makes it possible to predict the amounts, timing, and uncertainty of future cash flows.



ACCOUNTING IN ACTION Business Insight



Some accountants are reconsidering the current means of financial reporting. They propose a database concept of financial reporting. In such a system, all the information from transactions would be stored in a computerized database to be instantly accessed by various user groups. The main benefit of such a system is the ability to tailor the information requested to the needs of each user on a real-time basis.

What makes this idea controversial? Discussion currently revolves around access and aggregation issues. Questions abound: “Who should be allowed to make inquiries of the system?” “What is the lowest/smallest level of information to be provided?” “Will such a system necessarily improve on the current means of disclosure?” Such questions must be answered before database financial accounting can be implemented on a large scale.

Would instant access to financial information provide more relevant information? Do you think such an approach would do away with the need for annual reports?

COST PRINCIPLE

The **cost principle** dictates that assets be recorded at their cost. Cost is used because it is both relevant and reliable. Cost is **relevant** because it represents the price paid, the assets sacrificed, or the commitment made at date of acquisition. Cost is **reliable** because it is objectively measurable, factual, and verifiable. It is the result of an exchange transaction. Cost is the basis used in preparing financial statements.

The relevance of the cost principle, however, has come under criticism. After acquisition, the argument goes, the cost of an asset is not equivalent to market value or current value. Also, as the purchasing power of the dollar changes, so does the meaning associated with the dollar used as the basis of measurement. Con-

sider the classic story about the individual who went to sleep and woke up 10 years later. Hurrying to a telephone, he called his broker and asked what his formerly modest stock portfolio was worth. He was told that he was a multimillionaire. His **Starwood** stock was worth \$5 million, and his **Hilton** stock was up to \$10 million. Elated, he was about to inquire about his other holdings, when the telephone operator cut in with “Your time is up. Please deposit \$100,000 for the next three minutes.”³

HELPFUL HINT

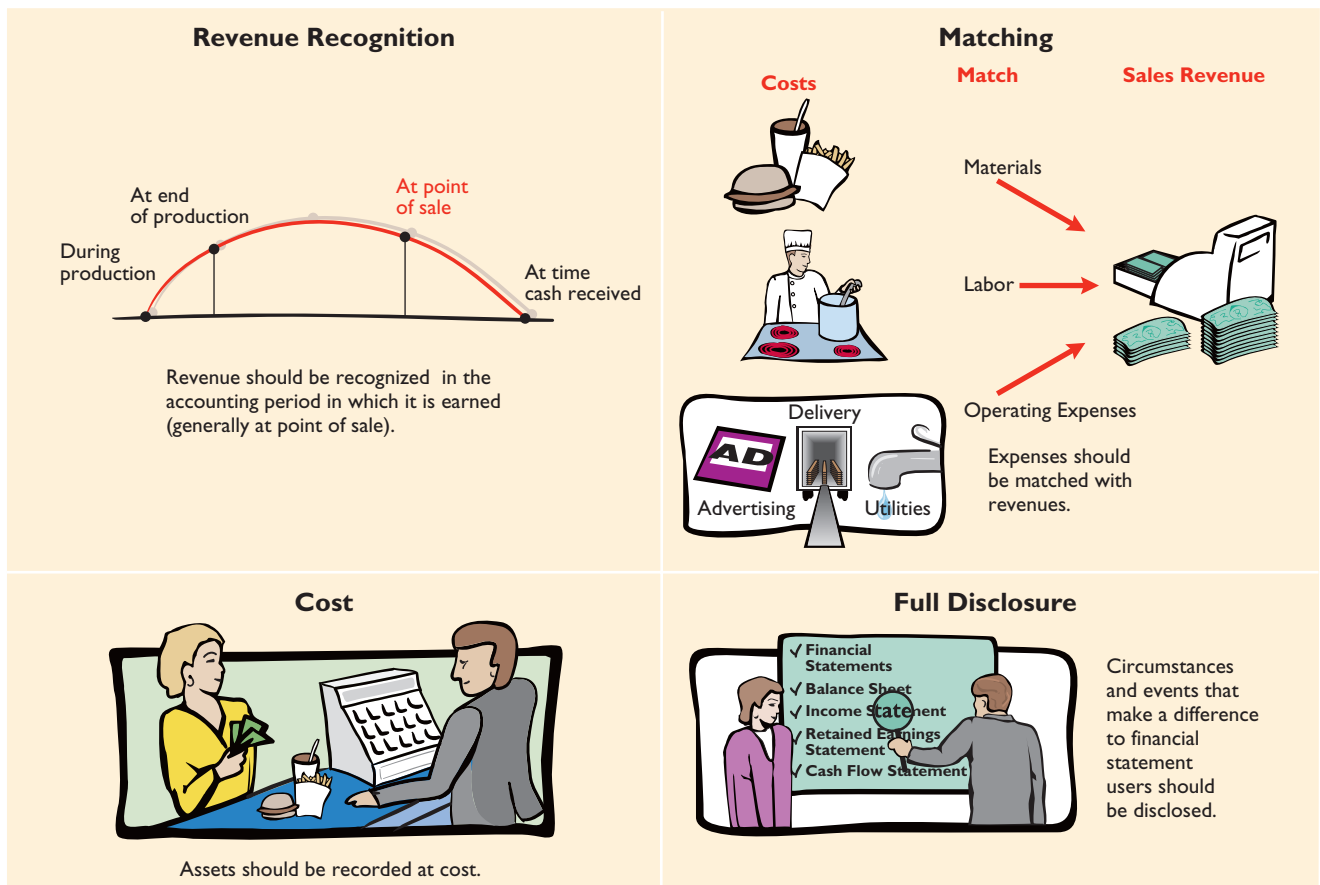
Are you a winner or loser when you hold cash in a period of inflation? Answer: A loser, because the value of the cash declines as inflation climbs.

Despite the inevitability of changing prices owing to inflation, the accounting profession still follows the stable monetary unit assumption in preparing the primary financial statements. While admitting that some changes in prices do occur, the profession believes the unit of measure—the dollar—has remained sufficiently constant over time to provide meaningful financial information. *Sometimes the disclosure of price-level adjusted data is in the form of supplemental information that accompanies the financial statements.*

The basic principles of accounting are summarized in Illustration 2-5.

Illustration 2-5

Basic principles used in accounting



CONSTRAINTS IN ACCOUNTING

Constraints permit a company to modify generally accepted accounting principles without reducing the usefulness of the reported information. The constraints are materiality and conservatism.

STUDY OBJECTIVE 6

Identify the two constraints in accounting.

³Adapted from *Barron's* (January 28, 1980), p. 27.

MATERIALITY

Materiality relates to an item's impact on a firm's overall financial condition and operations. An item is **material** when it is likely to influence the decision of a reasonably prudent investor or creditor. It is immaterial if its inclusion or omission has no impact on a decision maker. In short, if the item does not make a difference in decision making, GAAP do not have to be followed. To determine the materiality of an amount, the accountant usually compares it with such items as total assets, total liabilities, and net income.

To illustrate how the materiality constraint is applied, assume that Rodriguez Co. purchases a number of low-cost plant assets, such as wastepaper baskets. Although the proper accounting would appear to be to depreciate these wastepaper baskets over their useful life, they are usually expensed immediately. This practice is justified because these costs are considered immaterial. Establishing depreciation schedules for these assets is costly and time-consuming and will not make a material difference on total assets and net income. Another application of the materiality constraint would be the expensing of small tools. Some companies expense any plant assets under a specified dollar amount.

CONSERVATISM

The **conservatism** constraint dictates that when in doubt, choose the method that will be least likely to overstate assets and income. *It does not mean understating assets or income.* Conservatism provides a reasonable guide in difficult situations: Do not overstate assets and income.

A common application of the conservatism constraint is the use of the lower of cost or market method for inventories. As Chapter 9 will show, inventories are reported at market value if market value is below cost. This practice results in a higher cost of goods sold and lower net income. In addition, inventory on the balance sheet is stated at a lower amount.

Other examples of conservatism in accounting are the use of the last-in, first-out (LIFO) method for inventory valuation when prices are rising and the use of accelerated depreciation methods for plant assets. Both these methods result in lower asset-carrying values and lower net income than alternative methods.

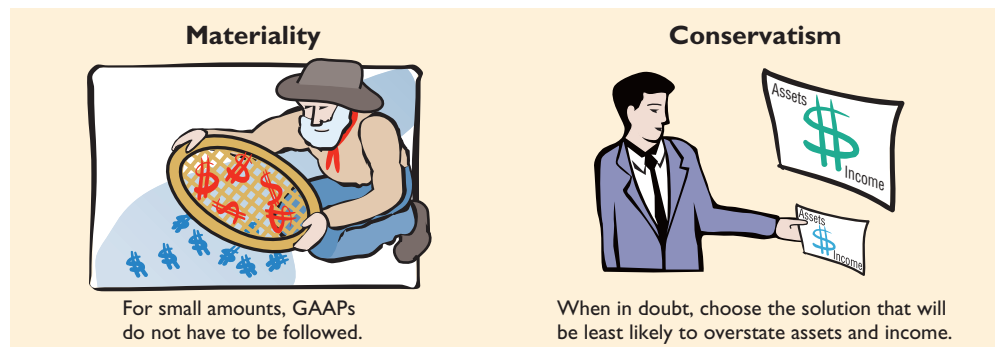
The two constraints in accounting are graphically depicted in Illustration 2-6.

HELPFUL HINT

In other words, if two methods are otherwise equally appropriate, choose the one that will least likely overstate assets and income.

Illustration 2-6

Constraints in accounting



SUMMARY OF CONCEPTUAL FRAMEWORK

As we have seen, the conceptual framework for developing sound reporting practices starts with a set of objectives for financial reporting. It follows with the description of qualities that make information useful. In addition, elements of financial statements are defined. More detailed operating guidelines are then provided. These guidelines take the form of assumptions and principles. The

conceptual framework also recognizes that constraints exist on the reporting environment. The conceptual framework is illustrated graphically in Illustration 2-7.

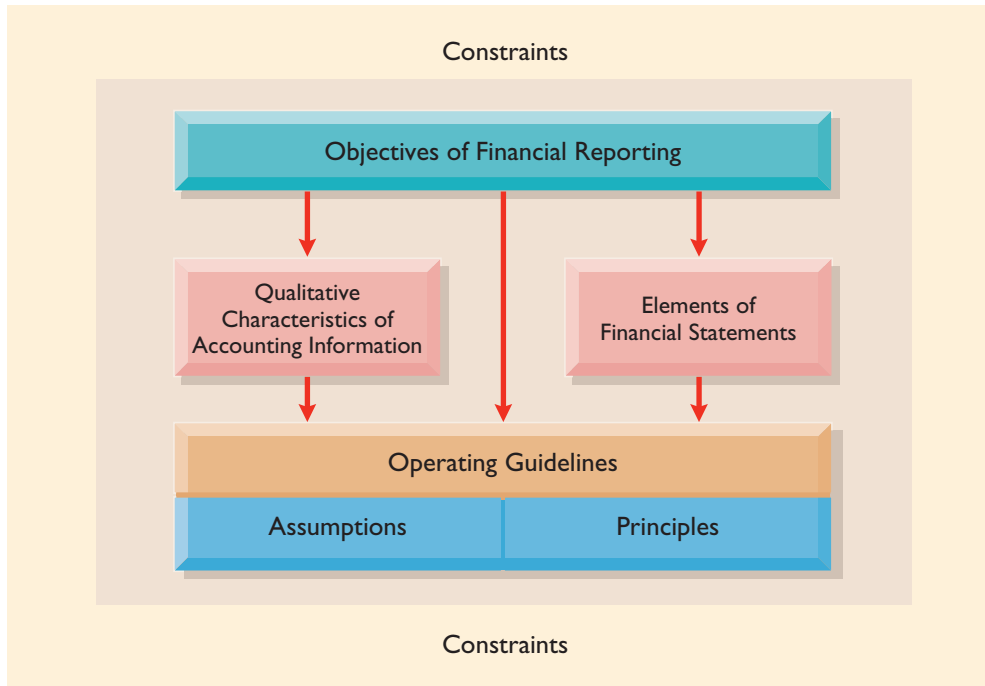


Illustration 2-7

Conceptual framework

BEFORE YOU GO ON...

▶ REVIEW IT

1. What are the monetary unit assumption, the economic entity assumption, the time period assumption, and the going concern assumption?
2. What are the revenue recognition principle, the matching principle, the full disclosure principle, and the cost principle?
3. What are the materiality constraint and the conservatism constraint?



FINANCIAL STATEMENT PRESENTATION— AN INTERNATIONAL PERSPECTIVE

World markets are becoming increasingly intertwined. Foreigners use American computers, eat American breakfast cereals, read American magazines, listen to American rock music, watch American movies and TV shows, and drink American soda. Americans drive Japanese cars, wear Italian shoes and Scottish woolens, drink Brazilian coffee and Indian tea, eat Swiss chocolate bars, sit on Danish furniture, and use Arabian oil. The variety and volume of exported and imported goods indicate the extensive involvement of U.S. business in international trade. Many U.S. companies consider the world their market.

Firms that conduct operations in more than one country through subsidiaries, divisions, or branches in foreign countries are referred to as **multinational corporations (MNCs)**. The accounting for such corporations is complicated because

STUDY OBJECTIVE 7

Explain the accounting principles used in international operations.

foreign currencies are involved. These international transactions must be translated into U.S. dollars.

Differences in Standards

In the new global economy many investment and credit decisions require the analysis of foreign financial statements. Unfortunately, accounting standards are not uniform from country to country. This lack of uniformity results from differences in legal systems, in processes for developing accounting standards, in governmental requirements, and in economic environments.



ACCOUNTING MATTERS! *International Insight*



Research and development costs are an example of different international accounting standards. Compare how four countries account for research and development (R&D):

Country	Accounting Treatment
United States	Expenditures are expensed.
United Kingdom	Certain expenditures may be capitalized.
Germany	Expenditures are expensed.
Japan	Expenditures may be capitalized and written off over 5 years.

Thus, an R&D expenditure of \$100 million is charged totally to expense in the current period in the United States and Germany. This same expense could range from zero to \$100 million in the United Kingdom and from \$20 million to \$100 million in Japan!

What would be the advantage of similar accounting standards for all countries? How can the financial and operating performance of international companies be compared?

Uniformity in Standards

Efforts to obtain uniformity in international accounting practices are taking place. In 1973 the **International Accounting Standards Committee (IASC)** was formed by agreement of accounting organizations in the United States, the United Kingdom, Canada, Australia, France, Germany, Japan, Mexico, and the Netherlands. Its purpose is to formulate international accounting standards and to promote their acceptance worldwide.

To date, numerous standards have been issued for IASC members to introduce to their respective countries. But the IASC has no enforcement powers, so these standards are by no means universally applied. They are, though, generally followed by the multinational companies that are audited by international public accounting firms. The foundation has been laid for progress toward greater uniformity in international accounting.

STUDY OBJECTIVE 8

Analyze the effects of business transactions on the basic accounting equation.

USING THE BUILDING BLOCKS

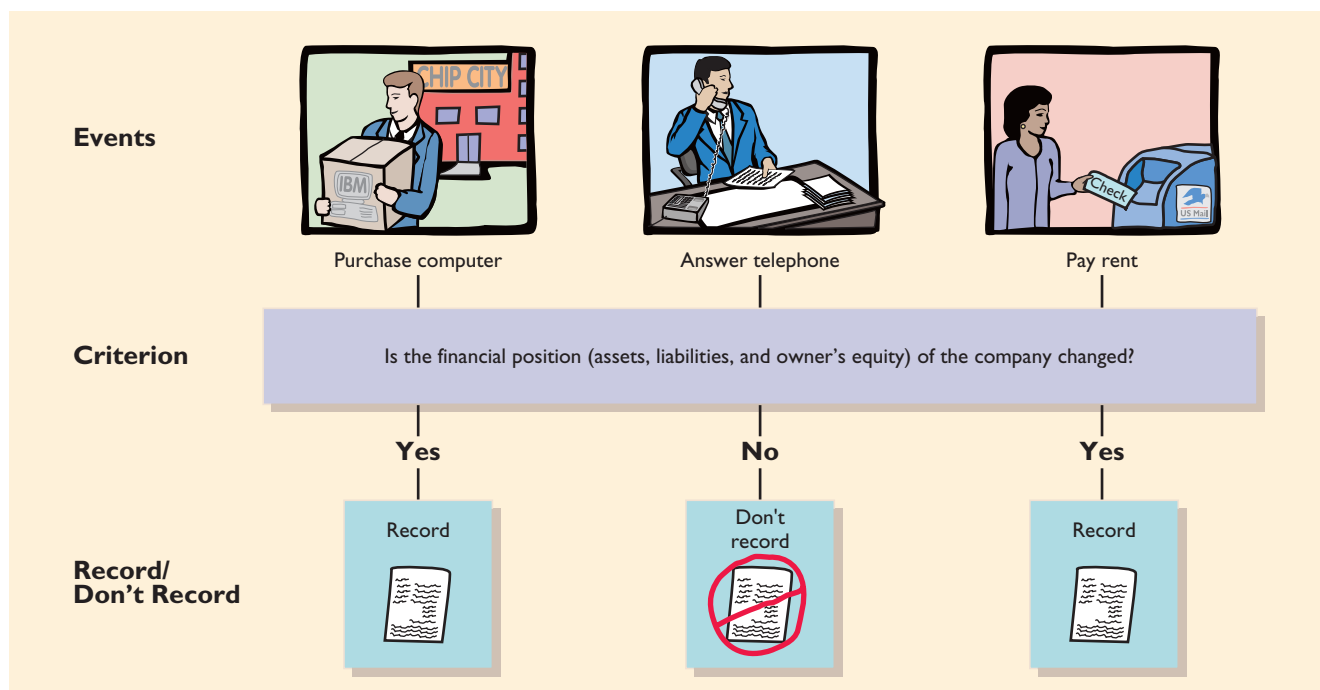
Transactions (often referred to as business transactions) are the economic events of an enterprise that are recorded. Transactions may be identified as external or internal. **External transactions involve economic events between the company and**

some outside enterprise. For example, Campus Pizza's purchase of cooking equipment from a supplier, payment of monthly rent to the landlord, and sale of pizzas to customers are external transactions. **Internal transactions are economic events that occur entirely within one company.** The use of cooking and cleaning supplies illustrates internal transactions for Campus Pizza.

A company may carry on many activities that do not in themselves represent business transactions. Hiring employees, answering the telephone, talking with customers, and placing orders for merchandise are examples. Some of these activities, however, may lead to business transactions: Employees will earn wages, and merchandise will be delivered by suppliers. Each event must be analyzed to find out if it has an effect on the components of the basic accounting equation. If it does, it will be recorded in the accounting process. Illustration 2-8 demonstrates the transaction identification process.

Illustration 2-8

Transaction identification process



The equality of the basic equation must be preserved. Therefore, each transaction must have a dual effect on the equation. For example, if an asset is increased, it must be offset by one or more of the following:

1. Decrease in another asset
2. Increase in a specific liability
3. Increase in owner's/stockholders' equity

It follows that two or more items could be affected when an asset is increased. For example, as one asset is increased \$10,000, another asset could decrease \$6,000, and a specific liability could increase \$4,000. Note also that any change in an individual liability or ownership claim is subject to similar analysis.

TRANSACTION ANALYSIS

The following examples are business transactions for a new catering business during its first month of operations. You will want to study these transactions until you are sure that you understand them. They are not difficult, but they are

important to your success in this course. The ability to analyze transactions in terms of the basic accounting equation is essential for an understanding of accounting.

Transaction (1). Investment by Stockholders

Ray and Barbara Neal decide to open a catering service that they incorporate as Best Caterers, Inc. They invest \$15,000 cash in the business in exchange for \$15,000 of common stock. The common stock indicates the ownership interest that the Neals have in Best Caterers, Inc. The transaction results in an equal increase in both assets and stockholders' equity. In this case there is an increase in the asset Cash of \$15,000 and an increase in Common Stock of \$15,000.

The effect of this transaction on the basic equation is shown below. Recorded to the right of Common Stock is the reason why stockholders' equity changed (i.e., investment).

	Assets	=	Liabilities	+	Stockholders' Equity
	Cash	=			Common Stock
(1)	+\$15,000	=			+\$15,000 Investment

Observe that the equality of the basic equation has been maintained. Note also that the source of the increase in stockholders' equity is indicated, to make clear that the increase is an investment rather than revenue from operations. Why does this matter? Because investments by stockholders do not represent revenues; they are excluded in determining net income. Therefore, it is necessary to make clear that the increase is an investment rather than revenue from operations. Additional investments (i.e., investments made by stockholders after the corporation has been initially formed) have the same effect on stockholders' equity as the initial investment.

Transaction (2). Purchase of Equipment for Cash

Best Caterers, Inc., purchases computer equipment for \$7,000 cash. This transaction results in an equal increase and decrease in total assets, though the composition of assets is changed: Cash is decreased \$7,000, and the asset Equipment is increased \$7,000. The specific effect of this transaction and the cumulative effect of the first two transactions are

	Assets		=	Liabilities	+	Stockholders' Equity
	Cash	+	=			Common Stock
Old Bal.	\$ 15,000					\$15,000
(2)	-7,000					
	\$ 8,000	+	=			\$15,000
	\$15,000					

Observe that total assets are still \$15,000 and that stockholders' equity also remains at \$15,000, the amount of the original investment.

Transaction (3). Purchase of Supplies on Credit

Best Caterers, Inc., purchases for \$1,600 from Acme Supply Company various supplies expected to last several months. Acme agrees to allow Best Caterers to pay this bill next month, in October. This transaction is often referred to as a purchase on account or a credit purchase. Assets are increased by the transaction because of the expected future benefits of using the paper and supplies, and liabilities are increased by the amount due Acme Company. The asset Supplies is increased \$1,600, and the liability Accounts Payable is increased by the same amount. The effect on the equation is

	Assets			=	Liabilities	+	Stockholders' Equity		
	Cash	+	Supplies	+	Equipment	=	Accounts Payable	+	Common Stock
Old Bal.	\$8,000				\$7,000				\$15,000
(3)			+\$1,600				+\$1,600		
New Bal.	\$8,000	+	\$1,600	+	\$7,000	=	\$1,600	+	\$15,000
	\$16,600						\$16,600		

Total assets are now \$16,600. This total is matched by a \$1,600 creditor's claim and a \$15,000 stockholders' claim.

Transaction (4). Services Rendered for Cash

Best Caterers, Inc., receives \$1,200 cash from customers for catering services it has provided. This transaction represents Best Caterers' principal revenue-producing activity. Recall that **revenue increases stockholders' equity**. Both assets and stockholders' equity are therefore increased. In this transaction, Cash is increased \$1,200, and Retained Earnings is increased \$1,200. The new balances in the equation are

	Assets			=	Liabilities	+	Stockholders' Equity			
	Cash	+	Supplies	+	Equipment	=	Accounts Payable	+	Common Stock	Retained Earnings
Old Bal.	\$8,000		\$1,600		\$7,000		\$1,600		\$15,000	
(4)	+\$1,200									+\$1,200 Service Revenue
New Bal.	\$9,200	+	\$1,600	+	\$7,000	=	\$1,600	+	\$15,000	\$1,200
	\$17,800						\$17,800			

The two sides of the equation balance at \$17,800. Note that stockholders' equity is increased when revenues are earned. The source of the increase in stockholders' equity is indicated as Service Revenue. Service Revenue is included in determining the net income of Best Caterers, Inc.

Transaction (5). Purchase of Advertising on Credit

Best Caterers, Inc., receives a bill for \$250 from the *Daily News* for advertising the opening of its business but postpones payment of the bill until a later date. This transaction results in an increase in liabilities and a decrease in stockholders'

equity. The specific items involved are Accounts Payable and Retained Earnings. The effect on the equation is

	Assets			=	Liabilities	+	Stockholders' Equity	
	Cash	Supplies	Equipment	=	Accounts Payable	+	Common Stock	Retained Earnings
Old Bal.	\$9,200	\$1,600	\$7,000	=	\$1,600	+	\$15,000	\$1,200
(5)					+250			-250 Advertising Expense
New Bal.	\$9,200	\$1,600	\$7,000	=	\$1,850	+	\$15,000	\$ 950
	\$17,800				\$17,800			

The two sides of the equation still balance at \$17,800. Observe that Retained Earnings is decreased when the expense is incurred, and the specific cause of the decrease (Advertising Expense) is noted. Expenses do not have to be paid in cash at the time they are incurred. When payment is made at a later date, the liability Accounts Payable will be decreased, and the asset Cash will be decreased [see Transaction (8)]. The cost of advertising is considered an expense, as opposed to an asset, because the benefits have been used. This expense is included in determining net income.

Transaction (6). Services Rendered for Cash and Credit

Best Caterers, Inc., provides catering services of \$3,500 for customers. Cash of \$1,500 is received from customers, and the balance of \$2,000 is billed to customers on account. This transaction results in an equal increase in assets and stockholders' equity. Three specific items are affected: Cash is increased \$1,500, Accounts Receivable is increased \$2,000, and Retained Earnings is increased \$3,500. The new balances are

	Assets				=	Liabilities	+	Stockholders' Equity	
	Cash	Accounts Receivable	Supplies	Equipment	=	Accounts Payable	+	Common Stock	Retained Earnings
Old Bal.	\$ 9,200		\$1,600	\$7,000	=	\$1,850	+	\$15,000	\$ 950
(6)	+1,500	+2,000							+3,500 Service Revenue
New Bal.	\$10,700	\$2,000	\$1,600	\$7,000	=	\$1,850	+	\$15,000	\$4,450
	\$21,300					\$21,300			

Why increase Retained Earnings by \$3,500 when only \$1,500 has been collected? Because the inflow of assets resulting from the earning of revenues does not have to be in the form of cash. Remember that stockholders' equity is increased when revenues are earned; in Best Caterers' case, revenues are earned when the service is provided. When collections on account are received at a later date, Cash will be increased, and Accounts Receivable will be decreased [see Transaction (9)].

Transaction (7). Payment of Expenses

Expenses paid in cash for September are store rent \$600, salaries of employees \$900, and utilities \$200. These payments result in an equal decrease in assets and stockholders' equity. Cash is decreased \$1,700, and Retained Earnings is decreased by the same amount. The effect of these payments on the equation is

	Assets				=	Liabilities	+	Stockholders' Equity	
	Cash	Accounts Receivable	Supplies	Equipment	=	Accounts Payable	+	Common Stock	Retained Earnings
Old Bal.	\$10,700	\$2,000	\$1,600	\$7,000	=	\$1,850	+	\$15,000	\$4,450
(7)	-1,700								-600
									-900
									-200
New Bal.	\$ 9,000	\$2,000	\$1,600	\$7,000	=	\$1,850	+	\$15,000	\$2,750
	\$19,600					\$19,600			

The two sides of the equation now balance at \$19,600. Three lines are required in the analysis to indicate the different types of expenses that have been incurred.

Transaction (8). Payment of Accounts Payable

Best Caterers, Inc., pays its *Daily News* advertising bill of \$250 in cash. Remember that the bill was previously recorded [in Transaction (5)] as an increase in Accounts Payable and a decrease in Retained Earnings. Thus this payment “on account” decreases the asset Cash by \$250 and also decreases the liability Accounts Payable by \$250. The effect of this transaction on the equation is

	Assets				=	Liabilities	+	Stockholders' Equity	
	Cash	Accounts Receivable	Supplies	Equipment	=	Accounts Payable	+	Common Stock	Retained Earnings
Old Bal.	\$9,000	\$2,000	\$1,600	\$7,000	=	\$1,850	+	\$15,000	\$2,750
(8)	-250					-250			
New Bal.	\$8,750	\$2,000	\$1,600	\$7,000	=	\$1,600	+	\$15,000	\$2,750
	\$19,350					\$19,350			

Observe that the payment of a liability related to an expense that has been incurred previously does not affect stockholders' equity. The expense was recorded in Transaction (5) and should not be recorded again. Neither Common Stock nor Retained Earnings changes as a result of this transaction.

Transaction (9). Receipt of Cash on Account

The sum of \$600 in cash is received from customers who have been billed previously for services [in Transaction (6)]. This transaction does not change total assets, but it changes the composition of those assets. Cash is increased \$600, and Accounts Receivable is decreased \$600. The new balances are

	Assets				=	Liabilities	+	Stockholders' Equity	
	Cash	Accounts Receivable	Supplies	Equipment	=	Accounts Payable	+	Common Stock	Retained Earnings
Old Bal.	\$8,700	\$2,000	\$1,600	\$7,000	=	\$1,600	+	\$15,000	\$2,750
(9)	+600	-600							
New Bal.	\$9,350	\$1,400	\$1,600	\$7,000	=	\$1,600	+	\$15,000	\$2,750
	\$19,350					\$19,350			

Note that a collection on account for services billed and recorded previously does not affect stockholders' equity. Revenue was already recorded in Transaction (6) and should not be recorded again.

Transaction (10). Dividends

The corporation pays a dividend of \$1,300 in cash to Ray and Barbara Neal, the stockholders of Best Caterers, Inc. This transaction results in an equal decrease in assets and stockholders' equity. Both Cash and Retained Earnings are decreased \$1,300, as shown below:

		Assets				=	Liabilities	+	Stockholders' Equity	
		Cash	Accounts Receivable	Supplies	Equipment	=	Accounts Payable	+	Common Stock	Retained Earnings
Old Bal.	\$9,350	\$1,400	\$1,600	\$7,000	=	\$1,600		\$15,000		\$2,750
(10)	-1,300				=					-1,300 Dividends
New Bal.	\$8,050	\$1,400	\$1,600	\$7,000	=	\$1,600		\$15,000		\$1,450
		\$18,050							\$18,050	

Note that the dividend reduces retained earnings, which is part of stockholders' equity. Dividends are not expenses. Like stockholders' investments, dividends are excluded in determining net income.

SUMMARY OF TRANSACTIONS**Illustration 2-9**

Tabular summary of Best Caterers, Inc., transactions

The transactions of Best Caterers, Inc., are summarized in Illustration 2-9. The transaction number, the specific effects of the transaction, and the balances after

		Assets				=	Liabilities	+	Stockholders' Equity				
		Cash	Accounts Receivable	Supplies	Equipment	=	Accounts Payable	+	Common Stock	Retained Earnings			
(1)	+\$15,000					=		+	\$15,000	Investment			
(2)	-7,000				+\$7,000	=							
	8,000				7,000	=			15,000				
(3)				+\$1,600		=	+\$1,600						
	8,000		+	1,600	+	7,000	=	1,600	+	15,000			
(4)	+1,200					=				+1,200 Service Revenue			
	9,200		+	1,600	+	7,000	=	1,600	+	15,000	+	1,200	
(5)						=	+250			-250 Advert. Expense			
	9,200		+	1,600	+	7,000	=	1,850	+	15,000	+	950	
(6)	+1,500		+\$2,000			=				+3,500 Service Revenue			
	10,700	+	2,000	+	1,600	+	7,000	=	1,850	+	15,000	+	4,450
(7)	-1,700					=				-600 Rent Expense			
						=				-900 Salaries Expense			
						=				-200 Utilities Expense			
	9,000	+	2,000	+	1,600	+	7,000	=	1,850	+	15,000	+	2,750
(8)	-250					=	-250						
	8,750	+	2,000	+	1,600	+	7,000	=	1,600	+	15,000	+	2,750
(9)	+600		-600			=							
	9,350	+	1,400	+	1,600	+	7,000	=	1,600	+	15,000	+	2,750
(10)	-1,300					=				-1,300 Dividends			
	\$8,050	+	\$1,400	+	\$1,600	+	\$7,000	=	\$1,600	+	\$15,000	+	\$1,450
		\$18,050							\$18,050				

each transaction are indicated. The illustration demonstrates a number of significant facts:

- Each transaction must be analyzed in terms of its effect on
 - the three components of the basic accounting equation.
 - specific types (kinds) of items within each component.
- The two sides of the equation always must be equal.
- The causes of each change in the stockholders' claim on assets must be indicated in the Common Stock and Retained Earnings columns.

There! You made it through transaction analysis. If you feel a bit shaky on any of the transactions, it probably would be a good idea at this point to get up, take a short break, and come back again for a 10-to 15-minute review of the transactions to make sure that you understand them before you go on to the next section.

BEFORE YOU GO ON...

▶ REVIEW IT

- What is an example of an external transaction? What is an example of an internal transaction?
- If an asset increases, what are the three possible effects on the basic accounting equation?

▶ DO IT

A tabular analysis of the transactions made by Roberta Mendez & Co., a decorating consulting firm, for the month of August is shown below. Each increase and decrease in stockholders' equity is explained.

Assets		=	Liabilities	+	Stockholders' Equity	
Cash	+ Office Equipment	=	Accounts Payable	+	Common Stock	+ Retained Earnings
1. +25,000					+25,000	Investment
2.	+7,000		+7,000			
3. +8,000						+8,000 Service Revenue
4. -850						-850 Rent Expense

Describe each transaction that occurred for the month.

ACTION PLAN

- Analyze the tabular analysis to determine the nature and effect of each transaction.
- Keep the accounting equation always in balance.
- Remember that a change in an asset will require a change in another asset, a liability, or stockholders' equity.

SOLUTION

- Stockholders purchased additional shares of stock for \$25,000 cash.
- The company purchased \$7,000 of office equipment on credit.
- The company received \$8,000 of cash in exchange for services performed.
- The company paid \$850 for this month's rent.



FINANCIAL STATEMENTS

STUDY OBJECTIVE 9

Understand what the four financial statements are and how they are prepared.

HELPFUL HINT

The income statement, retained earnings statement, and statement of cash flows are all for a *period of time*, whereas the balance sheet is for a *point* in time.

HELPFUL HINT

There is only one group of notes for the whole set of financial statements rather than separate sets of notes for each financial statement.

ALTERNATIVE TERMINOLOGY

The income statement is sometimes referred to as the *statement of operations*, *earnings statement*, or *profit and loss statement*.

After transactions are identified, recorded, and summarized, four financial statements are prepared from the summarized accounting data:

1. An **income statement** presents the revenues and expenses and resulting net income or net loss of a company for a specific period of time.
2. A **retained earnings statement** summarizes the changes in retained earnings for a specific period of time.
3. A **balance sheet** reports the assets, liabilities, and stockholders' equity of a business enterprise at a specific date.
4. A **statement of cash flows** summarizes information concerning the cash inflows (receipts) and outflows (payments) for a specific period of time.

Each statement provides management, stockholders, and other interested parties with relevant financial data.

The financial statements of Best Caterers, Inc., and their interrelationships are shown in Illustration 2-10. The statements are interrelated: **(1) Net income of \$2,750 shown on the income statement is added to the beginning balance of retained earnings in the retained earnings statement. (2) Retained earnings of \$1,450 at the end of the reporting period shown in the retained earnings statement is reported on the balance sheet. (3) Cash of \$8,050 on the balance sheet is reported on the statement of cash flows.**

Also, every set of financial statements is accompanied by explanatory notes and supporting schedules that are an integral part of the statements. Examples of these notes and schedules are illustrated in later chapters of this textbook.

Be sure to carefully examine the format and the content of each statement. The essential features of each are briefly described in the following sections.

INCOME STATEMENT

The primary focus of the income statement is to report the success or profitability of the company's operations over a specific period of time. For example, Best Caterers' income statement is dated "For the Month Ended September 30, 2008." It is prepared from the data appearing in the retained earnings column of Illustration 2-9. The heading of the statement identifies the company, the type of statement, and the time period covered by the statement.

On the income statement, revenues are listed first, followed by expenses. Finally, net income (or net loss) is determined. Although practice varies, we have chosen in our illustrations and homework solutions to list expenses in order of magnitude. Alternative formats for the income statement will be considered in later chapters.

Note that investment and dividend transactions between the stockholders and the business are not included in the measurement of net income. For example, the cash dividend from Best Caterers, Inc., was not regarded as a business expense, as explained earlier. This type of transaction is considered a reduction of retained earnings, which causes a decrease in stockholders' equity. The result of the income statement, be it a loss or a profit, is then carried to the retained earnings statement (Illustration 2-10).

RETAINED EARNINGS STATEMENT

The retained earnings statement of Best Caterers, Inc., reports the changes in retained earnings for a specific period of time. The time period is the same as that covered by the income statement ("For the Month Ended September 30, 2008"). Data for the preparation of the retained earnings statement are obtained from the

Illustration 2-10

Financial statements and their interrelationships

BEST CATERERS, INC. Income Statement For the Month Ended September 30, 2008		
Revenues		
Service revenue		\$4,700
Expenses		
Salaries expense	\$900	
Rent expense	600	
Advertising expense	250	
Utilities expense	<u>200</u>	
Total expenses		1,950
Net income		<u><u>\$2,750</u></u>

BEST CATERERS, INC. Retained Earnings Statement For the Month Ended September 30, 2008		
Retained earnings, September 1		\$ 0
Add: Net income		<u>2,750</u>
		2,750
Less: Dividends		<u>1,300</u>
Retained earnings, September 30		<u><u>\$1,450</u></u>

BEST CATERERS, INC. Balance Sheet September 30, 2008		
<u>Assets</u>		
Cash		<u>\$ 8,050</u>
Accounts receivable		1,400
Supplies		1,600
Equipment		<u>7,000</u>
Total assets		<u><u>\$18,050</u></u>
<u>Liabilities and Stockholders' Equity</u>		
Liabilities		
Accounts payable		\$ 1,600
Stockholders' equity		
Common stock	\$15,000	
Retained earnings	<u>1,450</u>	<u>16,450</u>
Total liabilities and stockholders' equity		<u><u>\$18,050</u></u>

BEST CATERERS, INC. Statement of Cash Flows For the Month Ended September 30, 2008		
Cash flows from operating activities		
Cash receipts from revenues		\$ 3,300
Cash payments for expenses		<u>(1,950)</u>
Net cash provided by operating activities		1,350
Cash flows from investing activities		
Purchase of equipment		(7,000)
Cash flows from financing activities		
Sale of common stock	\$15,000	
Payment of cash dividends	<u>(1,300)</u>	<u>13,700</u>
Net increase in cash		8,050
Cash at the beginning of the period		<u>0</u>
Cash at the end of the period		<u><u>\$ 8,050</u></u>

HELPFUL HINT

The heading of each statement identifies the company, the type of statement, and the specific date or time period covered by the statement.

HELPFUL HINT

The four financial statements are prepared in the sequence shown for the following reasons: Net income is computed first and is needed to determine the ending balance in retained earnings. The ending balance in retained earnings is needed in preparing the balance sheet. The cash shown on the balance sheet is needed in preparing the statement of cash flows.

HELPFUL HINT

Note that final sums are double-underlined, and negative amounts are presented in parentheses.

retained earnings column of the tabular summary (Illustration 2-9) and from the income statement in Illustration 2-10.

The beginning retained earnings amount is shown on the first line of the statement. Then net income and dividends are identified. The retained earnings ending balance is the final amount on the statement. The information provided by this statement indicates the reasons why retained earnings increased or decreased during the period. If there is a net loss, it is deducted with dividends in the retained earnings statement. The ending retained earnings is that amount carried to the balance sheet to reflect any changes in equity and to make the assets balance with the total liabilities and equity of the business (see Illustration 2-10).

BALANCE SHEET

Best Caterers, Inc.'s balance sheet (Illustration 2-10) reports the assets, liabilities, and stockholders' equity at a specific date (September 30, 2008). The balance sheet is prepared from the column headings and the month-end data shown in the last line of the tabular summary (Illustration 2-9).

Observe that the assets are listed at the top, followed by liabilities and stockholders' equity. Total assets must equal total liabilities and stockholders' equity. In the Best Caterers illustration, only one liability, accounts payable, is reported on the balance sheet. In most cases there will be more than one liability. When two or more liabilities are involved, a customary way of listing is shown in Illustration 2-11.

Illustration 2-11

Presentation of liabilities

	<u>Liabilities</u>
Notes payable	\$10,000
Accounts payable	63,000
Salaries payable	<u>18,000</u>
Total liabilities	\$91,000

The balance sheet is like a snapshot of the company's financial condition at a specific moment in time (usually the month-end or year-end).

ACCOUNTING IN ACTION *Business Insight*



Why do companies choose the particular year-ends that they do? Not every company uses December 31 as the accounting year-end. Many companies choose to end their accounting year when inventory or operations are at a low. This is advantageous because compiling accounting information requires much time and effort by managers, so they would rather do it when they aren't as busy operating the business. Also, inventory is easier and less costly to count when it is low. Some companies whose year-ends differ from December 31 are **Delta Air Lines**, June 30; **Walt Disney Productions**, September 30; **Kmart Corp.**, January 31; and **Dunkin Donuts, Inc.**, October 31.

STATEMENT OF CASH FLOWS

The primary purpose of a statement of cash flows is to provide financial information about the cash receipts and cash payments of an enterprise for a specific period of time. **The statement of cash flows reports (1) the cash effects of a company's**

operations during a period, (2) its investing transactions, (3) its financing transactions, (4) the net increase or decrease in cash during the period, and (5) the cash amount at the end of the period.

Reporting the sources, uses, and net increase or decrease in cash is useful because investors, creditors, and others want to know what is happening to a company's most liquid resource. The statement of cash flows, therefore, provides answers to the following simple but important questions:

1. Where did the cash come from during the period?
2. What was the cash used for during the period?
3. What was the change in the cash balance during the period?

A statement of cash flows for Best Caterers, Inc., is provided in Illustration 2-10.

As shown in the statement, cash increased \$8,050 during the period: Net cash flow provided from operating activities increased cash \$1,350. Cash flow from investing transactions decreased cash \$7,000. And cash flow from financing transactions increased cash \$13,700. At this time, you need not be concerned with how these amounts are determined. Appendix B will examine in detail how the statement is prepared.

HELPFUL HINT

Investing activities pertain to investments made by the company, not investments made by the stockholders.

HELPFUL HINT

The cash at the end of the period reported in the statement of cash flows equals the cash reported in the balance sheet.

BEFORE YOU GO ON...

▶ REVIEW IT

1. What are the income statement, retained earnings statement, balance sheet, and statement of cash flows?
2. How are the financial statements interrelated?

A LOOK BACK AT OUR FEATURE STORY

Refer back to the Feature Story about **PepsiCo** at the beginning of Chapter 1, and answer the following questions.

1. If you were interested in investing in **PepsiCo**, what would the balance sheet and income statement tell you?
2. Would you request audited financial statements? Explain.
3. Will the financial statements show the market value of the company? Explain.

SOLUTION

1. The balance sheet reports the assets, liabilities, and stockholders' equity of the company. The income statement presents the revenues and expenses and resulting net income (or net loss) for a specific period of time. The balance sheet is like a snapshot of the company's financial condition at a point in time. The income statement indicates the profitability of the company. Also, the sources of the company's revenues and its expenses are provided in the income statement.
2. You should request **audited** financial statements—statements that a CPA has examined and expressed an opinion as to the fairness of presentation. You should not make decisions without having audited financial statements.
3. The financial statements will not show the market value of the company. One important principle of accounting is the cost principle, which states that assets should be recorded at cost. Cost has an important advantage over other valuations: It is reliable.



A Look Back exercises refer to the chapter-opening Feature Story. These exercises help you to analyze that real-world situation in terms of the accounting topic of the chapter.

Demonstration Problems are a final review of the chapter. The **Action Plan** gives tips about how to approach the problem, and the **Solution** demonstrates both the form and the content of complete answers.

ACTION PLAN

- Remember that assets must equal liabilities plus stockholders' equity after each transaction.
- Investments and revenues increase stockholders' equity.
- Dividends and expenses decrease stockholders' equity.
- The income statement shows revenues and expenses for a period of time.
- The retained earnings statement shows the changes in retained earnings for a period of time.
- The balance sheet reports assets, liabilities, and stockholders' equity at a specific date.

DEMONSTRATION PROBLEM

Hospitality Legal Services, Inc., which provides contract services for caterers and their clients, was incorporated on July 1, 2008. During the first month of operations, the following transactions occurred:

- Stockholders invested \$10,000 in cash in exchange for shares of stock.
- Paid \$800 for July rent on office space.
- Purchased office equipment on account, \$3,000.
- Provided legal services to clients for cash, \$1,500 (use Service Revenue).
- Borrowed \$700 cash from a bank on a note payable.
- Performed legal services for client on account, \$2,000.
- Paid monthly expenses: salaries \$500; utilities \$300; and telephone \$100.

Instructions

- Prepare a tabular summary of the transactions.
- Prepare the income statement, retained earnings statement, and balance sheet at July 31 for Hospitality Legal Services, Inc.

SOLUTION TO DEMONSTRATION PROBLEM

(a) Trans- action	Assets			=	Liabilities		+	Stockholders' Equity	
	Cash	Accounts Receivable	Equipment	=	Notes Payable	Accounts Payable	+	Common Stock	Retained Earnings
(1)	+\$10,000							+\$10,000	
(2)	-800								-\$800 Rent Expense
	9,200			=				10,000 +	-800
(3)			+\$3,000			+\$3,000			
	9,200		+ 3,000	=		3,000		10,000 +	-800
(4)	+1,500								+1,500 Service Revenue
	10,700		+ 3,000	=		3,000		10,000 +	700
(5)	+700				+\$700				
	11,400		+ 3,000	=	700	3,000		10,000 +	700
(6)		+\$2,000							+2,000 Service Revenue
	+11,400	+ 2,000	+ 3,000	=	700	3,000		10,000 +	2,700
(7)	-900								-500 Salaries Expense
									-300 Utilities Expense
									-100 Telephone Expense
	<u>\$10,500</u>	<u>+ 2,000</u>	<u>+ 3,000</u>	=	<u>\$700</u>	<u>+ 3,000</u>		<u>\$10,000</u>	<u>+ 1,800</u>
	\$15,500				\$15,500				

(b)

HOSPITALITY LEGAL SERVICES, INC. Income Statement For the Month Ended July 31, 2008

Revenues	
Service revenue	\$3,500
Expenses	
Rent expense	\$800
Salaries expense	500
Utilities expense	300
Telephone expense	<u>100</u>
Total expenses	<u>1,700</u>
Net income	<u>\$1,800</u>

HOSPITALITY LEGAL SERVICES, INC.
Retained Earnings Statement
For the Month Ended July 31, 2008

Retained earnings, July 1	\$ -0-
Add: Net income	1,800
	<u>1,800</u>
Retained earnings, July 31	<u>1,800</u>

HOSPITALITY LEGAL SERVICES, INC.
Balance Sheet
July 31, 2008

Assets

Cash	\$10,500
Accounts receivable	2,000
Equipment	3,000
	<u>3,000</u>
Total assets	<u>\$15,500</u>

Liabilities and Stockholders' Equity

Liabilities	
Notes payable	\$ 700
Accounts payable	3,000
	<u>3,700</u>
Stockholders' equity	
Common stock	\$10,000
Retained earnings	1,800
	<u>11,800</u>
Total liabilities and stockholders' equity	<u>\$15,500</u>

This would be a good time to return to the **Student Owner's Manual** at the beginning of the book (or to look at it for the first time if you skipped it before) to read about the various types of assignment materials that appear at the end of each chapter. Knowing the purpose of the different assignments will help you appreciate what each contributes to your accounting skills and competencies.



BEFORE YOU GO ON...

► **REVIEW IT**

1. What is the major difference in the equity section of the balance sheet between a corporation and a proprietorship?
2. Where are income tax expense and earnings per share reported on the income statement? How is earnings per share computed?
3. How are the current ratio, working capital, profit margin percentage, return on assets, return on common stockholders' equity, and debt to total assets computed?
4. Explain how these ratios are useful in financial statement analysis.
5. What is the purpose of the International Accounting Standards Committee?
6. What are the three accounting guidelines publications for the hotel, restaurant, and club segments of the industry?
7. Identify and briefly explain the various positions available in an accounting department in a hotel operation.
8. Identify at least three areas in a club accounting operations which differ from that of a hotel operation.



ACTION PLAN**Remember that**

- The four principles are cost, revenue recognition, matching, and full disclosure.
- The two constraints are materiality and conservatism.
- Full disclosure relates generally to the item, materiality to the amount.

**ACTION PLAN**

- Remember that income tax expense is reported immediately after “Income before income taxes” for both a multiple-step and single-step income statement.
- Report earnings per share on both a multiple-step and a single-step income statement.
- Disclose net income and dividends on a retained earnings statement.
- Refer to Chapter 5, p. 159, for an example of a classified balance sheet.

DEMONSTRATION PROBLEM 1

Presented below are a number of operational guidelines and practices that have developed over time.

Instructions

Identify the accounting assumption, accounting principle, or reporting constraint that most appropriately justifies these procedures and practices. Use only one item per description.

- The first note, “Summary of Significant Accounting Policies,” presents information on the subclassification of plant assets and discusses the company’s depreciation methods.
- The local hamburger restaurant expenses all spatulas, french fry baskets, and other cooking utensils when purchased.
- Retailers recognize revenue at the point of sale.
- Green-Grow Landcape, Inc., includes an estimate of warranty expense in the year in which it sells its lawn mowers, which carry a 2-year warranty.
- Companies present sufficient financial information so that creditors and reasonably prudent investors will not be misled.
- Companies listed on U.S. stock exchanges report audited financial information annually and report unaudited information quarterly.
- Beach Resorts, Inc., does not record the 2004 value of \$1.5 million for a piece of beach-front property it purchased in 1989 for \$500,000.
- Restaurant Supplies, Inc., takes a \$32,000 loss on a number of older ovens in its inventory; it paid the manufacturer \$107,000 for them but can sell them for only \$75,000.
- Frito Lay** is a wholly owned subsidiary of **PepsiCo, Inc.**, and Frito Lay’s operating results and financial condition are included in the consolidated financial statements of PepsiCo. (Do not use full disclosure.)

SOLUTION TO DEMONSTRATION PROBLEM 1

- | | |
|-----------------------------------|--------------------------------|
| (a) Full disclosure principle | (f) Time period assumption |
| (b) Materiality constraint | (g) Cost principle |
| (c) Revenue recognition principle | (h) Conservatism constraint |
| (d) Matching principle | (i) Economic entity assumption |
| (e) Full disclosure principle | |

DEMONSTRATION PROBLEM 2

Presented below is financial information related to Notting Hill Hotel Corporation for the year 2008. All balances are ending balances unless stated otherwise.

Accounts payable	\$ 868,000
Accounts receivable	700,000
Accumulated depreciation—equipment	100,000
Administrative expenses	280,000
Bonds payable	1,600,000
Cash	800,000
Common stock	500,000
Cost of goods sold	1,600,000
Dividends	60,000
Equipment	1,100,000
Income tax expense	83,000
Interest expense	60,000
Interest revenue	120,000
Inventories	500,000

Loss on the sale of equipment	35,000
Marketable (trading) securities	400,000
Net sales	2,400,000
Notes payable (short-term)	800,000
Other long-term debt	387,000
Patents and other intangibles	900,000
Prepaid expenses	200,000
Retained earnings (January 1, 2008)	80,000
Selling expenses	220,000
Taxes payable	83,000

Notting Hill Hotel Corporation had 88,000 shares of common stock outstanding for the entire year.

Instructions

- (a) Prepare a multiple-step income statement.
- (b) Prepare a single-step income statement.
- (c) Prepare a retained earnings statement.
- (d) Prepare a classified balance sheet.

SOLUTION TO DEMONSTRATION PROBLEM 2

- (a) Multiple-step income statement

NOTTING HILL HOTEL CORPORATION
Income Statement
For the Year Ended December 31, 2008

Net sales		\$2,400,000
Cost of goods sold		<u>1,600,000</u>
Gross profit		800,000
Selling expenses	\$220,000	
Administrative expenses	<u>280,000</u>	<u>500,000</u>
Income from operations		300,000
Other revenues and gains		
Interest revenue		120,000
Other expenses and losses		
Loss on sale of equipment	35,000	
Interest expense	<u>60,000</u>	<u>95,000</u>
Income before income taxes		325,000
Income tax expense		<u>83,000</u>
Net income		<u>\$ 242,000</u>
Earnings per share		<u>\$2.75</u>

- (b) Single-step income statement

NOTTING HILL HOTEL CORPORATION
Income Statement
For the Year Ended December 31, 2008

Revenues		
Net sales		\$2,400,000
Interest revenue		<u>120,000</u>
Total revenues		2,520,000

(continues)

Expenses		
Cost of goods sold	\$1,600,000	
Selling expenses	220,000	
Administrative expenses	280,000	
Interest expense	60,000	
Loss on the sale of equipment	<u>35,000</u>	2,195,000
Income before income taxes		<u>325,000</u>
Income tax expense		<u>83,000</u>
Net income		<u>\$ 242,000</u>
Earnings per share		<u>\$2.75</u>

(c) Retained earnings statement

NOTTING HILL HOTEL CORPORATION
Retained Earnings Statement
For the Year Ended December 31, 2008

Retained earnings, January 1	\$ 80,000	
Add: Net income	<u>242,000</u>	
		322,000
Less: Dividends	<u>60,000</u>	
Retained earnings, December 31	<u>\$262,000</u>	

(d) Classified balance sheet

NOTTING HILL HOTEL CORPORATION
Balance Sheet
December 31, 2008

Current assets		
Cash		\$ 800,000
Marketable (trading) securities		400,000
Accounts receivable		700,000
Inventories		500,000
Prepaid expenses		<u>200,000</u>
Total current assets		<u>2,600,000</u>
Property, plant, and equipment		
Equipment	\$1,100,000	
Less: Accumulated depreciation	<u>100,000</u>	1,000,000
Intangible assets		
Patents and other intangible assets		<u>900,000</u>
Total assets		<u>\$4,500,000</u>
Current liabilities		
Notes payable		\$ 800,000
Accounts payable		868,000
Taxes payable		<u>83,000</u>
Total current liabilities		1,751,000
Long-term liabilities		
Bonds payable	\$1,600,000	
Other long-term debt	<u>387,000</u>	1,987,000
Total liabilities		<u>3,738,000</u>
Stockholders' equity		
Common stock	500,000	
Retained earnings	<u>262,000</u>	<u>762,000</u>
Total liabilities and stockholders' equity		<u>\$4,500,000</u>

SUMMARY OF STUDY OBJECTIVES

1. Explain the meaning of generally accepted accounting principles and identify the key items of the conceptual framework.

Generally accepted accounting principles are a set of rules and practices that are recognized as a general guide for financial reporting purposes. Generally accepted means that these principles must have “substantial authoritative support.” The key items of the conceptual framework are: (1) objectives of financial reporting; (2) qualitative characteristics of accounting information; (3) elements of financial statements; and (4) operating guidelines (assumptions, principles, and constraints).

2. Describe the basic objectives of financial reporting. The basic objectives of financial reporting are to provide information that is (1) useful to those making investment and credit decisions; (2) helpful in assessing future cash flows; and (3) helpful in identifying economic resources (assets), the claims to those resources (liabilities), and the changes in those resources and claims.

3. Discuss the qualitative characteristics of accounting information and elements of financial statements. To be judged useful, information should possess the following qualitative characteristics: relevance, reliability, comparability, and consistency. The elements of financial statements are a set of definitions that can be used to describe the basic terms used in accounting.

4. Identify the basic assumptions used by accountants. The major assumptions are: monetary unit, economic entity, time period, and going concern.

5. Identify the basic principles of accounting. The major principles are revenue recognition, matching, full disclosure, and cost.

6. Identify the two constraints in accounting. The major constraints are materiality and conservatism.

7. Explain the accounting principles used in international operations. There are few recognized worldwide accounting standards. The International Accounting Standards Committee (IASC), of which the United States is a member, is working to obtain conformity in international accounting practices.

8. Analyze the effects of business transactions on the basic accounting equation. Each business transaction must have a dual effect on the accounting equation. For example, if an individual asset is increased, there must be a corresponding (1) decrease in another asset, or (2) increase in a specific liability, or (3) increase in stockholders’ equity.

9. Understand what the four financial statements are and how they are prepared. An income statement presents the revenues and expenses of a company for a specified period of time. A retained earnings statement summarizes the changes in retained earnings that have occurred for a specific period of time. A balance sheet reports the assets, liabilities, and stockholders’ equity of a business at a specific date. A statement of cash flows summarizes information about the cash inflows (receipts) and outflows (payments) for a specific period of time.

GLOSSARY

Balance sheet A financial statement that reports the assets, liabilities, and stockholders’ equity at a specific date (p. 52).

Comparability Ability to compare accounting information of different companies because they use the same accounting principles (p. 34).

Conceptual framework A coherent system of interrelated objectives and fundamentals that can lead to consistent standards (p. 33).

Conservatism The approach of choosing an accounting method when in doubt that will least likely overstate assets and net income (p. 42).

Consistency Use of the same accounting principles and methods from year to year within a company (p. 35).

Cost principle Accounting principle that assets should be recorded at their historical cost (p. 40).

Economic entity assumption Accounting assumption that economic events can be identified with a particular unit of accountability (p. 37).

Elements of financial statements Definitions of basic terms used in accounting (p. 35).

Full disclosure principle Accounting principle that circumstances and events that make a difference to financial statement users should be disclosed (p. 40).

Generally accepted accounting principles (GAAP) A set of rules and practices, having substantial authoritative support, that are recognized as a general guide for financial reporting purposes (p. 32).

Going concern assumption The assumption that the enterprise will continue in operation long enough to carry out its existing objectives and commitments (p. 37).

Income statement A financial statement that presents the revenues and expenses and resulting net income or net loss of a company for a specific period of time (p. 52).

International Accounting Standards Committee (IASC) An accounting organization whose purpose is to formulate and publish international accounting standards and to promote their acceptance worldwide (p. 44).

Matching principle Accounting principle that expenses should be matched with revenues in the period when efforts are expended to generate revenues (p. 38).

Materiality The constraint of determining if an item is important enough to likely influence the decision of a reasonably prudent investor or creditor (p. 42).

Monetary unit assumption Accounting assumption that only transaction data capable of being expressed in monetary terms should be included in accounting records (p. 37).

Relevance The quality of information that indicates the information makes a difference in a decision (p. 34).

Reliability The quality of information that gives assurance that it is free of error and bias (p. 34).

Retained earnings statement A financial statement that summarizes the changes in retained earnings for a specific period of time (p. 52).

Revenue recognition principle Accounting principle that revenue should be recognized in the accounting period in which it is earned (generally at the point of sale) (p. 38).

Statement of cash flows A financial statement that provides information about the cash inflows (receipts) and cash outflows (payments) of an entity for a specific period of time (p. 52).

Time period assumption Accounting assumption that the economic life of a business can be divided into artificial time periods (p. 37).

Transactions The economic events of the enterprise that are recorded by accountants (p. 44).

EXERCISES

Identify generally accepted accounting principles.
(SO 1)

2-1 Indicate whether each of the following statements is true (T) or false (F).

- _____ GAAP stands for generally accepted accounting practices.
- _____ FASB stands for Financial Accounting Standards Board.
- _____ Together with the Securities and Exchange Commission, the GAAP set guidelines for how the FASB should operate.

Identify items included in conceptual framework.
(SO 1)

2-2 Which of the following is (Yes) or is not (No) part of the FASB conceptual framework?

- _____ Objectives of managerial reporting
- _____ Elements of financial statements
- _____ Quantitative characteristics of accounting information

Identify objectives of financial reporting.
(SO 2)

2-3 Which of the following is (Yes) or is not (No) a part of the three objectives of financial reporting under FASB?

- _____ The information is useful to the employees only.
- _____ The managerial forms are helpful in assessing current cash flows.
- _____ The economic resources, the claims to those resources, and the changes in those resources and claims are clearly identified.

(SO 3)

2-4 Presented below are four concepts. Please match each one with the correct scenario.

Relevance Reliability Comparability Consistency

- _____ Hotel Del Sol uses the Uniform System of Accounts so that it can assess how it is performing financially against like hotels.
- _____ Hotel Del Sol uses the straight line method for its depreciation and is expected to use this method in the succeeding years.
- _____ The controller at Hotel Del Sol provides information that is timely and has feedback and predictive value.
- _____ The controller and her staff at Hotel Del Sol check their work to make sure it is accurate.

(SO 3)

2-5 The operating guidelines of accounting have three parts: assumptions, principles, and constraints. Please match these guidelines with the following by indicating “A” for assumptions, “P” for principles, and “C” for constraints.

- _____ Going concern
- _____ Time period
- _____ Materiality
- _____ Revenue recognition
- _____ Conservatism
- _____ Matching

2-6 Presented below are six business transactions. On a sheet of paper, list the letters (a), (b), (c) with columns for assets, liabilities, and stockholders' equity. For each column, indicate whether the transactions increased (+), decreased (−), or had no effect (NE) on assets, liabilities, and stockholders' equity.

- (a) Purchased food on account.
- (b) Received cash for providing catering service.
- (c) Billed customer for \$5,000 on hotel room sold.
- (d) Paid \$150 for electricity bill.
- (e) Invested \$50,000 in the business.
- (f) Paid \$300 for lawn services for the motel.

Determine effect of transactions on basic accounting equation.
(SO 8)

2-7 Selected transactions for Golden Apples Catering Company are listed below.

1. Made cash investment to start business.
2. Paid monthly electricity bill.
3. Purchased food on account.
4. Received cash from customers.
5. Paid dividends.
6. Paid weekly wages.
7. Paid for food purchased in transaction (3).
8. Purchased additional kitchen equipment on account.
9. Paid rent for the month.

Analyze the effect of transactions.
(SO 8)

Instructions

List the numbers of the preceding transactions and describe the effect of each transaction on assets, liabilities, and stockholders' equity. For example, the first answer is: (1) Increase in assets and increase in stockholders' equity.

2-8 W. S. Blaskowski Foodservices entered into the following transactions during May 2008.

1. Purchased kitchen equipment for \$30,000 from General Appliances on account.
2. Paid \$3,000 cash for May rent.
3. Received \$5,000 cash from customers for services billed in April.
4. Provided services to the Osbornes' 50th wedding anniversary.
5. Paid World Web Services \$5,000 cash for advertising in May.
6. Stockholders invested an additional \$50,000 in the business.
7. Paid General Appliances for the equipment purchased in transaction (1).
8. Incurred consulting expense for May of \$2,000 on account.

Analyze the effect of transactions on assets, liabilities, and stockholders' equity.
(SO 8)

Instructions

Indicate with the appropriate letter whether each of the preceding transactions results in

- (a) an increase in assets and a decrease in assets.
- (b) an increase in assets and an increase in stockholders' equity.
- (c) an increase in assets and an increase in liabilities.
- (d) a decrease in assets and a decrease in stockholders' equity.
- (e) a decrease in assets and a decrease in liabilities.
- (f) an increase in liabilities and a decrease in stockholders' equity.
- (g) an increase in stockholders' equity and a decrease in liabilities.

2-9 On June 1, Maui Travel Agency, Inc., was established. The following transactions were completed during the month.

1. Stockholders invested \$40,000 cash, receiving common stock in exchange.
2. Paid \$1,000 cash for June office rent.
3. Purchased office equipment for \$5,000 cash.
4. Paid \$1,000 cash for office supplies.
5. Incurred \$500 of advertising costs in the *Daily Maui*, on account.
6. Earned \$25,000 for services rendered: Cash of \$12,000 is received from customers, and the balance of \$13,000 is billed to customers on account.
7. Paid \$750 cash dividend.
8. Paid *Daily Maui* amount due in transaction (4).
9. Paid employees' salaries \$2,500.
10. Cash of \$10,000 is received from customers who have previously been billed in transaction (6).

Analyze transactions and compute net income.
(SO 8)

Analyze transactions and prepare income statement, balance sheet, and retained earnings statement.
(SO 8)

Instructions

- (a) Prepare a tabular analysis of the transactions using the following column headings: Cash, Accounts Receivable, Supplies, Office Equipment, Accounts Payable, Common Stock, and Retained Earnings.
- (b) From an analysis of the Retained Earnings column, compute the net income or net loss for June.

2-10 Kiki's Famous Desserts Corporation was formed on July 1, 2007. On July 31, the balance sheet showed Cash \$7,000, Accounts Receivable \$2,000, Supplies \$500, Office Equipment \$5,000, Accounts Payable \$5,500, Common Stock \$7,500, and Retained Earnings \$1,500. During August, the following transactions occurred.

1. Collected \$1,000 of accounts receivable.
2. Paid \$1,200 cash on accounts payable.
3. Earned revenues of \$10,000, of which \$3,000 is collected in cash and the balance is due in September.
4. Purchased additional office equipment for \$2,000, paying \$250 in cash and the balance on account.
5. Paid salaries \$2,000, rent for August \$1,500, and advertising expenses \$450.
6. Paid dividends of \$550.
7. Received \$1,000 from Allied Bank—money borrowed on a note payable.
8. Incurred utility expenses for month on account \$500.

Instructions

- (a) Prepare a tabular analysis of the August transactions beginning with July 31 balances. The column headings should be as follows: Cash + Accounts Receivable + Supplies + Office Equipment = Notes Payable + Accounts Payable + Common Stock + Retained Earnings.
- (b) Prepare an income statement for August, a retained earnings statement for August, and a balance sheet at August 31.

EXPLORING THE WEB

2-11 The **Financial Accounting Standards Board (FASB)** is a private organization established to improve accounting standards and financial reporting. The FASB conducts extensive research before issuing a "Statement of Financial Accounting Standards," which represents an authoritative expression of generally accepted accounting principles.

Address: www.accounting.rutgers.edu/raw

Steps:

1. Choose **FASB**.
2. Choose **FASB Facts**.

Instructions

Answer the following questions.

- (a) What is the mission of the FASB?
- (b) How are topics added to the FASB technical agenda?
- (c) What characteristics make the FASB's procedures an "open" decision-making process?

ETHICS CASE

2-12 When the Financial Accounting Standards Board issues new standards, the required implementation date is usually 12 months or more from the date of issuance, with early implementation encouraged. Richard Keith, accountant at Manchester Corporation, discusses with his financial vice president the need for early implementation of a recently issued standard that would result in a much fairer presentation of the company's financial condition and earnings. When the financial vice president determines that early implementation of the standard will adversely affect reported net income for the year, he strongly discourages Richard from implementing the standard until it is required.

Instructions

- (a) Who are the stakeholders in this situation?
- (b) What, if any, are the ethical considerations in this situation?
- (c) What does Richard have to gain by advocating early implementation? Who might be affected by the decision against early implementation?



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

THE RECORDING PROCESS



THE NAVIGATOR ✓

- Understand *Concepts for Review*

- Read *Feature Story*

- Scan *Study Objectives*

- Read *Preview*

- Read text and answer *Before You Go On*
p. 74 p. 77 p. 87 p. 90
p. 91

- Work *Demonstration Problem*

- Review *Summary of Study Objectives*

- Complete *Assignments*

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. What assets, liabilities, stockholders' equity, retained earnings, dividends, revenues, and expenses are. (Ch. 1, pp. 11–12)
- b. Why assets equal liabilities plus stockholders' equity. (Ch. 1, p. 11)
- c. What transactions are and how they affect the basic accounting equation. (Ch. 2, pp. 44–51)

F E A T U R E S T O R Y

No Such Thing as a Perfect World

When she got a job doing the accounting for **Forster's Restaurants**, Tanis Anderson had almost finished her business administration degree at Simon Fraser University. But even after Tanis completed her degree requirements, her education still continued—this time, in the real world.

Tanis's responsibilities include paying the bills, tracking food and labor costs, and managing the payroll for **The Mug and Musket**, a popular destination restaurant in Surrey, British Columbia. "My title is Director of Finance," she laughs, "but really that means I take care of whatever needs doing!"

The use of judgment is a big part of the job. As Tanis says, "I learned all the fundamentals in my business classes; but school prepares you for a perfect world, and there is no such thing."

She feels fortunate that her boss understands that her job is a learning experience as well as a responsibility. "Sometimes he's let me do something he knew perfectly well was a mistake so I can learn something through experience," she admits.

To help others gain the benefits of her real-world learning, Tanis is

always happy to help students in the area who want to use Forster's as the subject of a project or a report. "It's the least I can do," she says.



 THE NAVIGATOR

S T U D Y O B J E C T I V E S

After studying this chapter, you should be able to

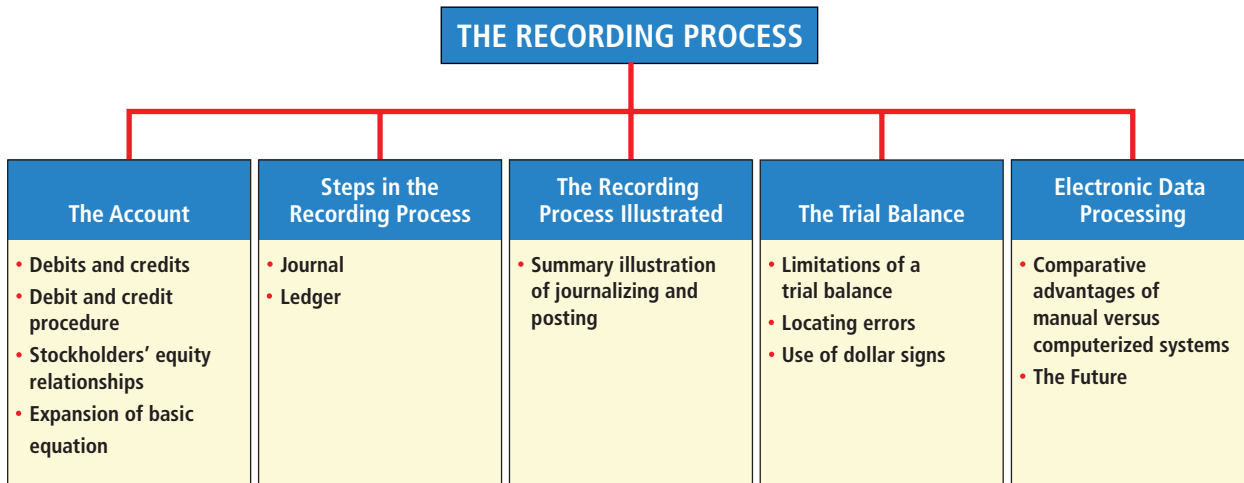
1. Explain what an account is and how it helps in the recording process.
2. Define debits and credits and explain how they are used to record business transactions.
3. Identify the basic steps in the recording process.
4. Explain what a journal is and how it helps in the recording process.
5. Explain what a ledger is and how it helps in the recording process.
6. Explain what posting is and how it helps in the recording process.
7. Prepare a trial balance and explain its purposes.
8. Identify the advantages of manual and computerized accounting systems.

 THE NAVIGATOR

PREVIEW OF CHAPTER 3

In Chapter 2 we analyzed business transactions in terms of the accounting equation. The cumulative effects of these transactions were presented in tabular form. Imagine a restaurant and gift shop such as **The Mug and Musket** using the same tabular format as Best Caterers, Inc., to keep track of every one of its transactions. In a single day, this restaurant and gift shop engages in hundreds of business transactions. To record each transaction this way would be impractical, expensive, and unnecessary. Instead, procedures and records are used to keep track of transaction data more easily.

This chapter introduces and illustrates these basic procedures and records. The content and organization of Chapter 3 are as follows:



THE ACCOUNT

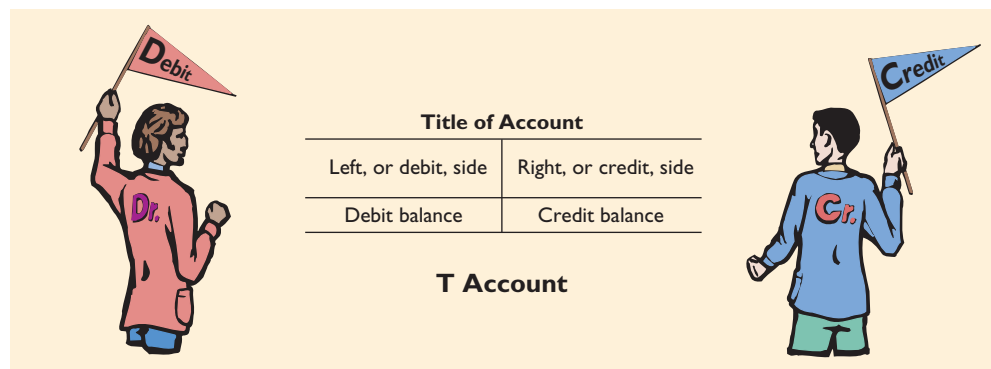
STUDY OBJECTIVE 1

Explain what an account is and how it helps in the recording process.

An **account** is an individual accounting record of increases and decreases in a specific asset, liability, or stockholders' equity item. For example, Best Caterers, Inc. (the company discussed in Chapter 2), would have separate accounts for Cash, Accounts Receivable, Accounts Payable, Service Revenue, Salaries Expense, and so on. In its simplest form, an account consists of three parts: (1) the title of the account, (2) a left, or debit, side, and (3) a right, or credit, side. Because the alignment of these parts of an account resembles the letter T, it is referred to as a **T account**. The basic form of an account is shown in Illustration 3-1.

Illustration 3-1

Basic form of account



The T account is a standard shorthand in accounting that helps make clear the effects of transactions on individual accounts. We will use it often throughout this book to explain basic accounting relationships. (Note that when we are referring to a specific account, we capitalize its name.)

DEBITS AND CREDITS

The term **debit** means left, and **credit** means right. They are commonly abbreviated as Dr. for debit and Cr. for credit.¹ These terms are directional signals: They indicate on which side of a T account a number will be recorded. Entering an amount on the left side of an account is called **debiting** the account; making an entry on the right side is **crediting** the account.

The procedure of having debits on the left and credits on the right is an accounting custom, or rule (like the custom of driving on the right-hand side of the road in the United States). *This rule applies to all accounts.* When the totals of the two sides are compared, an account will have a **debit balance** if the total of the debit amounts exceeds the credits. An account will have a **credit balance** if the credit amounts exceed the debits.

The recording of debits and credits in an account is shown in Illustration 3-2 for the cash transactions of Best Caterers, Inc. The data are taken from the cash column of the tabular summary in Illustration 2-10.

Tabular Summary	Account Form																																						
<table border="1"> <thead> <tr><th>Cash</th></tr> </thead> <tbody> <tr><td>\$15,000</td></tr> <tr><td>-7,000</td></tr> <tr><td>1,200</td></tr> <tr><td>1,500</td></tr> <tr><td>-1,700</td></tr> <tr><td>-250</td></tr> <tr><td>600</td></tr> <tr><td>-1,300</td></tr> <tr><td><u>\$ 8,050</u></td></tr> </tbody> </table>	Cash	\$15,000	-7,000	1,200	1,500	-1,700	-250	600	-1,300	<u>\$ 8,050</u>	<table border="1"> <thead> <tr><th colspan="4">Cash</th></tr> </thead> <tbody> <tr> <td style="width: 15%;">(Debits)</td> <td style="width: 15%;">15,000</td> <td style="width: 15%;">(Credits)</td> <td style="width: 15%;">7,000</td> </tr> <tr> <td></td> <td>1,200</td> <td></td> <td>1,700</td> </tr> <tr> <td></td> <td>1,500</td> <td></td> <td>250</td> </tr> <tr> <td></td> <td>600</td> <td></td> <td>1,300</td> </tr> <tr> <td>Balance</td> <td>8,050</td> <td></td> <td></td> </tr> <tr> <td>(Debit)</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Cash				(Debits)	15,000	(Credits)	7,000		1,200		1,700		1,500		250		600		1,300	Balance	8,050			(Debit)			
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	1,500		250																																				
	600		1,300																																				
Balance	8,050																																						
(Debit)																																							

STUDY OBJECTIVE 2

Define debits and credits and explain how they are used to record business transactions.

Illustration 3-2

Tabular summary compared to account form

HELPFUL HINT

At this point, don't think about increases and decreases in relation to debits and credits. As you'll soon learn, the effects of debits and credits depend on the type of account involved.

In the tabular summary, every positive item represents a receipt of cash; every negative amount represents a payment of cash. Notice that in the account form the increases in cash are recorded as debits, and the decreases in cash are recorded as credits. Having increases on one side and decreases on the other helps in determining the total of each side of the account, as well as the overall balance in the account. The account balance, a debit of \$8,050, indicates that Best Caterers, Inc., has had \$8,050 more increases than decreases in cash.

DEBIT AND CREDIT PROCEDURES

In Chapter 1 you learned the effect of a transaction on the basic accounting equation. Remember that each transaction must affect two or more accounts to keep the basic accounting equation in balance. In other words, for each transaction, **debits must equal credits** in the accounts. The equality of debits and credits provides the basis for the **double-entry system** of recording transactions.

Under the double-entry system the dual (two-sided) effect of each transaction is recorded in appropriate accounts. This universally used system provides a logical method for recording transactions. It also offers a means of proving the accu-

HELPFUL HINT

Debits must equal credits for each transaction.

¹These terms and their abbreviations come from the Latin words *debere* (Dr.) and *credere* (Cr.).

racy of the recorded amounts. If every transaction is recorded with equal debits and credits, then the sum of all the debits to the accounts must equal the sum of all the credits.

The double-entry system for determining the equality of the accounting equation is much more efficient than the plus/minus procedure used in Chapter 2. There, it was necessary after each transaction to compare total assets with total liabilities and stockholders' equity to determine the equality of the two sides of the accounting equation.

Assets and Liabilities

We know that both sides of the basic equation (Assets = Liabilities + Stockholders' Equity) must be equal. It follows that increases and decreases in assets and liabilities must be recorded opposite from each other. In Illustration 3-2, increases in cash—an asset—were entered on the left side, and decreases in cash were entered on the right side. Therefore, increases in liabilities must be entered on the right (credit) side, and decreases in liabilities must be entered on the left (debit) side. The effects that debits and credits have on assets and liabilities are summarized in Illustration 3-3.

Illustration 3-3

Debit and credit effects—assets and liabilities

Debits	Credits
Increase assets	Decrease assets
Decrease liabilities	Increase liabilities

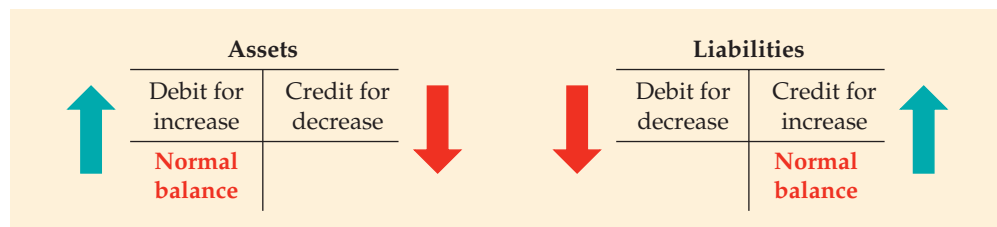
HELPFUL HINT

The normal balance for an account is always the same as the increase side.

Debits to a specific asset account should exceed the credits to that account. Credits to a liability account should exceed debits to that account. The **normal balance** of an account is on the side where an increase in the account is recorded. Thus asset accounts normally show debit balances, and liability accounts normally show credit balances. Illustration 3-4 shows how the normal balances can be diagrammed.

Illustration 3-4

Normal balances—assets and liabilities



Knowing the normal balance in an account may help you to trace errors. For example, a credit balance in an asset account such as Land or a debit balance in a liability account such as Wages Payable would indicate recording errors. Occasionally, an abnormal balance may be correct. The Cash account, for example, will have a credit balance when a company has overdrawn its bank balance (i.e., written a “bad” check).

Stockholders' Equity

As indicated in Chapter 1, there are five subdivisions of stockholders' equity: common stock, retained earnings, dividends, revenues, and expenses. In a double-entry system, accounts are kept for each of these subdivisions, as explained next.

COMMON STOCK. **Common stock** is issued in exchange for the owners' investment paid into a corporation. The Common Stock account is increased by credits and decreased by debits. When cash is invested in the business in exchange for shares of the corporation's stock, Cash is debited, and Common Stock is credited.

The rules of debit and credit for the Common Stock account are stated in Illustration 3-5.

Debits	Credits
Decrease common stock	Increase common stock

Illustration 3-5

Debit and credit effect—common stock

The normal balance in this account may be diagrammed as shown in Illustration 3-6.

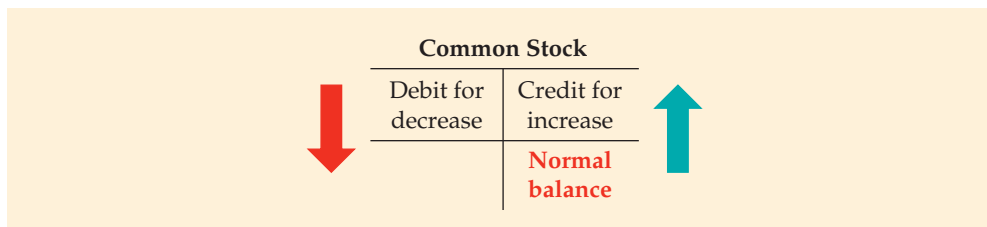


Illustration 3-6

Normal balance—common stock

HELPFUL HINT

The rules for debit and credit and the normal balance of common stock are the same as for liabilities.

RETAINED EARNINGS. **Retained earnings** is net income that is retained in the business. It represents the portion of stockholders' equity that has been accumulated through the profitable operation of the business. Retained earnings is increased by credits (net income) and decreased by debits (dividends or net losses), as shown in Illustration 3-7.

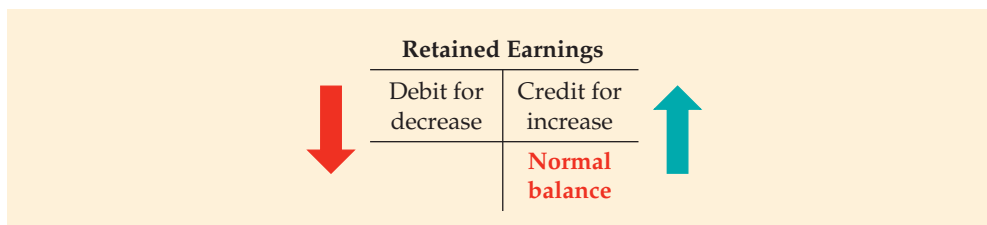


Illustration 3-7

Debit and credit effect and normal balance—retained earnings

DIVIDENDS. A **dividend** is a distribution by a corporation to its stockholders on a pro rata (equal) basis. The most common form of a distribution is a cash dividend. Dividends can be declared (authorized) only by the board of directors. They are a reduction of the stockholders' claims on retained earnings. The Dividends account is increased by debits and decreased by credits, with a normal debit balance as shown in Illustration 3-8.

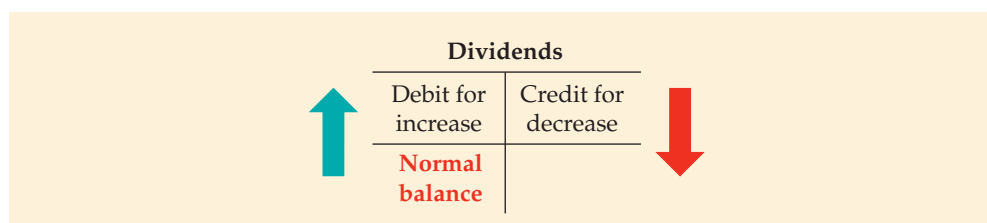


Illustration 3-8

Debit and credit effect and normal balance—dividends

Revenues and Expenses

HELPFUL HINT

Because revenues increase stockholders' equity, a revenue account has the same debit and credit rules as does the common stock account. Conversely, expenses have the opposite effect.

Remember that the ultimate purpose of earning revenues is to benefit the stockholders of the business. When revenues are earned, stockholders' equity is increased. Revenues are a subdivision of stockholders' equity that provides information as to *why* stockholders' equity increased. Revenue accounts are increased by credits and decreased by debits. Accordingly, **the effect of debits and credits on revenue accounts is identical to their effect on stockholders' equity.**

Expenses have the opposite effect: Expenses decrease stockholders' equity. Since expenses are the negative factor in computing net income, and revenues are the positive factor, it is logical that the increase and decrease sides of expense accounts should be the reverse of revenue accounts. Thus expense accounts are increased by debits and decreased by credits.

The effect of debits and credits on revenues and expenses may be stated as shown in Illustration 3-9.

Illustration 3-9

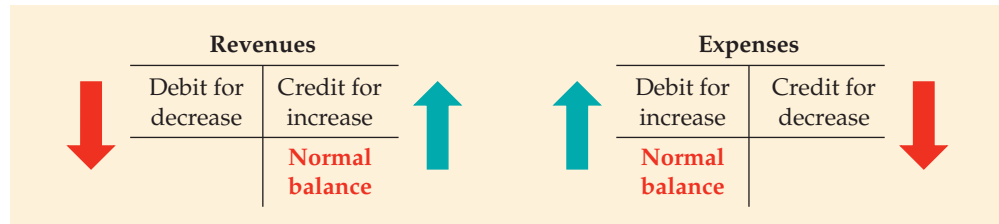
Debit and credit effects—revenues and expenses

Debits	Credits
Decrease revenues	Increase revenues
Increase expenses	Decrease expenses

Credits to revenue accounts should exceed the debits, and debits to expense accounts should exceed credits. Thus revenue accounts normally show credit balances, and expense accounts normally show debit balances. Illustration 3-10 diagrams the normal balances.

Illustration 3-10

Normal balances—revenues and expenses



ACCOUNTING IN ACTION *Business Insight*



The Chicago Cubs baseball team has the following major revenue and expense accounts:

Revenues	Expenses
Admissions (ticket sales)	Players' salaries
Concessions	Administrative salaries
Television and radio	Travel
Advertising	Ballpark maintenance

Do you think that the Chicago Bears (football team) would be likely to have the same major revenue and expense accounts as the Cubs? Do you think that the Chicago-based Wrigley Company would be likely to have the same major revenue and expense accounts? Why or why not?

STOCKHOLDERS' EQUITY RELATIONSHIPS

As indicated in Chapter 1, common stock and retained earnings are reported in the stockholders' equity section of the balance sheet. Dividends are reported on the retained earnings statement. Revenues and expenses are reported on the



income statement. Dividends, revenues, and expenses are eventually transferred to retained earnings at the end of the period. As a result, a change in any one of these three items affects stockholders' equity. The relationships related to stockholders' equity are shown in Illustration 3-11.

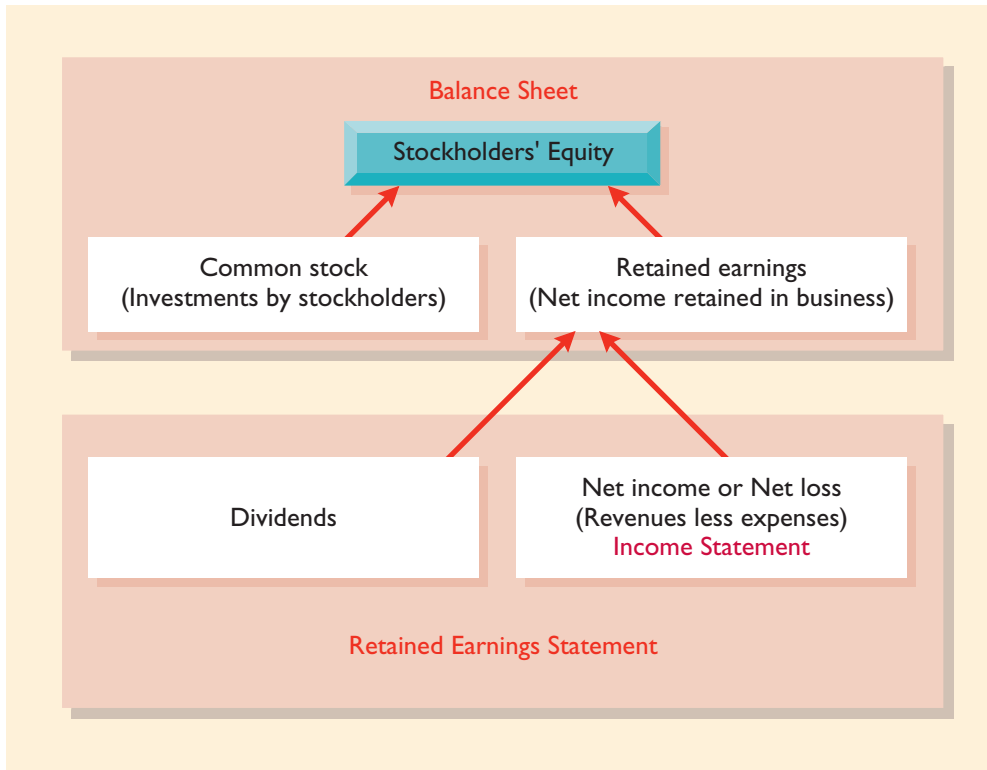
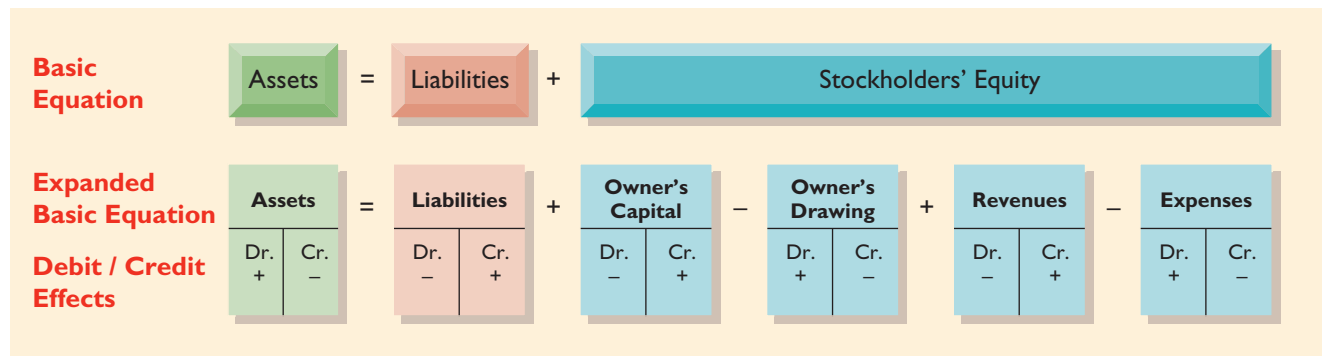


Illustration 3-11
Stockholders' equity relationships

EXPANSION OF THE BASIC EQUATION

You have already learned the basic accounting equation. Illustration 3-12 expands this equation to show the accounts that compose stockholders' equity. In addition, the debit/credit rules and effects on each type of account are illustrated. Study this diagram carefully. It will help you to understand the fundamentals of the double-entry system. Like the basic equation, the expanded basic equation must be in balance (total debits equal total credits).

Illustration 3-12
Expanded basic equation and debit/credit rules and effects



THE ACCOUNTING CYCLE

Now that we understand the accounts and how each type increases and decreases via debiting and crediting, we are ready to do "accounting." This means that we need to follow the accounting cycle. When you first learn how to drive a car,

the first step after you get into the car is to adjust your seat. Then you adjust the rearview mirror and the side mirrors. When all is fine, you turn on the engine, shift into gear, press on the gas, and so on. You would never turn on the engine, shift into gear, and then realize that you are too far from the peddles and so have to move your seat while the car is in gear. Of course, since you forgot to adjust the mirrors after you moved your seat, now you cannot see your blind spots. Refer back to Illustration 1-7, which shows the various steps in the accounting cycle beginning with a business transaction. In the remainder of this chapter until the end of Chapter 5, you will be following this cycle step-by-step. Remember, the steps are there for a reason. If you do not follow them, all your work will be wasted.

BEFORE YOU GO ON...

▶ REVIEW IT

1. What do the terms *debit* and *credit* mean?
2. What are the debit and credit effects on assets, liabilities, and stockholders' equity?
3. What are the debit and credit effects on revenues, expenses, and dividends?
4. What are the normal balances for **PepsiCo's** Cash, Accounts Payable, and Interest Expense accounts?



STEPS IN THE RECORDING PROCESS

STUDY OBJECTIVE 3

Identify the basic steps in the recording process.

In practically every business, there are three basic steps in the recording process:

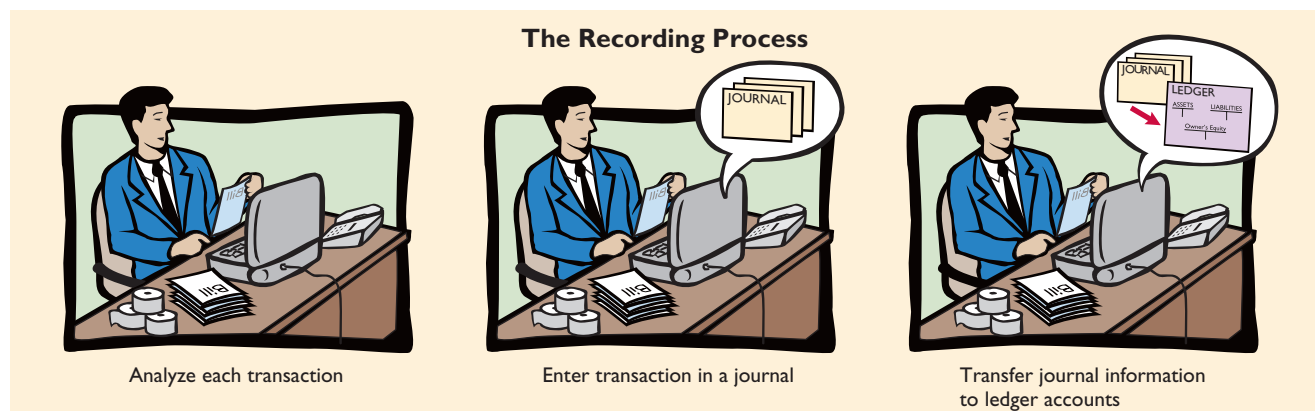
1. Analyze each transaction for its effects on the accounts.
2. Enter the transaction information in a journal (book of original entry).
3. Transfer the journal information to the appropriate accounts in the ledger (book of accounts).

Although it is possible to enter transaction information directly into the accounts without using a journal, few businesses do so.

The sequence of events in the recording process begins with the transaction. Evidence of the transaction is provided by a **business document**, such as a sales slip, a check, a bill, or a cash register tape. This evidence is analyzed to determine the effects of the transaction on specific accounts. The transaction is then entered in the journal. Finally, the journal entry is transferred to the designated accounts in the ledger. The sequence of events in the recording process is shown in Illustration 3-13.

Illustration 3-13

The recording process



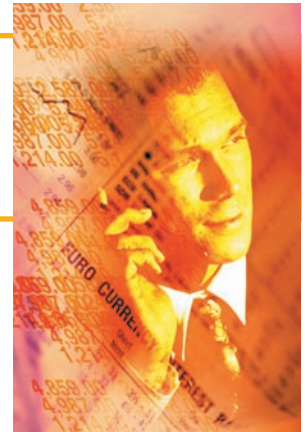
The basic steps in the recording process occur repeatedly. The analysis of transactions was illustrated in Chapter 1. Further examples will be given in this and later chapters. The other steps in the recording process are explained in the next sections.

Technology in Action examples show how computer technology is used in accounting and business.

TECHNOLOGY IN ACTION



Computerized and manual accounting systems basically parallel one another. Most of the procedures are handled by electronic circuitry in computerized systems. They seem to occur invisibly. But, to fully comprehend how computerized systems operate, you need to understand manual approaches for processing accounting data.



THE JOURNAL

Transactions are recorded initially in chronological order in a **journal** before being transferred to the accounts. Thus the journal is referred to as the book of original entry. For each transaction, the journal shows the debit and credit effects on specific accounts. Companies may use various kinds of journals, but every company has the most basic form of journal, a **general journal**. Typically, a general journal has spaces for dates, account titles and explanations, references, and two amount columns. Whenever we use the term *journal* in this textbook without a modifying adjective, we mean the general journal.

STUDY OBJECTIVE 4

Explain what a journal is and how it helps in the recording process.

The journal makes several significant contributions to the recording process:

1. It discloses in one place the complete effects of a transaction.
2. It provides a chronological record of transactions.
3. It helps to prevent or locate errors because the debit and credit amounts for each entry can be readily compared.

Entering transaction data in the journal is known as **journalizing**. Separate journal entries are made for each transaction. A complete entry consists of (1) the date of the transaction, (2) the accounts and amounts to be debited and credited, and (3) a brief explanation of the transaction.

Illustration 3-14 shows the technique of journalizing, using the first two transactions of Best Caterers, Inc. These transactions were: September 1, stockholders invested \$15,000 cash in the corporation in exchange for shares of stock, and

GENERAL JOURNAL					J1
Date	Account Titles and Explanation	Ref.	Debit	Credit	
2008 Sept. 1	Cash Common Stock (Issued shares of stock for cash)		15,000	15,000	
1	Computer Equipment Cash (Purchased equipment for cash)		7,000	7,000	

Illustration 3-14

Technique of journalizing

computer equipment was purchased for \$7,000 cash. The number J1 indicates that these two entries are recorded on the first page of the general journal.

The standard form and content of journal entries are as follows:

- The date of the transaction is entered in the Date column. The date recorded should include the year, month, and day of the transaction.
- The debit account title (i.e., the account to be debited) is entered first at the extreme left margin of the column headed “Account Titles and Explanation,” and the amount of the debit is recorded in the Debit column.
- The credit account title (i.e., the account to be credited) is indented and entered on the next line in the column headed “Account Titles and Explanation,” and the amount of the credit is recorded in the Credit column.
- A brief explanation of the transaction is given on the line below the credit account title.
- A space is left between journal entries. The blank space separates individual journal entries and makes the entire journal easier to read.
- The column titled Ref. (which stands for reference) is left blank when the journal entry is made. This column is used later when the journal entries are transferred to the ledger accounts. At that time, the ledger account number is placed in the Reference column to indicate where the amount in the journal entry was transferred.

It is important to use correct and specific account titles in journalizing. Since most accounts appear later in the financial statements, wrong account titles lead to incorrect financial statements. Some flexibility exists initially in selecting account titles. The main criterion is that each title must appropriately describe the content of the account. For example, the account title used for the cost of delivery trucks may be Delivery Equipment, Delivery Trucks, or Trucks. Once a company chooses the specific title to use, all later transactions involving the account should be recorded under that account title.²

If an entry involves only two accounts, one debit and one credit, it is considered a **simple entry**. Some transactions, however, require more than two accounts in journalizing. When three or more accounts are required in one journal entry, the entry is referred to as a **compound entry**. To illustrate, assume that on July 1, Butler Special Events purchased a delivery truck costing \$14,000 by paying \$8,000 cash and the balance on account (to be paid later). The compound entry is shown in Illustration 3-15.

In a compound entry, the total debit and credit amounts must be equal. Also, the standard format requires that all debits be listed before the credits.

Illustration 3-15

Compound journal entry

HELPFUL HINT

Assume you find this compound entry:

Wages Expense	700	
Cash		1,200
Rent Expense	400	

(Paid cash for wages and rent)

Is the entry correct? No. It is incorrect in form because both debits should be listed before the credit. It is incorrect in content because the debit amounts do not equal the credit amount.

GENERAL JOURNAL				J1	
Date	Account Titles and Explanation		Ref.	Debit	Credit
2008 July 1	Delivery Equipment			14,000	
	Cash				8,000
	Accounts Payable				6,000
	(Purchased truck for cash with balance on account)				

²In homework problems, when specific account titles are given, they should be used. When account titles are not given, you may select account titles that identify the nature and the content of each account. The account titles used in journalizing should not contain explanations such as Cash Paid or Cash Received.

BEFORE YOU GO ON...**▶ REVIEW IT**

1. What is the sequence of the steps in the recording process?
2. What contribution does the journal make to the recording process?
3. What is the standard form and content of a journal entry made in the general journal?

▶ DO IT

In establishing her beauty salon, Raisin Buns, Inc., Kate Browne as president and sole stockholder engaged in the following activities.

1. Opened a bank account in the name of Raisin Buns, Inc., and deposited \$20,000 of her own money in this account in exchange for shares of common stock.
2. Purchased equipment on account (to be paid in 30 days) for a total cost of \$4,800.
3. Interviewed three applicants for the position of stylists.

In what form (type of record) should Raisin Buns, Inc., record these three activities? Prepare the entries to record the transactions.

ACTION PLAN

- Understand which activities need to be recorded and which do not. Any that have economic effects should be recorded in a journal.
- Analyze the effects of transactions on asset, liability, and stockholders' equity accounts.

SOLUTION

Each transaction that is recorded is entered in the general journal. The three activities would be recorded as follows.

1. Cash	20,000	
Common Stock		20,000
(Issued shares of stock for cash)		
2. Equipment	4,800	
Accounts Payable		4,800
(Purchased equipment on account)		
3. No entry because no transaction has occurred		

**THE LEDGER**

The entire group of accounts maintained by a company is called the **ledger**. The ledger keeps in one place all the information about changes in specific account balances.

Companies may use various kinds of ledgers, but every company has a general ledger. A **general ledger** contains all the assets, liabilities, and stockholders' equity accounts, as shown in Illustration 3-16.

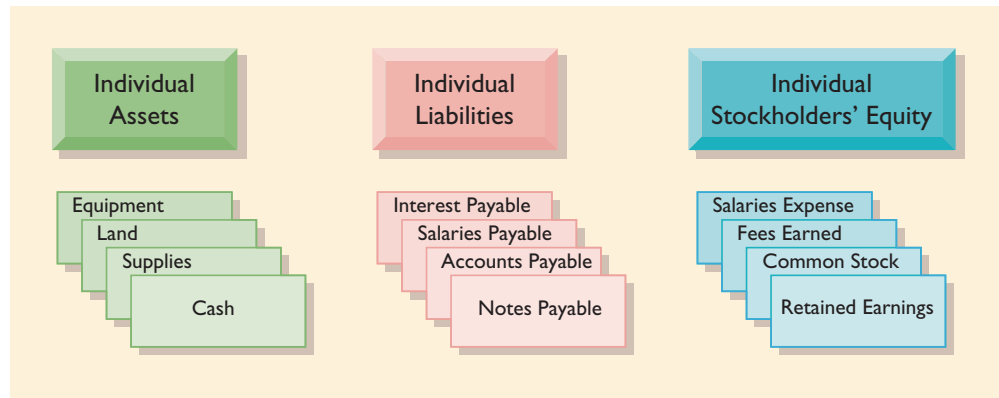
A business can use a looseleaf binder or a card file for the ledger. Each account is kept on a separate sheet or card. Whenever the term *ledger* is used in this textbook without a modifying adjective, it means the general ledger.

The ledger should be arranged in the order in which accounts are presented in the financial statements, beginning with the balance sheet accounts. First in order are the asset accounts, followed by liability accounts, stockholders' equity accounts, revenues, and expenses. Each account is numbered for easier identification.

STUDY OBJECTIVE 5

Explain what a ledger is and how it helps in the recording process.

Illustration 3-16
The general ledger



The ledger provides management with the balances in various accounts. For example, the Cash account shows the amount of cash that is available to meet current obligations. Amounts due from customers can be found by examining Accounts Receivable, and amounts owed to creditors can be found by examining Accounts Payable.

ACCOUNTING IN ACTION *Business Insight*



In his autobiography, Sam Walton described the double-entry accounting system with which he began the **Wal-Mart** empire: “We kept a little pigeonhole on the wall for the cash receipts and paperwork of each [Wal-Mart] store. I had a blue binder ledger book for each store. When we added a store, we added a pigeonhole. We did this at least up to twenty stores. Then once a month, the bookkeeper and I would enter the merchandise, enter the sales, enter the cash, and balance it.”

Why did Sam Walton keep separate pigeonholes and blue binders for each store? Why bother to keep separate records for each store?

SOURCE: Sam Walton, *Made in America* (New York: Doubleday, 1992), p. 53.

Standard Form of Account

The simple T-account form used in accounting textbooks is often useful for illustration purposes. However, in practice, the account forms used in ledgers are much more structured. A widely used form is shown in Illustration 3-17, using assumed data from a cash account.

Illustration 3-17
Three-column form of account

CASH						NO. 101
Date	Explanation	Ref.	Debit	Credit	Balance	
2008						
June 1			25,000		25,000	
2				8,000	17,000	
3			4,200		21,200	
9			7,500		28,700	
17				11,700	17,000	
20				250	16,750	
30				7,300	9,450	

This form is often called the **three-column form of account** because it has three money columns—debit, credit, and balance. The balance in the account is determined after each transaction. Note that the explanation space and reference columns are used to provide special information about the transaction.

Posting

The procedure of transferring journal entries to the ledger accounts is called **posting**. Posting involves the following steps:

1. In the ledger, enter in the appropriate columns of the account(s) debited the date, the journal page, and the debit amount shown in the journal.
2. In the reference column of the journal, write the account number to which the debit amount was posted.
3. In the ledger, enter in the appropriate columns of the account(s) credited the date, the journal page, and the credit amount shown in the journal.
4. In the reference column of the journal, write the account number to which the credit amount was posted.

These four steps are diagrammed in Illustration 3-18 using the first journal entry of Best Caterers, Inc. The boxed numbers indicate the sequence of the steps.

Posting should be performed in chronological order. That is, all the debits and credits of one journal entry should be posted before proceeding to the next journal

STUDY OBJECTIVE 5

Explain what posting is and how it helps in the recording process.

HELPFUL HINT

How can one tell whether all postings have been completed? Answer: Scan the reference column of the journal to see whether there are any blanks opposite account titles. If there are no blanks, all postings have been made.

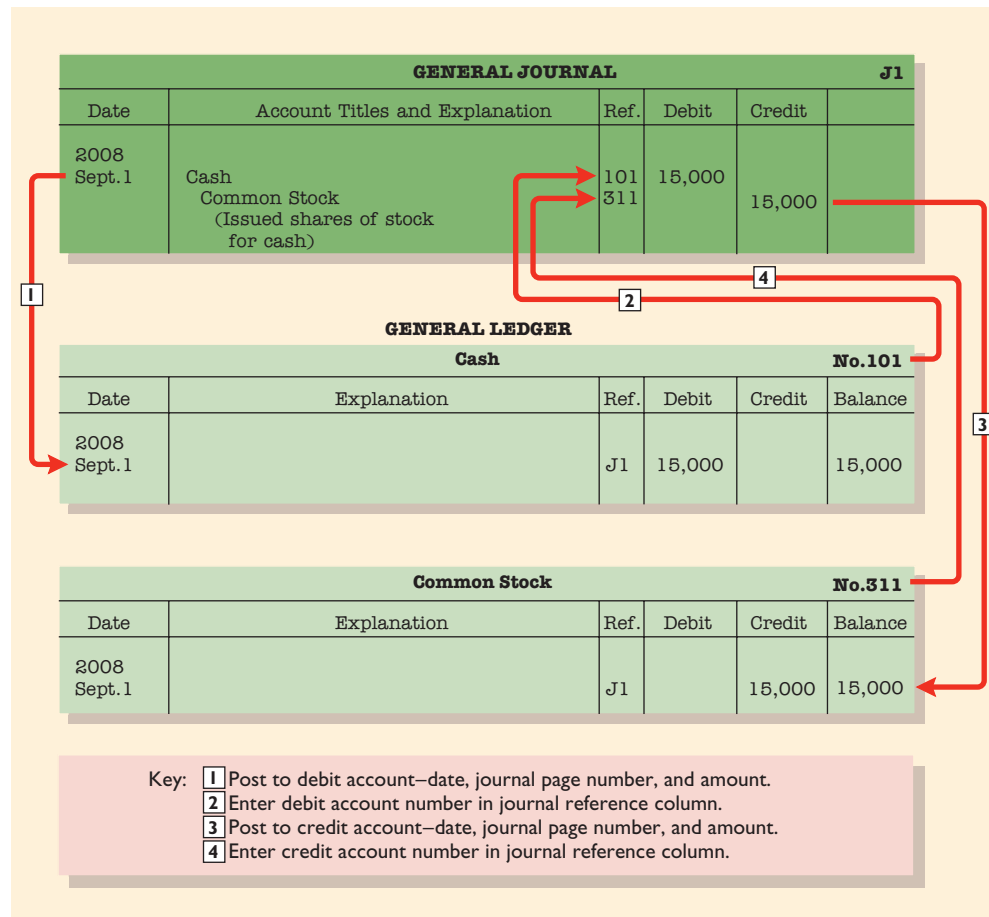


Illustration 3-18

Posting a journal entry

entry. Postings should be made on a timely basis to ensure that the ledger is up to date.³

The reference column *in the journal* serves several purposes. The numbers in this column indicate the entries that have been posted. After the last entry has been posted, this column should be scanned to see that all postings have been made.

The reference column *of a ledger account* indicates the journal page from which the transaction was posted. The explanation space of the ledger account is used infrequently because an explanation already appears in the journal. It generally is used only when detailed analysis of account activity is required.

TECHNOLOGY IN ACTION



Determining what to record is the most critical (and for most businesses the most expensive) point in the accounting process. In computerized systems, after this phase is completed, the input and all further processing just boil down to merging files and generating reports. Programmers and management information system types with good accounting backgrounds (as should be gained from a good principles textbook) are better able to develop effective computerized systems.

Chart of Accounts

The number and type of accounts used differ for each enterprise. The number of accounts depends on the amount of detail desired by management. For example, the management of one company may want one account for all types of utility expense. Another may keep separate expense accounts for each type of utility, such as gas, electricity, and water. Similarly, a small corporation like Best Caterers, Inc., will have fewer accounts than a corporate giant like **General Mills**. Best Caterers, Inc., may be able to manage and report its activities in twenty to thirty accounts, whereas **General Mills** requires thousands of accounts to keep track of its worldwide activities.

Most companies have a **chart of accounts** that lists the accounts and the account numbers that identify their location in the ledger. The numbering system used to identify the accounts usually starts with the balance sheet accounts and follows with the income statement accounts.

In this and the next two chapters we will be explaining the accounting for Premier Staffing Agency, Inc. (a service enterprise). Accounts 101–199 indicate asset accounts; 200–299 indicate liabilities; 300–350 indicate stockholders' equity accounts; 400–499, revenues; 601–799, expenses; 800–899, other revenues; and 900–999, other expenses.

The chart of accounts for Premier Staffing Agency, Inc., is shown in Illustration 3-19. Accounts shown in red are used in this chapter; accounts shown in black are explained in later chapters.

You will notice that there are gaps in the numbering system of the chart of accounts for Premier Staffing Agency, Inc. Gaps are left to permit the insertion of new accounts as needed during the life of the business.

³In homework problems it will be permissible to journalize all transactions before posting any of the journal entries.



CHART OF ACCOUNTS Premier Staffing Agency, Inc.	
Assets	Stockholders' Equity
<p>101 Cash 112 Accounts Receivable 129 Supplies 130 Prepaid Insurance 157 Office Equipment 158 Accumulated Depreciation—Office Equipment</p>	<p>311 Common Stock 320 Retained Earnings 332 Dividends 350 Income Summary</p> <hr/> <p style="text-align: center;">Revenues</p> <hr/> <p>400 Service Revenue</p> <hr/> <p style="text-align: center;">Expenses</p> <hr/> <p>611 Advertising Supplies Expense 711 Depreciation Expense 722 Insurance Expense 726 Salaries Expense 729 Rent Expense 905 Interest Expense</p>
Liabilities	Expenses
<p>200 Notes Payable 201 Accounts Payable 209 Unearned Revenue 212 Salaries Payable 230 Interest Payable</p>	

Illustration 3-19
Chart of accounts for Premier Staffing Agency, Inc.

THE RECORDING PROCESS ILLUSTRATED

Illustrations 3-20 through 3-29 show the basic steps in the recording process using the October transactions of the Premier Staffing Agency, Inc. Its accounting period is a month. A basic analysis and a debit–credit analysis precede the journalizing and posting of each transaction. For simplicity, the T-account form is used in the illustrations instead of the standard account form.

Study the transaction analyses in Illustrations 3-20 through 3-29 carefully. **The purpose of transaction analysis is first to identify the type of account involved and then to determine whether a debit or a credit to the account is required.** You should always perform this type of analysis before preparing a journal entry. Doing so will help you to understand the journal entries discussed in this chapter as well as more complex journal entries to be described in later chapters.

ACCOUNTING IN ACTION *Business Insight*



While most companies record transactions very carefully, the reality is that sometimes even the most careful companies make mistake in their accounting records. For example, **Hanover Compressor** at one time announced that it was restating its financial results for an error that had been made in each of the previous five years. It had accidentally omitted the cost of compressors manufactured at one of its plants, causing the cost of its inventory to be misstated. **Bank One Corporation** was fined \$1.8 million by banking regulators because regulators felt that its accounting system was unreliable and caused the bank to violate certain minimum banking requirements. Finally, before a major overhaul of its accounting system, the financial records of **Waste Management Company** were in such disarray that of the company's 57,000 employees, 10,000 were receiving pay slips that were in error.

In order to prepare and issue financial statements, these companies accounting equations (debit and credits) must have been in balance at year-end.

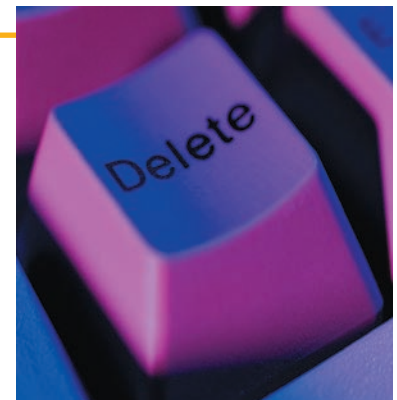


Illustration 3-20

Investment of cash by stockholders

HELPFUL HINT

To correctly record a transaction, you must carefully analyze the event and translate that analysis into debit and credit language.

First: Determine what type of account is involved.

Second: Determine what items increased or decreased and by how much.

Third: Translate the increases and decreases into debits and credits.

Transaction	October 1, stockholders invest \$10,000 cash in an advertising venture to be known as the Premier Staffing Agency, Inc.										
Basic Analysis	The asset Cash is increased \$10,000, and stockholders' equity (specifically Common Stock) is increased \$10,000.										
Debit – Credit Analysis	Debits increase assets: debit Cash \$10,000. Credits increase stockholders' equity: credit Common Stock \$10,000.										
Journal Entry	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">Oct. 1</td> <td style="width: 60%;">Cash</td> <td style="width: 10%; text-align: right;">101</td> <td style="width: 10%; text-align: right;">10,000</td> <td style="width: 10%;"></td> </tr> <tr> <td></td> <td>Common Stock (Issued shares of stock for cash)</td> <td style="text-align: right;">311</td> <td></td> <td style="text-align: right;">10,000</td> </tr> </table>	Oct. 1	Cash	101	10,000			Common Stock (Issued shares of stock for cash)	311		10,000
Oct. 1	Cash	101	10,000								
	Common Stock (Issued shares of stock for cash)	311		10,000							
Posting	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-bottom: 1px solid black; text-align: right;">Cash 101</td> <td style="width: 50%; border-bottom: 1px solid black; text-align: right;">Common Stock 311</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">Oct. 1, 10,000</td> <td style="padding: 5px;">Oct. 1, 10,000</td> </tr> </table>	Cash 101	Common Stock 311	Oct. 1, 10,000	Oct. 1, 10,000						
Cash 101	Common Stock 311										
Oct. 1, 10,000	Oct. 1, 10,000										

Illustration 3-21

Purchase of office equipment

Transaction	October 1, office equipment costing \$5,000 is purchased by signing a 3-month, 12%, \$5,000 note payable.										
Basic Analysis	The asset Office Equipment is increased \$5,000, and the liability Notes Payable is increased \$5,000.										
Debit – Credit Analysis	Debits increase assets: debit Office Equipment \$5,000. Credits increase liabilities: credit Notes Payable \$5,000.										
Journal Entry	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">Oct. 1</td> <td style="width: 60%;">Office Equipment</td> <td style="width: 10%; text-align: right;">157</td> <td style="width: 10%; text-align: right;">5,000</td> <td style="width: 10%;"></td> </tr> <tr> <td></td> <td>Notes Payable (Issued 3-month, 12% note for office equipment)</td> <td style="text-align: right;">200</td> <td></td> <td style="text-align: right;">5,000</td> </tr> </table>	Oct. 1	Office Equipment	157	5,000			Notes Payable (Issued 3-month, 12% note for office equipment)	200		5,000
Oct. 1	Office Equipment	157	5,000								
	Notes Payable (Issued 3-month, 12% note for office equipment)	200		5,000							
Posting	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-bottom: 1px solid black; text-align: right;">Office Equipment 157</td> <td style="width: 50%; border-bottom: 1px solid black; text-align: right;">Notes Payable 200</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">Oct. 1, 5,000</td> <td style="padding: 5px;">Oct. 1, 5,000</td> </tr> </table>	Office Equipment 157	Notes Payable 200	Oct. 1, 5,000	Oct. 1, 5,000						
Office Equipment 157	Notes Payable 200										
Oct. 1, 5,000	Oct. 1, 5,000										

Transaction	October 2, a \$1,200 cash advance is received from R. Knox, a client, for staffing services that are expected to be completed by December 31.																
Basic Analysis	The asset Cash is increased \$1,200; the liability Unearned Revenue is increased \$1,200 because the service has not been rendered yet. That is, when an advance payment is received, an unearned revenue (a liability) should be recorded in order to recognize the obligation that exists. Note also that although many liabilities have the word "payable" in their title, unearned revenue is considered a liability even though the word "payable" is not used.																
Debit – Credit Analysis	Debits increase assets: debit Cash \$1,200. Credits increase liabilities: credit Unearned Revenue \$1,200.																
Journal Entry	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">Oct. 2</td> <td style="width: 45%;">Cash</td> <td style="width: 10%; text-align: right;">101</td> <td style="width: 10%; text-align: right;">1,200</td> <td style="width: 15%;"></td> </tr> <tr> <td></td> <td>Unearned Revenue (Received cash from R. Knox for future service)</td> <td style="text-align: right;">209</td> <td style="text-align: right;">1,200</td> <td style="text-align: right;">1,200</td> </tr> </table>	Oct. 2	Cash	101	1,200			Unearned Revenue (Received cash from R. Knox for future service)	209	1,200	1,200						
Oct. 2	Cash	101	1,200														
	Unearned Revenue (Received cash from R. Knox for future service)	209	1,200	1,200													
Posting	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Cash 101</td> <td style="width: 50%; text-align: center;">Unearned Revenue 209</td> </tr> <tr> <td style="border-right: 1px solid black;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">Oct. 1</td> <td style="width: 10%; text-align: right;">10,000</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: right;">1,200</td> <td style="text-align: right;">1,200</td> <td style="text-align: right;">1,200</td> </tr> </table> </td> <td style="border-right: 1px solid black;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">Oct. 2</td> <td style="width: 10%; text-align: right;">1,200</td> </tr> </table> </td> </tr> </table>	Cash 101	Unearned Revenue 209	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">Oct. 1</td> <td style="width: 10%; text-align: right;">10,000</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: right;">1,200</td> <td style="text-align: right;">1,200</td> <td style="text-align: right;">1,200</td> </tr> </table>	Oct. 1	10,000			2	1,200	1,200	1,200	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">Oct. 2</td> <td style="width: 10%; text-align: right;">1,200</td> </tr> </table>			Oct. 2	1,200
Cash 101	Unearned Revenue 209																
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Oct. 1	10,000																
2	1,200	1,200	1,200														
		Oct. 2	1,200														

Illustration 3-22

Receipt of cash for future service

HELPFUL HINT

When the revenue is earned, the Unearned Revenue account is debited (decreased), and a revenue account is credited (increased).

Transaction	October 3, office rent for October is paid in cash, \$900.																
Basic Analysis	The expense Rent is increased \$900 because the payment pertains only to the current month; the asset Cash is decreased \$900.																
Debit – Credit Analysis	Debits increase expenses: debit Rent Expense \$900. Credits decrease assets: credit Cash \$900.																
Journal Entry	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">Oct. 3</td> <td style="width: 45%;">Rent Expense</td> <td style="width: 10%; text-align: right;">729</td> <td style="width: 10%; text-align: right;">900</td> <td style="width: 15%;"></td> </tr> <tr> <td></td> <td>Cash (Paid October rent)</td> <td style="text-align: right;">101</td> <td style="text-align: right;">900</td> <td style="text-align: right;">900</td> </tr> </table>	Oct. 3	Rent Expense	729	900			Cash (Paid October rent)	101	900	900						
Oct. 3	Rent Expense	729	900														
	Cash (Paid October rent)	101	900	900													
Posting	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Cash 101</td> <td style="width: 50%; text-align: center;">Rent Expense 729</td> </tr> <tr> <td style="border-right: 1px solid black;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">Oct. 1</td> <td style="width: 10%; text-align: right;">10,000</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: right;">1,200</td> <td style="text-align: right;">900</td> <td style="text-align: right;">900</td> </tr> </table> </td> <td style="border-right: 1px solid black;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">Oct. 3</td> <td style="width: 10%; text-align: right;">900</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> </table> </td> </tr> </table>	Cash 101	Rent Expense 729	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">Oct. 1</td> <td style="width: 10%; text-align: right;">10,000</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: right;">1,200</td> <td style="text-align: right;">900</td> <td style="text-align: right;">900</td> </tr> </table>	Oct. 1	10,000			2	1,200	900	900	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">Oct. 3</td> <td style="width: 10%; text-align: right;">900</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> </table>	Oct. 3	900		
Cash 101	Rent Expense 729																
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">Oct. 1</td> <td style="width: 10%; text-align: right;">10,000</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: right;">1,200</td> <td style="text-align: right;">900</td> <td style="text-align: right;">900</td> </tr> </table>	Oct. 1	10,000			2	1,200	900	900	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">Oct. 3</td> <td style="width: 10%; text-align: right;">900</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> </table>	Oct. 3	900						
Oct. 1	10,000																
2	1,200	900	900														
Oct. 3	900																

Illustration 3-23

Payment of monthly rent

Illustration 3-24

Payment for insurance

Transaction	October 4, \$600 is paid for a one-year insurance policy that will expire next year on September 30.												
Basic Analysis	The asset Prepaid Insurance is increased \$600 because the payment extends to more than the current month; the asset Cash is decreased \$600. Note that payments of expenses that will benefit more than one accounting period are identified as prepaid expenses or prepayments. When a payment is made, an asset account is debited in order to show the service or the benefit that will be received in the future.												
Debit – Credit Analysis	Debits increase assets: debit Prepaid Insurance \$600. Credits decrease assets: credit Cash \$600.												
Journal Entry	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Oct. 4</td> <td style="width: 60%;">Prepaid Insurance Cash (Paid one-year policy; effective date October 1)</td> <td style="width: 10%; text-align: right;">130 101</td> <td style="width: 10%; text-align: right;">600 600</td> <td style="width: 10%; text-align: right;">600</td> </tr> </table>	Oct. 4	Prepaid Insurance Cash (Paid one-year policy; effective date October 1)	130 101	600 600	600							
Oct. 4	Prepaid Insurance Cash (Paid one-year policy; effective date October 1)	130 101	600 600	600									
Posting	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Cash 101</td> <td colspan="2" style="text-align: center;">Prepaid Insurance 130</td> </tr> <tr> <td style="width: 25%;">Oct. 1 10,000</td> <td style="width: 25%;">Oct. 3 900</td> <td style="width: 25%;">Oct. 4 600</td> <td style="width: 25%;"></td> </tr> <tr> <td style="text-align: right;">2 1,200</td> <td style="text-align: right;">4 600</td> <td></td> <td></td> </tr> </table>	Cash 101		Prepaid Insurance 130		Oct. 1 10,000	Oct. 3 900	Oct. 4 600		2 1,200	4 600		
Cash 101		Prepaid Insurance 130											
Oct. 1 10,000	Oct. 3 900	Oct. 4 600											
2 1,200	4 600												

Illustration 3-25

Purchase of supplies on credit

Transaction	October 5, an estimated 3-month supply of materials is purchased on account from Aero Supply for \$2,500.								
Basic Analysis	The asset Supplies is increased \$2,500; the liability Accounts Payable is increased \$2,500.								
Debit – Credit Analysis	Debits increase assets: debit Supplies \$2,500. Credits increase liabilities: credit Accounts Payable \$2,500.								
Journal Entry	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Oct. 5</td> <td style="width: 60%;">Supplies Accounts Payable (Purchased supplies on account from Aero Supply)</td> <td style="width: 10%; text-align: right;">129 201</td> <td style="width: 10%; text-align: right;">2,500 2,500</td> <td style="width: 10%; text-align: right;">2,500</td> </tr> </table>	Oct. 5	Supplies Accounts Payable (Purchased supplies on account from Aero Supply)	129 201	2,500 2,500	2,500			
Oct. 5	Supplies Accounts Payable (Purchased supplies on account from Aero Supply)	129 201	2,500 2,500	2,500					
Posting	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Supplies 129</td> <td colspan="2" style="text-align: center;">Accounts Payable 201</td> </tr> <tr> <td style="width: 25%;">Oct. 5 2,500</td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;">Oct. 5 2,500</td> </tr> </table>	Supplies 129		Accounts Payable 201		Oct. 5 2,500			Oct. 5 2,500
Supplies 129		Accounts Payable 201							
Oct. 5 2,500			Oct. 5 2,500						

Keep in mind that every journal entry affects one or more of the following items: assets, liabilities, stockholders' equity, revenues, or expenses. By becoming skilled at transaction analysis, you will be able to recognize quickly the impact of any transaction on these five items.

Transaction	October 9, hire four employees to begin work on October 15. Each employee is to receive a weekly salary of \$500 for a 5-day work week, payable every 2 weeks—first payment made on October 26.
Basic Analysis	A business transaction has not occurred. There is only an agreement between the employer and the employees to enter into a business transaction beginning on October 15. Thus, a debit–credit analysis is not needed because there is no accounting entry. (See transaction of October 26 for first entry.)

Illustration 3-26
Hiring of employees

Transaction	October 20, the board of directors declares and pays a \$500 cash dividend to stockholders.																															
Basic Analysis	The dividends account is increased \$500; the asset Cash is decreased \$500.																															
Debit – Credit Analysis	Debits increase dividends: debit Dividends \$500. Credits decrease assets: credit Cash \$500.																															
Journal Entry	Oct. 20	Dividends Cash (Declared and paid a cash dividend)	332 101	500	500																											
Posting	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;">Cash</th> <th style="text-align: right;">101</th> </tr> </thead> <tbody> <tr> <td style="width: 10%;">Oct. 1</td> <td style="width: 80%;">10,000</td> <td style="width: 10%;"></td> </tr> <tr> <td>2</td> <td>1,200</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">900</td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">4</td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">20</td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">500</td> </tr> </tbody> </table>		Cash		101	Oct. 1	10,000		2	1,200				900			4			20			500	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;">Dividends</th> <th style="text-align: right;">332</th> </tr> </thead> <tbody> <tr> <td style="width: 10%;">Oct. 20</td> <td style="width: 80%;">500</td> <td style="width: 10%;"></td> </tr> </tbody> </table>			Dividends		332	Oct. 20	500	
Cash		101																														
Oct. 1	10,000																															
2	1,200																															
		900																														
		4																														
		20																														
		500																														
Dividends		332																														
Oct. 20	500																															

Illustration 3-27
Declaration and payment of dividend by corporation

Illustration 3-28

Payment of salaries

Transaction	October 26, employee salaries of \$4,000 are owed and paid in cash. (See October 9 transaction.)																				
Basic Analysis	The expense account Salaries Expense is increased \$4,000; the asset Cash is decreased \$4,000.																				
Debit – Credit Analysis	Debits increase expenses: debit Salaries Expense \$4,000. Credits decrease assets: credit Cash \$4,000.																				
Journal Entry	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Oct. 26</td> <td style="width: 60%;">Salaries Expense Cash (Paid salaries to date)</td> <td style="width: 10%; text-align: right;">726 101</td> <td style="width: 10%; text-align: right;">4,000</td> <td style="width: 10%; text-align: right;">4,000</td> </tr> </table>	Oct. 26	Salaries Expense Cash (Paid salaries to date)	726 101	4,000	4,000															
Oct. 26	Salaries Expense Cash (Paid salaries to date)	726 101	4,000	4,000																	
Posting	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Cash 101</th> <th colspan="2" style="text-align: center;">Salaries Expense 726</th> </tr> </thead> <tbody> <tr> <td style="width: 25%;">Oct. 1 10,000</td> <td style="width: 25%;">Oct. 3 900</td> <td style="width: 25%;">Oct. 26 4,000</td> <td style="width: 25%;"></td> </tr> <tr> <td style="text-align: right;">2 1,200</td> <td style="text-align: right;">4 600</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: right;">20 500</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: right;">26 4,000</td> <td></td> <td></td> </tr> </tbody> </table>	Cash 101		Salaries Expense 726		Oct. 1 10,000	Oct. 3 900	Oct. 26 4,000		2 1,200	4 600				20 500				26 4,000		
Cash 101		Salaries Expense 726																			
Oct. 1 10,000	Oct. 3 900	Oct. 26 4,000																			
2 1,200	4 600																				
	20 500																				
	26 4,000																				

Illustration 3-29

Receipt of cash for services provided

Transaction	October 31, received \$10,000 in cash from Copa Company for staffing services provided in October.																				
Basic Analysis	The asset Cash is increased \$10,000; the revenue account Service Revenue is increased \$10,000.																				
Debit – Credit Analysis	Debits increase assets: debit Cash \$10,000. Credits increase revenues: credit Service Revenue \$10,000.																				
Journal Entry	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Oct. 31</td> <td style="width: 60%;">Cash Service Revenue (Received cash for services provided)</td> <td style="width: 10%; text-align: right;">101 400</td> <td style="width: 10%; text-align: right;">10,000</td> <td style="width: 10%; text-align: right;">10,000</td> </tr> </table>	Oct. 31	Cash Service Revenue (Received cash for services provided)	101 400	10,000	10,000															
Oct. 31	Cash Service Revenue (Received cash for services provided)	101 400	10,000	10,000																	
Posting	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Cash 101</th> <th colspan="2" style="text-align: center;">Service Revenue 400</th> </tr> </thead> <tbody> <tr> <td style="width: 25%;">Oct. 1 10,000</td> <td style="width: 25%;">Oct. 3 900</td> <td style="width: 25%;"></td> <td style="width: 25%;">Oct. 31 10,000</td> </tr> <tr> <td style="text-align: right;">2 1,200</td> <td style="text-align: right;">4 600</td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">31 10,000</td> <td style="text-align: right;">20 500</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: right;">26 4,000</td> <td></td> <td></td> </tr> </tbody> </table>	Cash 101		Service Revenue 400		Oct. 1 10,000	Oct. 3 900		Oct. 31 10,000	2 1,200	4 600			31 10,000	20 500				26 4,000		
Cash 101		Service Revenue 400																			
Oct. 1 10,000	Oct. 3 900		Oct. 31 10,000																		
2 1,200	4 600																				
31 10,000	20 500																				
	26 4,000																				

BEFORE YOU GO ON...

▶ **REVIEW IT**

1. How does journalizing differ from posting?
2. What is the purpose of the (a) ledger and (b) chart of accounts?
3. Why are gaps left in the chart of accounts numbering system?

▶ **DO IT**

Hair It Is, Inc., recorded the following transactions in a general journal during the month of March:

Cash	2,280	
Service Revenue		2,280
Wages Expense	400	
Cash		400
Utilities Expense	92	
Cash		92

Post these entries to the general ledger accounts. Determine the ending balance in the cash accounts. The beginning balance in cash on March 1 was \$600.

ACTION PLAN

- Recall that posting involves transferring the journalized debits and credits to specific accounts in the ledger.
- Determine the ending balance by netting the total debits and credits.

SOLUTION

Cash	
3/1	600
	2,280
3/31 Bal.	2,388
Service Revenue	
	2,280
Wages Expense	
	400
Utilities Expense	
	92



SUMMARY ILLUSTRATION OF JOURNALIZING AND POSTING

The journal for Premier Staffing Agency, Inc., for October is shown in Illustration 3-30 on page 88. The ledger is shown in Illustration 3-31 on page 89, with all balances in color.

Illustration 3-30

General journal entries

GENERAL JOURNAL				PAGE J1
Date	Account Titles and Explanation	Ref.	Debit	Credit
2008				
Oct. 1	Cash	101	10,000	
	Common Stock	311		10,000
	(Issued shares of stock for cash)			
1	Office Equipment	157	5,000	
	Notes Payable	200		5,000
	(Issued 3-month, 12% note for office equipment)			
2	Cash	101	1,200	
	Unearned Revenue	209		1,200
	(Received cash from R. Knox for future services)			
3	Rent Expense	729	900	
	Cash	101		900
	(Paid October rent)			
4	Prepaid Insurance	130	600	
	Cash	101		600
	(Paid one-year policy; effective date October 1)			
5	Supplies	129	2,500	
	Accounts Payable	201		2,500
	(Purchased supplies on account from Aero Supply)			
20	Dividends	332	500	
	Cash	101		500
	(Declared and paid a cash dividend)			
26	Salaries Expense	726	4,000	
	Cash	101		4,000
	(Paid salaries to date)			
31	Cash	101	10,000	
	Service Revenue	400		10,000
	(Received cash for services provided)			

THE TRIAL BALANCE

STUDY OBJECTIVE 7

Prepare a trial balance and explain its purposes.

A **trial balance** is a list of accounts and their balances at a given time. Customarily, a trial balance is prepared at the end of an accounting period. The accounts are listed in the order in which they appear in the ledger; debit balances are listed in the left column and credit balances in the right column.

The primary purpose of a trial balance is to prove (check) that the debits equal the credits after posting. In other words, the sum of the debit account balances in the trial balance should equal the sum of the credit account balances. **If the debits and credits do not agree, the trial balance can be used to uncover errors in journalizing and posting. In addition, it is useful in the preparation of financial statements,** as will be explained in the next two chapters.

There are three steps for preparing a trial balance:

1. List the account titles and their balances.
2. Total the debit and credit columns.
3. Prove the equality of the two columns.

Illustration 3-31
General ledger

GENERAL LEDGER											
Cash No. 101						Accounts Payable No. 201					
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
2008						2008					
Oct. 1		J1	10,000		10,000	Oct. 5		J1		2,500	2,500
2		J1	1,200		11,200	Unearned Revenue No. 209					
3		J1		900	10,300	Date	Explanation	Ref.	Debit	Credit	Balance
4		J1		600	9,700	2008					
20		J1		500	9,200	Oct. 2		J1		1,200	1,200
26		J1		4,000	5,200	Common Stock No. 311					
31		J1	10,000		15,200	Date	Explanation	Ref.	Debit	Credit	Balance
						2008					
Supplies No. 129						Oct. 1		J1		10,000	10,000
Date	Explanation	Ref.	Debit	Credit	Balance	Dividends No. 332					
2008						Date	Explanation	Ref.	Debit	Credit	Balance
Oct. 5		J1	2,500		2,500	2008					
						Oct. 20		J1	500		500
Prepaid Insurance No. 130						Service Revenue No. 400					
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
2008						2008					
Oct. 4		J1	600		600	Oct. 31		J1		10,000	10,000
						Salaries Expense No. 726					
Office Equipment No. 157						Date	Explanation	Ref.	Debit	Credit	Balance
Date	Explanation	Ref.	Debit	Credit	Balance	2008					
2008						Oct. 26		J1	4,000		4,000
Oct. 1		J1	5,000		5,000	Rent Expense No. 729					
						Date	Explanation	Ref.	Debit	Credit	Balance
Notes Payable No. 200						2008					
Date	Explanation	Ref.	Debit	Credit	Balance	Oct. 3		J1	900		900
2008											
Oct. 1		J1		5,000	5,000						

The trial balance prepared from Premier Staffing’s ledger is shown in Illustration 3-32. Note that the total debits (\$28,700) equal the total credits (\$28,700). Account numbers are sometimes shown to the left of the account titles in the trial balance.

A trial balance is a necessary checkpoint for uncovering certain types of errors before you proceed to other steps in the accounting process. For example, if only the debit portion of a journal entry has been posted, the trial balance would bring this error to light.

HELPFUL HINT

A trial balance is so named because it is a test to see if the sum of the debit balances equals the sum of the credit balances.

LIMITATIONS OF A TRIAL BALANCE

A trial balance does not guarantee freedom from recording errors, however. **It does not prove that all transactions have been recorded or that the ledger is correct.** Numerous errors may exist even though the trial balance columns agree. For

BEFORE YOU GO ON...

▶ **REVIEW IT**

1. How does journalizing differ from posting?
2. What is the purpose of (a) the ledger and (b) a chart of accounts?

▶ **DO IT**

Raisin Buns, Inc., recorded the following transactions in a general journal during the month of March.

Cash	2,280	
Service Revenue		2,280
Wages Expense	400	
Cash		400
Utilities Expense	92	
Cash		92

Post these entries to the Cash account of the general ledger to determine the ending balance in cash. The beginning balance in cash on March 1 was \$600.

ACTION PLAN

- Recall that posting involves transferring the journalized debits and credits to specific accounts in the ledger.
- Determine the ending balance by netting the total debits and credits.

SOLUTION

Cash		
3/1	600	400
	2,280	92
3/31 Bal.	2,388	



Illustration 3-32

A trial balance

HELPFUL HINT

To sum a column of figures is sometimes referred to as *to foot* the column. The column is then said to be *footed*.

PREMIER STAFFING AGENCY, INC.		
Trial Balance		
October 31, 2008		
	Debit	Credit
Cash	\$15,200	
Supplies	2,500	
Prepaid Insurance	600	
Office Equipment	5,000	
Notes Payable		\$ 5,000
Accounts Payable		2,500
Unearned Revenue		1,200
Common Stock		10,000
Dividends	500	
Service Revenue		10,000
Salaries Expense	4,000	
Rent Expense	900	
	\$28,700	\$28,700

example, the trial balance may balance even when (1) a transaction is not journalized, (2) a correct journal entry is not posted, (3) a journal entry is posted twice, (4) incorrect accounts are used in journalizing or posting, or (5) offsetting errors are made in recording the amount of a transaction. In other words, as long as equal debits and credits are posted, even to the wrong account or in the wrong amount, the total debits will equal the total credits.

LOCATING ERRORS

The procedure for preparing a trial balance is relatively simple. However, if the trial balance does not balance, locating an error in a manual system can be time-consuming, tedious, and frustrating. Errors generally result from mathematical mistakes, incorrect postings, or simply transcribing data incorrectly.

What do you do if you are faced with a trial balance that does not balance? First, determine the amount of the difference between the two columns of the trial balance. After this amount is known, the following steps are often helpful:

1. If the error is \$1, \$10, \$100, or \$1,000, re-add the trial balance columns, and recompute the account balances.
2. If the error is divisible by 2, scan the trial balance to see whether a balance equal to half the error has been entered in the wrong column.
3. If the error is divisible by 9, retrace the account balances on the trial balance to see whether they are incorrectly copied from the ledger. For example, if a balance was \$12 and it was listed as \$21, a \$9 error has been made. Reversing the order of numbers is called a *transposition error*.
4. If the error is not divisible by 2 or 9 (e.g., \$365), scan the ledger to see whether an account balance of \$365 has been omitted from the trial balance, and scan the journal to see whether a \$365 posting has been omitted.

ETHICS NOTE

Auditors are required to differentiate *errors* from *irregularities* when evaluating the accounting system. An error is the result of an unintentional mistake; as such, it is neither ethical nor unethical. An irregularity, on the other hand, is an intentional misstatement, which is viewed as unethical.

TECHNOLOGY IN ACTION



In a computerized system, the trial balance is often only one column (no debit or credit columns), and the accounts have plus and minus signs associated with them. The final balance therefore is zero. Any errors that develop in a computerized system undoubtedly will involve the initial recording rather than some error in the posting or preparation of a trial balance.

USE OF DOLLAR SIGNS

Note that dollar signs do not appear in the journals or ledgers. Dollar signs are usually used only in the trial balance and the financial statements. Generally, a dollar sign is shown only for the first item in the column and for the total of that column. A single line is placed under the column of figures to be added or subtracted; the total amount is double underlined to indicate the final sum.

HELPFUL HINT

We have avoided the use of cents in the text to save you time and effort.

BEFORE YOU GO ON...

▶ REVIEW IT

1. What is a trial balance, and what is its primary purpose?
2. How is a trial balance prepared?
3. What are the limitations of a trial balance?

ELECTRONIC DATA PROCESSING

In accounting offices, calculators, eighteen-column pads, and tapes have moved aside for spreadsheet programs and software applications. In a theme park restaurant, cash registers gave way to point-of-sales systems, which total sales figures and produce managerial reports. In a hotel, the manual folio system was replaced by a property management system, and many night audit functions are now performed during the business day. Use of the Internet brings yet another dimension to the hospitality industry.

COMPARATIVE ADVANTAGES OF MANUAL VERSUS COMPUTERIZED SYSTEMS

Are computerized systems better? Well, it depends. With regard to speed, the computerized system wins. In today's business world, there is a need to act daily, not monthly, making speed and efficiency the name of the game. However, in accounting, there is a need for both manual and computerized systems.

Comprehension and Usage

To really understand accounting and use it effectively, you need to learn it manually first. You need to know the steps involved in the accounting cycle—accounts, types, normal balances, and debits and credits—before determining if an event is a business transaction. Only then do you begin the recording process. First come the journal and the ledger, then the trial balance, and later the adjustments. With a good knowledge of the ins and outs of a manual system, if you make a mistake somewhere, it is quite easy to backtrack and make corrections. If you only know how to enter numbers to input data and do not know why and how the numbers are being compiled, a \$10 mistake can easily be compounded into a \$200 mistake on the books.

Speed and Efficiency

A computerized system obviously has the advantage over the manual system in this regard. A touch of a few buttons and a short amount of time are all that is needed to generate reports that otherwise take hours. When you enter a debit and a credit into an accounting software, the balances are posted directly into the appropriate accounts in the general ledger. The data are then added and subtracted, and a new balance is calculated. This balance is automatically transferred to the correct line item on a trial balance. This all happens in a matter of seconds.

Accuracy

Humans do make errors. If a computer system is programmed correctly, there should not be any errors in the output. The time needed to detect and correct errors can be saved if the system is in full operation. However, if a human error occurs in data entry, the results will still be incorrect.

Timeliness of Information

One advantage of a computerized system is having updated information at your fingertips. As soon as data are entered, the new and updated information is available. Once raw data are gathered, analyzing them is a matter of programming in spreadsheet formulas. A lot of time is saved, and information, therefore, is timely. No longer will a manager have to wait two weeks after a month-end closing to find out how much profit and loss were realized in the past month.

A LOOK INTO THE FUTURE

Computerization and technology hold vast potential for the hospitality industry. Personal computers are more efficient than ever, and personal data assistants are part of a businessperson's wardrobe. Touch screens now replace bulky point-of-sales systems in foodservice outlets. Handheld ordering devices for servers are here already. Billing and invoices for a group's hotel stay can be sent via e-mail directly from the property management system. **Application solutions providers (ASPs)** are the fastest growing segment of the technology industry. These firms are targeting the club industry as they provide all technical system components at a secure remote site. Thus club managers can concentrate their time on membership and operations issues while qualified personnel monitor the technology. Club managers no longer need to worry about shopping for systems, training, hardware and software installation, incremental upgrades, connectivity, and access issues. ASPs are also looking into the hotel industry. Some companies, such as **Meristar Hotels and Resorts**, are their own ASP, providing the remote control and data storing and crunching functions for their general managers.

Technology also touches the restaurant industry. In 1996, **Long John Silver's** revamped its accounting procedures to use computerization in all general ledger, accounts payable and receivable, asset management, store-level reporting, and activity management. Small chain restaurants, such as **Pasta Pomodoro** in San Francisco, have begun using the Internet for purchasing and business analysis. Let's face it, technology and accounting data go hand in hand.

A LOOK BACK AT OUR FEATURE STORY

Refer back to the Feature Story about **The Mug and Musket** at the beginning of this chapter, and answer the following questions.

1. What accounting entries would Tanis likely make to record (a) the receipt of cash from a customer in payment of his or her bill, (b) payment of a utility bill, and (c) payment of wages for the waiters?
2. How did Tanis's job as director of finance help in her studies as she finished her business administration degree?

SOLUTION

1. Tanis would likely make the following entries:
 - (a) Cash
Food Sales Revenue
(Receipt of payment for foodservices)
 - (b) Utility Expense
Cash
(Payment of electric bill)
 - (c) Salaries (or Wages) Expense
Cash
(Paid waiters' wages)
2. As a result of her accounting position, Tanis was able to relate the subject matter as well as much of the assignment material in her business courses to a real-world context. From her job, she knew how bills were paid; how supplies were determined; and how employees were hired, managed, evaluated, and paid.



DEMONSTRATION PROBLEM

Bob Sample and other student investors opened the Campus Laundromat, Inc., on September 1, 2008. During the first month of operations, the following transactions occurred:

- Sept. 1 Stockholders invested \$20,000 cash in the business.
 2 Paid \$1,000 cash for store rent for the month of September.
 3 Purchased washers and dryers for \$25,000, paying \$10,000 in cash and signing a \$15,000, 6-month, 12% note payable.
 4 Paid \$1,200 for a one-year accident insurance policy.
 10 Received bill from the *Daily News* for advertising the opening of the laundromat \$200.
 20 Declared and paid a cash dividend to stockholders \$700.
 30 Determined that cash receipts for laundry fees for the month were \$6,200.

The chart of accounts for the company is the same as for Premier Staffing Agency, Inc., except for the following: No. 154 Laundry Equipment and No. 610 Advertising Expense.

Instructions

- (a) Journalize the September transactions. (Use J1 for the journal page number.)
 (b) Open ledger accounts and post the September transactions.
 (c) Prepare a trial balance at September 30, 2008.

ACTION PLAN

- Make separate journal entries for each transaction.
- In journalizing, make sure debits equal credits.
- In journalizing, use specific account titles taken from the chart of accounts.
- Provide appropriate description of journal entry.
- Arrange ledger in statement order, beginning with the balance sheet accounts.
- Post in chronological order.
- Use numbers in the reference column to indicate the amount has been posted.
- In the trial balance, list accounts in the order in which they appear in the ledger.
- List debit balances in the left column and credit balances in the right column.

SOLUTION TO DEMONSTRATION PROBLEM

(a)		GENERAL JOURNAL			J1
Date	Account Titles and Explanation	Ref.	Debit	Credit	
2008					
Sept. 1	Cash	101	20,000		
	Common Stock	311		20,000	
	(Stockholders invested cash in business)				
2	Rent Expense	729	1,000		
	Cash	101		1,000	
	(Paid September rent)				
3	Laundry Equipment	154	25,000		
	Cash	101		10,000	
	Notes Payable	200		15,000	
	(Purchased laundry equipment for cash and 6-month, 12% note payable)				
4	Prepaid Insurance	130	1,200		
	Cash	101		1,200	
	(Paid one-year insurance policy)				
10	Advertising Expense	610	200		
	Accounts Payable	201		200	
	(Received bill from <i>Daily News</i> for advertising)				
20	Dividends	332	700		
	Cash	101		700	
	(Declared and paid a cash dividend)				
30	Cash	101	6,200		
	Service Revenue	400		6,200	
	(Received cash for laundry fees earned)				

GENERAL LEDGER											
Cash No. 101						Accounts Payable No. 201					
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
2008						2008					
Sept. 1		J1	20,000		20,000	Sept. 10		J1		200	200
2		J1		1,000	19,000	Common Stock No. 311					
3		J1		10,000	9,000	Date	Explanation	Ref.	Debit	Credit	Balance
4		J1		1,200	7,800	2008					
20		J1		700	7,100	Sept. 1		J1		20,000	20,000
30		J1	6,200		13,300	Dividends No. 332					
Prepaid Insurance No. 130						Service Revenue No. 400					
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
2008						2008					
Sept. 4		J1	1,200		1,200	Sept. 1		J1	700		700
Laundry Equipment No. 154						Advertising Expense No. 610					
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
2008						2008					
Sept. 3		J1	25,000		25,000	Sept. 30		J1		6,200	6,200
Notes Payable No. 200						Rent Expense No. 729					
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
2008						2008					
Sept. 3		J1		15,000	15,000	Sept. 10		J1	200		200
						Sept. 2		J1	1,000		1,000

(c)

CAMPUS LAUNDROMAT, INC.

**Trial Balance
September 30, 2008**

	<u>Debit</u>	<u>Credit</u>
Cash	\$13,300	
Prepaid Insurance	1,200	
Laundry Equipment	25,000	
Notes Payable		\$15,000
Accounts Payable		200
Common Stock		20,000
Dividends	700	
Service Revenue		6,200
Advertising Expense	200	
Rent Expense	1,000	
	<u>\$41,400</u>	<u>\$41,400</u>



SUMMARY OF STUDY OBJECTIVES

1. Explain what an account is and how it helps in the recording process. An *account* is a record of increases and decreases in specific asset, liability, and stockholders' equity items.

2. Define debits and credits, and explain how they are used to record business transactions. The terms *debit* and *credit* are synonymous with left and right. Assets, dividends, and expenses are increased by debits and decreased by credits. Liabilities, common stock, retained earnings, and revenues are increased by credits and decreased by debits.

3. Identify the basic steps in the recording process. The basic steps in the recording process are (a) analyze each transaction in terms of its effects on the accounts, (b) enter the transaction information in a journal, (c) transfer the journal information to the appropriate accounts in the ledger.

4. Explain what a journal is and how it helps in the recording process. The initial accounting record of a transaction is entered in a journal before the data are entered in the accounts. A *journal* (a) discloses in one place the complete effects of a transaction, (b) provides a chronological record of transactions, and (c) prevents or locates errors because the debit and credit amounts for each entry can be readily compared.

5. Explain what a ledger is and how it helps in the recording process. The entire group of accounts maintained by a company is referred to as the *ledger*. The ledger keeps in one

place all the information about changes in specific account balances.

6. Explain what posting is and how it helps in the recording process. *Posting* is the procedure of transferring journal entries to the ledger accounts. This phase of the recording process accumulates the effects of journalized transactions in the individual accounts.

7. Prepare a trial balance and explain its purposes. A *trial balance* is a list of accounts and their balances at a given time. Its primary purpose is to prove the equality of debits and credits after posting. A trial balance also uncovers errors in journalizing and posting and is useful in preparing financial statements.

8. Identify the advantages of both manual and computerized accounting systems. A manual accounting system is advantageous when one is learning accounting. Learning the system manually provides users with a better comprehension of accounting and its logic. A computerized system does have the advantages of speed, efficiency, accuracy, and timeliness of information. However, the data compiled are only as good and as accurate as the data being entered. Thus manual and computerized accounting systems do complement each other.



GLOSSARY

Account A record of increases and decreases in specific asset, liability, or stockholders' equity items (p. 68).

Application Solutions Providers (ASPs) Companies that provide application solutions directly to the end-users in the industry. The end-users purchase application solutions via the Internet rather than the software (p. 93).

Chart of accounts A list of accounts and the account numbers that identify their location in the ledger (p. 80).

Common stock Issued in exchange for the owners' investment paid into the corporation (p. 71).

Compound entry A journal entry that involves three or more accounts (p. 76).

Credit The right side of an account (p. 69).

Debit The left side of an account (p. 69).

Dividend A distribution by a corporation to its stockholders on a pro rata (equal) basis (p. 71).

Double-entry system A system that records in appropriate accounts the dual effect of each transaction (p. 69).

General journal The most basic form of journal (p. 75).

General ledger A ledger that contains all asset, liability, and stockholders' equity accounts (p. 77).

Journal An accounting record in which transactions are initially recorded in chronological order (p. 75).

Journalizing The entering of transaction data in the journal (p. 75).

Ledger The entire group of accounts maintained by a company (p. 77).

Posting The procedure of transferring journal entries to the ledger accounts (p. 79).

Retained earnings Net income that is retained in the business (p. 71).

Simple entry A journal entry that involves only two accounts (p. 76).

T account The basic form of an account (p. 68).

Three-column form of account A form with columns for debit, credit, and balance amounts in an account (p. 79).

Trial balance A list of accounts and their balances at a given time (p. 88).

EXERCISES

3-1 For each of the following accounts indicate (a) the effect of a debit or a credit on the account and (b) the normal balance.

1. Rooms Revenue
2. Rent Expense

Indicate debit and credit effects and normal balance.
{SO 2}

- 3. Salary Payable
- 4. Capital
- 5. Food Revenue
- 6. Cash

3-2 Transactions for Milton’s Wings and Pizza for the month of June are presented below. Identify the accounts to be debited and credited for each transaction, and journalize the transactions.

Identify accounts to be debited and credited.
(SO 2)

- June 1 Milton Wolfe invests \$20,000 cash in exchange for shares of common stock in a small printing corporation.
- 2 Buys equipment on account for \$8,600.
- 3 Pays \$1,200 to landlord for June rent.
- 12 Bills B. J. Chang \$890 for a pizza party.

3-3 Ouro Johnson has the following transactions during August of the current year. Indicate (a) the basic analysis and (b) the debit–credit analysis illustrated on pages 82–86 of the text. Journalize the transactions.

Indicate basic and debit–credit analysis.
(SO 4)

- Aug. 1 Opens an office as a travel agent, investing \$25,000 in cash in exchange for common stock.
- 4 Pays insurance in advance for 6 months, \$1,200.
- 16 Receives \$5,000 from clients for arranging travel services.
- 27 Pays secretary \$1,500 salary.

3-4 Selected transactions for Y. K. Catering are presented in journal form below. Post the transactions to T accounts.

Post journal entries to T accounts.
(SO 6)

J1				
Date	Account Titles and Explanation	Ref.	Debit	Credit
May 10	Accounts Receivable		7,200	
	Service Revenue			7,200
15	Cash		5,500	
	Accounts Receivable			5,500
20	Cash		2,500	
	Service Revenue			2,500

3-5 An inexperienced bookkeeper prepared the following trial balance that does not balance. Prepare a correct trial balance, assuming all account balances are normal.

Prepare a correct trial balance.
(SO 7)

ELIZABETH BAKERY
Trial Balance
December 31, 2008

	Debit	Credit
Cash	\$33,600	
Prepaid Insurance		\$4,900
Accounts Payable		7,500
Unearned Fees	5,800	
Common Stock	20,000	
Dividends		4,000
Service Revenue		29,200
Salaries Expense	17,000	
Rent Expense		3,000
	\$76,400	\$48,600

Post journal entries and prepare a trial balance.
(SO 6, 7)

3-6 Selected transactions from the journal of Palm Tree Travel, Inc., are presented below.

Date	Account Titles and Explanation	Ref.	Debit	Credit
Aug. 1	Cash Common Stock (Investment of cash for stock)		10,000	10,000
10	Cash Service Revenue (Received cash for services provided)		3,900	3,900
12	Computer Cash Notes Payable (Purchased computer for cash and notes payable)		4,100	1,500 2,600
25	Accounts Receivable Service Revenue (Billed for services provided)		2,200	2,200
31	Cash Accounts Receivable (Receipt of cash on account)		1,800	1,800

Instructions

- (a) Post the transactions to T accounts.
- (b) Prepare a trial balance at August 31, 2008.

Journalize transactions from account data, and prepare a trial balance.
(SO 4, 7)

3-7 The T accounts below summarize the ledger of Mardi Gras Catering Corporation at the end of the first month of operations:

Cash		No. 101			
4/1	15,000	4/15	900		
4/12	600	4/25	1,500		
4/29	1,000				
4/30	600				
Accounts Receivable		No. 112			
4/7	4,100	4/29	1,000		
Supplies		No. 126			
4/4	2,500				
Accounts Payable		No. 201			
4/25	1,500	4/4	2,500		
				Common Stock	
				No. 311	
				4/1	15,000
				Service Revenue	
				No. 400	
				4/7	4,100
				4/12	600
				4/30	600
				Salaries Expense	
				No. 726	
				4/15	900

Instructions

- (a) Prepare the complete general journal entries (including explanations) from which the postings to Cash were made.
- (b) Prepare a trial balance at April 30, 2008.

Journalize a series of transactions.
(SO 2, 4)

3-8 Evergreen Campground was started on June 1 by Jolene and David Collier. The following selected events and transactions occurred during June.

- June 1 Invested \$150,000 cash in the business in exchange for common stock.
- 4 Purchased land costing \$40,000 for cash.
- 8 Incurred advertising expense of \$3,500 on account.

- 11 Paid salaries to employees \$1,500.
- 12 Hired Campground manager at a salary of \$5,000 per month, effective July 15.
- 13 Paid \$2,000 for a one-year insurance policy.
- 20 Received \$9,000 in cash for admission fees.
- 30 Received \$5,000 in cash for admission fees.
- 30 Paid \$1,000 on account for advertising incurred on June 8.

Evergreen uses the following accounts: Cash; Prepaid Insurance; Land; Accounts Payable; Unearned Admissions; Common Stock; Admission Revenue; Advertising Expense; and Salaries Expense.

Instructions

Journalize the April transactions.

3-9 Alyson Clark is a licensed incorporated CPA. During the first month of operations of the business, the following events and transactions occurred:

Journalize transactions, post, and prepare a trial balance.
(SO 2, 4, 6, 7)

- Sept. 1 Invested \$40,000 cash in exchange for common stock.
- 2 Hired a secretary-receptionist at a salary of \$2,480 per month.
- 3 Purchased \$1,500 of supplies on account from Ross Supply Company.
- 7 Paid office rent of \$1,500 for the month.
- 11 Completed a tax assignment and billed client \$1,900 for services rendered.
- 12 Received \$7,000 advance on a management consulting engagement.
- 17 Received cash of \$2,350 for services completed for Mutter Company.
- 31 Paid secretary-receptionist \$2,480 salary for the month.
- 31 Paid 40% of balance due Ross Supply Company.

The company uses the following chart of accounts: No. 101 Cash, No. 112 Accounts Receivable, No. 126 Supplies, No. 201 Accounts Payable, No. 205 Unearned Revenue, No. 311 Common Stock, No. 400 Service Revenue, No. 726 Salaries Expense, and No. 729 Rent Expense.

Instructions

- (a) Journalize the transactions.
- (b) Post to the ledger accounts.
- (c) Prepare a trial balance on September 30, 2008.

3-10 Surepar Miniature Golf and Driving Range was opened on March 1 by Bill Affleck. The following selected events and transactions occurred during March:

Journalize a series of transactions.
(SO 2, 4)

- Mar. 1 Invested \$60,000 cash in the business in exchange for common stock.
- 3 Purchased Lee's Golf Land for \$38,000 cash. The price consists of land \$23,000, building \$9,000, and equipment \$6,000. (Make one compound entry.)
- 5 Advertised the opening of the driving range and miniature golf course, paying advertising expenses of \$1,600.
- 6 Paid cash \$1,480 for a one-year insurance policy.
- 10 Purchased golf clubs and other equipment for \$2,600 from Parton Company payable in 30 days.
- 18 Received \$800 in cash for golf fees earned.
- 19 Sold 100 coupon books for \$15 each. Each book contains 10 coupons that enable the holder to play one round of miniature golf or to hit one bucket of golf balls.
- 25 Declared and paid \$1,000 cash dividend.
- 30 Paid salaries of \$600.
- 30 Paid Parton Company in full.
- 31 Received \$500 cash for fees earned.

Bill Affleck uses the following accounts: Cash; Prepaid Insurance; Land; Buildings; Equipment; Accounts Payable; Unearned Revenue; Common Stock; Dividends; Golf Revenue; Advertising Expense; and Salaries Expense.

Instructions

Journalize the March transactions.

FINANCIAL REPORTING PROBLEM: PepsiCo

3-11 The financial statements of **PepsiCo** are presented in Appendix A. The statements contain the following selected accounts for the year ended, 2006 stated in millions of dollars.

Accounts Payable	\$6,496	Income Taxes Payable	\$ 90
Accounts Receivable	3,725	Interest Expense	239
Property, Plant, and Equipment	9,687	Inventory	1,926

Instructions

- (a) Answer the following questions.
 - (1) What is the increase and decrease side for each account?
 - (2) What is the normal balance for each account?
- (b) Identify the probable other account in the transaction and the effect on that account when:
 - (1) Accounts Receivable is decreased.
 - (2) Accounts Payable is decreased.
 - (3) Inventory is increased.
- (c) Identify the other accounts(s) that ordinarily would be involved when:
 - (1) Interest Expense is increased.
 - (2) Property, Plant, and Equipment is increased.



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

ADJUSTING THE ACCOUNTS



THE NAVIGATOR ✓

- Understand *Concepts for Review*
- Read *Feature Story*
- Scan *Study Objectives*
- Read *Preview*
- Read text and answer *Before You Go On*
p. 107 p. 114 p. 119 p. 123
- Work *Demonstration Problem*
- Review *Summary of Study Objectives*
- Complete *Assignments*

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. What a double-entry system is. (Ch. 3, p. 69)
- b. How to increase or decrease assets, liabilities, and stockholders' equity using debit and credit procedures. (Ch. 3, pp. 67–72)
- c. How to journalize a transaction. (Ch. 3, pp. 75–76)
- d. How to post a transaction. (Ch. 3, pp. 79–80)
- e. How to prepare a trial balance. (Ch. 3, pp. 88–89)

F E A T U R E S T O R Y

Timing Is Everything

In Chapter 1 you learned a neat little formula: Net income = Revenues – Expenses. And in Chapter 3 you learned some nice, orderly rules for recording corporate revenue and expense transactions. Guess what? Things are not really that nice and neat. In fact, it is often difficult to determine in what time period some revenues and expenses should be reported. And, in measuring net income, timing is everything.

There are rules that give guidance on these issues. But occasionally, these rules are overlooked, misinterpreted, or even intentionally ignored. Think what the results would be if the following cases were true.

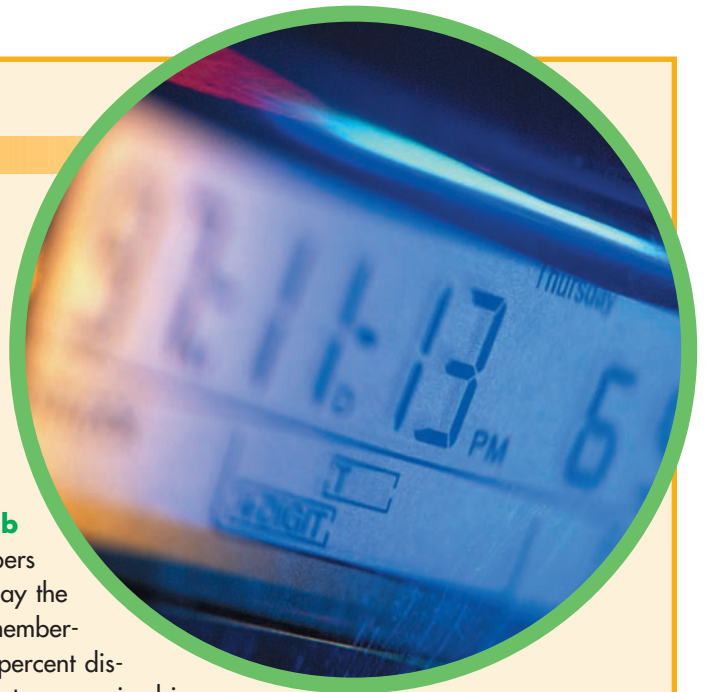
- **Lake Swan Resort** pays its general property insurance on a six-month basis. The total of \$18,000 for a six-month period, or \$3,000 per month, is paid on May 30 for June to November. The entire amount of \$18,000 is recorded as an expense for the

month of May because it is paid on May 30. Thus the company has a loss of \$7,533 for that month.

- **Juneau Country Club** gives its members an option to pay the entire year's membership with a 5 percent discount. Dues that are received in December 2008 for the year 2009 are all entered at December 2008 as dues income.
- **Cuisine-on-the-Go** receives in October a 50 percent deposit for a Christmas party in the amount of \$7,525. When the accountant records the transaction, it is entered as catering income for the month of October.
- **Hospitality Purveyors** has its annual convention in Houston. One event is an off-site event to NASA Johnson Space Center for a tour. Coach buses are con-

tracted for this outing with Luxury Coach, Inc. A check for \$3,685 is written to Luxury in May for its services to be provided in September. Luxury records the \$3,685 as income for the month of May.

In each case, accrual accounting concepts were violated. That is, revenues or expenses were not recorded in the proper period, which has a substantial impact on reported income. Their timing is off!



S T U D Y O B J E C T I V E S

After studying this chapter, you should be able to

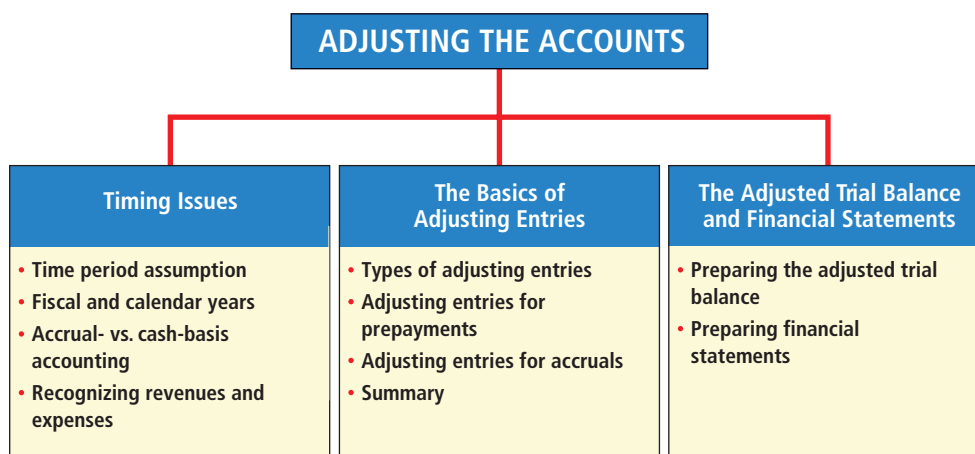
1. Explain the time period assumption.
2. Explain the accrual basis of accounting.
3. Explain why adjusting entries are needed.
4. Identify the major types of adjusting entries.
5. Prepare adjusting entries for prepayments.
6. Prepare adjusting entries for accruals.
7. Describe the nature and the purpose of an adjusted trial balance.
8. Prepare adjusting entries for the alternative treatment of prepayments.



PREVIEW OF CHAPTER 4

In Chapter 3 we examined the recording process through the preparation of the trial balance. Before we will be ready to prepare financial statements from the trial balance, additional steps need to be taken. The timing mismatch between revenues and expenses of the four companies mentioned in our Feature Story illustrates the types of situations that make these additional steps necessary. For example, long-lived assets purchased or constructed in prior accounting years are being used to produce goods and to provide services in the current year. What portion of these assets' costs, if any, should be recognized as an expense of the current period? Before financial statements can be prepared, this and other questions relating to the recognition of revenues and expenses must be answered. With the answers in hand, we can then adjust the relevant account balances.

The content and organization of Chapter 4 are as follows:



TIMING ISSUES

STUDY OBJECTIVE 1

Explain the time period assumption.

No adjustments would be necessary if we could wait to prepare financial statements until a company ended its operations. At that point we could easily determine its final balance sheet and the amount of lifetime income it earned. The following anecdote illustrates one way to compute lifetime income.

A grocery store owner from the old country kept his accounts payable on a spindle, accounts receivable on a note pad, and cash in a cigar box. His daughter, having just passed the CPA exam, chided her father: “I don’t understand how you can run your business this way. How do you know what your profits are?”

“Well,” the father replied, “when I got off the boat forty years ago, I had nothing but the pants I was wearing. Today, your brother is a doctor, your sister is a college professor, and you are a CPA. Your mother and I have a nice car, a well-furnished house, and a lake home. We have a good business, and everything is paid for. So, you add all that together, subtract the pants, and there’s your profit.”

SELECTING AN ACCOUNTING TIME PERIOD

Although the old grocer may be correct in his evaluation, it is impractical to wait so long for the results of operations. All entities, from the corner grocery, to a global company like **Kellogg**, to your college or university, find it desirable and necessary to report the results of their activities more frequently. For example, management usually wants monthly financial statements, and the Internal Revenue Service requires all businesses to file annual tax returns. Therefore, **accountants divide the economic life of a business into artificial time periods**. This convenient assumption is referred to as the **time period assumption**.

Many business transactions affect more than one of these arbitrary time periods. For example, Farmer Brown's milking machine bought in 1998 and the airplanes purchased by **Delta Air Lines** five years ago are still in use today. Therefore, we must determine the relevance of each business transaction to specific accounting periods. Doing so may involve subjective judgments and estimates.

FISCAL AND CALENDAR YEARS

Both small and large companies prepare financial statements periodically in order to assess their financial condition and results of operations. Accounting time periods are generally *a month, a quarter, or a year*. Monthly and quarterly time periods are called **interim periods**. Most large companies are required to prepare both quarterly and annual financial statements.

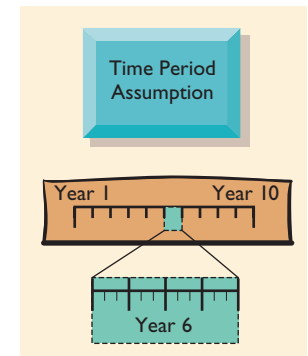
An accounting time period that is one year in length is referred to as a **fiscal year**. A fiscal year usually begins with the first day of a month and ends twelve months later on the last day of a month. The accounting period used by most businesses coincides with the **calendar year** (January 1 to December 31). Companies whose fiscal year differs from the calendar year include **Delta Air Lines**, June 30; **Walt Disney Productions**, September 30; and **CKE Restaurants, Inc.**, January 31. Sometimes a company's year-end will vary from year to year. For example, the **Marriott International, Inc.**, fiscal year ends on the Friday closest to December 31.

ACCRUAL- VERSUS CASH-BASIS ACCOUNTING

What you will learn in this chapter is **accrual-basis accounting**. Under the accrual basis, transactions that change a company's financial statements are recorded **in the periods in which the events occur**. For example, using the accrual basis to determine net income means recognizing revenues when earned (rather than when the cash is received). It also means recognizing expenses when incurred (rather than when paid). Information presented on an accrual basis reveals relationships likely to be important in predicting future results. Under accrual accounting, revenues are recognized when services are performed; so trends in revenues are thus more meaningful for decision making.

An alternative to the accrual basis is the cash basis. Under **cash-basis accounting**, revenue is recorded when cash is received, and an expense is recorded when cash is paid. The cash basis often leads to misleading financial statements. It fails to record revenue that has been earned but for which the cash has not been received. Also, expenses are not matched with earned revenues. **Cash-basis accounting is not in accordance with generally accepted accounting principles (GAAP)**.

Most companies use accrual-basis accounting. Individuals and some small companies use cash-basis accounting. The cash basis is justified for small businesses because they often have few receivables and payables. Accountants are sometimes



ALTERNATIVE TERMINOLOGY

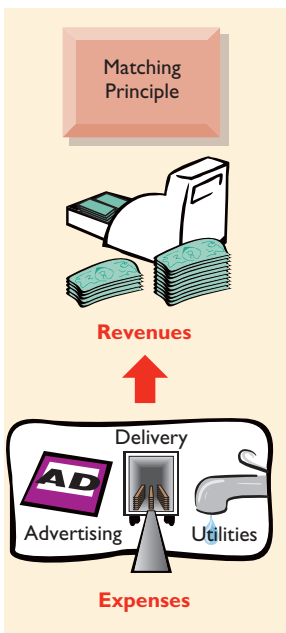
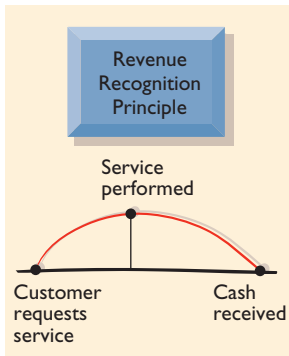
The time period assumption is also called the *periodicity assumption*.

STUDY OBJECTIVE 2

Explain the accrual basis of accounting.

INTERNATIONAL NOTE

Although different accounting standards are often used in other major industrialized countries, accrual-basis accounting is also followed by all these countries.



asked to convert cash-basis records to the accrual basis. As you might expect, extensive adjusting entries are required for this task.

RECOGNIZING REVENUES AND EXPENSES

Determining the amount of revenues and expenses to be reported in a given accounting period can be difficult. To help in this task, accountants have developed two principles as part of generally accepted accounting principles (GAAP): the revenue recognition principle and the matching principle.

The **revenue recognition principle** dictates that revenue be recognized in the accounting period in which it is earned. **In a service enterprise, revenue is considered to be earned at the time the service is performed.** To illustrate, assume that a dry-cleaning business cleans banquet and bed linens on June 30, but hotels do not claim and pay for their cleaning until the first week of July. Under the revenue recognition principle, revenue is earned in June when the service is performed rather than in July when the cash is received. At June 30, the dry cleaner would report a receivable on its balance sheet and revenue in its income statement for the service performed.

Accountants follow the approach of “let expenses follow revenues.” That is, expense recognition is tied to revenue recognition. In the preceding example, this principle means that the salary expense incurred in performing the cleaning service on June 30 should be reported in the income statement for the same period in which the service revenue is recognized. The critical issue in expense recognition is when the expense makes its contribution to revenue. This may or may not be the same period in which the expense is paid. If the salary incurred on June 30 is not paid until July, the dry cleaner would report salaries payable on its June 30 balance sheet. The practice of expense recognition is referred to as the **matching principle** because it dictates that efforts (expenses) be matched with accomplishments (revenues).

ACCOUNTING IN ACTION *Business Insight*

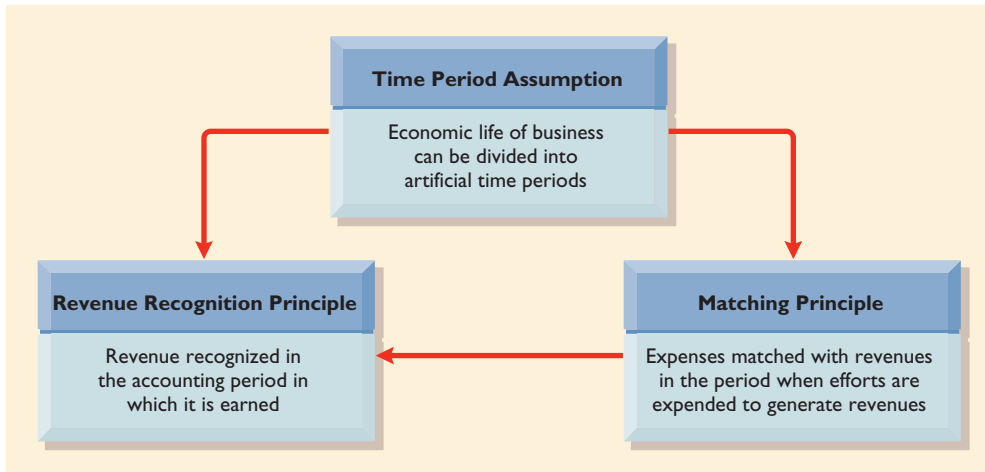


Suppose you are a filmmaker like George Lucas and spend \$11 million to produce a film such as *Star Wars*. Over what period should the cost be expensed? It should be expensed over the economic life of the film. But what is its economic life? The filmmaker must estimate how much revenue will be earned from box office sales, video sales, television, and games and toys—a period that could be less than a year or more than twenty years, as is the case for Twentieth Century Fox’s *Star Wars*. Originally released in 1977 and rereleased in 1997, domestic revenues total nearly \$500 million for *Star Wars* and continue to grow. This situation demonstrates the difficulty of properly matching expenses to revenues.

What accounting principle does this example illustrate? How will financial results be affected if the expenses are recognized over a period that is *less than* that used for revenues? What if the expenses are recognized over a period that is *longer than* that used for revenues?

SOURCE: *Star Trek Newsletter*, 22.

Once the economic life of a business has been divided into artificial time periods, the revenue recognition and matching principles can be applied. This one assumption and two principles thus provide guidelines as to when revenues and expenses should be reported. These relationships are shown in Illustration 4-1.

**Illustration 4-1**

GAAP relationships in revenue and expense recognition

BEFORE YOU GO ON...

REVIEW IT

1. What is the relevance of the time period assumption to accounting?
2. What are the revenue recognition and the matching principles?



THE BASICS OF ADJUSTING ENTRIES

In order for revenues to be recorded in the period in which they are earned and for expenses to be recognized in the period in which they are incurred, adjusting entries are made at the end of the accounting period. In short, **adjusting entries** are needed to ensure that the revenue recognition and the matching principles are followed.

Adjusting entries make it possible to report on the balance sheet the appropriate assets, liabilities, and stockholders' equity at the statement date and to report on the income statement the proper net income (or loss) for the period. However, the trial balance—the first pulling together of the transaction data—may not contain up-to-date and complete data. This is true for the following reasons:

1. Some events are not journalized daily because it is inexpedient to do so. Examples are the consumption of supplies and the earning of wages by employees.
2. Some costs are not journalized during the accounting period because they expire with the passage of time rather than through recurring daily transactions. Examples are equipment deterioration, rent, and insurance.
3. Some items may be unrecorded. An example is a utility service bill that will not be received until the next accounting period.

Adjusting entries are required every time financial statements are prepared. The starting point is an analysis of each account in the trial balance to determine whether it is complete and up-to-date. The analysis requires a thorough understanding of the company's operations and the interrelationship of accounts. Preparing adjusting entries is often an involved process. The company may need to make inventory counts of supplies and repair parts. It may need to prepare supporting

STUDY OBJECTIVE 3

Explain why adjusting entries are needed.

HELPFUL HINT

Adjusting entries are needed to enable financial statements to be in conformity with GAAP.

schedules of insurance policies, rental agreements, and other contractual commitments. Adjustments are often prepared after the balance sheet date. However, the adjusting entries are dated as of the balance sheet date.

STUDY OBJECTIVE 4

Identify the major types of adjusting entries.

Illustration 4-2

Categories of adjusting entries

TYPES OF ADJUSTING ENTRIES

Adjusting entries can be classified as either prepayments or accruals. Each of these classes has two subcategories, as shown in Illustration 4-2.

Prepayments

- 1. Prepaid expenses.** Expenses paid in cash and recorded as assets before they are used or consumed.
- 2. Unearned revenues.** Cash received and recorded as liabilities before revenue is earned.

Accruals

- 1. Accrued revenues.** Revenues earned but not yet received in cash or recorded.
- 2. Accrued expenses.** Expenses incurred but not yet paid in cash or recorded.

Specific examples and explanations of each type of adjustment are given on the following pages. Each example is based on the October 31 trial balance of Premier Staffing Agency, Inc., from Chapter 3, reproduced in Illustration 4-3.

Illustration 4-3

Trial balance

PREMIER STAFFING AGENCY, INC.		
Trial Balance		
October 31, 2008		
	<u>Debit</u>	<u>Credit</u>
Cash	\$15,200	
Supplies	2,500	
Prepaid Insurance	600	
Office Equipment	5,000	
Notes Payable		\$ 5,000
Accounts Payable		2,500
Unearned Revenue		1,200
Common Stock		10,000
Retained Earnings		-0-
Dividends	500	
Service Revenue		10,000
Salaries Expense	4,000	
Rent Expense	900	
	<u>\$28,700</u>	<u>\$28,700</u>

We assume that Premier Staffing uses an accounting period of one month. Thus monthly adjusting entries will be made. The entries will be dated October 31.

ADJUSTING ENTRIES FOR PREPAYMENTS

As indicated earlier, prepayments are either prepaid expenses or unearned revenues. Adjusting entries for prepayments are required to record the portion of the prepayment that represents the **expense incurred** or the **revenue earned** in the current accounting period.

STUDY OBJECTIVE 5

Prepare adjusting entries for prepayments.

If an adjustment is needed for prepayments, the asset and the liability are overstated and the related expense and revenue are understated before the adjustment. For example, in the trial balance, the balance in the asset Supplies shows only supplies purchased. This balance is overstated; a related expense account, Supplies Expense, is understated because the cost of supplies used has not been recognized. Thus the adjusting entry for prepayments will **decrease a balance sheet account** (Supplies) and **increase an income statement account** (Supplies Expense). The effects of adjusting entries for prepayments are depicted graphically in Illustration 4-4.

HELPFUL HINT

Remember that credits decrease assets and increase revenues. Debits increase expenses and decrease liabilities.

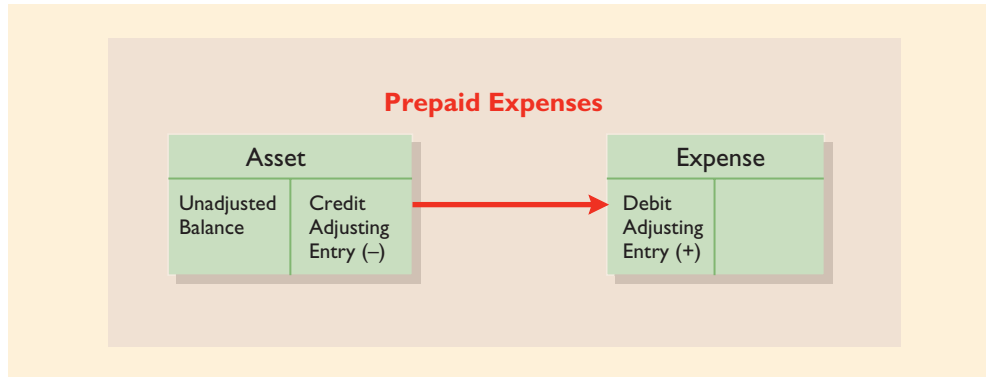


Illustration 4-4

Adjusting entries for prepayments

Prepaid Expenses

As stated on the preceding page, expenses paid in cash and recorded as assets before they are used or consumed are called **prepaid expenses**. When a cost is prepaid, an asset account is debited to show the service or benefit that will be received in the future. Prepayments often occur in regard to insurance, supplies, advertising, and rent. In addition, prepayments are made when buildings and equipment are purchased.

Prepaid expenses expire either with the passage of time (e.g., rent and insurance) or through use and consumption (e.g., supplies). The expiration of these costs does not require daily journal entries, which would be unnecessary and impractical. Instead, it is customary to postpone recognizing cost expirations until financial statements are prepared. At each statement date, adjusting entries are made for two purposes: (1) to record the expenses that apply to the current accounting period and (2) to show the unexpired costs in the asset accounts.

Prior to adjustment, assets are overstated and expenses are understated. **Thus the prepaid expense adjusting entry results in a debit (increase) to an expense account and a credit (decrease) to an asset account.**

SUPPLIES. Businesses use various types of supplies. For example, a CPA firm will have office supplies such as stationery, envelopes, and accounting paper. Supplies are generally debited to an asset account when they are acquired. In the course of operations, supplies are depleted; but recognition of supplies used is deferred until the adjustment process. At that point, a physical inventory (count) of supplies is taken. The difference between the balance in the Supplies (asset) account and the cost of supplies on hand represents the supplies used (expense) for the period.

Premier Staffing Agency, Inc., purchased supplies costing \$2,500 on October 5. A debit (increase) was made to the asset Supplies. This account shows a balance of \$2,500 in the October 31 trial balance. An inventory count at the close of business on October 31 reveals that \$1,000 of supplies are still on hand. Thus the cost

Supplies

Oct. 5



Supplies purchased; record asset



Oct. 31

Supplies used; record supplies expense

Equation analyses summarize the effects of the transaction on the accounting equation.

Equation Analysis			
A	=	L	+ SE
-1,500			-1,500 Exp

of supplies used is \$1,500 (\$2,500 – \$1,000), and the following adjusting entry is made:

Oct. 31	Supplies Expense	1,500	
	Supplies		1,500
	(To record supplies used)		

After the adjusting entry is posted, the two supplies accounts look like Illustration 4-5.

Illustration 4-5

Supplies accounts after adjustment

Supplies			Supplies Expense		
10/5	2,500	10/31 Adj. 1,500	10/31 Adj. 1,500		
10/31 Bal.	1,000				

The asset account Supplies now shows a balance of \$1,000, which is the cost of supplies on hand at the statement date. In addition, Supplies Expense shows a balance of \$1,500, which equals the cost of supplies used in October. **If the adjusting entry is not made, October expenses will be understated and net income overstated by \$1,500. Also, both assets and stockholders' equity will be overstated by \$1,500 on the October 31 balance sheet.**

ACCOUNTING IN ACTION *Business Insight*



In the past, the costs of media advertising for burgers, bleaches, athletic shoes, and such products were sometimes recorded as assets and expensed in subsequent periods as sales took place. The reasoning behind this treatment was that long ad campaigns provided benefits over multiple accounting periods. Today, this treatment is no longer allowed. Instead, advertising costs must be expensed when the advertising takes place. The issue is important because the outlays for advertising can be substantial. Recent big spenders: **Coca-Cola** spent \$2 billion; **PepsiCo, Inc.**, \$1.7 billion; **Campbell Soup Company**, \$1.7 billion; and **JC Penney Company**, \$947 million.

Why do you think current accounting rules require that the cost of long ad campaigns be expensed rather than recorded as an asset?

Insurance

Oct. 4



Insurance purchased; record asset

Insurance Policy			
Oct	Nov	Dec	Jan
\$50	\$50	\$50	\$50
Feb	March	April	May
\$50	\$50	\$50	\$50
June	July	Aug	Sept
\$50	\$50	\$50	\$50
1 YEAR \$600			

Oct. 31

Insurance expired; record insurance expense

INSURANCE. Most companies have fire and theft insurance on merchandise and equipment, personal liability insurance for accidents suffered by customers, and automobile insurance on company cars and trucks. The cost of insurance protection is determined by the payment of insurance premiums. The minimum term of coverage is usually one year, but three- to five-year terms are available and offer lower annual premiums. Insurance premiums normally are charged to the asset account Prepaid Insurance when paid. At the financial statement date it is necessary to debit (increase) Insurance Expense and credit (decrease) Prepaid Insurance for the cost that has expired during the period.

On October 4, Premier Staffing Agency, Inc., paid \$600 for a one-year fire insurance policy. The effective date of coverage was October 1. The premium was charged to Prepaid Insurance when it was paid, and this account shows a balance of \$600 in the October 31 trial balance. Analysis reveals that \$50 (\$600 ÷ 12) of insurance expires each month. Thus the following adjusting entry is made:

Oct. 31	Insurance Expense	50	
	Prepaid Insurance		50
	(To record insurance expired)		

After the adjusting entry is posted, the accounts look like Illustration 4-6.

Prepaid Insurance		Insurance Expense	
10/4	600	10/31 Adj.	50
10/31 Bal.	550	10/31 Adj.	50

The asset Prepaid Insurance shows a balance of \$550. This amount represents the unexpired cost for the remaining eleven months of coverage. The \$50 balance in Insurance Expense is equal to the insurance cost that has expired in October. **If this adjustment is not made, October expenses will be understated by \$50 and net income overstated by \$50. Also, both assets and stockholders' equity will be overstated by \$50 on the October 31 balance sheet.**

DEPRECIATION. A business enterprise typically owns productive facilities such as buildings, equipment, and vehicles. Because these assets provide service for a number of years, each is recorded as an asset, rather than an expense, in the year it is acquired. As explained in Chapter 1, such assets are recorded at cost, as required by the cost principle. The term of service is referred to as the **useful life**.

According to the matching principle, a portion of the cost of a long-lived asset should be reported as an expense during each period of the asset's useful life. **Depreciation** is the allocation of the cost of an asset to expense over its useful life in a rational and systematic manner.

Need for Depreciation Adjustment. From an accounting standpoint, acquiring productive facilities is viewed essentially as a long-term prepayment for services. The need for periodic adjusting entries for depreciation is therefore the same as that for other prepaid expenses: to recognize the cost that has expired (expense) during the period and to report the unexpired cost (asset) at the end of the period.

At the time an asset is acquired, its useful life cannot be known with certainty. The asset may be useful for a longer or shorter time than expected, depending on such factors as actual use, deterioration owing to the elements, or obsolescence. Thus you should recognize that **depreciation is an estimate** rather than a factual measurement of the cost that has expired. A common procedure in computing depreciation expense is to divide the cost of the asset by its useful life. For example, if cost is \$10,000 and useful life is expected to be 10 years, annual depreciation is \$1,000.¹

For Premier Staffing, depreciation on the office equipment is estimated to be \$480 a year, or \$40 per month. Accordingly, depreciation for October is recognized by the following adjusting entry:

Oct. 31	Depreciation Expense	40	
	Accumulated Depreciation—Office Equipment		40
	(To record monthly depreciation)		

After the adjusting entry is posted, the accounts look like Illustration 4-7. The balance in the accumulated depreciation account will increase \$40 each month. After journalizing and posting the adjusting entry on November 30, the balance will be \$80; on December 31, \$120; and so on.

Illustration 4-6

Insurance accounts after adjustment

A	=	L	+	SE
-50				-50 Exp

Cash Flows
no effects

Depreciation

Oct. 1



Office equipment purchased; record asset

Office Equipment			
Oct	Nov	Dec	Jan
\$40	\$40	\$40	\$40
Feb	March	April	May
\$40	\$40	\$40	\$40
June	July	Aug	Sept
\$40	\$40	\$40	\$40
Depreciation = \$480/year			

Oct. 31

Depreciation recognized; record depreciation expense

A	=	L	+	SE
-40				-40

¹Additional consideration is given to computing depreciation expense in Chapter 13.

Illustration 4-7

Accounts after adjustment for depreciation

Office Equipment			
10/1	5,000		
Accumulated Depreciation—Office Equipment			
	10/31	Adj.	40
Depreciation Expense			
	10/31	Adj.	40

HELPFUL HINT

All contra accounts have increases, decreases, and normal balances opposite to the account to which they relate.

Statement Presentation. Accumulated Depreciation—Office Equipment is a contra asset account. A **contra asset account** is one that is offset against an asset account on the balance sheet. This accumulated depreciation account appears just after Office Equipment on the balance sheet. Its normal balance is a credit. An alternative would be to credit (decrease) Office Equipment directly for the depreciation each month. But use of the contra account provides disclosure of **both the original cost of the equipment and the total cost that has expired to date**. In the balance sheet, Accumulated Depreciation—Office Equipment is deducted from the related asset account as shown in Illustration 4-8.

Illustration 4-8

Balance sheet presentation of accumulated depreciation

Office equipment	\$5,000	
Less: Accumulated depreciation—office equipment	40	\$4,960

ALTERNATIVE TERMINOLOGY

Book value is sometimes referred to as *carrying value* or *unexpired cost*.

The difference between the cost of any depreciable asset and its related accumulated depreciation is referred to as the **book value** of that asset. In Illustration 4-8, the book value of the equipment on the balance sheet date is \$4,960. You should realize that the book value is generally different from the market value (the price at which the asset could be sold in the marketplace). The reason the two are different is that depreciation is a means of cost allocation, not a matter of valuation.

Depreciation expense also identifies that portion of the asset’s cost that has expired in October. As in the case of other prepaid adjustments, the omission of this adjusting entry would cause total assets, total stockholders’ equity, and net income to be overstated and depreciation expense to be understated.

If the company owns additional equipment, such as delivery or store equipment, or if it has buildings, a separate depreciation expense is recorded on each of those items. Related accumulated depreciation accounts also are established, such as Accumulated Depreciation—Delivery Equipment, Accumulated Depreciation—Store Equipment, and Accumulated Depreciation—Buildings.

Unearned Revenues

As stated on page 108, cash received and recorded as liabilities before revenue is earned is called **unearned revenues**. Such items as rent, magazine subscriptions, and customer deposits for future service may result in unearned revenues. Airlines such as **United, American, and Delta** treat receipts from the sale of tickets as unearned revenue until the flight service is provided. Similarly, college tuition received prior to the start of a semester is considered unearned revenue by the college. Unearned revenues are the opposite of prepaid expenses. Indeed, unearned revenue on the books of one company is likely to be a prepayment on the books of the company that has made the advance payment. For example, if identical accounting periods are assumed, a landlord will have unearned rent revenue when a tenant has prepaid rent.

Unearned Revenues

Oct. 2



Cash is received in advance; liability is recorded

Oct. 31



Service is provided; revenue is recorded

When the payment is received for services to be provided in a future accounting period, an unearned revenue account (a liability) should be credited (increased) to recognize the obligation that exists. Later, unearned revenues are earned by providing service to a customer. It may not be practical to make daily journal entries as the revenue is earned. In such cases, recognition of earned revenue is delayed until the end of the period. Then an adjusting entry is made to record the revenue that has been earned and to show the liability that remains. In the typical case, liabilities are overstated and revenues are understated prior to adjustment. Thus **the adjusting entry for unearned revenues results in a debit (decrease) to a liability account and a credit (increase) to a revenue account.** Illustration 4-9 shows adjusting entries for unearned revenue.

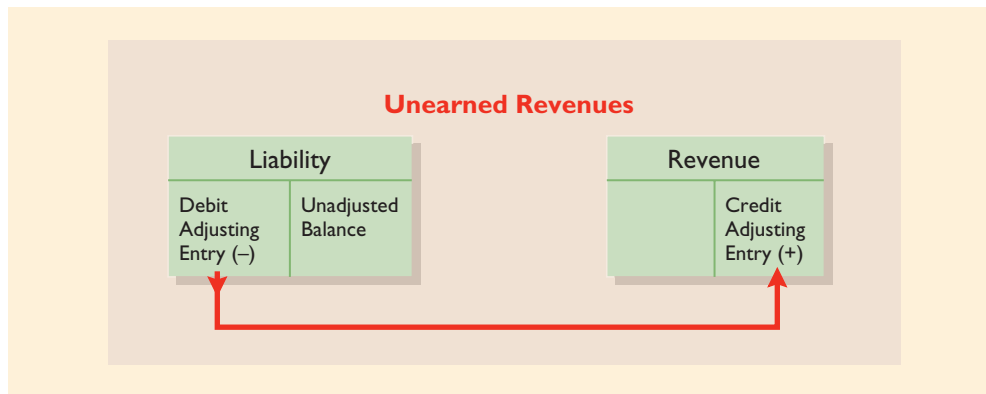


Illustration 4-9

Adjusting entries for unearned revenue.

Premier Staffing Agency, Inc., received \$1,200 on October 2 from R. Knox for staffing services expected for a New Year’s Eve party to be completed by December 31. The payment was credited to Unearned Revenue; this account shows a balance of \$1,200 in the October 31 trial balance. Analysis reveals that \$400 of those fees was earned in October. The following adjusting entry is made:

ALTERNATIVE TERMINOLOGY

Unearned revenue is sometimes referred to as *deferred revenue*.

Oct. 31	Unearned Revenue Service Revenue (To record revenue for services provided)	400		400
---------	--	-----	--	-----

A	=	L	+	SE
		-400		+400

After the adjusting entry is posted, the accounts look like Illustration 4-10.

Unearned Revenue				Service Revenue			
10/31	Adj.	400	10/2	1,200	10/31 Bal.	10,000	
			10/31 Bal.	800		31 Adj.	400

Illustration 4-10

Revenue accounts after prepayments adjustment

The liability Unearned Revenue now shows a balance of \$800. This amount represents the remaining prepaid staffing services to be performed in the future. At the same time, Service Revenue shows total revenue of \$10,400 earned in October. **If this adjustment is not made, revenues and net income would be understated by \$400 in the income statement. Also, liabilities would be overstated and stockholders’ equity would be understated by \$400 on the October 31 balance sheet.**

ACCOUNTING MATTERS! Ethics Insight



Companies would rather report steadily increasing profits than fluctuating profits. To “smooth” earnings, companies sometimes shift the reporting of revenues or expenses between periods. A *Wall Street Journal* article reported that **Microsoft Corp.** agreed to settle Securities and Exchange Commission charges that it misstated its earnings in some years by illegally maintaining different “reserve” accounts for such expenses as marketing and obsolete inventory. The settlement did not require Microsoft to pay a fine. Microsoft accepted the commission’s order without admitting or denying wrongdoing and agreed not to commit accounting violations. “The SEC said Microsoft maintained undisclosed reserve accounts totaling between \$200 million and \$900 million between 1994 and 1998 and didn’t maintain proper internal controls to document them or substantiate their size.” The SEC said that the improper use of these reserve accounts resulted in “material inaccuracies” in the financial reports filed with the SEC.

What accounting principles do you think Microsoft violated? What did the SEC mean by “material inaccuracies”? Why would a company prefer to report steadily increasing profits rather than fluctuating profits?

SOURCE: Rebecca Buckman, “Microsoft, SEC Settle Probe into Earnings Misstatements,” *Wall Street Journal Online*, June 4, 2002.



BEFORE YOU GO ON...

REVIEW IT

1. What are the four types of adjusting entries?
2. What is the effect on assets, stockholders’ equity, expenses, and net income if a prepaid expense adjusting entry is not made?
3. What is the effect on liabilities, stockholders’ equity, revenues, and net income if an unearned revenue adjusting entry is not made?
4. Using **PepsiCo’s** Consolidated Statement of income, what was the amount of depreciation expense for 2005 and 2006? (See Note 4 to the financial statements.)



DO IT

The ledger of Hammond, Inc., on March 31, 2008, includes the following selected accounts before adjusting entries.

	<u>Debit</u>	<u>Credit</u>
Prepaid Insurance	3,600	
Office Supplies	2,800	
Office Equipment	25,000	
Accumulated Depreciation—Office Equipment		5,000
Unearned Revenue		9,200

An analysis of the accounts shows the following:

1. Insurance expires at the rate of \$100 per month.
2. Supplies on hand total \$800.
3. The office equipment depreciates \$200 a month.
4. One-half of the unearned revenue was earned in March.

Prepare the adjusting entries for the month of March.

ACTION PLAN

- Make adjusting entries at the end of the period for revenues earned and expenses incurred in the period.
- Don’t forget to make adjusting entries for prepayments. Failure to adjust for prepayments leads to overstatement of the asset or liability and related understatement of the expense or revenue.

SOLUTION

1. Insurance Expense	100	
Prepaid Insurance		100
(To record insurance expired)		
2. Office Supplies Expense	2,000	
Office Supplies		2,000
(To record supplies used)		
3. Depreciation Expense	200	
Accumulated Depreciation—Office Equipment		200
(To record monthly depreciation)		
4. Unearned Revenue	4,600	
Service Revenue		4,600
(To record revenue for services provided)		



ADJUSTING ENTRIES FOR ACCRUALS

The second category of adjusting entries is **accruals**. Adjusting entries for accruals are required to record revenues earned and expenses incurred in the current accounting period that have not been recognized through daily entries.

An accrual adjustment is needed when various accounts are understated: the revenue account and the related asset account, and/or the expense account and the related liability account. Thus the adjusting entry for accruals will **increase both a balance sheet and an income statement account**. Adjusting entries for accruals are graphically depicted in Illustration 4-11.

STUDY OBJECTIVE 6

Prepare adjusting entries for accruals.

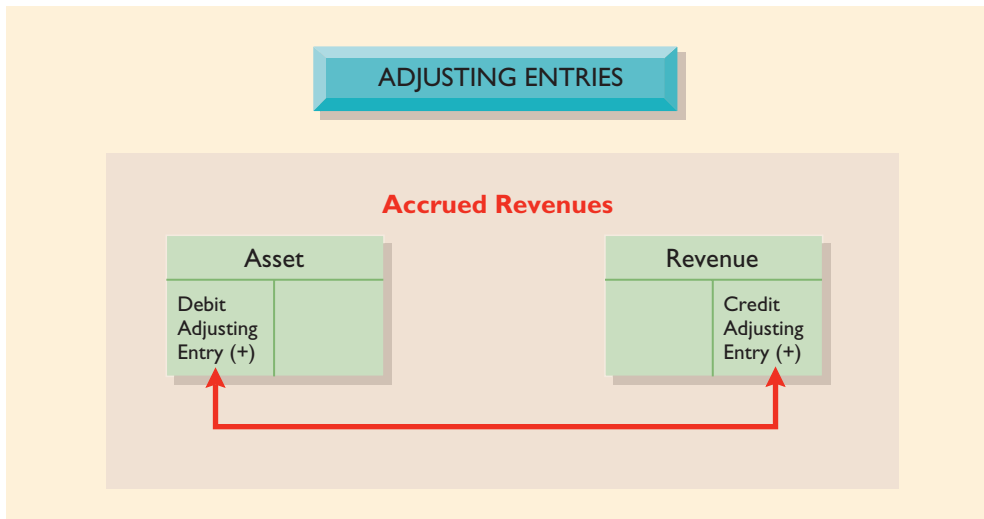


Illustration 4-11

Adjusting entries for accruals

Accrued Revenues

As explained on page 108, revenues earned but not yet received in cash or recorded at the statement date are **accrued revenues**. Accrued revenues may accumulate (accrue) with the passing of time, as in the case of interest revenue and rent revenue. Or they may result from services that have been performed but neither billed nor collected, as in the case of commissions and fees. The former are unrecorded because the earning of interest and rent does not involve daily transactions. The latter may be unrecorded because only a portion of the total service has been provided.

Accrued Revenues

Oct. 31

Revenue and receivable are recorded for unbilled services

Nov. 10
Cash is received; receivable is reduced

An adjusting entry is required for two purposes: (1) to show the receivable that exists at the balance sheet date and (2) to record the revenue that has been earned during the period. Prior to adjustment, both assets and revenues are understated. Thus **an adjusting entry for accrued revenues results in a debit (increase) to an asset account and a credit (increase) to a revenue account.**

In October, Premier Staffing Agency, Inc., earned \$200 for services that were not billed to clients before October 31. Because these services have not been billed, they have not been recorded. The following adjusting entry is made:

<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">=</td> <td style="text-align: center;">L</td> <td style="text-align: center;">+</td> <td style="text-align: center;">SE</td> </tr> <tr> <td style="text-align: center;">-200</td> <td></td> <td></td> <td></td> <td style="text-align: center;">+200</td> </tr> </table>	A	=	L	+	SE	-200				+200	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; padding-right: 10px;">Oct. 31</td> <td style="width: 60%; border-left: 1px solid black; padding-left: 10px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Accounts Receivable</td> <td style="width: 10%; text-align: right;">200</td> <td style="width: 40%;"></td> </tr> <tr> <td style="padding-left: 20px;">Service Revenue</td> <td></td> <td style="text-align: right;">200</td> </tr> <tr> <td style="padding-left: 40px;">(To record revenue for services provided)</td> <td></td> <td></td> </tr> </table> </td> </tr> </table>	Oct. 31	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Accounts Receivable</td> <td style="width: 10%; text-align: right;">200</td> <td style="width: 40%;"></td> </tr> <tr> <td style="padding-left: 20px;">Service Revenue</td> <td></td> <td style="text-align: right;">200</td> </tr> <tr> <td style="padding-left: 40px;">(To record revenue for services provided)</td> <td></td> <td></td> </tr> </table>	Accounts Receivable	200		Service Revenue		200	(To record revenue for services provided)		
A	=	L	+	SE																		
-200				+200																		
Oct. 31	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Accounts Receivable</td> <td style="width: 10%; text-align: right;">200</td> <td style="width: 40%;"></td> </tr> <tr> <td style="padding-left: 20px;">Service Revenue</td> <td></td> <td style="text-align: right;">200</td> </tr> <tr> <td style="padding-left: 40px;">(To record revenue for services provided)</td> <td></td> <td></td> </tr> </table>	Accounts Receivable	200		Service Revenue		200	(To record revenue for services provided)														
Accounts Receivable	200																					
Service Revenue		200																				
(To record revenue for services provided)																						

After the adjusting entry is posted, the accounts look like Illustration 4-12.

Illustration 4-12

Receivable and revenue accounts after accrual adjustment

Accounts Receivable		Service Revenue	
10/31	Adj.	200	
			10/31 10,000
			31 400
			31 Adj. 200
			10/31 Bal. 10,600

The asset Accounts Receivable shows that \$200 is owed by clients at the balance sheet date. The balance of \$10,600 in Service Revenue represents the total revenue earned during the month (\$10,000 + \$400 + \$200). **If the adjusting entry is not made, the following will all be understated: assets and stockholders' equity on the balance sheet and revenues and net income on the income statement.**

ALTERNATIVE TERMINOLOGY
Accrued revenues are also called *accrued receivables*.

In the next accounting period, the clients will be billed. The entry to record the billing should recognize that a portion has already been recorded in the previous month's adjusting entry. To illustrate, assume that bills totaling \$3,000 are mailed to clients on November 10. Of this amount, \$200 represents revenue earned in October and recorded as Service Revenue in the October 31 adjusting entry. The remaining \$2,800 represents revenue earned in November. Thus the following entry is made:

<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">=</td> <td style="text-align: center;">L</td> <td style="text-align: center;">+</td> <td style="text-align: center;">SE</td> </tr> <tr> <td style="text-align: center;">-2,800</td> <td></td> <td></td> <td></td> <td style="text-align: center;">+2,800</td> </tr> </table>	A	=	L	+	SE	-2,800				+2,800	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; padding-right: 10px;">Nov. 10</td> <td style="width: 60%; border-left: 1px solid black; padding-left: 10px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Accounts Receivable</td> <td style="width: 10%; text-align: right;">2,800</td> <td style="width: 40%;"></td> </tr> <tr> <td style="padding-left: 20px;">Service Revenue</td> <td></td> <td style="text-align: right;">2,800</td> </tr> <tr> <td style="padding-left: 40px;">(To record revenue for services provided)</td> <td></td> <td></td> </tr> </table> </td> </tr> </table>	Nov. 10	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Accounts Receivable</td> <td style="width: 10%; text-align: right;">2,800</td> <td style="width: 40%;"></td> </tr> <tr> <td style="padding-left: 20px;">Service Revenue</td> <td></td> <td style="text-align: right;">2,800</td> </tr> <tr> <td style="padding-left: 40px;">(To record revenue for services provided)</td> <td></td> <td></td> </tr> </table>	Accounts Receivable	2,800		Service Revenue		2,800	(To record revenue for services provided)		
A	=	L	+	SE																		
-2,800				+2,800																		
Nov. 10	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Accounts Receivable</td> <td style="width: 10%; text-align: right;">2,800</td> <td style="width: 40%;"></td> </tr> <tr> <td style="padding-left: 20px;">Service Revenue</td> <td></td> <td style="text-align: right;">2,800</td> </tr> <tr> <td style="padding-left: 40px;">(To record revenue for services provided)</td> <td></td> <td></td> </tr> </table>	Accounts Receivable	2,800		Service Revenue		2,800	(To record revenue for services provided)														
Accounts Receivable	2,800																					
Service Revenue		2,800																				
(To record revenue for services provided)																						

This entry records service revenue between November 1 and November 10. The subsequent collection of revenue from clients (including the \$200 earned in October) will be recorded with a debit (increase) to Cash and a credit (decrease) to Accounts Receivable.

Accrued Expenses

ALTERNATIVE TERMINOLOGY
Accrued expenses are also called *accrued liabilities*.

As indicated on page 108, expenses incurred but not yet paid or recorded at the statement date are called **accrued expenses**. Interest, rent, taxes, and salaries can be accrued expenses. Accrued expenses result from the same causes as accrued revenues. In fact, an accrued expense on the books of one company is an accrued revenue to another company. For example, the \$200 accrual of fees by Premier is an accrued expense to the client that received the service.

Adjustments for accrued expenses are needed for two purposes: (1) to record the obligations that exist at the balance sheet date and (2) to recognize the expenses that apply to the current accounting period. Prior to adjustment, both liabilities and expenses are understated. Therefore, as shown in Illustration 4-13, **the adjusting entry for accrued expenses results in a debit (increase) to an expense account and a credit (increase) to a liability account.**

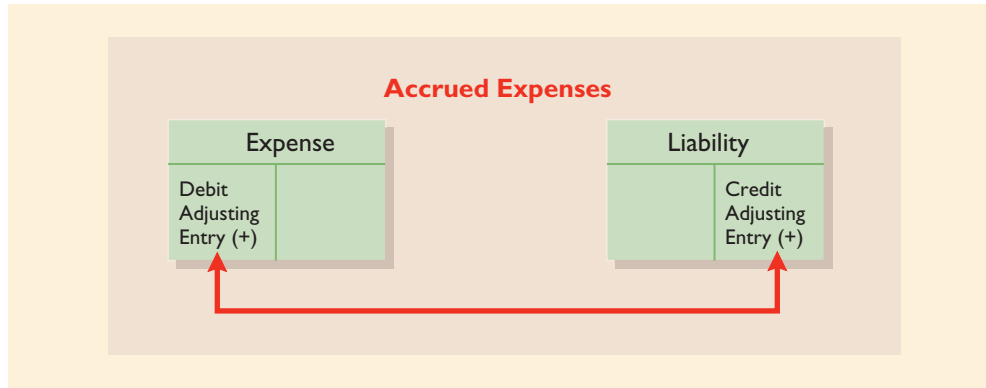


Illustration 4-13

Adjusting entries for accrued expenses.

ACCRUED INTEREST. Premier Staffing Agency, Inc., signed a \$5,000, three-month note payable on October 1. The note requires interest at an annual rate of 12 percent. The amount of the interest accumulation is determined by three factors: (1) the face value of the note; (2) the interest rate, which is always expressed as an annual rate; and (3) the length of time the note is outstanding. In this instance, the total interest due on the \$5,000 note at its due date three months hence is \$150 ($\$5,000 \times 12\% \times 3/12$); the interest for one month is \$50. The formula for computing interest² and its application to Premier Staffing Agency, Inc., for the month of October are shown in Illustration 4-14. Note that the time period is expressed as a fraction of a year.

HELPFUL HINT
Interest is a cost of borrowing money that accumulates with the passage of time.

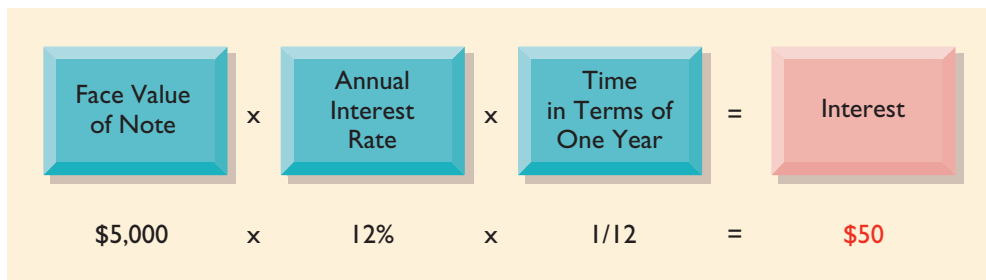


Illustration 4-14

Formula for computing interest

The accrued expense adjusting entry at October 31 is

Oct. 31	Interest Expense		50	
	Interest Payable			50
	(To record interest on notes payable)			

A	=	L	+	SE
		+50		-50

After this adjusting entry is posted, the accounts look like Illustration 4-15.

Interest Expense		Interest Payable	
10/31 Adj.	50	10/31 Adj.	50

Illustration 4-15

Interest accounts after adjustment

²The computation of interest will be considered in more depth in later chapters.

In Illustration 4-15, Interest Expense shows the interest charges for the month. The amount of interest owed at the statement date is shown in Interest Payable. It will not be paid until the note comes due at the end of three months. The Interest Payable account is used instead of crediting (increasing) Notes Payable. The reason for using the two accounts is to disclose the two types of obligations (interest and principal) in the accounts and statements. **If this adjusting entry is not made, liabilities and interest expense will be understated, and net income and stockholders' equity will be overstated.**

ACCRUED SALARIES. Some types of expenses are paid for after the services have been performed. Examples are employee salaries and commissions. At Premier Staffing, Inc., salaries were last paid on October 26; the next payday is November 9. As shown in the calendar in Illustration 4-16, three working days remain in October (October 29–31).

Illustration 4-16

Calendar showing Premier's pay periods



At October 31, the salaries for the last three days of the month represent an accrued expense and a related liability. The employees receive total salaries of \$2,000 for a five-day workweek, or \$400 per day. Thus accrued salaries at October 31 are \$1,200 ($\400×3). The adjusting entry is

A	=	L	+	SE
		+1,200		-1,200

Oct. 31	Salaries Expense Salaries Payable (To record accrued salaries)	1,200	1,200
---------	--	-------	-------

After this adjusting entry is posted, the accounts look like Illustration 4-17.

Illustration 4-17

Salary accounts after adjustment

Salaries Expense		Salaries Payable	
10/26	4,000		
31 Adj.	1,200	10/31 Adj.	1,200
10/31 Bal.	5,200		

After this adjustment, the balance in Salaries Expense of \$5,200 (13 days \times \$400) is the actual salary expense for October. (The employees started work on October 15.) The balance in Salaries Payable of \$1,200 is the amount of the liability for salaries owed as of October 31. **If the \$1,200 adjustment for salaries is not recorded, Premier's expenses will be understated \$1,200, and its liabilities will be understated \$1,200.**

At Premier Staffing, salaries are payable every two weeks. The next payday is November 9, when total salaries of \$4,000 will again be paid. The payment will consist of \$1,200 of salaries payable at October 31 plus \$2,800 of salaries expense

for November (seven working days as shown in the November calendar \times \$400). Therefore, the following entry is made on November 9:

Nov. 9	Salaries Payable Salaries Expense Cash (To record November 9 payroll)	1,200 2,800	4,000
--------	--	----------------	-------

A	=	L	+	SE
-4,000		-1,200		-2,800

This entry does two things: (1) It eliminates the liability for Salaries Payable that was recorded in the October 31 adjusting entry. (2) It records the proper amount of Salaries Expense for the period between November 1 and November 9.

TECHNOLOGY IN ACTION



In many computer systems, the adjusting process is handled like any other transaction, with the accountant inputting the adjustment at the time required. The main difference between adjusting entries and regular transactions is that with adjusting entries, one part of the computer system may perform the required calculation for such items as depreciation or interest and then “feed” these figures to the journalizing process. Such systems are also able to display information before and after changes were made.

If a computer performs adjusting entries, what role does the accountant play? Why might management be interested in “information before and after changes”?



BEFORE YOU GO ON...

► REVIEW IT

1. If an accrued revenue adjusting entry is not made, what is the effect on assets, stockholders’ equity, revenues, and net income?
2. If an accrued expense adjusting entry is not made, what is the effect on liabilities, stockholders’ equity, and interest expense?

► DO IT

Hector and Jeremy are the new owners of Micro Resort Rental Services, Inc. At the end of August 2008, their first month of ownership, Hector and Jeremy are trying to prepare monthly financial statements. They have the following information for the month:

1. At August 31, Micro owed employees \$800 in salaries that will be paid on September 1.
2. On August 1, Micro borrowed \$30,000 from a local bank on a fifteen-year mortgage. The annual interest rate is 10%.
3. Service revenue unrecorded in August totaled \$1,100.

Prepare the adjusting entries needed at August 31, 2008.

ACTION PLAN

- Make adjusting entries at the end of the period for revenues earned and expenses incurred in the period.
- Don’t forget to make adjusting entries for accruals. Adjusting entries for accruals will increase both a balance sheet and an income statement account.

SOLUTION

1. Salaries Expense Salaries Payable (To record accrued salaries)	800	800
2. Interest Expense Interest Payable (To record interest) (\$30,000 \times 10% \times 1/12 = \$250)	250	250

3. Accounts Receivable	1,100	
Service Revenue		1,100
(To record revenue for services provided)		



SUMMARY OF BASIC RELATIONSHIPS

The four basic types of adjusting entries are summarized in Illustration 4-18. Take some time to study and analyze the adjusting entries shown in the summary. Be sure to note that **each adjusting entry affects one balance sheet account and one income statement account.**

Illustration 4-18

Summary of adjusting entries

Type of Adjustment	Reason for Adjustment	Accounts before Adjustment	Adjusting Entry
1. Prepaid expenses	Prepaid expenses originally recorded in asset accounts have been used.	Assets overstated Expenses understated	Dr. Expenses Cr. Assets
2. Unearned revenues	Unearned revenues initially recorded in liability accounts have been earned.	Liabilities overstated Revenues understated	Dr. Liabilities Cr. Revenues
3. Accrued revenues	Revenues have been earned but not yet received in cash or recorded.	Assets understated Revenues understated	Dr. Assets Cr. Revenues
4. Accrued expenses	Expenses have been incurred but not yet paid in cash or recorded.	Expenses understated Liabilities understated	Dr. Expenses Cr. Liabilities

The journalizing and posting of adjusting entries for Premier Staffing Agency, Inc., on October 31 are shown in Illustrations 4-19 and 4-20. All adjustments are identified in the ledger by the reference J2 because they have been journalized on page 2 of the general journal. A center caption entitled “Adjusting Entries” may be inserted between the last transaction entry and the first adjusting entry to identify these entries. When reviewing the general ledger in Illustration 4-20, note that the adjustments are highlighted in color.

Illustration 4-19

General journal showing adjusting entries

GENERAL JOURNAL				J2	
Date	Account Titles and Explanation	Ref.	Debit	Credit	
2008	<u>Adjusting Entries</u>				
Oct. 31	Supplies Expense	611	1,500		
	Supplies	129			1,500
	(To record supplies used)				
31	Insurance Expense	722	50		
	Prepaid Insurance	130			50
	(To record insurance expired)				
31	Depreciation Expense	711	40		
	Accumulated Depreciation—Office Equipment	158			40
	(To record monthly depreciation)				
31	Unearned Revenue	209	400		
	Service Revenue	400			400
	(To record revenue for services provided)				
31	Accounts Receivable	112	200		
	Service Revenue	400			200
	(To record revenue for services provided)				
31	Interest Expense	905	50		
	Interest Payable	230			50
	(To record interest on notes payable)				
31	Salaries Expense	726	1,200		
	Salaries Payable	212			1,200
	(To record accrued salaries)				

HELPFUL HINT

(1) Adjusting entries should not involve debits or credits to cash.
(2) Evaluate whether the adjustment makes sense. For example, an adjustment to recognize supplies used should increase supplies expense.
(3) Double-check all computations.

General ledger after adjustment

GENERAL LEDGER											
Cash No. 101						Interest Payable No. 230					
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
2008						2008					
Oct. 1		J1	10,000		10,000	Oct. 31	Adj. entry	J2		50	50
2		J1	1,200		11,200	Common Stock No. 311					
3		J1		900	10,300	Date	Explanation	Ref.	Debit	Credit	Balance
4		J1		600	9,700	2008					
20		J1		500	9,200	Oct. 1		J1		10,000	10,000
26		J1		4,000	5,200	Retained Earnings No. 320					
31		J1	10,000		15,200	Date	Explanation	Ref.	Debit	Credit	Balance
Accounts Receivable No. 112						2008					
Date	Explanation	Ref.	Debit	Credit	Balance	Dividends No. 332					
2008						Date	Explanation	Ref.	Debit	Credit	Balance
Oct. 31	Adj. entry	J2	200		200	2008					
Supplies No. 129						Oct. 20		J1	500		500
Date	Explanation	Ref.	Debit	Credit	Balance	Service Revenue No. 400					
2008						Date	Explanation	Ref.	Debit	Credit	Balance
Oct. 5		J1	2,500		2,500	2008					
31	Adj. entry	J2		1,500	1,000	Oct. 31	J1		10,000	10,000	
Prepaid Insurance No. 130						31	Adj. entry	J2		400	10,400
Date	Explanation	Ref.	Debit	Credit	Balance	31	Adj. entry	J2		200	10,600
2008						Supplies Expense No. 611					
Oct. 4		J1	600		600	Date	Explanation	Ref.	Debit	Credit	Balance
31	Adj. entry	J2		50	550	2008					
Office Equipment No. 157						Oct. 31	Adj. entry	J2	1,500		1,500
Date	Explanation	Ref.	Debit	Credit	Balance	Depreciation Expense No. 711					
2008						Date	Explanation	Ref.	Debit	Credit	Balance
Oct. 1		J1	5,000		5,000	2008					
Accumulated Depreciation—Office Equipment No. 158						Oct. 31	Adj. entry	J2	40		40
Date	Explanation	Ref.	Debit	Credit	Balance	Insurance Expense No. 722					
2008						Date	Explanation	Ref.	Debit	Credit	Balance
Oct. 31	Adj. entry	J2		40	40	2008					
Notes Payable No. 200						Oct. 31	Adj. entry	J2	50		50
Date	Explanation	Ref.	Debit	Credit	Balance	Salaries Expense No. 726					
2008						Date	Explanation	Ref.	Debit	Credit	Balance
Oct. 1		J1		5,000	5,000	2008					
Accounts Payable No. 201						Oct. 26		J1	4,000		4,000
Date	Explanation	Ref.	Debit	Credit	Balance	31	Adj. entry	J2	1,200		5,200
2008						Rent Expense No. 729					
Oct. 5		J1		2,500	2,500	Date	Explanation	Ref.	Debit	Credit	Balance
Unearned Revenue No. 209						2008					
Date	Explanation	Ref.	Debit	Credit	Balance	Oct. 3		J1	900		900
2008						Interest Expense No. 905					
Oct. 2		J1		1,200	1,200	Date	Explanation	Ref.	Debit	Credit	Balance
31	Adj. entry	J2	400		800	2008					
Salaries Payable No. 212						Oct. 31	Adj. entry	J2	50		50
Date	Explanation	Ref.	Debit	Credit	Balance						
2008											
Oct. 31	Adj. entry	J2		1,200	1,200						

THE ADJUSTED TRIAL BALANCE AND FINANCIAL STATEMENTS

STUDY OBJECTIVE 7

Describe the nature and purpose of an adjusted trial balance.

After all adjusting entries have been journalized and posted, another trial balance is prepared from the ledger accounts. This is called an **adjusted trial balance**. Its purpose is to **prove the equality** of the total debit balances and the total credit balances in the ledger after all adjustments have been made. The accounts in the adjusted trial balance contain all data that are needed for the preparation of financial statements.

PREPARING THE ADJUSTED TRIAL BALANCE

The adjusted trial balance for Premier Staffing Agency, Inc., is shown in Illustration 4-21. It has been prepared from the ledger accounts in Illustration 4-20. The amounts affected by the adjusting entries are highlighted in color. Compare these amounts to those in the unadjusted trial balance in Illustration 4-3 on page 108.

PREPARING FINANCIAL STATEMENTS

Financial statements can be prepared directly from the adjusted trial balance. Illustrations 4-22 and 4-23 show the interrelationships of data in the adjusted trial balance and the financial statements.

Illustration 4-21

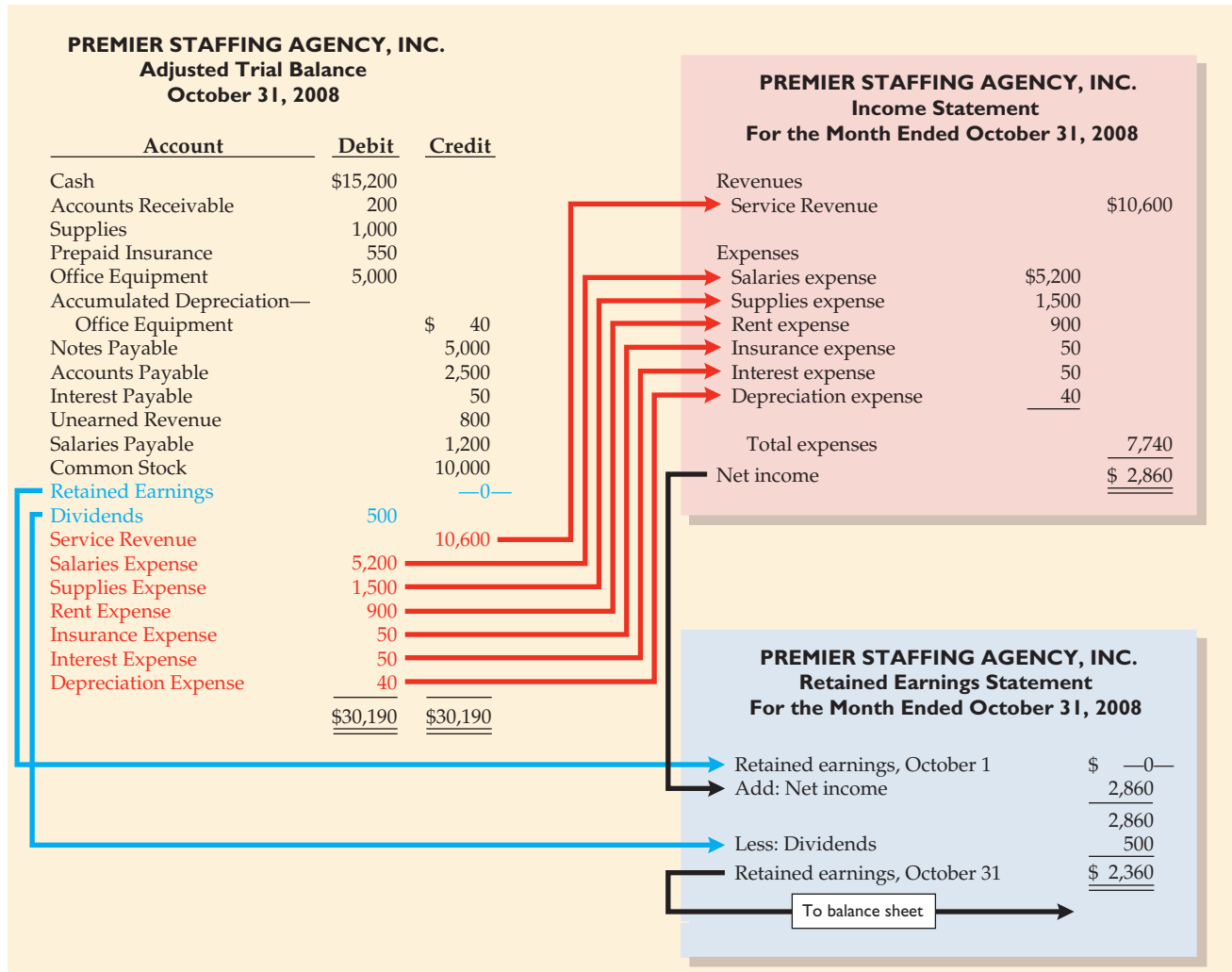
Adjusted trial balance

PREMIER STAFFING AGENCY, INC.		
Adjusted Trial Balance		
October 31, 2008		
	Dr.	Cr.
Cash	\$15,200	
Accounts Receivable	200	
Supplies	1,000	
Prepaid Insurance	550	
Office Equipment	5,000	
Accumulated Depreciation—Office Equipment		\$ 40
Notes Payable		5,000
Accounts Payable		2,500
Unearned Revenue		800
Salaries Payable		1,200
Interest Payable		50
Common Stock		10,000
Retained Earnings		–0–
Dividends	500	
Service Revenue		10,600
Salaries Expense	5,200	
Supplies Expense	1,500	
Rent Expense	900	
Insurance Expense	50	
Interest Expense	50	
Depreciation Expense	40	
	<u>\$30,190</u>	<u>\$30,190</u>

As shown in Illustration 4-22, the income statement is first prepared from the revenue and expense accounts. The retained earnings statement is derived from the retained earnings and dividends accounts and the net income (or net loss) shown in the income statement. As shown in Illustration 4-23, the balance sheet is then prepared from the asset and liability accounts, the common stock account, and the ending retained earnings balance as reported in the retained earnings statement.

Illustration 4-22

Preparation of the income statement and retained earnings statement from the adjusted trial balance



BEFORE YOU GO ON...

► REVIEW IT

1. What is the purpose of an adjusted trial balance?
2. How is an adjusted trial balance prepared?



Illustration 4-23

Preparation of the balance sheet from the adjusted trial balance

PREMIER STAFFING AGENCY, INC. Adjusted Trial Balance October 31, 2008			PREMIER STAFFING AGENCY, INC. Balance Sheet October 31, 2008		
Account	Debit	Credit	Assets		
Cash	\$15,200		Cash		\$15,200
Accounts Receivable	200		Accounts receivable		200
Supplies	1,000		Supplies		1,000
Prepaid Insurance	550		Prepaid insurance		550
Office Equipment	5,000		Office equipment	\$5,000	
Accumulated Depreciation— Office Equipment		\$ 40	Less: Accumulated depreciation	40	4,960
Notes Payable		5,000	Total assets		\$21,910
Accounts Payable		2,500	Liabilities and Stockholder's Equity		
Interest Payable		50	Liabilities		
Unearned Revenue		800	Notes payable	\$ 5,000	
Salaries Payable		1,200	Accounts payable	2,500	
Common Stock		10,000	Interest payable	50	
Retained Earnings		—	Unearned revenue	800	
Dividends	500		Salaries payable	1,200	
Service Revenue		10,600	Total liabilities	9,550	
Salaries Expense	5,200		Stockholders' equity		
Supplies Expense	1,500		Common Stock	10,000	
Rent Expense	900		Retained earnings	2,360	
Insurance Expense	50		Total liabilities and stockholder's equity		\$21,910
Interest Expense	50				
Depreciation Expense	40				
	<u>\$30,190</u>	<u>\$30,190</u>			

Balance at Oct. 31
 from Retained Earnings
 Statement in Illustration 4-22

ALTERNATIVE TREATMENT OF PREPAID EXPENSES AND UNEARNED REVENUES

STUDY OBJECTIVE 8

Prepare adjusting entries for the alternative treatment of prepayments.

In our discussion of adjusting entries for prepaid expenses and unearned revenues, we illustrated transactions for which the initial entries were made to balance sheet accounts. In the case of prepaid expenses, the prepayment was debited to an asset account. In the case of unearned revenue, the cash received was credited to a liability account. Some businesses use an alternative treatment: (1) At the time an expense is prepaid, it is debited to an expense account. (2) At the time of a receipt for future services, it is credited to a revenue account. The circumstances that justify such entries and the different adjusting entries that may be required are described next. The alternative treatment of prepaid expenses and unearned revenues has the same effect on the financial statements as the procedures described in the chapter.

PREPAID EXPENSES

Prepaid expenses become expired costs either through the passage of time (e.g., insurance) or through consumption (e.g., supplies). If, at the time of purchase, the company expects to consume the supplies before the next financial statement date, **it may be more convenient initially to debit (increase) an expense account rather than an asset account.**

Assume that Premier Staffing Agency, Inc., expects that all the supplies purchased on October 5 will be used before the end of the month. A debit of \$2,500 to Supplies Expense (rather than to the asset account Supplies) on October 5 will eliminate the need for an adjusting entry on October 31, if all the supplies are used. At October 31, the Supplies Expense account will show a balance of \$2,500, which is the cost of supplies used between October 5 and October 31.

But what if the company does not use all the supplies, and an inventory of \$1,000 of supplies remains on October 31? Obviously, an adjusting entry is needed. Prior to adjustment, the expense account Supplies Expense is overstated \$1,000, and the asset account Supplies is understated \$1,000. Thus the following adjusting entry is made:

Oct. 31	Supplies	1,000	
	Supplies Expense		1,000
	(To record supplies inventory)		

A	=	L	+	SE
+1,000				+1,000

After posting the adjusting entry, the accounts look like Illustration 4-24.

Supplies		Supplies Expense	
10/31 Adj.	1,000	10/5	2,500
		10/31 Adj.	1,000
		10/31 Bal.	1,500

Illustration 4-24

Prepaid expenses accounts after adjustment

After adjustment, the asset account Supplies shows a balance of \$1,000, which is equal to the cost of supplies on hand at October 31. In addition, Supplies Expense shows a balance of \$1,500, which is equal to the cost of supplies used between October 5 and October 31. If the adjusting entry is not made, expenses will be overstated and net income will be understated by \$1,000 in the October income statement. Also, both assets and stockholders' equity will be understated by \$1,000 on the October 31 balance sheet.

A comparison of the entries and accounts for advertising supplies is shown in Illustration 4-25.

Prepayment Initially Debited to Asset Account		Prepayment Initially Debited to Expense Account (alternative)	
Oct. 5	Supplies 2,500	Oct. 5	Supplies Expense 2,500
	Accounts Payable 2,500		Accounts Payable 2,500
Oct. 31	Supplies Expense 1,500	Oct. 31	Supplies Advertising Supplies Expense 1,000
	Advertising Supplies 1,500		

Illustration 4-25

Adjustment approaches—a comparison

After posting the entries, the accounts look like Illustration 4-26.

Supplies		(alternative) Supplies	
10/5	2,500	10/31 Adj.	1,000
10/31 Bal.	1,000		
Supplies Expense		Supplies Expense	
10/31 Adj.	1,500	10/5	2,500
		10/31 Adj.	1,000
		10/31 Bal.	1,500

Illustration 4-26

Comparison of accounts

Note that the account balances under each alternative are the same at October 31: Supplies \$1,000 and Supplies Expense \$1,500.

UNEARNED REVENUES

Unearned revenues become earned either through the passage of time (e.g., unearned rent) or through providing the service (e.g., unearned fees). Similar to the case for prepaid expenses, a revenue account may be credited (increased) when cash is received for future services.

To illustrate, assume that Premier Staffing received \$1,200 for future services on October 2. The services were expected to be performed before October 31.³ In such a case, Service Revenue is credited. If revenue is in fact earned before October 31, no adjustment is needed.

However, if at the statement date \$800 of the services has not been performed, an adjusting entry is required. The revenue account Service Revenue is overstated \$800, and the liability account Unearned Revenue is understated \$800. Thus the following adjusting entry is made:

HELPFUL HINT
The required adjusted balances here are Service Revenue \$400 and Unearned Revenue \$800.

A	=	L	+	SE
		+800		-800

Oct. 31	Service Revenue Unearned Revenue (To record unearned revenue)	800	800
---------	---	-----	-----

After posting the adjusting entry, the accounts look like Illustration 4-27.

Illustration 4-27

Unearned revenue accounts after adjustment

Unearned Revenue			Service Revenue			
	10/31 Adj.	800	10/31 Adj.	800	10/2	1,200
					10/31 Bal.	400

The liability account Unearned Revenue shows a balance of \$800. This is equal to the services that will be provided in the future. In addition, the balance in Service Revenue equals the services provided in October. If the adjusting entry is not made, both revenues and net income will be overstated by \$800 in the October income statement. Also, liabilities will be understated by \$800, and stockholders' equity will be overstated by \$800 on the October 31 balance sheet.

A comparison of the entries and accounts for service revenue earned and unearned is shown in Illustration 4-28.

Illustration 4-28

Adjustment approaches—a comparison

Unearned Revenue Initially Credited to Liability Account			Unearned Revenue Initially Credited to Revenue Account (alternative)		
Oct. 2	Cash	1,200	Oct. 2	Cash	1,200
	Unearned Revenue	1,200		Service Revenue	1,200
Oct. 31	Unearned Revenue	400	Oct. 31	Service Revenue	800
	Service Revenue	400		Unearned Revenue	800

After posting the entries, the accounts look like Illustration 4-29. Note that the balances in the accounts are the same under the two alternatives: Unearned Revenue \$800 and Service Revenue \$400.

³This example focuses only on the alternative treatment of unearned revenues. In the interest of simplicity, the entries to Service Revenue pertaining to the immediate earning of revenue (\$10,000) and the adjusting entry for accrued revenue (\$200) have been ignored.

Unearned Revenue		(alternative) Unearned Revenue	
10/31 Adj.	400	10/2	1,200
		10/31 Bal.	800
Service Revenue		Service Revenue	
	10/31 Adj.	400	10/2
			1,200
		10/31 Bal.	400

Illustration 4-29

Comparison of accounts

SUMMARY OF ADDITIONAL ADJUSTMENT RELATIONSHIPS

The use of alternative adjusting entries requires additions to the summary of basic relationships presented earlier in Illustration 4-18. The additions are shown in color in Illustration 4-30.

Alternative adjusting entries **do not apply** to accrued revenues and accrued expenses because **no entries occur before these types of adjusting entries are made**. Therefore, the entries in Illustration 4-18 for these two types of adjustments remain unchanged.

Illustration 4-30

Summary of basic relationship for prepayments

Type of Adjustment	Reason for Adjustment	Account Balances before Adjustment	Adjusting Entry
1. Prepaid expenses	(a) Prepaid expenses initially recorded in asset accounts have been used.	Assets overstated Expenses understated	Dr. Expenses Cr. Assets
	(b) Prepaid expenses initially recorded in expense accounts have not been used.	Assets understated Expenses overstated	Dr. Assets Cr. Expenses
2. Unearned revenues	(a) Unearned revenues initially recorded in liability accounts have been earned.	Liabilities overstated Revenues understated	Dr. Liabilities Cr. Revenues
	(b) Unearned revenues initially recorded in revenue accounts have not been earned.	Liabilities understated Revenues overstated	Dr. Revenues Cr. Liabilities

LOOK BACK AT OUR FEATURE STORY

Refer back to the Feature Story about **Lake Swan Resort, Juneau Country Club, Cuisine-on-the-Go**, and **Hospitality Purveyors** at the beginning of this chapter, and answer the following questions:

1. What are the purposes of adjusting entries?
2. What do these four companies have in common relative to accrual accounting?
3. What other types of adjusting entries do you believe these companies might make?

SOLUTION

1. Adjusting entries are necessary to make the financial statements complete and accurate. Adjusting entries are made to record revenues in the period in which they are earned and to recognize expenses in the period in which they are incurred. Therefore, adjustments ensure that the revenue recognition and matching principles are followed.
2. Each of the companies misstated net income by either overstating revenues (sales) or understating expenses. They failed to properly time the reporting of revenues or expenses.

3. (a) Accrued expenses: rent, salaries, utilities, interest, taxes.
- (b) Accrued revenues: interest earned, rent, commissions, fees.
- (c) Prepaid expenses: insurance, rent, supplies, advertising.
- (d) Unearned revenues: rent, subscriptions, customer deposits, and prepayments.



DEMONSTRATION PROBLEM

Terry Thomas opens the Green Thumb Lawn Care Company to provide lawn-care services to hotels, restaurants, and theme parks on April 1. On April 30, the trial balance shows the following balances for selected accounts:

Prepaid Insurance	\$ 3,600
Equipment	28,000
Notes Payable	20,000
Unearned Revenue	4,200
Service Revenue	1,800

Analysis reveals the following additional data.

1. Prepaid insurance is the cost of a two-year insurance policy, effective April 1.
2. Depreciation on the equipment is \$500 per month.
3. The note payable is dated April 1. It is a six-month, 12 percent note.
4. Seven customers paid for the company's six month lawn service package of \$600 beginning in April. These customers were serviced in April.
5. Lawn services provided other customers but not billed at April 30 totaled \$1,500.

Instructions

Prepare the adjusting entries for the month of April. Show computations.

SOLUTION TO DEMONSTRATION PROBLEM

GENERAL JOURNAL

J1

Date	Account Titles and Explanation	Ref.	Debit	Credit
	<u>Adjusting Entries</u>			
Apr. 30	Insurance Expense		150	
	Prepaid Insurance			150
	(To record insurance expired: $\$3,600 \div 24 = \150 per month)			
30	Depreciation Expense		500	
	Accumulated Depreciation—Equipment			500
	(To record monthly depreciation)			
30	Interest Expense		200	
	Interest Payable			200
	(To record interest on notes payable: $\$20,000 \times 12\% \times 1/12 = \200)			
30	Unearned Revenue		700	
	Service Revenue			700
	(To record service revenue: $\$600 \div 6 = \100 ; $\$100$ per month \times 7 customers = \$700)			
30	Accounts Receivable		1,500	
	Service Revenue			1,500
	(To record revenue for services provided)			

ACTION PLAN

- Note that adjustments are being made for one month.
- Make computations carefully.
- Select account titles carefully.
- Make sure debits are made first and credits are indented.
- Check that debits equal credits for each entry.



SUMMARY OF STUDY OBJECTIVES

- 1. Explain the time period assumption.** The time period assumption assumes that the economic life of a business can be divided into artificial time periods.
- 2. Explain the accrual basis of accounting.** Accrual-basis accounting means that events that change a company's financial statements are recorded in the periods in which the events occur, rather than in the periods in which the company receives or pays cash.
- 3. Explain why adjusting entries are needed.** Adjusting entries are made at the end of an accounting period. They ensure that revenues are recorded in the period in which they are earned and that expenses are recognized in the period in which they are incurred.
- 4. Identify the major types of adjusting entries.** The major types of adjusting entries are prepaid expenses, unearned revenues, accrued revenues, and accrued expenses.
- 5. Prepare adjusting entries for prepayments.** Prepayments are either prepaid expenses or unearned revenues. Adjusting entries for prepayments are required at the statement date to record the portion of the prepayment that represents the expense incurred or the revenue earned in the current accounting period.
- 6. Prepare adjusting entries for accruals.** Accruals are either accrued revenues or accrued expenses. Adjusting entries for accruals are required to record revenues earned and expenses incurred in the current accounting period that have not been recognized through daily entries.
- 7. Describe the nature and the purpose of an adjusted trial balance.** An adjusted trial balance shows the balances of all accounts, including those that have been adjusted, at the end of an accounting period. Its purpose is to show the effects of all financial events that have occurred during the accounting period.
- 8. Prepare adjusting entries for the alternative treatment of prepayments.** Prepayments may be initially debited to an expense account. Unearned revenues may be credited to a revenue account. At the end of the period, these accounts may be overstated. The adjusting entries for prepaid expenses are a debit to an asset account and a credit to an expense account. Adjusting entries for unearned revenues are a debit to a revenue account and a credit to a liability account.



GLOSSARY

- Accrual-basis accounting** Accounting basis in which transactions that change a company's financial statements are recorded in the periods in which the events occur (p. 105).
- Accrued expenses** Expenses incurred but not yet paid in cash or recorded (p. 116).
- Accrued revenues** Revenues earned but not yet received in cash or recorded (p. 115).
- Adjusted trial balance** A list of accounts and their balances after all adjustments have been made (p. 122).
- Adjusting entries** Entries made at the end of an accounting period to ensure that the revenue recognition and matching principles are followed (p. 107).
- Book value** The difference between the cost of a depreciable asset and its related accumulated depreciation (p. 112).
- Calendar year** An accounting period that extends from January 1 to December 31 (p. 105).
- Cash-basis accounting** Accounting basis in which revenue is recorded when cash is received and an expense is recorded when cash is paid (p. 105).
- Contra asset account** An account that is offset against an asset account on the balance sheet (p. 112).
- Depreciation** The allocation of the cost of an asset to expense over its useful life in a rational and systematic manner (p. 111).
- Fiscal year** An accounting period that is one year in length (p. 105).
- Interim periods** Monthly or quarterly accounting time periods (p. 105).
- Matching principle** The principle that efforts (expenses) be matched with accomplishments (revenues) (p. 106).
- Prepaid expenses** Expenses paid in cash and recorded as assets before they are used or consumed (p. 109).
- Revenue recognition principle** The principle that revenue be recognized in the accounting period in which it is earned (p. 106).
- Time period assumption** An assumption that the economic life of a business can be divided into artificial time periods (p. 105).
- Unearned revenues** Cash received and recorded as liabilities before revenue is earned (p. 112).
- Useful life** The length of service of a productive facility (p. 111).

EXERCISES

4-1 The ledger of Taqueria San Juan includes the following accounts. Explain why each account may require adjustment.

- | | |
|--------------------------|----------------------|
| (a) Prepaid Insurance | (c) Unearned Revenue |
| (b) Depreciation Expense | (d) Interest Payable |

Indicate why adjusting entries are needed.
(SO 3)

130 CHAPTER 4 Adjusting the Accounts

Identify the major types of adjusting entries.
(SO 4)

4-2 Empire Bakers accumulates the following adjustment data on December 31. Indicate **(a)** the type of adjustment (prepaid expense, accrued revenues, and so on) and **(b)** the accounts before adjustment (overstated or understated).

1. Prepaid supplies of \$800 are used.
2. \$600 worth of kitchen equipment has not been depreciated.
3. Interest of \$450 has accumulated on a note payable.
4. \$100 of the \$600 insurance premium paid has been used.

Prepare adjusting entry for supplies.
(SO 5)

4-3 Professional Design Company specializes in uniform design for foodservices. Its trial balance on December 31 shows Supplies \$9,000 and Supplies Expense \$0. On December 31, there are \$2,000 of supplies on hand. Prepare the adjusting entry at December 31; and, using T accounts, enter the balances in the accounts, post the adjusting entry, and indicate the adjusted balance in each account.

Prepare adjusting entries for accruals.
(SO 6)

4-4 The bookkeeper for Royal Cruises asks you to prepare the following accrued adjusting entries at December 31.

1. Interest on notes payable of \$500 is accrued.
2. Services provided but unbilled total \$2,520.
3. Salaries earned by employees of \$1,800 have not been recorded.

Use the following account titles: Service Revenue, Accounts Receivable, Interest Expense, Interest Payable, Salaries Expense, and Salaries Payable.

Analyze accounts in an adjusted trial balance.
(SO 7)

4-5 The trial balance of Hawaiian Catering Company includes the following balance sheet accounts. Identify the accounts that require adjustment. For each account that requires adjustment, indicate **(a)** the type of adjusting entry (prepaid expenses, unearned revenues, accrued revenues, and accrued expenses) and **(b)** the related account in the adjusting entry.

- Accounts Receivable
- Prepaid Insurance
- Accumulated Depreciation—Equipment
- Interest Payable
- Unearned Service Revenue

Identify types of adjustments and account relationships.
(SO 4, 5, 6)

4-6 Pho Saigon Noodles and Catering accumulates the following adjustment data at December 31.

1. Services provided but unbilled total \$750.
2. Food supplies of \$300 have been used.
3. Utility expenses of \$300 are unpaid.
4. Unearned revenue of \$450 has been earned.
5. Salaries of \$1,000 are unpaid.
6. Prepaid insurance totaling \$445 has expired.

Instructions

For each of the above items, indicate the following.

- (a)** The type of adjustment (prepaid expense, unearned revenue, accrued revenue, or accrued expense).
- (b)** The accounts before adjustment (overstatement or understatement).

Prepare adjusting entries, post, and prepare adjusted trial balance and financial statements.
(SO 5, 6, 7)

4-7 Spring River Resort Inc. opened for business on June 1 with eight air-conditioned units. Its trial balance before adjustment on August 31 is as follows.

SPRING RIVER RESORT INC.
Trial Balance
August 31, 2008

Account Number		Debit	Credit
101	Cash	\$19,600	
126	Supplies	3,300	
130	Prepaid Insurance	6,000	

140	Land	25,000	
143	Cottages	125,000	
149	Furniture	26,000	
201	Accounts Payable		\$ 6,500
208	Unearned Rent		7,400
275	Mortgage Payable		80,000
311	Common Stock		100,000
320	Retained Earnings		-0-
332	Dividends	5,000	
429	Rent Revenue		80,000
622	Repair Expense	3,600	
726	Salaries Expense	51,000	
732	Utilities Expense	9,400	
		<u>\$273,900</u>	<u>\$273,900</u>

In addition to those accounts listed on the trial balance, the chart of accounts for Spring River Resort also contains the following accounts and account numbers: No. 112 Accounts Receivable, No. 144 Accumulated Depreciation—Cottages, No. 150 Accumulated Depreciation—Furniture, No. 212 Salaries Payable, No. 230 Interest Payable, No. 620 Depreciation Expense—Cottages, No. 621 Depreciation Expense—Furniture, No. 631 Supplies Expense, No. 718 Interest Expense, and No. 722 Insurance Expense.

Other data:

1. Insurance expires at the rate of \$400 per month.
2. A count of August 31 shows \$900 of supplies on hand.
3. Annual depreciation is \$3,600 on cottages and \$2,400 on furniture.
4. Unearned rent of \$4,100 was earned prior to August 31.
5. Salaries of \$400 were unpaid at August 31.
6. Rentals of \$800 were due from tenants at August 31. (Use Accounts Receivable.)
7. The mortgage interest rate is 9 percent per year. (The mortgage was taken out on August 1.)

Instructions

Journalize the adjusting entries on August 31 for the three-month period June 1–August 31.

4-8 Jan Spears opened her decorating company on January 1, 2008. During the first month of operations, the following transactions occurred:

*Prepare adjusting entries.
(SO 5, 6, 7)*

1. Performed services for country club clients. On January 31, \$2,300 of such services was earned but not yet billed to the clubs.
2. Utility expenses incurred but not paid prior to January 31 totaled \$650.
3. Purchased decorating supplies on January 1 for \$50,000, paying \$10,000 in cash and signing a \$40,000, three-year note payable. Interest is \$300 per month.
4. Purchased a one-year fire insurance policy on January 1 for \$6,000.
5. Purchased a computer at \$2,100. On January 31, determined that \$200 of the computer had been depreciated.

Instructions

Prepare the adjusting entries on January 31. Account titles are: Accumulated Depreciation—Furniture, Depreciation Expense, Service Revenue, Accounts Receivable, Insurance Expense, Interest Expense, Interest Payable, Prepaid Insurance, Supplies, Supplies Expense, Utilities Expense, and Utilities Payable.

4-9 Michael Davidson started his own hospitality consulting firm, Star Company, on June 1, 2008. Star Company performs feasibility studies to determine if restaurants should be opened at certain locations. The trial balance at June 30 is as follows.

*Prepare adjusting entries, post to ledger accounts, and prepare adjusted trial balance.
(SO 5, 6, 7)*

STAR COMPANY
Trial Balance
June 30, 2008

Account Number		Debit	Credit
101	Cash	\$ 7,700	
110	Accounts Receivable	4,000	
120	Prepaid Insurance	2,400	
130	Supplies	1,500	
135	Office Equipment	11,000	
200	Accounts Payable		\$ 3,500
230	Unearned Service Revenue		3,000
311	Common Stock		19,100
320	Retained Earnings		–0–
400	Service Revenue		6,000
510	Salaries Expense	4,000	
520	Rent Expense	1,000	
		\$31,600	\$31,600

In addition to those accounts listed on the trial balance, the chart of accounts for Star Company also contains the following accounts and account numbers: No. 136 Accumulated Depreciation—Office Equipment, No. 210 Utilities Payable, No. 220 Salaries Payable, No. 530 Depreciation Expense, No. 540 Insurance Expense, No. 550 Utilities Expense, and No. 560 Supplies Expense.

Other data:

1. \$500 of supplies has been used during the month.
2. A utility bill for \$200 has not been recorded and will not be paid until next month.
3. The insurance policy is for two years.
4. \$1,000 of unearned service revenue has been earned at the end of the month.
5. Salaries of \$600 are accrued at June 30.
6. The office equipment has a five-year life with no salvage value. It is being depreciated at \$200 per month for 60 months.
7. Invoices representing \$1,000 of services performed during the month have not been recorded as of June 30.

Instructions

- (a) Prepare the adjusting entries for the month of June. Use J3 as the page number for your journal.
- (b) Post the adjusting entries to the ledger accounts. Enter the totals from the trial balance as beginning account balances, and place a check mark in the posting reference column.
- (c) Prepare an adjusted trial balance at June 30, 2008.

4-10 The Thayer Motel, Inc., opened for business on May 1, 2008. Its trial balance before adjustment on May 31 is as follows.

In addition to those accounts listed on the trial balance, the chart of accounts for Thayer Mo-

Prepare adjusting entries, post, and prepare adjusted trial balance and financial statements.
 (SO 5, 6, 7)

THAYER MOTEL, INC.
Trial Balance
May 31, 2008

Account Number		Debit	Credit
101	Cash	\$ 2,500	
126	Supplies	1,900	
130	Prepaid Insurance	2,400	
140	Land	15,000	

141	Lodge	70,000	
149	Furniture	16,800	
201	Accounts Payable		\$ 5,300
208	Unearned Rent		4,600
275	Mortgage Payable		35,000
311	Common Stock		60,000
332	Dividends	1,000	
429	Rent Revenue		9,200
610	Advertising Expense	500	
726	Salaries Expense	3,000	
732	Utilities Expense	1,000	
		<u>\$114,100</u>	<u>\$114,100</u>

tel also contains the following accounts and account numbers: No. 142 Accumulated Depreciation—Lodge, No. 150 Accumulated Depreciation—Furniture, No. 212 Salary Payable, No. 230 Interest Payable, No. 320 Retained Earnings, No. 619 Depreciation Expense—Lodge, No. 621 Depreciation Expense—Furniture, No. 631 Supplies Expense, No. 718 Interest Expense, and No. 722 Insurance Expense.

Other data:

1. Insurance expires at the rate of \$200 per month.
2. A count of supplies shows \$900 of unused supplies on May 31.
3. Annual depreciation is \$2,400 on the lodge and \$3,000 on furniture.
4. The mortgage interest rate is 12%. (The mortgage was taken out on May 1.)
5. Unearned rent of \$2,500 has been earned.
6. Salaries of \$800 are accrued and unpaid at May 31.

Instructions

- (a) Journalize the adjusting entries on May 31.
- (b) Prepare a ledger using the three-column form of account. Enter the trial balance amounts, and post the adjusting entries. (Use J1 as the posting reference.)
- (c) Prepare an adjusted trial balance on May 31.
- (d) Prepare an income statement and a retained earnings statement for the month of May and a balance sheet at May 31.

4-11 The financial statements of **PepsiCo** are presented in Appendix A at the end of this textbook.

Instructions

- (a) Using the consolidated financial statements and related information, identify items that may result in adjusting entries for prepayments.
- (b) Using the consolidated financial statements and related information, identify items that may result in adjusting entries for accruals.
- (c) Using the Selected Financial Data and Five-Year Summary, what has been the trend since 2004 for net income?

4-12 A wealth of accounting-related information is available via the Internet. For example, the Rutgers Accounting Web offers access to a great variety of sources.

Address: accounting.rutgers.edu

Steps: Click on **Accounting Resources**. (*Note:* Once on this page, you may have to click on the **text only** box to access the available information.)

Instructions

- (a) List the categories of information available through the **Accounting Resources** page.
- (b) Select any one of these categories, and briefly describe the types of information available.



ETHICS CASE

4-13 Die Hard Company is a pest-control company providing services to hotels and clubs. Its sales declined greatly this year due to the passage of legislation outlawing the sale of several of Die Hard's chemical pesticides. In the coming year, Die Hard will have environmentally safe and competitive chemicals to replace these discontinued products. Sales in the next year are expected to greatly exceed any prior year's. The decline in sales and profits appears to be a one-year aberration. But even so, the company president fears a large dip in the current year's profits. He believes that such a dip could cause a significant drop in the market price of Die Hard's stock and make the company a takeover target.

To avoid this possibility, the company president calls in Becky Freeman, controller, to discuss this period's year-end adjusting entries. He urges her to accrue every possible revenue and to defer as many expenses as possible. He says to Becky, "We need the revenues this year, and next year can easily absorb expenses deferred from this year. We can't let our stock price be hammered down!" Becky didn't get around to recording the adjusting entries until January 17, but she dated the entries December 31 as if they were recorded then. Becky also made every effort to comply with the president's request.

Instructions

- (a) Who are the stakeholders in this situation?
- (b) What are the ethical considerations of (1) the president's request and (2) Becky's dating the adjusting entries December 31?
- (c) Can Becky accrue revenues and defer expenses and still be ethical?



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

COMPLETION OF THE ACCOUNTING CYCLE



THE NAVIGATOR ✓

- Understand *Concepts for Review*

- Read *Feature Story*

- Scan *Study Objectives*

- Read *Preview*

- Read text and answer *Before You Go On*
p. 144 p. 153 p. 159

- Work *Demonstration Problem*

- Review *Summary of Study Objectives*

- Complete *Assignments*

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. How to apply the revenue recognition and matching principles. (Ch. 4, p. 106)
- b. How to make adjusting entries. (Ch. 4, pp. 107–118)
- c. How to prepare an adjusted trial balance. (Ch. 4, p. 122)
- d. How to prepare a balance sheet, income statement, and retained earnings statement. (Ch. 4, pp. 122–123)

F E A T U R E S T O R Y

Everyone Likes to Win

When Ted Castle was a hockey coach at the University of Vermont, his players were self-motivated by their desire to win. Hockey was a game you either won or lost. But at **Rhino Foods, Inc.**, a specialty-bakery-foods company he founded in Burlington, Vermont, he discovered that manufacturing-line workers were not so self-motivated. Ted thought, what if he turned the food-making business into a game, with rules, strategies, and trophies?

Ted knew that in a game, knowing the score is all-important. He felt that only if the employees know the score—know exactly how the business is doing daily, weekly, monthly—could he turn food making into a game. But Rhino is a closely held, family-owned business, and its financial statements and profits were confidential. Should Ted open Rhino's books to the employees?

A consultant he was working with put Ted's concerns in perspec-

ive. The consultant said, "Imagine you're playing touch football. You play for an hour or two, and the whole time I'm sitting there with a book, keeping score. All of a sudden I blow the whistle, and I say, 'OK, that's it. Everybody go home.' I close my book and walk away. How would you feel?" Ted opened his books and revealed the financial statements to his employees.

The next step was to teach employees the rules and strategies of how to win at making food. The first lesson: "Your opponent at Rhino is expenses. You must cut and control expenses." Ted and his staff distilled those lessons into daily scorecards (production reports and income statements) that keep Rhino's employees up to date on the game. At noon each day Ted posts the previous day's results at the en-



trance to the production room. Everyone checks whether they made or lost money on what they produced the day before. And it's not just an academic exercise; there's a bonus check for each employee at the end of every four-week "game" that meets profitability guidelines. Everyone can be a winner!

Rhino has flourished since the first game. Employment has increased from 20 to 130 people, while both revenues and profits have grown dramatically.



S T U D Y O B J E C T I V E S

After studying this chapter, you should be able to

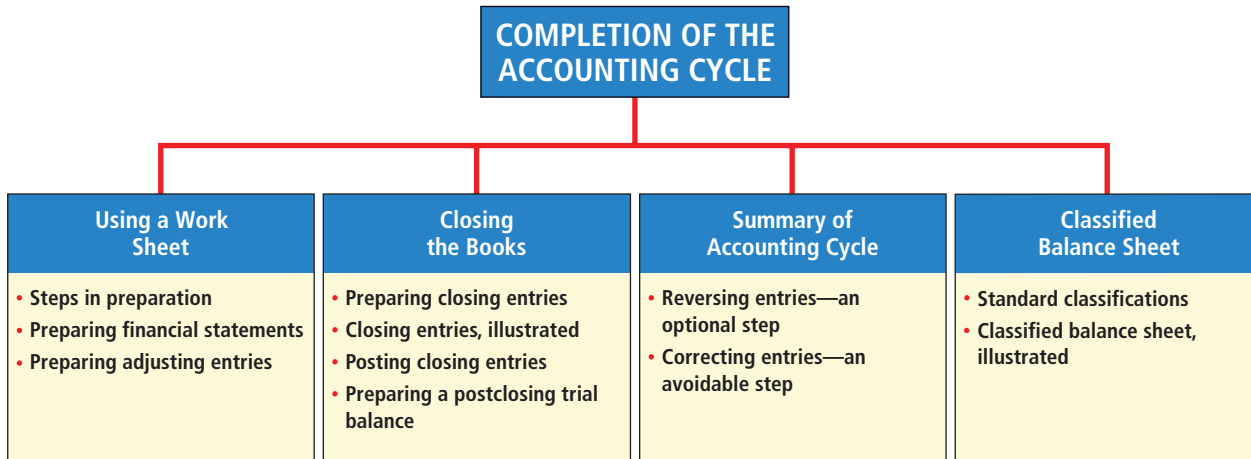
1. Prepare a work sheet.
2. Explain the process of closing the books.
3. Describe the content and the purpose of a postclosing trial balance.
4. State the required steps in the accounting cycle.
5. Explain the approaches to preparing correcting entries.
6. Identify the sections of a classified balance sheet.



PREVIEW OF CHAPTER 5

As was true at **Rhino Foods, Inc.**, financial statements can help employees understand what is happening in the business. In Chapter 4 we prepared financial statements directly from the adjusted trial balance. However, with so many details involved in the end-of-period accounting procedures, it is easy to make errors. Locating and correcting errors can cost much time and effort. One way to minimize errors in the records and to simplify the end-of-period procedures is to use a work sheet.

In this chapter we will explain the role of the work sheet in accounting, as well as the remaining steps in the accounting cycle, most especially the closing process, again using Premier Staffing Agency as an example. Then we will consider (1) correcting entries and (2) classified balance sheets. The content and organization of Chapter 5 are as follows.



USING A WORK SHEET

STUDY OBJECTIVE 1

Prepare a work sheet.

A **work sheet** is a multiple-column form that may be used in the adjustment process and in preparing financial statements. As its name suggests, the work sheet is a working tool. **A work sheet is not a permanent accounting record;** it is neither a journal nor a part of the general ledger. The work sheet is merely a device used to make it easier to prepare adjusting entries and the financial statements. In small companies with relatively few accounts and adjustments, a work sheet may not be needed. In large companies with numerous accounts and many adjustments, it is almost indispensable.

The basic form of a work sheet and the procedure (five steps) for preparing it are shown in Illustration 5-1. Each step must be performed in the prescribed sequence.

The use of a work sheet is optional. When one is used, financial statements are prepared from the work sheet. The adjustments are entered in the work sheet columns and are then journalized and posted after the financial statements have been prepared. Thus management and other interested parties can receive the financial statements at an earlier date when a work sheet is used.

STEPS IN PREPARING A WORK SHEET

We will use the October 31 trial balance and adjustment data of Premier Staffing in Chapter 4 to illustrate preparation of a work sheet. Each step of the process is described below and demonstrated in Illustrations 5-2 and 5-3A and B, which follow page 142.

Illustration 5-1

Form and procedure for a work sheet

Work Sheet										
Account Titles	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.

- 1 Prepare a trial balance on the work sheet
- 2 Enter adjustment data
- 3 Enter adjusted balances
- 4 Extend adjusted balances to appropriate statement columns
- 5 Total the statement columns, compute net income (or net loss), and complete work sheet

Step 1. Prepare a Trial Balance on the Work Sheet

All ledger accounts with balances are entered in the account title space. Debit and credit amounts from the ledger are entered in the trial balance columns. The work sheet trial balance for Premier Staffing Agency is shown in Illustration 5-2.

Step 2. Enter the Adjustments in the Adjustments Columns

Illustration 5-3A. When a work sheet is used, all adjustments are entered in the adjustments columns. In entering the adjustments, applicable trial balance accounts should be used. If additional accounts are needed, they are inserted on the lines immediately below the trial balance totals. Each adjustment is indexed and keyed; this practice facilitates the journalizing of the adjusting entry in the general journal. **The adjustments are not journalized until after the work sheet is completed and the financial statements have been prepared.**

The adjustments for Premier Staffing Agency are the same as the adjustments illustrated on page 120. They are keyed in the adjustments columns of the work sheet as follows.

- (a) An additional account Supplies Expense is debited \$1,500 for the cost of supplies used, and Supplies is credited \$1,500.
- (b) An additional account Insurance Expense is debited \$50 for the insurance that has expired, and Prepaid Insurance is credited \$50.
- (c) Two additional depreciation accounts are needed. Depreciation Expense is debited \$40 for the month's depreciation, and Accumulated Depreciation—Office Equipment is credited \$40.
- (d) Unearned Revenue is debited \$400 for services provided, and Service Revenue is credited \$400.

- (e) An additional account Accounts Receivable is debited \$200 for services provided but not billed, and Service Revenue is credited \$200.
- (f) Two additional accounts relating to interest are needed. Interest Expense is debited \$50 for accrued interest, and Interest Payable is credited \$50.
- (g) Salaries Expense is debited \$1,200 for accrued salaries, and an additional account Salaries Payable is credited \$1,200.

Note in Illustration 5-3A that after all the adjustments have been entered, the adjustments columns are totaled, and the equality of the column totals is proved.

Step 3. Enter Adjusted Balances in the Adjusted Trial Balance Columns

The adjusted balance of an account is obtained by combining the amounts entered in the first four columns of the work sheet for each account (Illustration 5-3A). For example, the Prepaid Insurance account in the trial balance columns has a \$600 debit balance and a \$50 credit in the adjustments columns. The result is a \$550 debit balance recorded in the adjusted trial balance columns. **For each account on the work sheet, the amount in the adjusted trial balance columns is the account balance that will appear in the ledger after the adjusting entries have been journalized and posted.** The balances in these columns are the same as those in the adjusted trial balance in Illustration 4-21 (page 122).

After all account balances have been entered in the adjusted trial balance columns, the columns are totaled, and their equality is proved. The agreement of the column totals facilitates completion of the work sheet. If these columns are not in agreement, the financial statement columns will not balance, and the financial statements will be incorrect.

Step 4. Extend Adjusted Trial Balance Amounts to Appropriate Financial Statement Columns

Turn over the second transparency, Illustration 5-3B. The fourth step is to extend adjusted trial balance amounts to the income statement and balance sheet columns of the work sheet. Balance sheet accounts are entered in the appropriate balance sheet debit and credit columns. For instance, Cash is entered in the balance sheet debit column, and Notes Payable is entered in the credit column. Accumulated Depreciation is extended to the balance sheet credit column. The reason is that accumulated depreciation is a contra asset account with a credit balance.

Because the work sheet does not have columns for the retained earnings statement, the balances in Common Stock and Retained Earnings, if any, are extended to the balance sheet credit column. In addition, the balance in Dividends is extended to the balance sheet debit column because it is a stockholders' equity account with a debit balance.

The expense and revenue accounts, such as Salaries Expense and Service Revenue, are entered in the appropriate income statement columns.

All these extensions are shown in Illustration 5-3C.

Step 5. Total the Statement Columns, Compute the Net Income (or Net Loss), and Complete the Work Sheet

Each of the financial statement columns must be totaled (Illustration 5-3B). The net income or loss for the period is then found by computing the difference between the totals of the two income statement columns. If total credits exceed total debits, net income has resulted. In such a case, as shown in Illustration 5-3B, the words "Net Income" are inserted in the account titles space. The amount then

HELPFUL HINT

Every adjusted trial balance amount must be extended to one of the four statement columns. Debit amounts go to debit columns, and credit amounts go to credit columns.

is entered in the income statement debit column and the balance sheet credit column. **The debit amount balances the income statement columns, and the credit amount balances the balance sheet columns.** In addition, the credit in the balance sheet column indicates the increase in stockholders' equity resulting from net income.

If, instead, total debits in the income statement columns exceed total credits, a net loss has occurred. The amount of the net loss is entered in the income statement credit column and the balance sheet debit column.

After the net income or net loss has been entered, new column totals are determined. The totals shown in the debit and the credit income statement columns will match. The totals shown in the debit and the credit balance sheet columns also will match. If either the income statement columns or the balance sheet columns are not equal after the net income or net loss has been entered, an error has been made in the work sheet. The completed work sheet for Premier Staffing Agency, Inc., is shown in Illustration 5-3B.

HELPFUL HINT

All pairs of columns must balance for a work sheet to be complete.

TECHNOLOGY IN ACTION



The work sheet can be computerized using an electronic spreadsheet program. The Excel supplement for this textbook is one of the most popular versions of such spreadsheet packages. With a program like Excel, you can produce any type of work sheet (accounting or otherwise) that you could produce with paper and pencil on a columnar pad. The tremendous advantage of an electronic work sheet over the paper-and-pencil version is the ability to change selected data easily. When data are changed, the computer updates the balance of your computations instantly. More specific applications of electronic spreadsheets will be noted as we proceed.

What are the advantages of an electronic worksheet over a pencil-and-paper version?



PREPARING FINANCIAL STATEMENTS FROM A WORK SHEET

After a work sheet has been completed, all the data that are required for the preparation of financial statements are at hand. The income statement is prepared from the income statement columns. The balance sheet and the retained earnings statement are prepared from the balance sheet columns. The financial statements prepared from the work sheet for Premier Staffing Agency, Inc., are shown in Illustration 5-4. At this point, adjusting entries have not been journalized and posted. Therefore, the ledger does not support all financial statement amounts.

The amount shown for common stock on the work sheet does not change from the beginning to the end of the period unless additional stock is issued by the company during the period. Because there was no balance in Premier's retained earnings, the account is not listed on the work sheet. Only after dividends and net income (or loss) are posted to retained earnings does this account have a balance at the end of the first year of the business.

Using a work sheet, financial statements can be prepared before adjusting entries are journalized and posted. **However, the completed work sheet is not a substitute for formal financial statements.** Data in the financial statement columns of the work sheet are not arranged properly for statement purposes. Also, as noted, the financial statement presentation for some accounts differs from their statement columns on the work sheet. **A work sheet is essentially a working tool of the accountant; it is not distributed to management and other parties.**

(Note: Text continues on page 143, following acetate overlays.)

Illustration 5-2

Preparing a trial balance

PREMIER STAFFING AGENCY, INC.										
Work Sheet										
For the Month Ended October 31, 2008										
Account Titles	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash	15,200									
Supplies	2,500									
Prepaid Insurance	600									
Office Equipment	5,000									
Notes Payable		5,000								
Accounts Payable		2,500								
Unearned Revenue		1,200								
Common Stock		10,000								
Dividends	500									
Service Revenue		10,000								
Salaries Expense	4,000									
Rent Expense	900									
Totals	<u>28,700</u>	<u>28,700</u>								

↑
Include all accounts from ledger with balances.

↑
Trial balance amounts are taken directly from ledger accounts.

Illustration 5-4

Financial statements from a work sheet

PREMIER STAFFING AGENCY, INC.		
Income Statement		
For the Month Ended October 31, 2008		
Revenues		
Service revenue		\$10,600
Expenses		
Salaries expense	\$5,200	
Supplies expense	1,500	
Rent expense	900	
Insurance expense	50	
Interest expense	50	
Depreciation expense	40	
Total expenses		<u>7,740</u>
Net income		<u>\$ 2,860</u>

PREMIER STAFFING AGENCY, INC.	
Retained Earnings Statement	
For the Month Ended October 31, 2008	
Retained earnings, October 1	\$ -0-
Add: Net income	<u>2,860</u>
	2,860
Less: Dividends	<u>500</u>
Retained earnings, October 31	<u>\$2,360</u>

PREMIER STAFFING AGENCY, INC.		
Balance Sheet		
October 31, 2008		
<u>Assets</u>		
Cash		\$15,200
Accounts receivable		200
Supplies		1,000
Prepaid insurance		550
Office equipment	\$5,000	
Less: Accumulated depreciation	<u>40</u>	<u>4,960</u>
Total assets		<u>\$21,910</u>
<u>Liabilities and Stockholders' Equity</u>		
Liabilities		
Notes payable		\$ 5,000
Accounts payable		2,500
Interest payable		50
Unearned revenue		800
Salaries payable		<u>1,200</u>
Total liabilities		9,550
Stockholders' equity		
Common stock		10,000
Retained earnings		<u>2,360</u>
Total liabilities and stockholders' equity		<u>\$21,910</u>

PREPARING ADJUSTING ENTRIES FROM A WORK SHEET

A work sheet is not a journal, and it cannot be used as a basis for posting to ledger accounts. To adjust the accounts, it is necessary to journalize the adjustments and post them to the ledger. **The adjusting entries are prepared from the adjustments columns of the work sheet.** The reference letters in the adjustments columns and the explanations of the adjustments at the bottom of the work sheet help to identify the adjusting entries. However, writing the explanation to the adjustments at the bottom of the work sheet is not required. As indicated previously, the journalizing and posting of adjusting entries follows the preparation of financial statements when a work sheet is used. The adjusting entries on October 31 for Premier Staffing Agency, Inc., are the same as those shown in Illustration 4-19 (page 120).

BEFORE YOU GO ON...

▶ REVIEW IT

1. What are the five steps in preparing a work sheet?
2. How is net income or net loss shown in a work sheet?
3. How does a work sheet relate to preparing financial statements and adjusting entries?

▶ DO IT

Susan Elbe is preparing a work sheet for her travel agency. Explain to Susan how the following adjusted trial balance accounts should be extended to the financial statement columns of the work sheet: Cash, Accumulated Depreciation, Accounts Payable, Dividends, Service Revenue, and Salaries Expense.

ACTION PLAN

- Extend asset balances to the balance sheet debit column. Extend liability balances to the balance sheet credit column. Extend accumulated depreciation to the balance sheet credit column.
- Extend the Dividends account to the balance sheet debit column.
- Extend expenses to the income statement debit column.
- Extend revenue accounts to the income statement credit column.

SOLUTION

Income statement debit column—Salaries Expense

Income statement credit column—Service Revenue

Balance sheet debit column—Cash; Dividends

Balance sheet credit column—Accumulated Depreciation; Accounts Payable

As indicated in the Technology in Action box on page 141, the work sheet is an ideal application for electronic spreadsheet software such as Microsoft Excel and LOTUS 1-2-3.

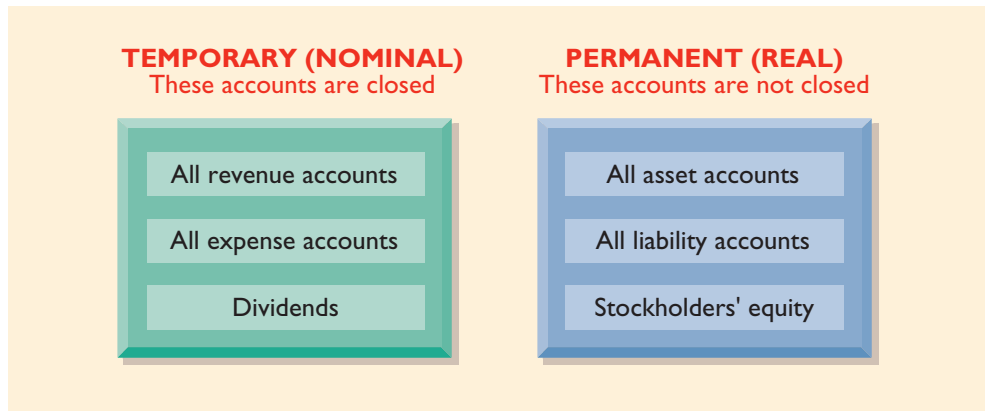


CLOSING THE BOOKS

STUDY OBJECTIVE 2

Explain the process of closing the books.

At the end of the accounting period, the accounts are made ready for the next period. This is called **closing the books**. In closing the books, it is necessary to distinguish between temporary and permanent accounts. **Temporary**, or **nominal, accounts** relate only to a given accounting period. They include all income statement accounts and dividends. All temporary accounts are closed. In contrast, **permanent**, or **real, accounts** relate to one or more future accounting periods. They consist of all balance sheet accounts, including common stock and retained earnings. Permanent accounts are not closed. Instead, their balances are carried forward into the next accounting period. Illustration 5-5 identifies the accounts in each category.

**Illustration 5-5**

Temporary versus permanent accounts

HELPFUL HINT

A contra asset account, such as accumulated depreciation, is a real account also.

PREPARING CLOSING ENTRIES

At the end of the accounting period, the temporary account balances are transferred to the permanent stockholders' equity account, Retained Earnings, through the preparation of closing entries. **Closing entries** formally recognize in the ledger the transfer of net income (or net loss) and Dividends to Retained Earnings, as shown in the retained earnings statement. **These entries also produce a zero balance in each temporary account. These accounts are then ready to be used to accumulate data in the next accounting period separate from the data of prior periods.** Permanent accounts are not closed.

Journalizing and posting closing entries are required steps in the accounting cycle. (See Illustration 1-7 on page 15.) These steps are performed after financial statements have been prepared. In contrast to the steps in the cycle that you have already studied, closing entries are generally journalized and posted **only at the end of a company's annual accounting period.** This practice facilitates the preparation of annual financial statements because all temporary accounts will contain data for the entire year.

In preparing closing entries, each income statement account could be closed directly to Retained Earnings. However, to do so would result in excessive detail in the Retained Earnings account. Instead, the revenue and expense accounts are closed to another temporary account, **Income Summary**; only the net income or net loss is transferred from this account to Retained Earnings.

Closing entries are journalized in the general journal. A center caption entitled Closing Entries, inserted in the journal between the last adjusting entry and the first closing entry, identifies these entries. Then the closing entries are posted to the ledger accounts.

Closing entries may be prepared directly from the adjusted balances in the ledger, from the income statement and balance sheet columns of the work sheet, or from the income and retained earnings statements. Separate closing entries could be prepared for each nominal account, but the following four entries accomplish the desired result more efficiently:

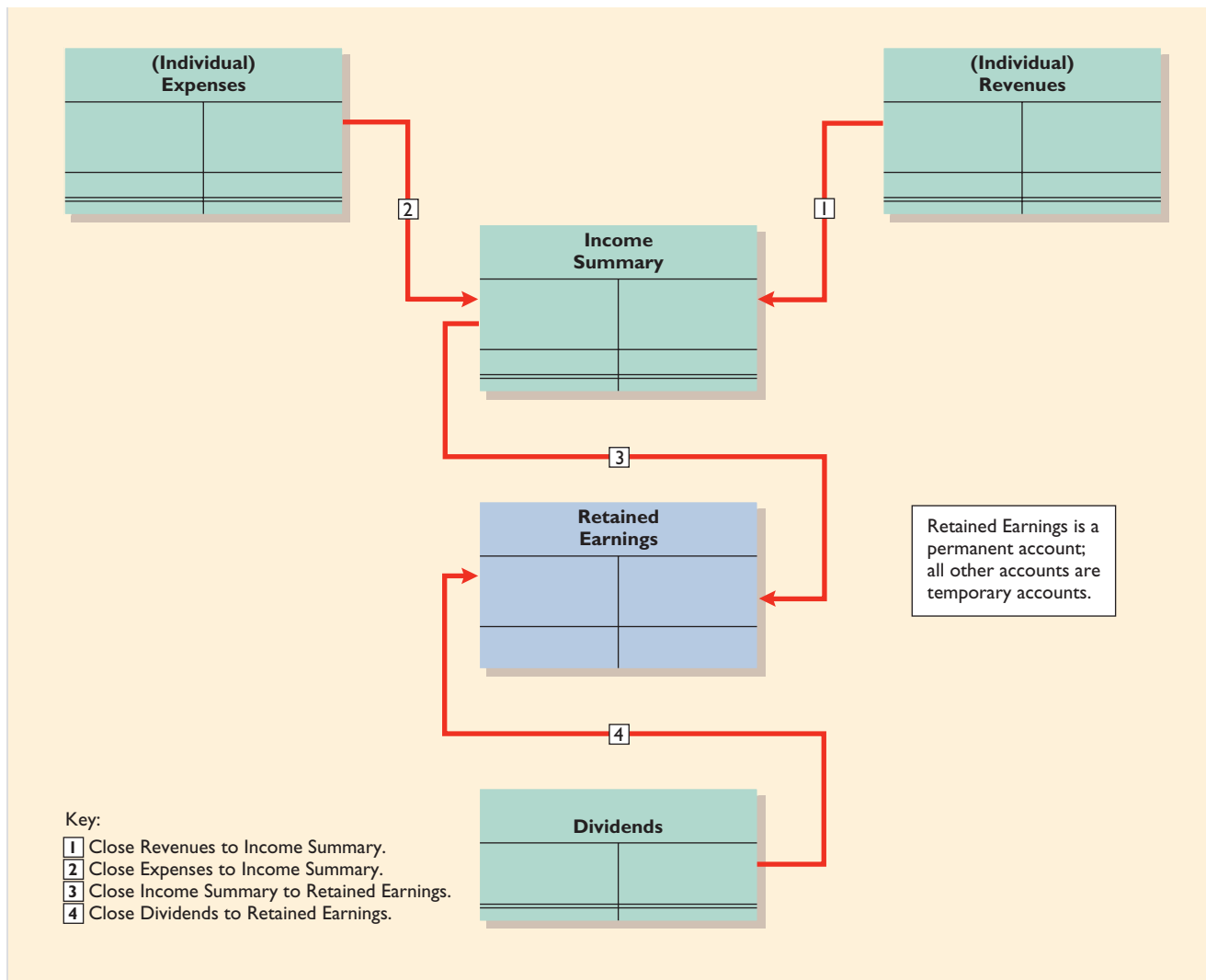
1. Debit each revenue account for its balance, and credit Income Summary for total revenues.
2. Debit Income Summary for total expenses, and credit each expense account for its balance.
3. Debit Income Summary and credit Retained Earnings for the amount of net income.
4. Debit Retained Earnings for the balance in the Dividends account, and credit Dividends for the same amount.

HELPFUL HINT

When the work sheet is used, revenue and expense account data are found in the income statement columns, and Dividends is in the balance sheet debit column.

Illustration 5-6

Diagram of closing process—corporation

**HELPFUL HINT**

Dividends is closed directly to Retained Earnings and *not* to Income Summary because Dividends is not an expense.

The four entries are referenced in the diagram of the closing process shown in Illustration 5-6 and in the journal entries in Illustration 5-7. The posting of closing entries is shown in Illustration 5-8. If a net loss has occurred, entry (3) credits Income Summary and debits Retained Earnings.

ACCOUNTING IN ACTION *Business Insight*



Until Sam Walton had opened twenty Wal-Mart stores, he used what he called the “ESP method” of closing the books. ESP was a pretty basic method: If the books didn’t balance, Walton calculated the amount by which they were off and entered that amount under the heading ESP—which stood for “Error Some Place.” As Walton noted, “It really sped things along when it came time to close those books.”

How did Sam Walton know the “books didn’t balance”? In what circumstances today might the ESP method be acceptable?

SOURCE: Sam Walton, *Made in America* (New York: Doubleday, 1992), p. 53.

CLOSING ENTRIES, ILLUSTRATED

In practice, closing entries are generally prepared only at the end of a company's annual accounting period. However, to illustrate the journalizing and posting of closing entries, we will assume that Premier Staffing Agency, Inc., closes its books monthly. The closing entries at October 31 are shown in Illustration 5-7.

GENERAL JOURNAL					J3
Date	Account Titles and Explanation	Ref.	Debit	Credit	
	<u>Closing Entries</u>				
	(1)				
Oct. 31	Service Revenue	400	10,600		
	Income Summary	350		10,600	
	(To close revenue account)				
	(2)				
31	Income Summary	350	7,740		
	Supplies Expense	611		1,500	
	Depreciation Expense	711		40	
	Insurance Expense	722		50	
	Salaries Expense	726		5,200	
	Rent Expense	729		900	
	Interest Expense	905		50	
	(To close expense accounts)				
	(3)				
31	Income Summary	350	2,860		
	Retained Earnings	320		2,860	
	(To close net income to retained earnings)				
	(4)				
31	Retained Earnings	320	500		
	Dividends	332		500	
	(To close dividends to retained earnings)				

Illustration 5-7

Closing entries journalized

HELPFUL HINT

Income Summary is a very descriptive title: Total revenues are closed to Income Summary, total expenses are closed to Income Summary, and the balance in the Income Summary is a net income or a net loss.

Note that the amounts for Income Summary in entries (1) and (2) are the totals of the income statement credit and debit columns, respectively, in the work sheet.

A couple of cautions in preparing closing entries: (1) Avoid unintentionally doubling the revenue and expense balances rather than zeroing them. (2) Do not close Dividends through the Income Summary account. **Dividends are not expenses, and they are not a factor in determining net income.**

POSTING OF CLOSING ENTRIES

The posting of the closing entries and the ruling of the accounts are shown in Illustration 5-8. Note that all temporary accounts have zero balances after posting the closing entries. In addition, you should realize that the balance in Retained Earnings represents the accumulated undistributed earnings of the corporation at the end of the accounting period. This balance is shown on the balance sheet and is the ending amount reported on the retained earnings statement, as shown in Illustration 5-4. **The Income Summary account is used only in closing.** No entries are journalized and posted to this account during the year.

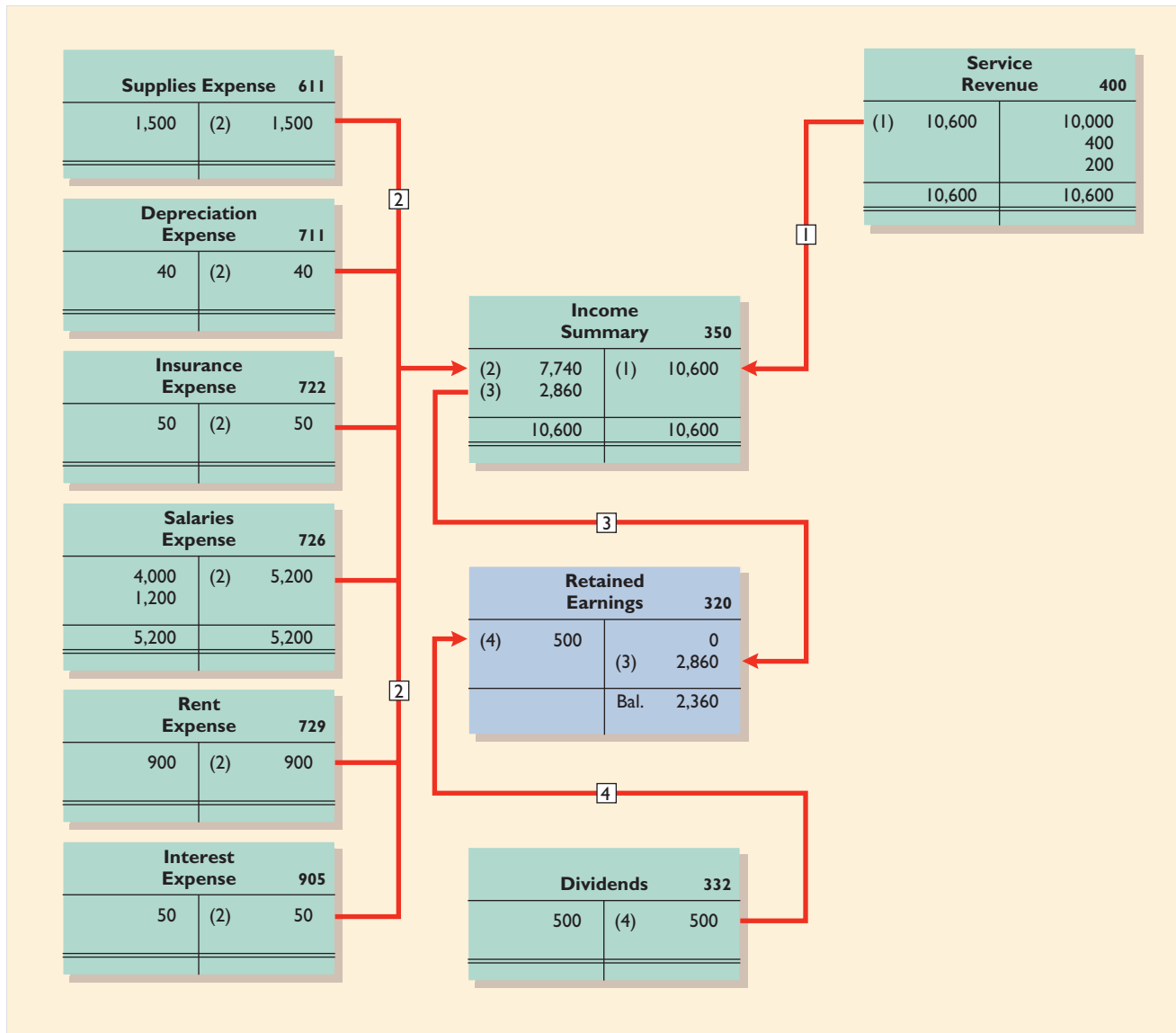
As part of the closing process, the **temporary accounts**—revenues, expenses, and Dividends—in T-account form are totaled, balanced, and double-ruled, as shown in Illustration 5-8. The **permanent accounts**—assets, liabilities, and stockholders' equity (Common Stock and Retained Earnings)—are not closed. A single rule is drawn beneath the current-period entries, and the account balance carried forward to the next period is entered below the single rule. (For example, see Retained Earnings.)

HELPFUL HINT

The balance in Income Summary before it is closed must equal the net income or the net loss for the period.

Illustration 5-8

Posting of closing entries



ACCOUNTING IN ACTION  Business Insight



The **River Oaks Country Club** is an exclusive private club in the Houston metropolitan area. It has more than 1,500 members, and monthly billing can be a big project without the use of computers. Mel Samuelson, chief financial officer of the club, comments that he could not imagine how cumbersome the system would be if month-end closing and billing had to be done manually. “It only takes us one day to do our month-end closing with computers,” said Samuelson. “If every transaction for all 1,530 members has to be done by hand, it may take at least a week just for the closing.” Mr. Samuelson also adds that with the use of computers, all postings are updated on a daily basis, making information accessible and real-time.

As Mr. Samuelson suggests, computers do provide more accurate and updated information. More important, this also means that the associates in the accounting office can now use the time saved to do other, more meaningful analysis of data, thereby providing better information to management and better service to its members.

PREPARING A POSTCLOSING TRIAL BALANCE

After all closing entries have been journalized and posted, another trial balance, called a **postclosing trial balance**, is prepared from the ledger. The postclosing trial balance lists permanent accounts and their balances after closing entries have been journalized and posted. **The purpose of this trial balance is to prove the equality of the permanent account balances that are carried forward into the next accounting period.** Since all temporary accounts will have zero balances, the postclosing trial balance will contain only permanent—that is, *balance sheet*—accounts.

The procedure for preparing a postclosing trial balance again consists entirely of listing the accounts and their balances. The postclosing trial balance for Premier Staffing Agency, Inc., is shown in Illustration 5-9. These balances are the same as those reported in the company's balance sheet in Illustration 5-4.

PREMIER STAFFING AGENCY, INC.		
Postclosing Trial Balance		
October 31, 2008		
	<u>Debit</u>	<u>Credit</u>
Cash	\$15,200	
Accounts Receivable	200	
Supplies	1,000	
Prepaid Insurance	550	
Office Equipment	5,000	
Accumulated Depreciation—Office Equipment		\$ 40
Notes Payable		5,000
Accounts Payable		2,500
Unearned Revenue		800
Salaries Payable		1,200
Interest Payable		50
Common Stock		10,000
Retained Earnings		2,360
	<u>\$21,950</u>	<u>\$21,950</u>

STUDY OBJECTIVE 3

Describe the content and the purpose of a postclosing trial balance.

Illustration 5-9

Postclosing trial balance

HELPFUL HINT

Will total debits in a postclosing trial balance equal total assets on the balance sheet? Answer: No. Accumulated depreciation is deducted from assets on the balance sheet but added to the credit balance total in a postclosing trial balance.

The postclosing trial balance is prepared from the permanent accounts in the ledger. The permanent accounts of Premier Staffing are shown in the general ledger in Illustration 5-10 on page 150. Remember that the balance of each permanent account is computed after every posting. Therefore, no additional work on these accounts is needed as part of the closing process.

A postclosing trial balance provides evidence that the journalizing and posting of closing entries have been completed properly. It also shows that the accounting equation is in balance at the end of the accounting period. However, like the trial balance, it does not prove that all transactions have been recorded or that the ledger is correct. For example, the postclosing trial balance will balance if a transaction is not journalized and posted or if a transaction is journalized and posted twice.

The remaining accounts in the general ledger are temporary accounts (shown in Illustration 5-11 on page 151). After the closing entries are posted correctly, each temporary account has a zero balance. These accounts are double-ruled to finalize the closing process.

Illustration 5-10

General ledger, permanent accounts

(Permanent Accounts Only)

GENERAL LEDGER											
Cash No. 101						Accounts Payable No. 201					
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
2008						2008					
Oct. 1		J1	10,000		10,000	Oct. 5		J1		2,500	2,500
2		J1	1,200		11,200	Unearned Revenue No. 209					
3		J1		900	10,300	Date	Explanation	Ref.	Debit	Credit	Balance
4		J1		600	9,700	2008					
20		J1		500	9,200	Oct. 2		J1		1,200	1,200
26		J1		4,000	5,200	31	Adj. entry	J2	400		800
31		J1	10,000		15,200	Salaries Payable No. 212					
Accounts Receivable No. 112						Date	Explanation	Ref.	Debit	Credit	Balance
Date	Explanation	Ref.	Debit	Credit	Balance	2008					
2008						Oct. 31	Adj. entry	J2		1,200	1,200
Oct. 31	Adj. entry	J2	200		200	Interest Payable No. 230					
Supplies No. 129						Date	Explanation	Ref.	Debit	Credit	Balance
Date	Explanation	Ref.	Debit	Credit	Balance	2008					
2008						Oct. 31	Adj. entry	J2		50	50
Oct. 5		J1	2,500		2,500	Common Stock No. 311					
31	Adj. entry	J2		1,500	1,000	Date	Explanation	Ref.	Debit	Credit	Balance
Prepaid Insurance No. 130						2008					
Date	Explanation	Ref.	Debit	Credit	Balance	Oct. 1		J1		10,000	10,000
2008						Retained Earnings No. 320					
Oct. 4		J1	600		600	Date	Explanation	Ref.	Debit	Credit	Balance
31	Adj. entry	J2		50	550	2008					
Office Equipment No. 157						Oct. 1					-0-
Date	Explanation	Ref.	Debit	Credit	Balance	31	Closing entry	J3		2,860	2,860
2008						31	Closing entry	J3	500		2,360
Oct. 1		J1	5,000		5,000	Accumulated Depreciation—Office Equipment No. 158					
Notes Payable No. 200						Date	Explanation	Ref.	Debit	Credit	Balance
Date	Explanation	Ref.	Debit	Credit	Balance	2008					
2008						Oct. 31	Adj. entry	J2	40		40
Oct. 1		J1		5,000	5,000	Notes Payable No. 200					
Accumulated Depreciation—Office Equipment No. 158						Date	Explanation	Ref.	Debit	Credit	Balance
Date	Explanation	Ref.	Debit	Credit	Balance	2008					
2008						Oct. 1		J1		5,000	5,000
Oct. 31	Adj. entry	J2		40	40	Notes Payable No. 200					
Notes Payable No. 200						Date	Explanation	Ref.	Debit	Credit	Balance
Date	Explanation	Ref.	Debit	Credit	Balance	2008					
2008						Oct. 1		J1		5,000	5,000

Note: The permanent accounts for Premier Staffing Agency, Inc., are shown here; the temporary accounts are shown in Illustration 5-11. Both permanent and temporary accounts are part of the general ledger; they are segregated here to aid in learning.

SUMMARY OF THE ACCOUNTING CYCLE

STUDY OBJECTIVE 4

State the required steps in the accounting cycle.

The required steps in the accounting cycle are shown in Illustration 1-7 on page 15. As discussed early in Chapter 1, you can see that the cycle begins with the analysis of business transactions and ends with the preparation of a postclosing trial balance. The steps in the cycle are performed in sequence and are repeated in each accounting period.

Illustration 5-11

General ledger, temporary accounts

(Temporary Accounts Only)

GENERAL LEDGER											
Dividends No. 332						Insurance Expense No. 722					
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
2008						2008					
Oct. 31		J1	500		500	Oct. 31	Adj. entry	J2	50		50
31	Closing entry	J3		500	<u>-0-</u>	31	Closing entry	J3		50	<u>-0-</u>
Income Summary No. 350						Salaries Expense No. 726					
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
2008						2008					
Oct. 31	Closing entry	J3		10,600	10,600	Oct. 26		J1	4,000		4,000
31	Closing entry	J3	7,740		2,860	31	Adj. entry	J2	1,200		5,200
31	Closing entry	J3	2,860		<u>-0-</u>	31	Closing entry	J3		5,200	<u>-0-</u>
Service Revenue No. 400						Rent Expense No. 729					
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
2008						2008					
Oct. 31		J1		10,000	10,000	Oct. 3		J1	900		900
31	Adj. entry	J2		400	10,400	31	Closing entry	J3		900	<u>-0-</u>
31	Adj. entry	J2		200	10,600						
31	Closing entry	J3	10,600		<u>-0-</u>						
Supplies Expense No. 611						Interest Expense No. 905					
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
2008						2008					
Oct. 31	Adj. entry	J2	1,500		1,500	Oct. 31	Adj. entry	J2	50		50
31	Closing entry	J3		1,500	<u>-0-</u>	31	Closing entry	J3		50	<u>-0-</u>
Depreciation Expense No. 711						<p><i>Note:</i> The temporary accounts for Premier Staffing Agency, Inc., are shown here; the permanent accounts are shown in Illustration 5-10. Both permanent and temporary accounts are part of the general ledger; they are segregated here to aid in learning.</p>					
Date	Explanation	Ref.	Debit	Credit	Balance						
2008											
Oct. 31	Adj. entry	J2	40		40						
31	Closing entry	J3		40	<u>-0-</u>						

Steps 1–3 may occur daily during the accounting period, as explained in Chapter 3. Steps 4–7 are performed on a periodic basis, such as monthly, quarterly, or annually. Steps 8 and 9, closing entries and a postclosing trial balance, are usually prepared only at the end of a company’s *annual* accounting period. As you have seen, a work sheet also may be used in preparing adjusting entries and financial statements.

CORRECTING ENTRIES—AN AVOIDABLE STEP

Unfortunately, errors may occur in the recording process. Errors should be corrected **as soon as they are discovered** by journalizing and posting **correcting entries**. If the accounting records are free of errors, no correcting entries are necessary.

STUDY OBJECTIVE 5

Explain the approaches to preparing correcting entries.

You should recognize three differences between correcting entries and adjusting entries:

1. Adjusting entries are an integral part of the accounting cycle. Correcting entries, on the other hand, are unnecessary if the records are free of errors.
2. Adjustments are journalized and posted only at the end of an accounting period. In contrast, correcting entries are made whenever an error is discovered.
3. Adjusting entries always affect at least one balance sheet account and one income statement account. In contrast, correcting entries may involve any combination of accounts in need of correction. **Correcting entries must be posted before closing entries.**

ETHICS NOTE

Citigroup once reported a correcting entry reducing reported revenue by \$23 million while firing 11 employees. Company officials did not specify why the employees had apparently intentionally inflated the revenue figures, although it was noted that their bonuses were tied to their unit's performance.

To determine the correcting entry, it is useful to compare the incorrect entry with the correct entry. Doing so helps to identify the accounts and amounts that should—and should not—be corrected. After comparison, a correcting entry is made to correct the accounts. This approach is illustrated in the following two cases.

CASE 1. On May 10, a \$50 cash collection on account from a customer is journalized and posted as a debit to Cash \$50 and a credit to Service Revenue \$50. The error is discovered on May 20 when the customer pays the remaining balance in full (Illustration 5-12).

Illustration 5-12

Comparison of entries

Incorrect Entry (May 10)			Correct Entry (May 10)		
Cash	50		Cash	50	
Service Revenue		50	Accounts Receivable		50

A comparison of the incorrect entry with the correct entry reveals that the debit to Cash \$50 is correct. However, the \$50 credit to Service Revenue should have been credited to Accounts Receivable. As a result, both Service Revenue and Accounts Receivable are overstated in the ledger. The correcting entry in Illustration 5-13 is required.

Illustration 5-13

Correcting entry

A	=	L	+	SE
-50				-50

Correcting Entry			
May 20	Service Revenue	50	
	Accounts Receivable		50
	(To correct entry of May 10)		

CASE 2. On May 18, office equipment costing \$450 is purchased on account. The transaction is journalized and posted as a debit to Delivery Equipment \$45 and a credit to Accounts Payable \$45. The error is discovered on June 3 when the monthly statement for May is received from the creditor (Illustration 5-14).

Illustration 5-14

Comparison of entries

Incorrect Entry (May 18)			Correct Entry (May 18)		
Delivery Equipment	45		Office Equipment	450	
Accounts Payable		45	Accounts Payable		450

A comparison of the two entries shows that three accounts are incorrect. Delivery Equipment is overstated \$45, Office Equipment is understated \$450, and Accounts Payable is understated \$405. The correcting entry is shown in Illustration 5-15.

Correcting Entry			
June 3	Office Equipment	450	
	Delivery Equipment		45
	Accounts Payable		405
	(To correct entry of May 18)		

Illustration 5-15

Correcting entry

A	=	L	+	SE
+450				
-45		+405		

Instead of preparing a correcting entry, **it is possible to reverse the incorrect entry and then prepare the correct entry.** This approach will result in more entries and postings than a correcting entry, but it will accomplish the desired result.

ACCOUNTING IN ACTION *Business Insight*



In the hospitality industry, much work is done behind the scenes so that guests can enjoy their experience, whether they are on a cruise, staying in a hotel for business, staying at a resort for their vacation, playing tennis at their country club, or dining out with good friends. All the products that make the ultimate service a reality have to be transported and shipped by various carriers. The produce may be grown in California and freighted to Texas; the grill in the kitchen may be manufactured in Ohio and shipped to Florida. Consider the following events with two freight companies.

Yale Express, a short-haul trucking firm, turned over much of its cargo to local truckers for delivery completion. Yale collected the entire delivery charge and, when billed by the local trucker, sent payment for the final phase to the local trucker. Yale used a cutoff period of 20 days into the next accounting period in making its adjusting entries for accrued liabilities. That is, it waited 20 days to receive the local truckers' bills to determine the amount of the unpaid but incurred delivery charges as of the balance sheet date.

In contrast, **Republic Carloading**, a nationwide, long-distance freight forwarder, frequently did not receive transportation bills from truckers to whom it passed on cargo until months after the year-end. In making its year-end adjusting entries, Republic waited for months in order to include all these outstanding transportation bills.

When Yale Express merged with Republic Carloading, Yale's vice president employed the 20-day cutoff procedure for both firms. As a result, millions of dollars of Republic's accrued transportation bills went unrecorded. When the erroneous procedure was detected and correcting entries were made, these and other errors changed a reported profit of \$1.14 million into a loss of \$1.88 million!

What might Yale Express's vice president have done to produce more accurate financial statements without waiting months for Republic's outstanding transportation bills?

BEFORE YOU GO ON...

► **REVIEW IT**

1. How do permanent accounts differ from temporary accounts?
2. What four different types of entries are required in closing the books?
3. What is the content and the purpose of a postclosing trial balance?
4. What are the required and optional steps in the accounting cycle?

► **DO IT**

The work sheet for Hancock Health and Exercise Club shows the following in the financial statement columns: Common Stock \$98,000, Dividends \$15,000, Retained Earnings \$42,000, and Net Income \$18,000. Prepare the closing entries on December 31 that affect stockholders' equity.

ACTION PLAN

- Remember to make closing entries in the correct sequence.
- Make the first two entries to close revenues and expenses.
- Make the third entry to close net income to retained earnings.
- Make the final entry to close dividends to retained earnings.

SOLUTION

Dec. 31	Income Summary	18,000	
	Retained Earnings		18,000
	(To close net income to retained earnings)		
31	Retained Earnings	15,000	
	Dividends		15,000
	(To close dividends to retained earnings)		



CLASSIFIED BALANCE SHEET

STUDY OBJECTIVE 6

Identify the sections of a classified balance sheet.

The financial statements illustrated up to this point were purposely kept simple. We classified items as assets, liabilities, and stockholders' equity in the balance sheet and as revenues and expenses in the income statement. **Financial statements, however, become more useful to management, creditors, and potential investors when the elements are classified into significant subgroups.** In the remainder of this chapter we will introduce you to the primary balance sheet classifications. The classified income statement will be presented in Chapter 6. The classified financial statements are what Ted Castle, owner of **Rhino Foods, Inc.**, gave to his employees to understand what was happening in the business.

STANDARD CLASSIFICATIONS

A **classified balance sheet** usually contains the standard classifications shown in Illustration 5-16.

Illustration 5-16

Standard balance sheet classifications

<u>Assets</u>	<u>Liabilities and Stockholders' Equity</u>
Current assets	Current liabilities
Long-term investments	Long-term liabilities
Property, plant, and equipment	Stockholders' equity
Intangible assets	

These sections help the financial statement user determine such matters as (1) the availability of assets to meet debts as they come due and (2) the claims of short- and long-term creditors on total assets. A classified balance sheet also makes it easier to compare companies in the same industry, such as **Four Seasons, Forte Hotels**, and **John Q. Hammons Hotels** in the hotel industry. Each of the sections is explained next.

A complete set of specimen financial statements for **PepsiCo, Inc.**, is shown in Appendix A at the back of the book.

Current Assets

Current assets are cash and other resources that are reasonably expected to be realized in cash or sold or consumed in the business within one year of the balance

sheet date or the company’s operating cycle, whichever is longer. For example, accounts receivable are current assets because they will be realized in cash through collection within one year. A prepayment such as supplies is a current asset because of its expected use or consumption in the business within one year.

The **operating cycle** of a company is the average time that is required to go from cash to cash in producing revenues. The term *cycle* suggests a circular flow, which in this case, starts and ends with cash. For example, in municipal transit companies, the operating cycle would tend to be short because services are provided entirely on a cash basis. On the other hand, the operating cycle in manufacturing companies is longer: They purchase goods and materials, manufacture and sell products, bill customers, and collect cash. This is a cash-to-cash cycle that may extend for several months. Most companies have operating cycles of less than one year. More will be said about operating cycles in later chapters.

In a service enterprise, it is customary to recognize four types of current assets: (1) cash, (2) short-term investments, such as U.S. government bonds, (3) receivables (notes receivable, accounts receivable, and interest receivable), and (4) prepaid expenses (insurance and supplies). **These items are listed in the order of liquidity;** that is, they are listed in the order in which they are expected to be converted into cash. This arrangement is illustrated in Illustration 5-17 in the presentation of **UAL, Inc. (United Airlines)**.

INTERNATIONAL NOTE

Other countries use a different format for the balance sheet. In Great Britain, for example, property, plant, and equipment are reported first on the balance sheet; assets and liabilities are netted and grouped into net current and net total assets.

UAL, INC. (UNITED AIRLINES) Balance Sheet (partial) (in millions)	
Current assets	
Cash	\$1,348
Short-term investments	388
Receivables	788
Aircraft fuel, spare parts, and supplies	310
Prepaid expenses	219
Other current assets	254
Total current assets	<u>\$3,307</u>

Illustration 5-17

Current assets section

A company’s current assets are important in assessing the company’s short-term debt-paying ability, as explained later in the chapter.

Long-Term Investments

Like current assets, **long-term investments** are resources that can be realized in cash. However, the conversion into cash is not expected within one year or the operating cycle, whichever is longer. In addition, long-term investments are not intended for use or consumption within the business. This category, often just called *investments*, normally includes stocks and bonds of other corporations. **Yahoo! Inc.**, reported the balance sheet shown in Illustration 5-18.

HELPFUL HINT

Long-term investments are investments *made by* the business—not investments by the stockholders *in* the business. Investments by the stockholders in the business are reported as part of stockholders’ equity (see pp. 157–158).

YAHOO! INC. Balance Sheet (partial)	
Long-term investments	
Long-term investments in marketable securities	\$763,408

Illustration 5-18

Long-term investments section

Property, Plant, and Equipment

ALTERNATIVE TERMINOLOGY
Property, plant, and equipment are sometimes referred to as *plant assets* or *fixed assets*.

Property, plant, and equipment are tangible resources of a relatively permanent nature that are used in the business and not intended for sale. This category includes land, buildings, machinery and equipment, delivery equipment, and furniture and fixtures. Assets subject to depreciation should be reported at cost less accumulated depreciation. Illustration 5-19 shows this practice for **Delta Air Lines**.

Illustration 5-19

Property, plant, and equipment section

DELTA AIR LINES, INC.			
Balance Sheet (partial)			
(in millions)			
Property, plant, and equipment			
Flight equipment	\$20,295		
Less: Accumulated depreciation	6,109	\$14,186	
Ground property and equipment	4,841		
Less: Accumulated depreciation	2,503	2,338	\$16,524

Intangible Assets

Intangible assets are noncurrent resources that do not have physical substance. Intangible assets include patents, copyrights, and trademarks or trade names that give the holder **exclusive right** of use for a specified period of time. Their value to a company generally is derived from the rights or privileges granted by governmental authority (such as the U.S. Patent Office and the Copyright Office). Intangibles are recorded at cost, and this cost is expensed (amortized) over the useful life of the intangible. Intangibles with indefinite lives are not amortized.

In its balance sheet, **The Walt Disney Company** reported the intangible assets shown in Illustration 5-20.

Illustration 5-20

Intangible assets section

THE WALT DISNEY COMPANY		
Balance Sheet (partial)		
(in millions)		
Intangible assets		
Patents, trademarks, and other intangibles	\$2,776	
Goodwill	17,083	
		\$19,859

Current Liabilities

Listed first in the liabilities and stockholders' equity section of the balance sheet are current liabilities. **Current liabilities** are obligations that are reasonably expected to be paid from existing current assets or through the creation of other current liabilities. As in the case of current assets, the time period for payment is one year or the operating cycle, whichever is longer. Current liabilities include (1) debts related to the operating cycle, such as accounts payable and wages and salaries payable; and (2) other short-term debts, such as bank loans payable, interest payable, taxes payable, and current maturities of long-term obligations (payments to be made within the next year on long-term obligations).

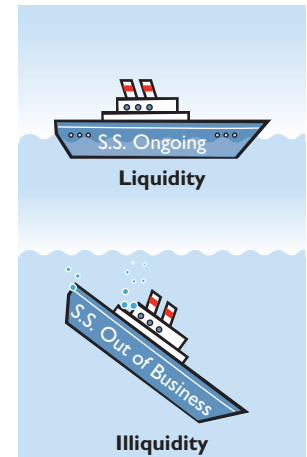
The arrangement of items within the current liabilities section has evolved through custom rather than from a prescribed rule. Notes payable is usually listed

first, followed by accounts payable. Other items are then listed in any order. The current liabilities section adapted from the balance sheet of **UAL, Inc. (United Airlines)**, is shown in Illustration 5-21.

UAL, INC. (UNITED AIRLINES) Balance Sheet (partial) (in thousands)	
Current liabilities	
Notes payable	\$ 297,518
Accounts payable	382,967
Current maturities of long-term obligations	81,525
Unearned ticket revenue	432,979
Salaries and wages payable	435,622
Taxes payable	80,390
Other current liabilities	240,652
Total current liabilities	<u>\$1,951,653</u>

Illustration 5-21

Current liabilities section



Users of financial statements look closely at the relationship between current assets and current liabilities. This relationship is important in evaluating a company's **liquidity**—its ability to pay obligations that are expected to become due within the next year or operating cycle. When current assets exceed current liabilities on the balance sheet date, the likelihood for paying the liabilities is favorable. When the reverse is true, short-term creditors may not be paid, and the company ultimately may be forced into bankruptcy.

Long-Term Liabilities

Obligations expected to be paid after one year or an operating cycle, whichever is longer, are classified as **long-term liabilities**. Liabilities in this category include bonds payable, mortgages payable, long-term notes payable, lease liabilities, and obligations under employee pension plans. Many companies report long-term debt maturing after one year as a single amount in the balance sheet. They then show the details of the debt in the notes that accompany the financial statements. Others list the various sources of long-term liabilities. In its balance sheet, **Brunswick Corporation** reported the long-term liabilities shown in Illustration 5-22.

ALTERNATIVE TERMINOLOGY

Long-term liabilities are also called *long-term debt* or *noncurrent liabilities*.

BRUNSWICK CORPORATION Balance Sheet (partial) (in thousands)	
Long-term liabilities	
Notes payable	\$437.2
Bonds payable	124.4
Guaranteed debt	15.5
Other long-term debt	12.4
Total long-term liabilities	<u>\$589.5</u>

Illustration 5-22

Long-term liabilities section

Stockholders' (Owners') Equity

The content of the owners' equity section varies with the form of business organization. In a proprietorship, there is one capital account. In a partnership, there is a capital account for each partner. For a corporation, owners' (stockholders') eq-

uity is divided into two accounts—Common Stock and Retained Earnings. As indicated previously, investments of capital in the business by the stockholders are recorded in the Common Stock account. Income retained for use in the business is recorded in the Retained Earnings account. These two accounts are combined and reported as **stockholders' equity** on the balance sheet.

In its balance sheet, **Dell, Inc.**, recently reported its stockholders' equity section as shown in Illustration 5-23.

Illustration 5-23

Stockholders' equity section

DELL, INC. (in millions)	
Stockholders' equity	
Common stock, 2,681,000,000 shares	\$1,479
Retained earnings	3,394
Total stockholders' equity	<u>\$4,873</u>

CLASSIFIED BALANCE SHEET, ILLUSTRATED

An unclassified, report form balance sheet of Premier Staffing Agency, Inc., was presented in Illustration 4-23 on page 124. Using the same adjusted trial balance accounts on October 31, 2008, we can prepare the classified balance sheet shown in Illustration 5-24. For illustrative purposes, assume that \$1,000 of the notes payable is due currently and \$4,000 is long term.

The balance sheet is most often presented in **report form**, with assets listed above liabilities and stockholders' equity. The balance sheet also may be presented in **account form**: The assets section is placed on the left and the liabilities and stockholders' equity sections on the right, as shown in Illustration 5-24.

Another, more complete example of a classified balance sheet is presented in report form in Illustration 5-25.

Illustration 5-24

Classified balance sheet in account form

PREMIER STAFFING AGENCY, INC. Balance Sheet October 31, 2008			
<u>Assets</u>		<u>Liabilities and Stockholders' Equity</u>	
Current assets		Current liabilities	
Cash	\$15,200	Notes payable	\$ 1,000
Accounts receivable	200	Accounts payable	2,500
Supplies	1,000	Unearned revenue	800
Prepaid insurance	550	Salaries payable	1,200
Total current assets	<u>16,950</u>	Interest payable	50
Property, plant, and equipment		Total current liabilities	<u>5,550</u>
Office equipment	\$5,000	Long-term liabilities	
Less: Accumulated depreciation	40	Notes payable	4,000
Total assets	<u>\$21,910</u>	Total liabilities	9,550
		Stockholders' equity	
		Common stock	\$10,000
		Retained earnings	2,360
		Total stockholders' equity	<u>12,360</u>
		Total liabilities and stockholders' equity	<u>\$21,910</u>

FRANKLIN CORPORATION			
Balance Sheet			
October 31, 2008			
<u>Assets</u>			
Current assets			
Cash		\$ 6,600	
Short-term investments		2,000	
Accounts receivable		7,000	
Inventories		4,000	
Supplies		2,100	
Prepaid insurance		<u>400</u>	
Total current assets			\$22,100
Long-term investments			
Investment in stock of Walters Corp.			7,200
Property, plant, and equipment			
Land		10,000	
Office equipment	\$24,000		
Less: Accumulated depreciation	<u>5,000</u>	<u>19,000</u>	29,000
Intangible assets			
Patents			<u>3,100</u>
Total assets			<u><u>\$61,400</u></u>
<u>Liabilities and Stockholders' Equity</u>			
Current liabilities			
Notes payable		\$11,000	
Accounts payable		2,100	
Unearned revenue		900	
Salaries payable		1,600	
Interest payable		<u>450</u>	
Total current liabilities			\$16,050
Long-term liabilities			
Notes payable		1,300	
Mortgage payable		<u>10,000</u>	
Total long-term liabilities			<u>11,300</u>
Total liabilities			27,350
Stockholders' equity			
Common stock		20,000	
Retained earnings		<u>14,050</u>	
Total stockholders' equity			<u>34,050</u>
Total liabilities and stockholders' equity			<u><u>\$61,400</u></u>

Illustration 5-25

Classified balance sheet in report form

BEFORE YOU GO ON...**▶ REVIEW IT**

1. What are the major sections in a classified balance sheet?
2. Using the **PepsiCo, Inc.** annual report, determine its current liabilities on December 31, 2005, and December 30, 2006. Were current liabilities higher or lower than current assets in these two years?
3. What is the difference between the report form and the account form of the classified balance sheet?



LOOK BACK AT OUR FEATURE STORY

Refer back to the Feature Story about **Rhino Foods, Inc.** at the beginning of this chapter and answer the following questions:

1. What is the lesson of the Rhino Foods story and Ted Castle's innovations?
2. How did Rhino's employees' knowledge of financial statements, especially production reports and the income statement, contribute to their effectiveness as employees?

SOLUTION

1. If you give employees equity in the company and provide them with the training and the information to understand the financial consequences of their decisions and actions, they will act more responsibly and make a greater contribution to the sales and income of the company. In other words, they begin to think like owners.
2. By understanding the income statement, they now recognize the impact of revenues and expenses in arriving at net income—as well as how productivity and expenses affect their bonuses.



DEMONSTRATION PROBLEM

At the end of its first month of operations, Watson Island Tour Service, Inc., has the following unadjusted trial balance:

WATSON ISLAND TOUR SERVICE, INC. August 31, 2008 Trial Balance

	<u>Debit</u>	<u>Credit</u>
Cash	\$ 5,400	
Accounts Receivable	8,800	
Prepaid Insurance	2,400	
Supplies	1,300	
Equipment	60,000	
Notes Payable		\$40,000
Accounts Payable		2,400
Common Stock		30,000
Dividends	1,000	
Service Revenue		10,900
Salaries Expense	3,200	
Utilities Expense	800	
Advertising Expense	400	
	<u>\$83,300</u>	<u>\$83,300</u>

ACTION PLAN

- In completing the work sheet, be sure to (a) key the adjustments, (b) start at the top of the adjusted trial balance columns and extend adjusted balances to the correct statement columns, and (c) enter net income (or net loss) in the proper columns.
- In preparing a classified balance sheet, know the contents of each of the sections.
- In journalizing closing entries, remember that there are only four entries and that dividends are closed to retained earnings.

Other data consist of the following:

1. Insurance expires at the rate of \$200 per month.
2. There are \$1,000 of supplies on hand at August 31.
3. Monthly depreciation on the equipment is \$900.
4. Interest of \$500 on the notes payable has accrued during August.

Instructions

- (a) Prepare a work sheet.
- (b) Prepare a classified balance sheet assuming that \$35,000 of the notes payable are long term.
- (c) Journalize the closing entries.

SOLUTION TO DEMONSTRATION PROBLEM

(a) **WATSON ISLAND TOUR SERVICE, INC.**
Work Sheet
For the Month Ended August 31, 2008

Account Titles	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash	5,400				5,400				5,400	
Accounts Receivable	8,800				8,800				8,800	
Prepaid Insurance	2,400			(a) 200	2,200				2,200	
Supplies	1,300			(b) 300	1,000				1,000	
Equipment	60,000				60,000				60,000	
Notes Payable		40,000				40,000				40,000
Accounts Payable		2,400				2,400				2,400
Common Stock		30,000				30,000				30,000
Dividends	1,000				1,000				1,000	
Service Revenue		10,900				10,900	10,900			
Salaries Expense	3,200				3,200		3,200			
Utilities Expense	800				800		800			
Advertising Expense	400				400		400			
Totals	<u>83,300</u>	<u>83,300</u>								
Insurance Expense			(a)	200	200		200			
Supplies Expense			(b)	300	300		300			
Depreciation Expense			(c)	900	900		900			
Accumulated Depreciation— Equipment				(c) 900		900				900
Interest Expense			(d)	500	500		500			
Interest Payable				(d) 500		500				500
Totals			<u>1,900</u>	<u>1,900</u>	<u>84,700</u>	<u>84,700</u>	6,300	10,900	78,400	73,800
Net Income							4,600			4,600
Totals							<u>10,900</u>	<u>10,900</u>	<u>78,400</u>	<u>78,400</u>

Explanation: (a) Insurance expired, (b) Supplies used, (c) Depreciation expensed, (d) Interest accrued

(b) **WATSON ISLAND TOUR SERVICE, INC.**
Balance Sheet
August 31, 2008

Assets

Current assets	
Cash	\$ 5,400
Accounts receivable	8,800
Prepaid insurance	2,200
Supplies	1,000
Total current assets	<u>17,400</u>
Property, plant, and equipment	
Equipment	\$60,000
Less: Accumulated depreciation—equipment	<u>900</u>
Total assets	<u>\$76,500</u>

(continues)

Liabilities and Stockholders' Equity

Current liabilities	
Notes payable	\$ 5,000
Accounts payable	2,400
Interest payable	500
Total current liabilities	7,900
Long-term liabilities	
Notes payable	35,000
Total liabilities	42,900
Stockholders' equity	
Common stock	30,000
Retained earnings	3,600*
Total liabilities and stockholders' equity	<u>\$76,500</u>

*Net income of \$4,600 less dividends of \$1,000.

(c) Aug. 31	Service Revenue	10,900	
	Income Summary		10,900
	(To close revenue account)		
31	Income Summary	6,300	
	Salaries Expense		3,200
	Depreciation Expense		900
	Utilities Expense		800
	Interest Expense		500
	Advertising Expense		400
	Supplies Expense		300
	Insurance Expense		200
	(To close expense accounts)		
31	Income Summary	4,600	
	Retained Earnings		4,600
	(To close net income to retained earnings)		
31	Retained Earnings	1,000	
	Dividends		1,000
	(To close dividends to retained earnings)		



SUMMARY OF STUDY OBJECTIVES

1. Prepare a work sheet. The steps in preparing a work sheet are (a) prepare a trial balance on the work sheet, (b) enter the adjustments in the adjustment columns, (c) enter adjusted balances in the adjusted trial balance columns, (d) extend adjusted trial balance amounts to appropriate financial statement columns, and (e) total the statement columns, compute net income (or net loss), and complete the work sheet.

2. Explain the process of closing the books. Closing the books occurs at the end of an accounting period. The process is to journalize and post closing entries and then rule and balance all accounts. In closing the books, separate entries are made to close revenues and expenses to Income Summary, Income Summary to Retained Earnings, and Dividends to Retained Earnings. Only temporary accounts are closed.

3. Describe the content and the purpose of a postclosing trial balance. A postclosing trial balance contains the balances in permanent accounts that are carried forward to the next accounting period. The purpose of this trial balance is to prove the equality of these balances.

4. State the required steps in the accounting cycle. The

required steps in the accounting cycle are (a) analyze business transactions, (b) journalize the transactions, (c) post to ledger accounts, (d) prepare a trial balance, (e) journalize and post adjusting entries, (f) prepare an adjusted trial balance, (g) prepare financial statements, (h) journalize and post closing entries, and (i) prepare a postclosing trial balance.

5. Explain the approaches to preparing correcting entries. One approach for determining the correcting entry is to compare the incorrect entry with the correct entry. After comparison, a correcting entry is made to correct the accounts. An alternative to a correcting entry is to reverse the incorrect entry and then prepare the correct entry.

6. Identify the sections of a classified balance sheet. In a classified balance sheet, assets are classified as current assets; long-term investments; property, plant, and equipment; or intangibles. Liabilities are classified as either current or long term. There is also an owners' equity section, which varies with the form of business organization. The classified balance sheet can be presented in either report form or account form.



GLOSSARY

- Classified balance sheet** A balance sheet that contains a number of standard classifications or sections (p. 154).
- Closing entries** Entries made at the end of an accounting period to transfer the balances of temporary accounts to a permanent stockholders' equity account, Retained Earnings (p. 145).
- Correcting entries** Entries to correct errors made in recording transactions (p. 151).
- Current assets** Cash and other resources that are reasonably expected to be realized in cash or to be sold or consumed in the business within one year or the operating cycle, whichever is longer (p. 154).
- Current liabilities** Obligations reasonably expected to be paid from existing current assets or through the creation of other current liabilities within the next year or operating cycle, whichever is longer (p. 156).
- Income summary** A temporary account used in closing revenue and expense accounts (p. 145).
- Intangible assets** Noncurrent resources that do not have physical substance (p. 156).
- Liquidity** The ability of a company to pay obligations that are expected to become due within the next year or operating cycle (p. 157).
- Long-term investments** Resources not expected to be realized in cash within the next year or operating cycle (p. 155).
- Long-term liabilities (long-term debt)** Obligations expected to be paid after more than one year (p. 157).
- Operating cycle** The average time required to go from cash to cash in producing revenues (p. 155).
- Permanent (real) accounts** Balance sheet accounts whose balances are carried forward to the next accounting period (p. 144).
- Postclosing trial balance** A list of permanent accounts and their balances after closing entries have been journalized and posted (p. 149).
- Property, plant, and equipment** Assets of a relatively permanent nature that are being used in the business and not intended for resale (p. 156).
- Stockholders' equity** The ownership claim of shareholders on total assets (p. 158).
- Temporary (nominal) accounts** Revenue, expense, and dividends accounts whose balances are transferred to Retained Earnings at the end of an accounting period (p. 144).
- Work sheet** A multiple-column form that may be used in the adjustment process and in preparing financial statements (p. 138).

EXERCISES

- 5-1** Indicate which of the following statements are true or false regarding the work sheet. *Use of a work sheet.*
 _____ The work sheet is essentially a working tool of the accounting. (SO 1)
 _____ The work sheet cannot be used as a basis for posting to ledgers.
 _____ The work sheet is distributed to management and other interested parties.
 _____ Financial statements can be prepared directly from the work sheet before journalizing and posting the adjusting entries.
- 5-2** The ledger of W. S. Juice Bar includes the following unadjusted balances: Service Revenue \$60,000; Salaries Expense \$28,950; and Prepaid Rent \$6,000. Adjusting entries are required for (a) services provided for \$1,000 but not yet billed and collected; (b) accrued salaries payable of \$1,350; and (c) expired rent of \$2,000. Enter the unadjusted balances and adjustments into a work sheet, and complete the work sheet for all accounts. (*Hint:* You will need to add the following accounts: Accounts Receivable, Salaries Payable, and Rent Expense.) *Prepare partial work sheet.*
 (SO 1)
- 5-3** The income statement of Health 24 City Club for the month ending August 31 shows Membership Dues Revenues of \$25,000; Salaries Expense of \$9,300; Repairs and Maintenance Expense of \$2,400; and Net Income of \$6,950. Prepare the entries to close the revenue and expense accounts, and complete the closing process for these accounts using the three-column form of account. *Journalize and post closing entries using the three-column form of account.*
 (SO 2)
- 5-4** Using the data in Exercise 5-3, identify the accounts that would be included in a postclosing trial balance. *Identify postclosing trial balance accounts.*
 (SO 3)
- 5-5** Sam Perroni, owner of Perroni's Harbor Cruise, found the following errors that his bookkeeper made after the transactions had been journalized and posted. Prepare the correcting entries. *Prepare correcting entries.*
 (SO 5)
1. A collection on account from a customer for \$1,280 was recorded as a debit to Accounts Receivable of \$1,280 and a credit to Service Revenue of \$1,280.
 2. The purchase of supplies for the boats on account for \$3,570 was recorded as a debit to Supplies of \$3,750 and credit to Accounts Payable of \$3,750.
- 5-6** At Fred's Fish Chips, the following errors were discovered after the transactions had been journalized and posted. Prepare the correcting entries. *Prepare correcting entries.*
 (SO 5)
1. A collection on account from a customer for \$850 was recorded as a debit to Cash of \$850 and a credit to Service Revenue of \$850.

Prepare the current assets section of a balance sheet; (SO 6)

Complete work sheet. (SO 1)

2. The purchase of store supplies on account for \$2,340 was recorded as a debit to Store Supplies of \$2,430 and a credit to Accounts Payable of \$2,430.

5-7 The balance sheet debit column of the work sheet for Empanada Supreme includes the following accounts: Prepaid Insurance \$4,600; Cash \$24,080; Supplies \$6,200; Short-term Investments \$7,240; and Accounts Receivable \$15,670. Prepare the current assets section of the balance sheet, listing the accounts in proper sequence.

5-8 The adjusted trial balance columns of the work sheet for Cajun Company are as follows:

CAJUN COMPANY
Work Sheet (partial)
For the Month Ended April 30, 2008

Account Titles	Adjusted Trial Balance		Income Statement		Balance Sheet	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash	14,752					
Accounts Receivable	7,840					
Prepaid Rent	2,280					
Equipment	23,050					
Accumulated Depreciation		4,921				
Notes Payable		5,700				
Accounts Payable		5,972				
Common Stock		25,000				
Retained Earnings		8,960				
Dividends	3,650					
Service Revenue		12,590				
Salaries Expense	9,840					
Rent Expense	760					
Depreciation Expense	671					
Interest Expense	57					
Interest Payable		57				
Totals	<u>62,900</u>	<u>62,900</u>				

Instructions

Complete the work sheet.

Journalize and post closing entries and prepare a postclosing trial balance. (SO 2, 3, 6)

5-9 The adjusted trial balance of Lanza Company at the end of its fiscal year is as follows:

LANZA COMPANY
Adjusted Trial Balance
July 31, 2008

No.	Account Titles	Debits	Credits
101	Cash	\$ 14,840	
112	Accounts Receivable	8,780	
157	Equipment	15,900	
167	Accumulated Depreciation		\$ 5,400
201	Accounts Payable		4,220
208	Unearned Rent Revenue		1,800
311	Common Stock		20,000
320	Retained Earnings		25,200
332	Dividends	16,000	
404	Commission Revenue		67,000
429	Rent Revenue		6,500
711	Depreciation Expense	4,000	
720	Salaries Expense	55,700	
732	Utilities Expense	14,900	
		<u>\$130,120</u>	<u>\$130,120</u>

Instructions

- (a) Prepare the closing entries using page J15.
- (b) Post to Retained Earnings and No. 350 Income Summary accounts. (Use the three-column form.)
- (c) Prepare a postclosing trial balance on July 31.
- (d) Prepare an income statement and a retained earnings statement for the year ended July 31, 2008. There were no issuances of stock during the year.
- (e) Prepare a classified balance sheet on July 31.

5-10 John Clais began operations as an event consultant on January 1, 2008. The trial balance columns of the work sheet on March 31 are as follows.

Prepare work sheet, financial statements, and adjusting and closing entries.
(SO 1, 2, 3, 6)

JOHN CLAIS, INC.
Work Sheet
For the Quarter Ended March 31, 2008

Account Titles	Trial Balance	
	Dr.	Cr.
Cash	12,400	
Accounts Receivable	2,620	
Supplies	1,250	
Prepaid Insurance	2,000	
Equipment	32,000	
Notes Payable		10,000
Accounts Payable		12,350
Common Stock		20,000
Dividends	600	
Service Revenue		13,620
Salaries Expense	3,200	
Travel Expense	900	
Rent Expense	1,000	
	55,970	55,970

Other data:

1. Supplies on hand total \$500.
2. Depreciation is \$250 per quarter.
3. Interest accrued on a six-month note payable, issued January 1, \$400.
4. Insurance expires at the rate of \$180 per month.
5. Services provided but unbilled at March 31 total \$1,750.

Instructions

- (a) Enter the trial balance on a work sheet, and complete the work sheet.
- (b) Prepare an income statement and a retained earnings statement for the quarter and a classified balance sheet on March 31.
- (c) Journalize the adjusting entries from the adjustments columns of the work sheet.
- (d) Journalize the closing entries from the financial statement columns of the work sheet.

FINANCIAL REPORTING PROBLEM: PepsiCo

5-11 The financial statements of **PepsiCo, Inc.**, are presented in Appendix A at the end of this textbook.

Instructions

Answer the following questions using the Consolidated Balance Sheet and the Notes to Consolidated Financial Statements section.

- (a) What were PepsiCo's total current assets at December 30, 2006, and December 31, 2005?
- (b) Are assets that PepsiCo included under current assets listed in proper order? Explain.
- (c) How are PepsiCo's assets classified?
- (d) What are "cash equivalents"?
- (e) What were PepsiCo's total current liabilities at December 30, 2006, and December 31, 2005?



EXPLORING THE WEB

5-12 Numerous companies have established home pages on the Internet, for example, **Hyatt Corporation** (www.hyatt.com/corporate) and **Four Seasons Hotels and Resorts** (www.fourseasons.com). You may have noticed company Internet addresses in television commercials or magazine advertisements.

Instructions

Examine the home pages of any two companies, and answer the following questions:

- (a) What type of information is available?
- (b) Is any accounting-related information presented?
- (c) Would you describe the home pages as informative, promotional, or both? Why?

ETHICS CASE

5-13 As the controller of TellTale Ice Cream Company, you discover a misstatement that significantly overstated net income in the prior year's financial statements. The misleading financial statements appear in the company's annual report, which was issued to banks and other creditors less than a month ago. After much thought about the consequences of telling the president, Eddie Lieman, about this misstatement, you gather your courage to inform him. Eddie says, "Hey! What they don't know won't hurt them. But just so we set the record straight, we'll adjust this year's financial statements for last year's misstatement. We can absorb that misstatement better in this year than in last year anyway! Just don't make such a mistake again."

Instructions

- (a) Who are the stakeholders in this situation?
- (b) What are the ethical issues in this situation?
- (c) What would you do as the controller in this situation?



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

FINANCIAL STATEMENTS



THE NAVIGATOR ✓

- Understand *Concepts for Review*
- Read *Feature Story*
- Scan *Study Objectives*
- Read *Preview*
- Read text and answer *Before You Go On*
p. 184 p. 194
- Work *Demonstration Problems*
- Review *Summary of Study Objectives*
- Complete *Assignments*

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. The difference between the accrual basis and the cash basis of accounting. (Ch. 4, pp. 105–106)
- b. The major items included in a corporation's balance sheet. (Ch. 5, pp. 154–159)

F FEATURE STORY

Cash Is King

Cash flow is important, and “Cash is king” is a phrase used in almost all industries. For the most part, cash is the only difference between successful operations and closure. We all know that the income statement is important because it tells us how much money the operation has made. But, owing to the accrual basis of accounting, we record sales when the transaction occurs, not when the cash is received. Thus, while an income statement may show a profit, if the sales made are still in the form of accounts receivables, there is no cash on hand to pay bills.

We also know that the balance sheet is important because it gives us, in a snapshot, the financial picture of our business. As with the income statement, it is done on an accrual basis. The balance sheet might show \$200,000 in the cash account; but if there is also \$400,000 in accounts payable, this is not a comfortable picture.

Therefore, you will want to use a statement of cash flows to give you an exact idea of where the money comes from, how it is spent, and,

most important, how much cash you really have on hand for the business. But while the statement of cash flows is fundamental, it is also the most complex of the three statements. In November 1987, the Financial Accounting Standards Board (FASB) issued a new requirement—known as FASB 95—that all annual financial statements for fiscal years ending after July 15, 1988, must include the statement of cash flows as one of its components. This requirement has been viewed as one of the more important changes made in the accounting profession in recent years. As a result, the statement of cash flows and the topic of cash flow itself have become very important.

The cash-flow crunch experienced by the hospitality industry in recent years owing to overbuilding and a weak economy has hospitality managers placing extra importance on cash flow. Cash is not only



a prerequisite for a successful hospitality business but also a continued essential element for business survival. A few years ago, print advertising spoke to the importance of profits. Today, profits are still important, but eye-catching phrases that contain the word *cash* are more prominent in stating the health of a business.

SOURCE: A. L. DeFranco & R. S. Schmidgall, “Cash Flow Practices and Procedures in the Club Industry,” *Bottomline* 11 (8) (1996/1997): 16–20.



S STUDY OBJECTIVES

After studying this chapter, you should be able to

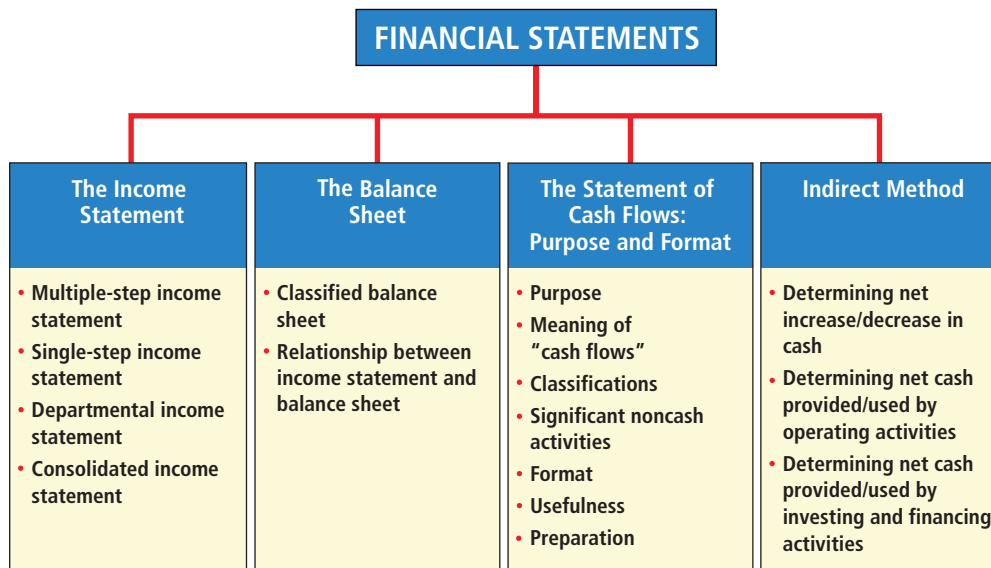
1. Distinguish between multiple-step and single-step income statements.
2. Explain the computation and importance of gross profit.
3. Distinguish between departmental and consolidated income statements.
4. Understand the relationship between the income statement and the balance sheet.
5. Indicate the primary purpose of the statement of cash flows.
6. Distinguish among operating, investing, and financing activities.
7. Prepare a statement of cash flows using the indirect method.



PREVIEW OF CHAPTER 6

As you know by now, the three financial statements—income statement, balance sheet, and statement of cash flow—are all very important to each and every hospitality manager. Why would one want to use a multiple-step income statement when a single-step one is available? How many departmental statements are there in a hotel or a theme park? Can we just use departmental statements or the consolidated one but not both? How can a hotel company spend \$400 million buying another property when it has just reported a loss of \$10 million? Where does the money come from? Answers to these and similar questions can be found in this chapter, which presents the three financial statements.

The content and organization of Chapter 6 are as follows:



THE INCOME STATEMENT

STUDY OBJECTIVE 1

Distinguish between a multiple-step and a single-step income statement.

Two forms of the income statement are used widely by merchandisers. Also, merchandisers use the classified balance sheet, introduced in Chapter 5. The use of these financial statements by merchandisers is explained below.

MULTIPLE-STEP INCOME STATEMENT

The **multiple-step income statement** is so named because it shows the steps in determining net income (or net loss). It shows two main steps: (1) Cost of goods sold is subtracted from net sales to determine gross profit. (2) Operating expenses are deducted from gross profit to determine net income. These steps relate to the company's principal operating activities. A multiple-step statement also distinguishes between *operating* and *nonoperating activities*. This distinction provides users with more information about a company's income performance. The statement also highlights intermediate components of income and shows subgroupings of expenses.

Income Statement Presentation of Sales

The multiple-step income statement begins by presenting sales revenue. As contra-revenue accounts, sales returns and allowances and sales discounts are deducted from sales to arrive at **net sales**. The sales revenues section for Sellers T-Shirts, using assumed data, is as shown in Illustration 6-1.

SELLERS T-SHIRTS Income Statement (partial)		
Sales revenues		
Sales		\$480,000
Less: Sales returns and allowances	\$12,000	
Sales discounts	8,000	20,000
Net sales		\$460,000

Illustration 6-1

Computation of net sales

This presentation discloses the key aspects of the company’s principal revenue-producing activities.

Gross Profit

Cost of goods sold is deducted from sales revenue to determine **gross profit**. Net sales revenue are used for this computation. On the basis of the sales data presented in Illustration 6-1 (net sales of \$460,000) and the cost of goods sold under the perpetual inventory system (assume \$316,000), the gross profit for Sellers T-Shirts is \$144,000, computed as shown in Illustration 6-2.

STUDY OBJECTIVE 2

Explain the computation and importance of gross profit.

Net sales	\$460,000
Cost of goods sold	<u>316,000</u>
Gross profit	\$144,000

Illustration 6-2

Computation of gross profit

A company’s gross profit also may be expressed as a percentage. This is done by dividing the amount of gross profit by net sales. For Sellers T-Shirts, the **gross profit rate** is 31.3 percent, computed as shown in Illustration 6-3.

Gross Profit	÷	Net Sales	=	Gross Profit Rate
\$144,000	÷	\$460,000	=	31.3%

Illustration 6-3

Gross profit rate formula and computation

The gross profit rate is generally considered to be more useful than the gross profit amount. The rate expresses a more meaningful (qualitative) relationship between net sales and gross profit. For example, a gross profit of \$1,000,000 may be impressive. But if it is the result of a gross profit rate of only 7 percent, it is not so impressive. The gross profit rate tells how many cents of each sales dollar go to gross profit.

Gross profit represents the **merchandising profit** of a company. It is not a measure of the overall profitability because operating expenses have not been deducted. But the amount and trend of gross profit are closely watched by management and other interested parties. They compare current gross profit with amounts reported in past periods. They also compare the company’s gross profit rate with rates of competitors and with industry averages. Such comparisons provide information about the effectiveness of a company’s purchasing function and the soundness of its pricing policies.

Operating Expenses and Net Income

Operating expenses are the third component in measuring net income for a merchandiser. As indicated earlier, these expenses are similar in merchandising and service enterprises. At Sellers T-Shirts, operating expenses were \$114,000. The firm’s net income is determined by subtracting operating expenses from gross profit. Thus net income is \$30,000, as shown in Illustration 6-4.

Illustration 6-4

Operating expenses in computing net income

Gross profit	\$144,000
Operating expenses	<u>114,000</u>
Net income	<u>\$ 30,000</u>

The net income amount is the “bottom line” of a company’s income statement.

Nonoperating Activities

Nonoperating activities consist of (1) revenues and expenses from auxiliary operations and (2) gains and losses that are unrelated to the company’s operations. The results of nonoperating activities are shown in two sections: **Other revenues and gains** and **Other expenses and losses**. For a merchandiser, these sections typically will include the items shown in Illustration 6-5.

ACCOUNTING IN ACTION *Ethics Insight*



After **Enron**, many companies were forced by increased investor criticism and regulator scrutiny to improve the clarity of their financial disclosures. For example, IBM announced that it would begin providing more detail regarding its “Other gains and losses.” It had previously included these items in its selling, general, and administrative expenses, with little disclosure.

Disclosing other gains and losses in a separate line item on the income statement won’t have any effect on bottom-line income. However, analysts complained that burying these details in the selling, general, and administrative expense line reduced their ability to fully understand how well IBM was performing. For example, previously, if IBM sold off one of its buildings at a gain, it would include this gain in the selling, general, and administrative expense line item, thus reducing that expense. This made it appear that the company had done a better job of controlling operating expenses than it actually had. Other companies recently announcing changes to increase the informativeness of their income statements included **PepsiCo**, **Krispy Kreme Doughnuts**, and **General Electric**.

Why have investors and analysts demanded more accuracy in isolating “Other gains and losses” from operating items?

Nonoperating Activities	
Other revenues and gains	Other expenses and losses
Interest revenue from notes receivable and marketable securities	Interest expense on notes and loans payable
Dividend revenue from investments in capital stock	Casualty losses from recurring causes such as vandalism and accidents
Rent revenue from subleasing a portion of the store	Loss from the sale or abandonment of property, plant, and equipment
Gain from the sale of property, plant, and equipment	Loss from strikes by employees and suppliers

Illustration 6-5
Items reported in nonoperating sections

The nonoperating activities are reported in the income statement immediately after the company's primary operating activities. These sections are shown in Illustration 6-6 using assumed data for Sellers T-Shirts.

SELLERS T-SHIRTS		
Income Statement		
For the Year Ended December 31, 2008		
Calculation of gross profit	Sales revenues	
	Sales	\$480,000
	Less: Sales returns and allowances	\$12,000
	Sales discounts	8,000
	Net sales	460,000
	Cost of goods sold	316,000
	Gross profit	144,000
Calculation of income from operations	Operating expenses	
	Selling expenses	
	Store salaries expense	45,000
	Advertising expense	16,000
	Depreciation expense—store equipment	8,000
	Freight-out	7,000
	Total selling expenses	76,000
	Administrative expenses	
	Salaries expense	19,000
	Utilities expense	17,000
Insurance expense	2,000	
Total administrative expenses	38,000	
Total operating expenses	114,000	
	Income from operations	30,000
Results of nonoperating activities	Other revenues and gains	
	Interest revenue	3,000
	Gain on sale of equipment	600
		3,600
	Other expenses and losses	
	Interest expense	1,800
	Casualty loss from vandalism	200
	2,000	
		1,600
	Net income	\$ 31,600

Illustration 6-6
Multiple-step income statement—nonoperating sections and subgroupings of operating expenses

HELPFUL HINT

Operating income relates to the sale of primary goods in the ordinary course of business.

ETHICS NOTE

At the end of a celebratory lunch, the employees of a sales department each gave the manager \$10, and he paid the bill with his charge card. During the next week you notice that the manager reported the full amount of the lunch bill on his expense report (and requested reimbursement). When this question was posed to the CEO of Intel, he suggested that an appropriate action would be to report the problem anonymously to the internal audit staff for investigation. What would you do? Does it make a difference if the company is large or small?

When the two nonoperating sections are included, the label **Income from operations** (or Operating income) precedes them. It clearly identifies the results of the company's normal operations. Income from operations is determined by subtracting cost of goods sold and operating expenses from net sales.

In the nonoperating activities sections, items generally are reported at the net amount. Thus, if a company received a \$2,500 insurance settlement on vandalism losses of \$2,700, the loss is reported at \$200. Note, too, that the results of the two nonoperating sections are netted. The difference is added to or subtracted from income from operations to determine net income. It is not uncommon for companies to combine these two nonoperating sections into a single "Other revenues and expenses" section.

Subgrouping of Operating Expenses

In larger companies, operating expenses are often subdivided into selling expenses and administrative expenses, as illustrated in Illustration 6-6. **Selling expenses** are those associated with making sales. They include expenses for sales promotion as well as expenses of completing the sale, such as delivery and shipping. **Administrative expenses** (sometimes called *general expenses*) relate to general operating activities, such as personnel management, accounting, and security.

When subgroupings are made, some expenses may have to be prorated (e.g., 70 percent to selling and 30 percent to administrative expenses). For example, if a store building is used for both selling and general functions, building expenses such as depreciation, utilities, and property taxes will need to be allocated.

Any reasonable classification of expenses that serves to inform those who use the statement is satisfactory. The tendency in statements prepared for management's internal use is to present in considerable detail expense data grouped along lines of responsibility.

SINGLE-STEP INCOME STATEMENT

Another income statement format is the **single-step income statement**. The statement is so named because only one step—subtracting total expenses from total revenues—is required in determining net income (or net loss).

In a single-step statement, all data are classified under two categories: (1) Revenues and (2) Expenses. The Revenues category includes both operating revenues and other revenues and gains. The Expenses category includes cost of goods sold, operating expenses, and other expenses and losses. A condensed single-step statement for Sellers T-Shirts is shown in Illustration 6-7.

Illustration 6-7

Single-step income statement

SELLERS T-SHIRTS		
Income Statement		
For the Year Ended December 31, 2008		
Revenues		
Net sales		\$460,000
Interest revenue		3,000
Gain on sale of equipment		600
Total revenues		<u>463,600</u>
Expenses		
Cost of goods sold	\$316,000	
Selling expenses	76,000	
Administrative expenses	38,000	
Interest expense	1,800	
Casualty loss from vandalism	200	
Total expenses		<u>432,000</u>
Net income		<u>\$ 31,600</u>

There are two primary reasons for using the single-step format: (1) A company does not realize any type of profit or income until total revenues exceed total expenses, so it makes sense to divide the statement into these two categories. (2) The format is simpler and easier to read than the multiple-step format. But for homework problems, the single-step format should be used only when it is specifically requested.

DEPARTMENTAL INCOME STATEMENT

Imagine working in a theme park with different types of rides. While little kids might want to go on the bumper cars and trains, teenagers might prefer the roller coasters; others might want to take the monorail to view the entire park. Of course, these are not the only services a theme park offers. As guests, you also will visit the souvenir stores, have a snack at one of the food stands, or sit down for dinner at one of the theme restaurants.

In a hotel, a similar picture of a variety of options is depicted. Although the guests all stay in the guest rooms, some might want to have their meals in the hotel restaurant or order room service, whereas others might have their meals away from the hotel facilities. There are also services such as those at a business center, fax, and Internet access that will be used by some but not all.

So how can a hotel or a theme park decide which service is making the property the most money? Are all these services, or departments, needed? Are there departments that are money losers but are necessary for the operation of the entire property?

This is the reason why *departmental income statements* are needed. In Chapter 1 you learned the various departments of a hotel and how they all work together to provide a total experience for the guests. Each of these departments has its own departmental income statement. Although each department provides a different service, each departmental income statement has the same format. For revenue-generating departments, such as rooms and food and beverage, you will have revenues and expenses, very similar to the multiple-step and the single-step income statements discussed earlier. The statements for departments such as engineering, accounting, and security show only expenses because they do not generate any revenues. For a theme park, the departments will be rides instead of rooms or arcade games instead of a business center. Illustration 6-8 presents an example of a departmental income statement.

STUDY OBJECTIVE 3

Distinguish between departmental and consolidated income statements.

DEPARTMENTAL INCOME STATEMENT	
ROOMS DEPARTMENT	
For the Month Ending April 30, 2008	
Revenues	
Gross sales	\$650,000
Less: Allowances	10,500
Net sales	639,500
Expenses	
Salaries and wages	95,240
Benefits	28,500
Linen	12,340
Guests supplies	4,800
Guests transportation	1,060
Long distance calls	367
Total expenses	(142,307)
Departmental income	<u>\$497,193</u>

Illustration 6-8

Departmental Income Statement

CONSOLIDATED INCOME STATEMENT

Once all departmental income statements are put together, added, and summarized, the company has a **consolidated income statement**. Its format is similar to the single-step and the multiple-step income statements; but rather than being headed as Rooms Department, it is named for the business (i.e., Savoy Resort). A sample consolidated income statement is presented in Illustration 6-9.

Illustration 6-9

Consolidated Income Statement

CONSOLIDATED INCOME STATEMENT	
SAVOY RESORT	
For the Month Ending June 30, 2008	
Revenues	
Rooms	\$ 854,300
Food and beverage	1,788,560
Telecommunications	38,992
Garage and valet	85,000
Salon and spa	50,000
Total Departmental Income	\$2,816,852
Expenses	
Rooms	\$ 196,489
Food and beverage	1,466,619
Telecommunications	15,597
Garage and valet	22,100
Salon and spa	16,500
Administrative and general	208,447
Human resources	126,758
Information systems	92,956
Security	30,985
Marketing	64,788
Property operations and maintenance	67,604
Utilities	112,674
Occupation costs	45,000
Interest expense	3,680
Depreciation and amortization	42,253
Total expenses	(\$2,512,451)
Gross Income	304,401
Less: Income tax	(103,496)
Net Income	\$ 200,905

CLASSIFIED BALANCE SHEET

In the balance sheet, merchandise inventory is reported as a current asset immediately below accounts receivable. Recall from Chapter 5 that items are listed under current assets in their order of liquidity. Merchandise inventory is less liquid than accounts receivable because the goods must first be sold and then collection must be made from the customer. Illustration 6-10 presents the assets section of a classified balance sheet for Sellers T-Shirts and also that of Fame Restaurant. Sellers, as was used in our illustrations, sells merchandise to hospitality companies. In the case of a restaurant, it also sells gifts and sundries to its customers. Therefore, you also may see “gift shop and sundries,” which represents the merchandise.

HELPFUL HINT

Merchandise inventory is a current asset because it is expected to be sold within one year or the operating cycle, whichever is longer.

SELLERS T-SHIRTS Balance Sheet (partial) December 31, 2008		
<u>Assets</u>		
Current assets		
Cash		\$ 9,500
Accounts receivable		16,100
Merchandise inventory		40,000
Prepaid insurance		1,800
Total current assets		<u>67,400</u>
Property, plant, and equipment		
Store equipment	\$80,000	
Less: Accumulated depreciation—store equipment	<u>24,000</u>	<u>56,000</u>
Total assets		<u><u>\$123,400</u></u>

Illustration 6-10

Assets section of a classified balance sheet (partial)

HELPFUL HINT

The \$40,000 is the cost of the inventory on hand, not its expected selling price.

FAME RESTAURANT Balance Sheet (partial) December 31, 2008		
<u>Current Assets</u>		
Cash—Petty		\$ 500
Cash—Bank		200,000
Accounts receivables	\$25,000	
Less: Allowance of doubtful accounts	<u>1,000</u>	
Net accounts receivables		24,000
Inventories—Food		40,000
Inventories—Beverage		15,800
Gift shop and sundries		2,590
Supplies		4,587
Prepaid expenses		<u>34,877</u>
Total current assets		<u><u>\$322,354</u></u>

RELATIONSHIP BETWEEN THE INCOME STATEMENT AND THE BALANCE SHEET

While you may be learning the financial statements one by one, there is a close and important relationship between all of them. Let us first examine the relationship between the income statement and the balance sheet. As you know, the income statement tells you whether you are making a profit or a loss in your hotel, restaurant, club, theme park, or cruise line for a particular period. The balance sheet, on the other hand, provides you with a list of all your assets, liabilities, and equity in your business at a point in time, normally at the end of an accounting period, summarizing the state of your business. How are they related? Illustration 6-11 portrays this relationship. Here, you will see a simplified income statement and a simplified balance sheet. You also may recall that cash is part of assets, whereas retained earnings in a corporation is the same as owner's equity in a small business. Any dollar a business makes as net income will flow from the income statement as profit and to the balance sheet as retained earnings or owner's equity. These funds flow into cash as a debit and into retained earnings as a credit. After the transaction is recorded, the

STUDY OBJECTIVE 4

Understand the relationship between the income statement and the balance sheet.

business has more cash for investment in the future to buy more assets and to generate more revenues. The cycle keeps on going.

Illustration 6-11

Interaction: Income statement and balance sheet

Income Statement	
Revenues	
–	Operating expenses
–	Gen. & admin. costs
= Operating profit	
+	Interest income/expense
+/-	Other income
–	Tax
= Net Income	

Balance Sheet	
Assets Current Long-term Other <u>Total Assets</u>	Liabilities Current Long-term Other Total Liabilities Equity Common Stock Retained Earnings Total Equity <u>Total Liabilities and Owner's Equity</u>

THE STATEMENT OF CASH FLOWS: PURPOSE AND FORMAT

STUDY OBJECTIVE 5

Indicate the primary purpose of the statement of cash flows.

The three basic financial statements we've studied so far present only fragmentary information about a company's cash flows (cash receipts and cash payments). For example, **comparative balance sheets** show the increase in property, plant, and equipment during the year. But they do not show how the additions were financed or paid for. The **income statement** shows net income. But it does not indicate the amount of cash generated by operating activities. Similarly, the **retained earnings statement** shows cash dividends declared but not the cash dividends paid during the year. None of these statements presents a detailed summary of the net change in cash as a result of operating, investing, and financing activities during the period.

PURPOSE OF THE STATEMENT OF CASH FLOWS

The primary purpose of the statement of cash flows is to provide information about an entity's cash receipts and cash payments during a period. A secondary objective is to provide information about its operating, investing, and financing activities.¹ The **statement of cash flows** reports the cash receipts, cash payments, and net change in cash resulting from operating, investing, and financing activities during a period. It does so in a format that reconciles the beginning and the ending cash balances.

¹"Statement of Cash Flows," *Statement of Financial Accounting Standards No. 95* (Stamford, CT: FASB, 1987).

Reporting the causes of changes in cash helps investors, creditors, and other interested parties understand what is happening to a company's most liquid resource—its cash. A statement of cash flows helps us understand what is happening. It provides answers to the following simple but important questions about an enterprise:

1. Where did the cash come from during the period?
2. What was the cash used for during the period?
3. What was the change in the cash balance during the period?

MEANING OF CASH FLOWS

The statement of cash flows is generally prepared using **cash and cash equivalents** as its basis. *Cash equivalents* are short-term, highly liquid investments that have two characteristics:

1. They are readily convertible to known amounts of cash.
2. They are so near their maturity that their market value is relatively insensitive to changes in interest rates.

Generally, only investments with original maturities of three months or less qualify under this definition. Examples of cash equivalents are Treasury bills, commercial paper (short-term corporate notes), and money market funds. All typically are purchased with cash that is in excess of immediate needs.

Note that since cash and cash equivalents are viewed as the same, transfers between cash and cash equivalents are not treated as cash receipts and cash payments. That is, such transfers are not reported in the statement of cash flows. The term *cash* when used in this chapter includes cash and cash equivalents.

CLASSIFICATION OF CASH FLOWS

The statement of cash flows classifies cash receipts and cash payments as operating, investing, and financing activities as follows:

1. **Operating activities** include the cash effects of transactions that create revenues and expenses. They thus enter into the determination of net income.
2. **Investing activities** include (a) acquiring and disposing of investments and productive long-lived assets and (b) lending money and collecting the loans.
3. **Financing activities** include (a) obtaining cash from issuing debt and repaying the amounts borrowed and (b) obtaining cash from stockholders and providing them with a return on their investment.

The category of operating activities is the most important because it shows the cash provided by company operations. This source of cash is generally considered to be the best measure of a company's ability to generate sufficient cash to continue as a going concern.

Illustration 6-12 lists typical cash receipts and cash payments within each of the three classifications. *Study the list carefully.* It will prove very useful in solving homework exercises and problems.

As you can see, some cash flows related to investing or financing activities are classified as operating activities. For example, receipts of investment revenue (interest and dividends) are classified as operating activities. So are payments of interest to lenders. Why are these considered operating activities? **Because these items are reported in the income statement, where results of operations are shown.**

Note the following general guidelines: (1) Operating activities involve income determination (income statement) items. (2) Investing activities involve cash flows

STUDY OBJECTIVE 6

Distinguish among operating, investing, and financing activities.

resulting from changes in investments and long-term asset items. (3) Financing activities involve cash flows resulting from changes in long-term liability and stockholders' equity items.

Illustration 6-12

Typical receipts and payments classified by business activity and shown in the statement of cash flows

HELPFUL HINT

Operating activities generally relate to changes in current assets and current liabilities. Investing activities generally relate to changes in noncurrent assets. Financing activities relate to changes in long-term liabilities and stockholders' equity accounts.

Types of Cash Inflows and Outflows

Operating activities

Cash inflows:

- From sale of goods or services
- From returns on loans (interest received) and on equity securities (dividends received)

Cash outflows:

- To suppliers for inventory
- To employees for services
- To government for taxes
- To lenders for interest
- To others for expenses

Investing activities

Cash inflows:

- From sale of property, plant, and equipment
- From sale of debt or equity securities of other entities
- From collection of principal on loans to other entities

Cash outflows:

- To purchase property, plant, and equipment
- To purchase debt or equity securities of other entities
- To make loans to other entities

Financing activities

Cash inflows:

- From sale of equity securities (company's own stock)
- From issuance of debt (bonds and notes)

Cash outflows:

- To stockholders as dividends
- To redeem long-term debt or reacquire capital stock



Operating activities



Investing activities



Financing activities

SIGNIFICANT NONCASH ACTIVITIES

Not all of a company's significant activities involve cash. Examples of significant noncash activities include the following:

- Issuance of common stock to purchase assets
- Conversion of bonds into common stock
- Issuance of debt to purchase assets
- Exchanges of plant assets

Significant financing and investing activities that do not affect cash are not reported in the body of the statement of cash flows. However, these activities are reported in either a *separate schedule* at the bottom of the statement of cash flows or in a *separate note or supplementary schedule* to the financial statements.

The reporting of these noncash activities in a separate schedule satisfies the **full disclosure principle**. In solving homework assignments, you should present significant noncash investing and financing activities in a separate schedule at the bottom of the statement of cash flows. (See lower section of Illustration 6-13 for an example.)

HELPFUL HINT

Do not include noncash investing and financing activities in the body of the statement of cash flows. Report this information in a separate schedule.

ACCOUNTING IN ACTION *Business Insight*



Net income is not the same as net cash provided by operating activities. The differences are illustrated by the following results from recent annual reports (all data are in million of dollars). Note the disparity among the companies that engaged in both the restaurant or food-service industry and the lodging industry.

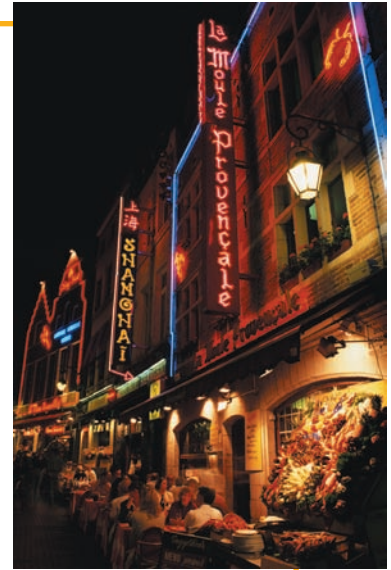
RESTAURANTS

<u>Company</u>	<u>Date</u>	<u>Net Income</u>	<u>Net Cash from Operations</u>
Brinker	6/28/2006	\$212,395,000	\$470,505,000
Darden	5/28/2006	338,194,000	717,090,000
Landry's	12/31/2005	44,815,036	151,056,018
Morton's	1/1/2006	695,000	25,708,000
OSI Restaurant Partners	12/31/2005	149,601,000	372,227,000

HOTELS

<u>Company</u>	<u>Date</u>	<u>Net Income</u>	<u>Net Cash from Operations</u>
Choice	12/31/2005	\$ 87,565,000	\$132,907,000
Hilton	12/31/2005	460,000,000	486,000,000
Intercontinental	12/31/2005	£515,000,000	£423,000,000
Marriott	12/30/2005	\$669,000,000	\$837,000,000
Starwood	12/31/2005	422,000,000	764,000,000

SOURCE: Securities and Exchange Commission, www.sec.gov.



FORMAT OF THE STATEMENT OF CASH FLOWS

The general format of the statement of cash flows is the three activities discussed previously—operating, investing, and financing—plus the significant noncash investing and financing activities. A widely used form of the statement of cash flows is shown in Illustration 6-13.

COMPANY NAME		
Statement of Cash Flows		
Period Covered		
Cash flows from operating activities		
(List of individual items)	<u>XX</u>	
Net cash provided (used) by operating activities		XXX
Cash flows from investing activities		
(List of individual inflows and outflows)	<u>XX</u>	
Net cash provided (used) by investing activities		XXX
Cash flows from financing activities		
(List of individual inflows and outflows)	<u>XX</u>	
Net cash provided (used) by financing activities		<u>XXX</u>
Net increase (decrease) in cash		XXX
Cash at beginning of period		<u>XXX</u>
Cash at end of period		<u>XXX</u>
Noncash investing and financing activities		
(List of individual noncash transactions)		<u>XXX</u>

Illustration 6-13

Format of statement of cash flows

As illustrated, the cash flows from the operating activities section always appear first. It is followed by the investing activities and the financing activities sections.

Note also that **the individual inflows and outflows from investing and financing activities are reported separately**. Thus cash outflow for the purchase of property, plant, and equipment is reported separately from the cash inflow from the sale of property, plant, and equipment. Similarly, cash inflow from the issuance of debt securities is reported separately from cash outflow for the retirement of debt. If a company did not report the inflows and outflows separately, it would obscure the investing and financing activities of the enterprise. This would make it more difficult to assess future cash flows.

The reported operating, investing, and financing activities result in net cash either *provided or used* by each activity. The amounts of net cash provided or used by each activity then are totaled. The result is the net increase (decrease) in cash for the period. This amount is then added to or subtracted from the beginning-of-period cash balance. This gives the end-of-period cash balance. Finally, any significant noncash investing and financing activities are reported in a separate schedule, usually at the bottom of the statement.

USEFULNESS OF THE STATEMENT OF CASH FLOWS

The information in a statement of cash flows should help investors, creditors, and others to assess the following aspects of the firm's financial position:

- 1. The entity's ability to generate future cash flows.** By examining relationships between items in the statement of cash flows, investors and others can make predictions of the amounts, timing, and uncertainty of future cash flows better than they can from accrual basis data.
- 2. The entity's ability to pay dividends and to meet obligations.** If a company does not have adequate cash, employees cannot be paid, debts settled, or dividends paid. Employees, creditors, and stockholders should be particularly interested in this statement because it alone shows the flows of cash in a business.
- 3. The reasons for the difference between net income and net cash provided (used) by operating activities.** Net income provides information on the success or failure of a business enterprise. However, some are critical of accrual-basis net income because it requires many estimates. As a result, the reliability of the number is often challenged. Such is not the case with cash. Many readers of the statement of cash flows want to know the reasons for the difference between net income and net cash provided by operating activities. Then they can assess for themselves the reliability of the income number.
- 4. The cash investing and financing transactions during the period.** By examining a company's investing and financing transactions, a financial statement reader can better understand why assets and liabilities changed during the period.

In summary, the information in the statement of cash flows is useful in answering the following questions:

- How did cash increase when there was a net loss for the period?
- How were the proceeds of the bond issue used?
- How was the expansion in the plant and equipment financed?
- Why were dividends not increased?
- How was the retirement of debt accomplished?
- How much money was borrowed during the year?
- Is cash flow greater or less than net income?

ETHICS NOTE

Many investors believe that "Cash is cash, and everything else is accounting." That is, they feel that cash flow is less susceptible to management manipulation than traditional accounting measures such as net income. Though we would discourage reliance on cash flows to the exclusion of accrual accounting, comparing cash from operations to net income can reveal important information about the "quality" of reported net income. Such a comparison can reveal the extent to which net income provides a good measure of actual performance.

HELPFUL HINT

Income from operations and cash flow from operating activities are different. Income from operations is based on accrual accounting; cash flow from operating activities is prepared on a cash basis.

PREPARING THE STATEMENT OF CASH FLOWS

The statement of cash flows is prepared differently from the three other basic financial statements. First, it is not prepared from an adjusted trial balance. The statement requires detailed information concerning the changes in account balances that occurred between two periods of time. An adjusted trial balance will not provide the necessary data. Second, the statement of cash flows deals with cash receipts and payments. As a result, **the accrual concept is not used in the preparation of a statement of cash flows.**

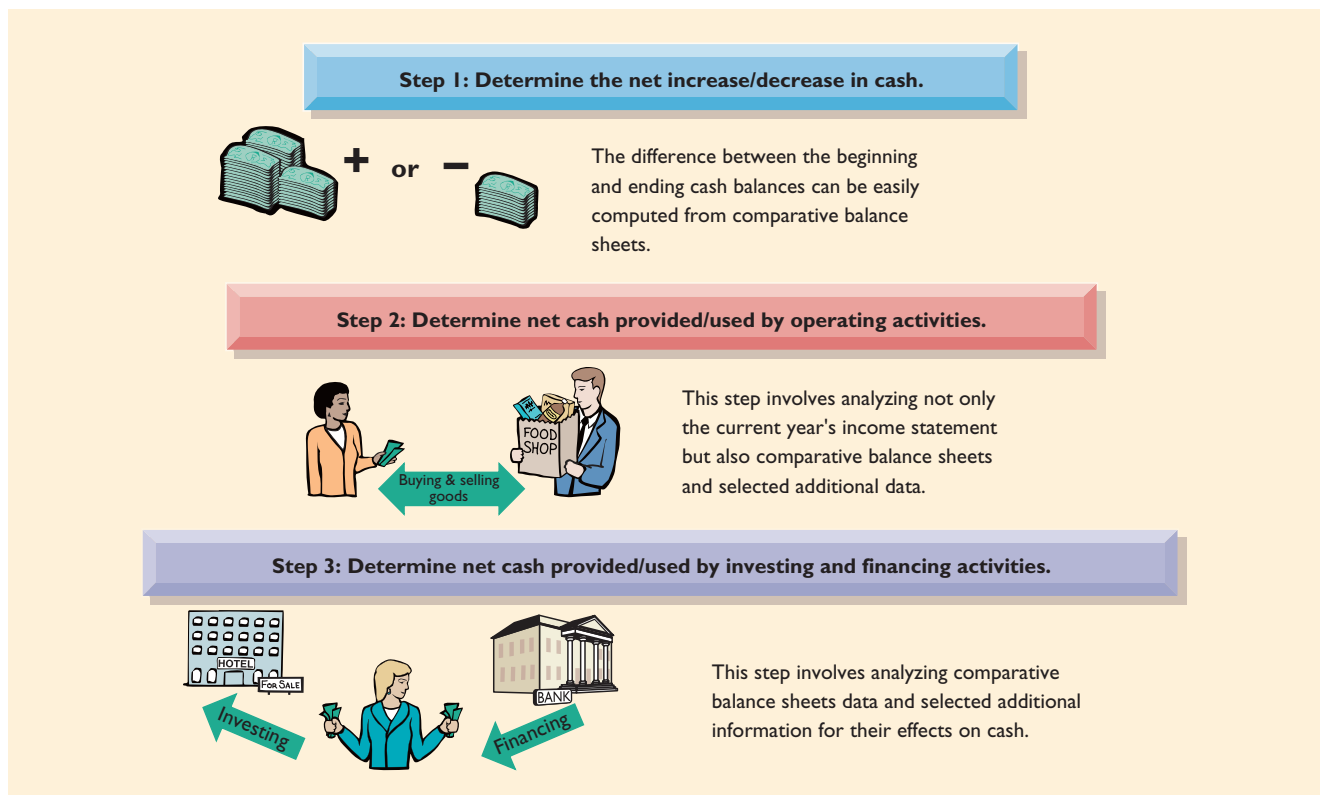
The information to prepare this statement usually comes from three sources:

1. **Comparative balance sheets.** Information in the comparative balance sheets indicates the amount of the changes in assets, liabilities, and stockholders' equities from the beginning to the end of the period.
2. **Current income statement.** Information in this statement helps determine the amount of cash provided or used by operations during the period.
3. **Additional information.** Such information includes transaction data that are needed to determine how cash was provided or used during the period.

Preparing the statement of cash flows from these data sources involves three major steps, as explained in Illustration 6-14.

Illustration 6-14

Three major steps in preparing the statement of cash flows



INDIRECT AND DIRECT METHODS

In order to perform step 2, the operating activities section must be converted from an accrual basis to a cash basis. This conversion may be done by either of two methods: (1) the indirect method or (2) the direct method. Both methods arrive

at the same total amount for “Net cash provided by operating activities.” They differ in disclosing the items that comprise the total amount.

The indirect method is used extensively in practice. Companies (98.8 percent) favor the indirect method for two reasons: (1) It is easier to prepare, and (2) it focuses on the differences between net income and net cash flow from operating activities.

A minority of companies favor the direct method. This method shows operating cash receipts and payments, and so it is more consistent with the objective of a statement of cash flows. The FASB has expressed a preference for the direct method but allows the use of either method. When the direct method is used, the net cash flow from operating activities as computed using the indirect method also must be reported in a separate schedule.

BEFORE YOU GO ON...

▶ REVIEW IT

1. What is the primary purpose of a statement of cash flows?
2. What are the major classifications of cash flows on the statement of cash flows?
3. Why is the statement of cash flows useful? What key information does it convey?
4. What are the three major steps in preparing a statement of cash flows?

▶ DO IT

During its first week of existence, Plano Submarine Sandwiches had the following transactions.

1. Issued 100,000 shares of \$5 par value common stock for \$800,000 cash.
2. Borrowed \$200,000 from State Bank, signing a five-year note bearing 8 percent interest.
3. Purchased two delivery trucks for \$170,000 cash.
4. Paid employees \$12,000 for salaries and wages.
5. Collected \$20,000 cash for services provided.

Classify each of these transactions by type of cash flow activity.

ACTION PLAN

- Identify the three types of activities used to report all cash inflows and outflows.
- Report as operating activities the cash effects of transactions that create revenues and expenses and enter into the determination of net income.
- Report as investing activities transactions that (a) acquire and dispose of investments and productive long-lived assets and (b) lend money and collect loans.
- Report as financing activities transactions that (a) obtain cash from issuing debt and repay the amounts borrowed and (b) obtain cash from stockholders and pay them dividends.

SOLUTION

1. Financing activity
2. Financing activity
3. Investing activity
4. Operating activity
5. Operating activity

INTERNATIONAL NOTE

International accounting requirements are quite similar in most respects with regard to the cash-flow statement. Some interesting exceptions: In Japan, operating and investing activities are combined. In Australia, the direct method is mandatory. In Spain, the indirect method is mandatory. Also, in a number of European and Scandinavian countries, a cash-flow statement is not required at all, although in practice most publicly traded firms provide one.



On the following pages we describe and illustrate the indirect method as it is used extensively in the hospitality industry.

INDIRECT METHOD FOR STATEMENT OF CASH FLOWS

To explain and illustrate the indirect method, we will use the transactions of the Airport Shuttle Services Company to prepare annual statements of cash flows. We will show basic transactions in the first year, with additional transactions added in the second year.

STUDY OBJECTIVE 7

Prepare a statement of cash flows using the indirect method.

FIRST YEAR OF OPERATIONS—2008

Airport Shuttle Services Company started on January 1, 2008. At that time, it issued 50,000 shares of \$1.00 par value common stock for \$50,000 cash. The company rented its office space and furniture and performed consulting services throughout the first year. The comparative balance sheets at the beginning and the end of 2008, showing changes in each account, appear in Illustration 6-15. The income statement and additional information for Airport Shuttle Services Company are shown in Illustration 6-16.

AIRPORT SHUTTLE SERVICES COMPANY Comparative Balance Sheets			
Assets	Dec. 31, 2008	Jan. 1, 2008	Change Increase/Decrease
Cash	\$34,000	\$-0-	\$34,000 Increase
Accounts receivable	30,000	-0-	30,000 Increase
Equipment	10,000	-0-	10,000 Increase
Total	<u>\$74,000</u>	<u>\$-0-</u>	
Liabilities and Stockholders' Equity			
Accounts payable	\$ 4,000	\$-0-	\$ 4,000 Increase
Common stock	50,000	-0-	50,000 Increase
Retained earnings	20,000	-0-	20,000 Increase
Total	<u>\$74,000</u>	<u>\$-0-</u>	

Illustration 6-15

Comparative balance sheets, 2008, with increases and decreases

HELPFUL HINT

Although each of the balance sheet items increased, their individual effects are not the same. Some of these increases are cash inflows, and some are cash outflows.

AIRPORT SHUTTLE SERVICES COMPANY Income Statement For the Year Ended December 31, 2008	
Revenues	\$85,000
Operating expenses	<u>40,000</u>
Income before income taxes	45,000
Income tax expense	<u>10,000</u>
Net income	<u>\$35,000</u>
Additional information:	
1. A dividend of \$15,000 was declared and paid during the year.	
2. The equipment was purchased at the end of 2008. No depreciation was taken in 2008.	

Illustration 6-16

Income statement and additional information, 2008

HELPFUL HINT

You may wish to insert immediately into the statement of cash flows the beginning and ending cash balances and the increase/decrease in cash necessitated by these balances. The net increase/decrease is the target amount. The net cash flows from the three classes of activity must equal the target amount.

Step 1: Determine the Net Increase/Decrease in Cash

To prepare a statement of cash flows, the first step is to **determine the net increase or decrease in cash**. This is a simple computation. For example, Airport Shuttle Services Company had no cash on hand at the beginning of 2008. It had \$34,000 on hand at the end of 2008. Thus the change in cash for 2008 was an increase of \$34,000.

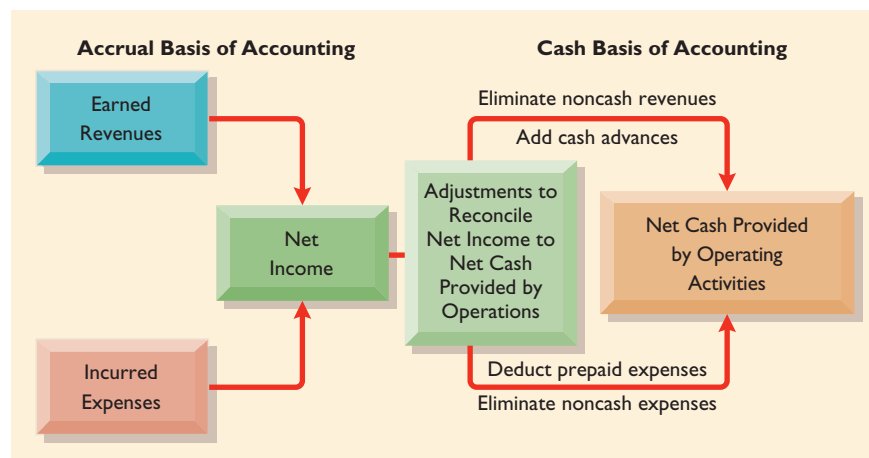
Step 2: Determine Net Cash Provided/Used by Operating Activities

To determine net cash provided by operating activities under the indirect method, **net income is adjusted for items that did not affect cash**. A useful starting point is to understand *why* net income must be converted. Under generally accepted accounting principles, most companies use the accrual basis of accounting. As you have learned, this basis requires that revenue be recorded when earned and that expenses be recorded when incurred. Earned revenues may include credit sales that have not been collected in cash. Expenses incurred may not have been paid in cash. Thus, under the accrual basis of accounting, net income is not the same as net cash provided by operating activities. Therefore, under the indirect method, net income must be adjusted to convert certain items to the cash basis.

The **indirect method** (or reconciliation method) starts with net income and converts it to net cash provided by operating activities. In other words, **the indirect method adjusts net income for items that affected reported net income but did not affect cash**. Illustration 6-17 shows this adjustment. That is, noncash charges in the income statement are added back to net income. Likewise, noncash credits are deducted. The result is net cash provided by operating activities.

Illustration 6-17

Net income versus net cash provided by operating activities



A useful starting point in identifying the adjustments to net income is the current asset and current liability accounts other than cash. Those accounts—receivables, payables, prepayments, and inventories—should be analyzed for their effects on cash.

INCREASE IN ACCOUNTS RECEIVABLE. When accounts receivable increase during the year, revenues on an accrual basis are higher than revenues on a cash basis. In other words, operations of the period led to revenues, *but not all these revenues resulted in an increase in cash*. Some of the revenues resulted in an increase in accounts receivable.

Illustration 6-18 shows that Airport Shuttle Services Company had \$85,000 in revenues, but it collected only \$55,000 in cash. To convert net income to net cash provided by operating activities, the increase of \$30,000 in accounts receivable must be deducted from net income.

Accounts Receivable		
1/1/08	Balance	-0-
	Revenues	85,000
<hr/>		
12/31/08	Balance	30,000

Illustration 6-18

Analysis of accounts receivable

INCREASE IN ACCOUNTS PAYABLE. In the first year, operating expenses incurred on account were credited to Accounts Payable. When accounts payable increase during the year, operating expenses on an accrual basis are higher than they are on a cash basis. For Airport Shuttle Services, operating expenses reported in the income statement were \$40,000. But since accounts payable increased \$4,000, only \$36,000 (\$40,000 – \$4,000) of the expenses were paid in cash. To adjust net income to net cash provided by operating activities, the increase of \$4,000 in accounts payable must be added to net income. A T-account analysis indicates that payments to creditors are less than operating expenses (Illustration 6-19).

Accounts Payable			
	Payments to creditors	36,000	
1/1/08	Balance		-0-
	Operating expenses		40,000
<hr/>			
12/31/08	Balance		4,000

Illustration 6-19

Analysis of accounts payable

For Airport Shuttle Services, the changes in accounts receivable and accounts payable were the only changes in current asset and current liability accounts. This means that any other revenues or expenses reported in the income statement were received or paid in cash. Thus the income tax expense of \$10,000 was paid in cash, and no adjustment of net income is necessary.

The operating activities section of the statement of cash flows for Airport Shuttle Services Company is shown in Illustration 6-20.

AIRPORT SHUTTLE SERVICES COMPANY Statement of Cash Flows—Indirect Method (partial) For the Year Ended December 31, 2008		
Cash flows from operating activities		
Net income		\$35,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Increase in accounts receivable	\$ (30,000)	
Increase in accounts payable	4,000	(26,000)
Net cash provided by operating activities		\$ 9,000

Illustration 6-20

Presentation of net cash provided by operating activities, 2008—indirect method

Step 3: Determine Net Cash Provided/Used by Investing and Financing Activities

The third and final step in preparing the statement of cash flows begins with a study of the balance sheet. We look at it to determine changes in noncurrent accounts. The change in each noncurrent account is then analyzed to determine the effect, if any, the change had on cash.

In Airport Shuttle Services Company, the three noncurrent accounts are Equipment, Common Stock, and Retained Earnings. All three have increased during the year. What caused these increases? No transaction data are given in the balance sheet for the increases in Equipment of \$10,000 and Common Stock of \$50,000. In solving your homework, you should assume that any unexplained differences in noncurrent accounts involve *cash*. Thus the increase in Equipment is assumed to be a purchase of equipment for \$10,000 cash. This purchase of equipment is reported as a cash outflow in the investing activities section of the statement of cash flows. The increase in Common Stock is assumed to result from the issuance of common stock for \$50,000 cash. The issuance of common stock is reported as an inflow of cash in the financing activities section.

What caused the net increase of \$20,000 in the Retained Earnings account? First, net income increased retained earnings by \$35,000. Second, the additional information provided below the income statement in Illustration 6-16 indicates that a cash dividend of \$15,000 was declared and paid.

This analysis also can be made directly from the Retained Earnings account in the ledger of Airport Shuttle Services Company, as shown in Illustration 6-21.

Illustration 6-21

Analysis of retained earnings

Retained Earnings					
12/31/08	Cash dividend	15,000	1/1/08	Balance	–0–
				Net Income	35,000
			12/31/08	Balance	20,000

The \$20,000 increase in Retained Earnings in 2008 is a *net* change. When a net change in a noncurrent balance sheet account has occurred during the year, it generally is necessary to report the individual items that cause the net change. Therefore, the \$35,000 increase owing to net income is reported in the operating activities section. The cash dividend paid is reported in the financing activities section.

Statement of Cash Flows—2008

We now can prepare the statement of cash flows. The statement starts with the operating activities, followed by the investing activities, and then the financing activities. The 2008 statement of cash flows for Airport Shuttle Services is shown in Illustration 6-22.

Airport Shuttle Services' statement of cash flows for 2008 shows the following: Operating activities *provided* \$9,000 cash, investing activities *used* \$10,000 cash, and financing activities *provided* \$35,000 cash. The increase in cash of \$34,000 reported in the statement of cash flows agrees with the increase of \$34,000 shown as the change in the cash account in the comparative balance sheets.

AIRPORT SHUTTLE SERVICES COMPANY Statement of Cash Flows—Indirect Method For the Year Ended December 31, 2008		
Cash flows from operating activities		
Net income		\$35,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Increase in accounts receivable	\$(30,000)	
Increase in accounts payable	4,000	(26,000)
Net cash provided by operating activities		9,000
Cash flows from investing activities		
Purchase of equipment	(10,000)	
Net cash used by investing activities		(10,000)
Cash flows from financing activities		
Issuance of common stock	50,000	
Payment of cash dividends	(15,000)	
Net cash provided by financing activities		35,000
Net increase in cash		34,000
Cash at beginning of period		-0-
Cash at end of period		<u>\$34,000</u>

Illustration 6-22

Statement of cash flows, 2008—indirect method

SECOND YEAR OF OPERATIONS—2009

Illustrations 6-23 and 6-24 present information related to the second year of operations for Airport Shuttle Services Company.

AIRPORT SHUTTLE SERVICES COMPANY Comparative Balance Sheets December 31			
<u>Assets</u>	<u>2009</u>	<u>2008</u>	<u>Change</u> <u>Increase/Decrease</u>
Cash	\$ 56,000	\$34,000	\$ 22,000 Increase
Accounts receivable	20,000	30,000	10,000 Decrease
Prepaid expenses	4,000	-0-	4,000 Increase
Land	130,000	-0-	130,000 Increase
Building	160,000	-0-	160,000 Increase
Accumulated depreciation—building	(11,000)	-0-	11,000 Increase
Equipment	27,000	10,000	17,000 Increase
Accumulated depreciation—equipment	(3,000)	-0-	3,000 Increase
Total	<u>\$383,000</u>	<u>\$74,000</u>	
<u>Liabilities and Stockholders' Equity</u>			
Accounts payable	\$ 59,000	\$ 4,000	\$ 55,000 Increase
Bonds payable	130,000	-0-	130,000 Increase
Common stock	50,000	50,000	-0-
Retained earnings	144,000	20,000	124,000 Increase
Total	<u>\$383,000</u>	<u>\$74,000</u>	

Illustration 6-23

Comparative balance sheets, 2009, with increases and decreases

Illustration 6-24

Income statement and additional information, 2009

AIRPORT SHUTTLE SERVICES COMPANY		
Income Statement		
For the Year Ended December 31, 2009		
Revenues		\$507,000
Operating expenses (excluding depreciation)	\$261,000	
Depreciation expense	15,000	
Loss on sale of equipment	3,000	279,000
Income from operations		228,000
Income tax expense		89,000
Net income		<u>\$139,000</u>
Additional information:		
1. In 2009, the company declared and paid a \$15,000 cash dividend.		
2. The company obtained land through the issuance of \$130,000 of long-term bonds.		
3. A building costing \$160,000 was purchased for cash. Equipment costing \$25,000 was also purchased for cash.		
4. During 2009, the company sold equipment with a book value of \$7,000 (cost \$8,000, less accumulated depreciation \$1,000) for \$4,000 cash.		

Step 1: Determine the Net Increase/Decrease in Cash

To prepare a statement of cash flows from this information, the first step is to determine the net increase or decrease in cash. As indicated from the information presented, cash increased \$22,000 (\$56,000 – \$34,000).

Step 2: Determine Net Cash Provided/Used by Operating Activities

As in step 2 in 2008, net income on an accrual basis must be adjusted to arrive at net cash provided/used by operating activities. Explanations for the adjustments to net income for Airport Shuttle Services in 2009 follow.

HELPFUL HINT

Decrease in accounts receivable indicates that cash collections were greater than sales.

Increase in accounts receivable indicates that sales were greater than cash collections.

Increase in prepaid expenses indicates that the amount paid for the prepayments exceeded the amount that was recorded as an expense.

Decrease in prepaid expenses indicates that the amount recorded as an expense exceeded the amount of cash paid for the prepayments.

Increase in accounts payable indicates that expenses incurred exceed the cash paid for expenses that period.

DECREASE IN ACCOUNTS RECEIVABLE. Accounts receivable decreases during the period because cash receipts are higher than revenues reported on the accrual basis. To adjust net income to net cash provided by operating activities, the decrease of \$10,000 in accounts receivable must be added to net income.

INCREASE IN PREPAID EXPENSES. Prepaid expenses increase during a period because cash paid for expenses is higher than expenses reported on the accrual basis. Cash payments have been made in the current period, but expenses (as charges to the income statement) have been deferred to future periods. To adjust net income to net cash provided by operating activities, the \$4,000 increase in prepaid expenses must be deducted from net income. An increase in prepaid expenses results in a decrease in cash during the period.

INCREASE IN ACCOUNTS PAYABLE. Like the increase in 2008, the 2009 increase of \$55,000 in accounts payable must be added to net income to convert to net cash provided by operating activities.

DEPRECIATION EXPENSE. During 2009, the company reported depreciation expense of \$15,000. Of this amount, \$11,000 related to the building and \$4,000 to the equipment. These two amounts were determined by analyzing the accumulated depreciation accounts in the balance sheets.

- **Increase in Accumulated Depreciation—Building.** The Accumulated Depreciation—Building account increased \$11,000. This change represents the

depreciation expense on the building for the year. **Depreciation expense is a noncash charge. So it is added back to net income** in order to arrive at net cash provided by operating activities.

- Increase in Accumulated Depreciation—Equipment.** The Accumulated Depreciation—Equipment account increased \$3,000. But this change does not represent depreciation expense for the year. The additional information at the bottom of the income statement indicates why not: This account was decreased (debited \$1,000) as a result of the sale of some equipment. Thus depreciation expense for 2009 was \$4,000 (\$3,000 + \$1,000). That amount is added to net income to determine net cash provided by operating activities. The T-account in Illustration 6-25 provides information about the changes that occurred in this account in 2009.

Accumulated Depreciation—Equipment			
Accumulated depreciation on equipment sold	1,000	1/1/09 Balance	–0–
		Depreciation expense	4,000
		12/31/09 Balance	3,000

Illustration 6-25

Analysis of accumulated depreciation—equipment

Depreciation expense on the building (\$11,000) plus depreciation expense on the equipment (\$4,000) equals the depreciation expense of \$15,000 reported in the income statement.

Other charges to expense that do not require the use of cash, such as the amortization of intangible assets and depletion expense, are treated in the same way as depreciation. Depreciation and similar noncash charges are frequently listed in the statement of cash flows as the first adjustments to net income.

LOSS ON SALE OF EQUIPMENT. In the income statement, Airport Shuttle Services Company reported a \$3,000 loss on the sale of equipment (book value \$7,000, less cash proceeds \$4,000). The loss reduced net income but *did not reduce cash*. So the loss is *added to net income* in determining net cash provided by operating activities.²

As a result of the previous adjustments, net cash provided by operating activities is \$218,000, as computed in Illustration 6-26.

AIRPORT SHUTTLE SERVICES COMPANY		
Statement of Cash Flows—Indirect Method (partial)		
For the Year Ended December 31, 2009		
Cash flows from operating activities		
Net income		\$139,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$15,000	
Loss on sale of equipment	3,000	
Decrease in accounts receivable	10,000	
Increase in prepaid expenses	(4,000)	
Increase in accounts payable	55,000	79,000
Net cash provided by operating activities		\$218,000

Illustration 6-26

Presentation of net cash provided by operating activities, 2009—indirect method

²If a gain on sale occurs, a different situation results. To allow a gain to flow through to net cash provided by operating activities would be double counting the gain—once in net income and again in the investing activities section as part of the cash proceeds from sale. As a result, a gain is deducted from net income in reporting net cash provided by operating activities.

Step 3: Determine Net Cash Provided/Used by Investing and Financing Activities

The next step involves analyzing the remaining changes in balance sheet accounts to determine net cash provided (used) by investing and financing activities.

INCREASE IN LAND. As indicated from the change in the Land account and the additional information, land of \$130,000 was purchased through the issuance of long-term bonds. The issuance of bonds payable for land has no effect on cash, but it is a significant noncash investing and financing activity that merits disclosure in a separate schedule.

INCREASE IN BUILDING. As the additional data indicate, an office building was acquired for \$160,000 cash. This is a cash outflow reported in the investing section.

INCREASE IN EQUIPMENT. The Equipment account increased \$17,000. The additional information explains that this was a net increase that resulted from two transactions: (1) a purchase of equipment for \$25,000 and (2) the sale for \$4,000 of equipment costing \$8,000. These transactions are classified as investing activities. Each transaction should be reported separately. Thus the purchase of equipment should be reported as an outflow of cash for \$25,000. The sale should be reported as an inflow of cash for \$4,000. The T-account in Illustration 6-27 shows the reasons for the change in this account during the year.

Illustration 6-27

Analysis of equipment

		Equipment	
1/1/09	Balance	10,000	
	Purchase of equipment	25,000	
12/31/09	Balance	27,000	
			Cost of equipment sold 8,000

The following entry shows the details of the equipment sale transaction:

A	=	L	+	SE
+4,000				-3,000
+1,000				
-8,000				

Cash	4,000	
Accumulated Depreciation	1,000	
Loss on Sale of Equipment	3,000	
Equipment		8,000

INCREASE IN BONDS PAYABLE. The Bonds Payable account increased \$130,000. As indicated in the additional information, land was acquired from the issuance of these bonds. This noncash transaction is reported in a separate schedule at the bottom of the statement.

INCREASE IN RETAINED EARNINGS. Retained earnings increased \$124,000 during the year. This increase can be explained by two factors: (1) Net income of \$139,000 increased retained earnings. (2) Dividends of \$15,000 decreased retained earnings. Net income is adjusted to net cash provided by operating activities in the operating activities section. **Payment of the dividends is a cash outflow that is reported as a financing activity.**

HELPFUL HINT

When stocks or bonds are issued for cash, the actual proceeds will appear in the statement of cash flows as a financing inflow (rather than the par value of the stocks or the face value of bonds).

HELPFUL HINT

It is the **payment** of dividends, not the declaration, that appears in the cash flow statement.

Statement of Cash Flows—2009

Combining the previous items, we obtain a statement of cash flows for 2009 for Airport Shuttle Services Company as presented in Illustration 6-28.

AIRPORT SHUTTLE SERVICES COMPANY Statement of Cash Flows—Indirect Method For the Year Ended December 31, 2009		
Cash flows from operating activities		
Net income		\$139,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$ 15,000	
Loss on sale of equipment	3,000	
Decrease in accounts receivable	10,000	
Increase in prepaid expenses	(4,000)	
Increase in accounts payable	55,000	79,000
Net cash provided by operating activities		218,000
Cash flows from investing activities		
Purchase of building	(160,000)	
Purchase of equipment	(25,000)	
Sale of equipment	4,000	
Net cash used by investing activities		(181,000)
Cash flows from financing activities		
Payment of cash dividends	(15,000)	
Net cash used by financing activities		(15,000)
Net increase in cash		22,000
Cash at beginning of period		34,000
Cash at end of period		\$ 56,000
Noncash investing and financing activities		
Issuance of bonds payable to purchase land		\$130,000

Illustration 6-28

Statement of cash flows, 2009—indirect method

HELPFUL HINT

Note that in the investing and financing activities sections, positive numbers indicate cash inflows (receipts), and negative numbers indicate cash outflows (payments).

Summary of Conversion to Net Cash Provided by Operating Activities—Indirect Method

As shown in the previous illustrations, the statement of cash flows prepared by the indirect method starts with net income. It then adds (or deducts) items not affecting cash to arrive at net cash provided by operating activities. The additions and deductions consist of (1) changes in specific current assets and current liabilities and (2) noncash charges reported in the income statement. A summary of the adjustments for current assets and current liabilities is provided in Illustration 6-29.

Current Assets and Current Liabilities	Adjustments to Convert Net Income to Net Cash Provided by Operating Activities	
	Add to Net Income a(n):	Deduct from Net Income a(n):
Accounts receivable	Decrease	Increase
Inventory	Decrease	Increase
Prepaid expenses	Decrease	Increase
Accounts payable	Increase	Decrease
Accrued expenses payable	Increase	Decrease

Illustration 6-29

Adjustments for current assets and current liabilities

HELPFUL HINT

1. An increase in a current asset is deducted from net income.
2. A decrease in a current asset is added to net income.
3. An increase in a current liability is added to net income.
4. A decrease in a current liability is deducted from net income.

Adjustments for the noncash charges reported in the income statement are made as shown in Illustration 6-30.

Illustration 6-30

Adjustments for noncash charges

<u>Noncash Charges</u>	<u>Adjustments to Convert Net Income to Net Cash Provided by Operating Activities</u>
Depreciation expense	Add
Patent amortization expense	Add
Depletion expense	Add
Loss on sale of asset	Add

BEFORE YOU GO ON...▶ **REVIEW IT**

1. What is the format of the operating activities section of the statement of cash flows using the indirect method?
2. Where is depreciation expense shown on a statement of cash flows using the indirect method?
3. Where are significant noncash investing and financing activities shown in a statement of cash flows? Give some examples.

▶ **DO IT**

Presented below is information related to Reynolds Gourmet Foods Company. Use it to prepare a statement of cash flows using the indirect method.

REYNOLDS GOURMET FOODS COMPANY			
Comparative Balance Sheets			
December 31			
<u>Assets</u>	<u>2009</u>	<u>2008</u>	<u>Change Increase/Decrease</u>
Cash	\$ 54,000	\$ 37,000	\$ 17,000 Increase
Accounts receivable	68,000	26,000	42,000 Increase
Inventories	54,000	–0–	54,000 Increase
Prepaid expenses	4,000	6,000	2,000 Decrease
Land	45,000	70,000	25,000 Decrease
Buildings	200,000	200,000	–0–
Accumulated depreciation—buildings	(21,000)	(11,000)	10,000 Increase
Equipment	193,000	68,000	125,000 Increase
Accumulated depreciation—equipment	(28,000)	(10,000)	18,000 Increase
Totals	<u>\$569,000</u>	<u>\$386,000</u>	
<u>Liabilities and Stockholders' Equity</u>			
Accounts payable	\$ 23,000	\$ 40,000	\$ 17,000 Decrease
Accrued expenses payable	10,000	–0–	10,000 Increase
Bonds payable	110,000	150,000	40,000 Decrease
Common stock (\$1 par)	220,000	60,000	160,000 Increase
Retained earnings	206,000	136,000	70,000 Increase
Totals	<u>\$569,000</u>	<u>\$386,000</u>	

REYNOLDS GOURMET FOODS COMPANY		
Income Statement		
For the Year Ended December 31, 2009		
Revenues		\$890,000
Cost of goods sold	\$465,000	
Operating expenses	221,000	
Interest expense	12,000	
Loss on sale of equipment	2,000	
		<u>700,000</u>

Income from operations	190,000
Income tax expense	<u>65,000</u>
Net income	<u>\$125,000</u>

Additional information:

- Operating expenses include depreciation expense of \$33,000 and charges from prepaid expenses of \$2,000.
- Land was sold at its book value for cash.
- Cash dividends of \$55,000 were declared and paid in 2009.
- Interest expense of \$12,000 was paid in cash.
- Equipment with a cost of \$166,000 was purchased for cash. Equipment with a cost of \$41,000 and a book value of \$36,000 was sold for \$34,000 cash.
- Bonds of \$10,000 were redeemed at their book value for cash. Bonds of \$30,000 were converted into common stock.
- Common stock (\$1 par) of \$130,000 was issued for cash.
- Accounts payable pertain to merchandise suppliers.

ACTION PLAN

- Determine the net increase/decrease in cash.
- Determine net cash provided/used by operating activities by adjusting net income for items that did not affect cash.
- Determine net cash provided/used by investing activities.
- Determine net cash provided/used by financing activities.

SOLUTION

REYNOLDS GOURMET FOODS COMPANY Statement of Cash Flows—Indirect Method For the Year Ended December 31, 2009		
Cash flows from operating activities		
Net income		\$125,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$ 33,000	
Increase in accounts receivable	(42,000)	
Increase in inventories	(54,000)	
Decrease in prepaid expenses	2,000	
Decrease in accounts payable	(17,000)	
Increase in accrued expenses payable	10,000	
Loss on sale of equipment	<u>2,000</u>	<u>(66,000)</u>
Net cash provided by operating activities		59,000
Cash flows from investing activities		
Sale of land	25,000	
Sale of equipment	34,000	
Purchase of equipment	<u>(166,000)</u>	
Net cash used by investing activities		(107,000)
Cash flows from financing activities		
Redemption of bonds	(10,000)	
Sale of common stock	130,000	
Payment of dividends	<u>(55,000)</u>	
Net cash provided by financing activities		<u>65,000</u>
Net increase in cash		17,000
Cash at beginning of period		<u>37,000</u>
Cash at end of period		<u>\$ 54,000</u>
Noncash investing and financing activities		
Conversion of bonds into common stock		<u>\$ 30,000</u>

HELPFUL HINT

- Determine net cash provided/used by operating activities, recognizing that operating activities generally relate to changes in current assets and current liabilities.
- Determine net cash provided/used by investing activities, recognizing that investing activities generally relate to changes in noncurrent assets.
- Determine net cash provided/used by financing activities, recognizing that financing activities generally relate to changes in long-term liabilities and stockholders' equity accounts.

DEMONSTRATION PROBLEM 1

The income statement for the year ended December 31, 2008, for Tuscany Bay Resort contains the following condensed information:

TUSCANY BAY RESORT Income Statement

Revenues		\$6,583,000
Operating expenses (excluding depreciation)	\$4,920,000	
Depreciation expense	<u>880,000</u>	<u>5,800,000</u>
Income before income taxes		783,000
Income tax expense		<u>353,000</u>
Net income		<u>\$ 430,000</u>

Included in operating expenses is a \$24,000 loss resulting from the sale of guest room furniture for \$270,000 cash. Guest room furniture was purchased at a cost of \$750,000.

The following balances are reported on Tuscany Bay's comparative balance sheets at December 31.

TUSCANY BAY RESORT Comparative Balance Sheets (partial)

	<u>2008</u>	<u>2007</u>
Cash	\$672,000	\$130,000
Accounts receivable	775,000	610,000
Inventories	834,000	867,000
Accounts payable	521,000	501,000

Income tax expense of \$353,000 represents the amount paid in 2008. Dividends declared and paid in 2008 totaled \$200,000.

Instructions

Prepare the statement of cash flows using the indirect method.

SOLUTION TO DEMONSTRATION PROBLEM 1

TUSCANY BAY RESORT Statement of Cash Flows—Indirect Method For the Year Ended December 31, 2008

Cash flows from operating activities		
Net income		\$ 430,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation expense	\$ 880,000	
Loss on sale of guest room furniture	24,000	
Increase in accounts receivable	(165,000)	
Decrease in inventories	33,000	
Increase in accounts payable	<u>20,000</u>	<u>792,000</u>
Net cash provided by operating activities		1,222,000
Cash flows from investing activities		
Sale of guest room furniture	270,000	
Purchase of guest room furniture	<u>(750,000)</u>	
Net cash used by investing activities		(480,000)
Cash flows from financing activities		
Payment of cash dividends		<u>(200,000)</u>
Net increase in cash		542,000
Cash at beginning of period		<u>130,000</u>
Cash at end of period		<u>\$ 672,000</u>

DEMONSTRATION PROBLEM 2

The adjusted trial balance columns of the work sheet for the year ended December 31, 2008, for Tournament Souvenir and Pro Shop are as follows:

Debit		Credit	
Cash	14,500	Accumulated Depreciation	18,000
Accounts Receivable	11,100	Notes Payable	25,000
Merchandise Inventory	29,000	Accounts Payable	10,600
Prepaid Insurance	2,500	Common Stock	50,000
Store Equipment	95,000	Retained Earnings	31,000
Dividends	12,000	Sales	536,800
Sales Returns and Allowances	6,700	Interest Revenue	2,500
Sales Discounts	5,000		<u>673,900</u>
Cost of Goods Sold	363,400		
Freight-out	7,600		
Advertising Expense	12,000		
Store Salaries Expense	56,000		
Utilities Expense	18,000		
Rent Expense	24,000		
Depreciation Expense	9,000		
Insurance Expense	4,500		
Interest Expense	3,600		
	<u>673,900</u>		

Instructions

Prepare an income statement assuming Tournament Souvenir and Pro Shop does not use subgroupings for operating expenses.

SOLUTION TO DEMONSTRATION PROBLEM 2

TOURNAMENT SOUVENIR AND PRO SHOP Income Statement For the Year Ended December 31, 2008

Sales revenues		
Sales		\$536,800
Less: Sales returns and allowances	\$6,700	
Sales discounts	<u>5,000</u>	<u>11,700</u>
Net sales		525,100
Cost of goods sold		<u>363,400</u>
Gross profit		161,700
Operating expenses		
Store salaries expense	56,000	
Rent expense	24,000	
Utilities expense	18,000	
Advertising expense	12,000	
Depreciation expense	9,000	
Freight-out	7,600	
Insurance expense	<u>4,500</u>	
Total operating expenses		<u>131,100</u>
Income from operations		30,600
Other revenues and gains		
Interest revenue	2,500	
Other expenses and losses		
Interest expense	<u>3,600</u>	<u>1,100</u>
Net income		<u>\$ 29,500</u>

ACTION PLAN

- Remember that the key components of the income statement are net sales, cost of goods sold, gross profit, total operating expenses, and net income (loss). Report these components in the right-hand column of the income statement.
- Put nonoperating items after income from operations.

SUMMARY OF STUDY OBJECTIVES

1. Distinguish between multiple-step and single-step income statements. A multiple-step income statement shows numerous steps in determining net income, including nonoperating activities sections. In a single-step income statement, all data are classified under two categories (revenues or expenses), and net income is determined in one step.

2. Explain the computation and importance of gross profit. Gross profit is computed by subtracting cost of goods sold from net sales. Gross profit represents the merchandising profit of a company. The amount and trend of gross profit are closely watched by management and other interested parties.

3. Distinguish between departmental and consolidated income statements. A consolidated income statement is a summary statement of all the departmental income statements of a property.

4. Understand the relationship between the income statement and the balance sheet. Any dollar a business makes as net income will flow from the income statement as profit to the balance sheet to add into the retained earnings or equity account. These funds flow into cash as a debit and retained earnings or equity as a credit. The business will then have more cash for investment in the future to buy more assets and to generate more revenues. The cycle keeps on going.

5. Indicate the primary purpose of the statement of cash flows. The primary purpose of the statement of cash flows is to provide information about the cash receipts and cash payments during a period. A secondary objective is to provide information about the operating, investing, and financing activities during the period.

6. Distinguish among operating, investing, and financing activities. Operating activities include the cash effects of transactions that enter into the determination of net income. Investing activities involve cash flows resulting from changes in investments and long-term asset items. Financing activities involve cash flows resulting from changes in long-term liability and stockholders' equity items.

7. Prepare a statement of cash flows using the indirect method. The preparation of a statement of cash flows involves three major steps: (1) Determine the net increase or decrease in cash. (2) Determine net cash provided (used) by operating activities. (3) Determine net cash flows provided (used) by investing and financing activities. Under the indirect method, accrual basis net income is adjusted to net cash provided by operating activities.



GLOSSARY

Administrative expenses Expenses relating to general operating activities such as personnel management, accounting, and store security (p. 174).

Consolidated income statement A combined income statement of all departmental income statements of an entity (p. 176).

Financing activities Cash flow activities that include (a) obtaining cash from issuing debt and repaying the amounts borrowed and (b) obtaining cash from stockholders and providing them with a return on their investment (p. 179).

Income from operations Income from a company's principal operating activity; determined by subtracting cost of goods sold and operating expenses from net sales (p. 174).

Indirect method A method of preparing a statement of cash flows in which net income is adjusted for items that did not affect cash, to determine net cash provided by operating activities (p. 186).

Investing activities Cash flow activities that include (a) acquiring and disposing of investments and productive long-lived assets and (b) lending money and collecting on those loans (p. 179).

Multiple-step income statement An income statement that shows numerous steps in determining net income (or net loss) (p. 170).

Net sales Sales less sales returns and allowances and sales discounts (p. 171).

Nonoperating activities Revenues and expenses from auxiliary operations and gains and losses unrelated to the company's operations (p. 172).

Operating activities Cash flow activities that include the cash effects of transactions that create revenues and expenses and thus enter into the determination of net income (p. 179).

Other expenses and losses A nonoperating activities section of the income statement that shows expenses from auxiliary operations and losses unrelated to the company's operations (p. 172).

Other revenues and gains A nonoperating activities section of the income statement that shows revenues from auxiliary operations and gains unrelated to the company's operations (p. 172).

Selling expenses Expenses associated with making sales (p. 174).

Single-step income statement An income statement that shows only one step in determining net income (or net loss) (p. 174).

Statement of cash flows A financial statement that provides information about the cash receipts and cash payments of an entity during a period, classified as operating, investing, and financing activities, in a format that reconciles the beginning and ending cash balances (p. 178).

EXERCISES

6-1 Explain where each of the following items would appear (1) on a multiple-step income statement and (2) on a single-step income statement: **(a)** gain on sale of equipment, **(b)** casualty loss from vandalism, and **(c)** cost of goods sold.

Contrast presentation in multiple-step and single-step income statements.

(SO 1)

6-2 Presented below are the components in Clearwater Seafood's income statement. Determine the missing amounts.

Compute missing amounts in determining net income.

(SO 2)

	<u>Sales</u>	<u>Cost of Goods Sold</u>	<u>Gross Profit</u>	<u>Operating Expenses</u>	<u>Net Income</u>
(a)	\$75,000	?	\$28,600	?	\$10,800
(b)	\$108,000	\$70,000	?	?	\$29,500
(c)	?	\$71,900	\$99,600	\$39,500	?

6-3 In its income statement for the year ended December 31, 2008, Bach Resort & Spa reported the following condensed data.

Prepare multiple-step and single-step income statements.

(SO 1)

Administrative expenses	\$ 435,000	Selling expenses	\$ 490,000
Cost of goods sold	1,289,000	Loss on sale of equipment	10,000
Interest expense	70,000	Net sales	2,342,000
Interest revenue	28,000		

Instructions

(a) Prepare a multiple-step income statement.

(b) Prepare a single-step income statement.

6-4 The T-accounts for Equipment and the related Accumulated Depreciation for Stone Kitchen Equipment Company at the end of 2008 are as follows.

Determine cash received in sale of equipment.

(SO 6, 7)

<u>Equipment</u>				<u>Accumulated Depreciation</u>	
Beg. bal.	80,000	Disposals	22,000	Disposals	5,500
Acquisitions	41,600			Beg. bal.	44,500
				Depr.	12,000
End. bal.	99,600			End. bal.	51,000

Stone Kitchen Equipment Company's income statement reported a loss on the sale of equipment of \$4,900. What amount was reported on the statement of cash flows as "cash flow from sale of equipment"?

6-5 Blair Restaurant Supply reported net income of \$2.5 million in 2008. Depreciation for the year was \$180,000, accounts receivable decreased \$350,000, and accounts payable decreased \$310,000. Compute net cash provided by operating activities using the indirect method.

Compute cash provided by operating activities—indirect method.

(SO 7)

6-6 The net income for Karen Gourmet Foods for 2008 was \$280,000. For 2008, depreciation on plant assets was \$60,000, and the company incurred a loss on sale of plant assets of \$10,000. Compute net cash provided by operating activities under the indirect method.

Compute cash provided by operating activities—indirect method.

(SO 7)

6-7 Each of the following items must be considered in preparing a statement of cash flows for Janeway Travel for the year ended December 31, 2008. For each item, state how it should be shown in the statement of cash flows for 2008.

Indicate statement presentation of selected transactions.

(SO 6)

(a) Issued bonds for \$300,000 cash.

(b) Purchased equipment for \$140,000 cash.

(c) Sold land costing \$20,000 for \$20,000 cash.

(d) Declared and paid a \$50,000 cash dividend.

6-8 The comparative balance sheets for Mogilny Tours show the following changes in noncash current asset accounts: Accounts receivable decrease \$75,000; prepaid expenses increase \$16,000;

Compute net cash provided by operating activities using indirect method.

(SO 6)

and inventories increase \$30,000. Compute net cash provided by operating activities using the indirect method, assuming that net income is \$250,000.

Classify items by activities.
(SO 6)

6-9 Classify the following items as an operating, an investing, or a financing activity. Assume all items involve cash unless there is information to the contrary.

- (a) Purchase of equipment.
- (b) Sale of building.
- (c) Redemption of bonds.
- (d) Depreciation.
- (e) Payment of dividends.
- (f) Issuance of capital stock.

Classify transactions by type of activity.
(SO 6)

6-10 Antoine Winery had the following transactions during 2008:

1. Issued \$50,000 par value common stock for cash.
2. Collected \$11,000 of accounts receivable.
3. Declared and paid a cash dividend of \$25,000.
4. Sold a long-term investment with a cost of \$15,000 for \$15,000 cash.
5. Issued \$200,000 par value common stock upon conversion of bonds having a face value of \$200,000.
6. Paid \$14,000 on accounts payable.
7. Purchased a machine for \$30,000, giving a long-term note in exchange.

Instructions

Analyze the seven transactions, and indicate whether each transaction resulted in a cash flow from (a) operating activities, (b) investing activities, (c) financing activities, or (d) noncash investing and financing activities.

Prepare the operating activities section—indirect method.
(SO 6)

6-11 Duggan Sports Bar reported net income of \$195,000 for 2008. Duggan also reported depreciation expense of \$25,000, and a loss of \$5,000 on the sale of equipment. The comparative balance sheets show an increase in accounts receivable of \$15,000 for the year, an \$8,000 increase in accounts payable, and a decrease in prepaid expenses of \$7,000.

Instructions

Prepare the operating activities section of the statement of cash flows for 2008 using the indirect method.

Prepare the operating activities section—indirect method.
(SO 3)

6-12 The current sections of Blues Traveler Co. balance sheets at December 31, 2007 and 2008, are presented below.

BLUES TRAVELER CO.
Comparative Balance Sheets (partial)
December 31

	2008	2007
Current assets		
Cash	\$105,000	\$ 99,000
Accounts receivable	110,000	85,000
Inventory	171,000	186,000
Prepaid expenses	27,000	32,000
Total current assets	\$413,000	\$402,000
Current liabilities		
Accrued expenses payable	\$ 15,000	\$ 5,000
Accounts payable	88,000	92,000
Total current liabilities	\$103,000	\$ 97,000

Blues Traveler's net income for 2008 was \$163,000. Depreciation expense was \$30,000.

Instructions

Prepare the operating activities section of Blues Traveler's statement of cash flows for the year ended December 31, 2008, using the indirect method.

FINANCIAL REPORTING PROBLEM: PepsiCo

6-13 The financial statements of **PepsiCo** are presented in Appendix A at the end of this textbook.

Instructions

Answer the following questions using the Consolidated Statement of Income:

- (a) What was the percentage change in (1) sales and (2) net income from 2004 to 2005 and from 2005 to 2006?
- (b) What was the company's gross profit rate in 2004, 2005, and 2006?
- (c) What was the company's percentage of net income to net sales in 2004, 2005, and 2006? Comment on any trend in this percentage.

**FINANCIAL REPORTING PROBLEM: PepsiCo**

6-14 Refer to the financial statements of **PepsiCo**, presented in Appendix A, and answer the following questions:

- (a) What was the amount of net cash provided by operating activities for the year ended December 30, 2006? For the year ended December 31, 2005?
- (b) What was the amount of increase or decrease in cash and cash equivalents for the year ended December 30, 2006? For the year ended December 31, 2005?
- (c) Which method of computing net cash provided by operating activities does **PepsiCo** use?
- (d) From your analysis of the 2006 statement of cash flows, did the change in accounts and notes receivable require or provide cash? Did the change in inventories require or provide cash? Did the change in accounts payable and other current liabilities require or provide cash?
- (e) What was the net outflow or inflow of cash from investing activities for the year ended December 30, 2006?
- (f) What was the amount of interest paid in the year ended December 30, 2006? What was the amount of income taxes paid in the year ended December 30, 2006? (See Note 14.)

**EXPLORING THE WEB**

6-15 Purpose: Learn about the **Securities and Exchange Commission (SEC)**.

Address: www.sec.gov/index.html

Step

From the SEC homepage, choose **About the SEC**.

Instructions

Answer the following questions:

- (a) How many enforcement actions does the SEC take each year against securities law violators? What are typical infractions?
- (b) After the Great Depression, Congress passed the Securities Acts of 1933 and 1934 to improve investor confidence in the markets. On which two commonsense notions are these laws based?
- (c) Who was the president of the United States at the time of the creation of the SEC? Who was the first SEC chairperson?

ETHICS CASE

6-16 Puebla Corporation is a medium-sized hotel corporation. It has ten stockholders, who have been paid a total of \$1 million in cash dividends for eight consecutive years. The policy of the board of directors requires that in order for this dividend to be declared, net cash provided by operating activities as reported in Puebla's current year's statement of cash flows must be in excess of \$1 million. President and CEO Phil Monat's job is secure so long as he produces annual operating cash flows to support the usual dividend.

At the end of the current year, controller Rick Rodgers presents President Monat with some disappointing news: The net cash provided by operating activities is calculated, by the indirect method, to be only \$970,000. The president says to Rick, “We must get that amount above \$1 million. Isn’t there some way to increase operating cash flow by another \$30,000?” Rick answers, “These figures were prepared by my assistant. I’ll go back to my office and see what I can do.” The president replies, “I know you won’t let me down, Rick.”

Upon close scrutiny of the statement of cash flows, Rick concludes that he can get the operating cash flows above \$1 million by reclassifying a \$60,000, two-year note payable listed in the financing activities section as “Proceeds from bank loan—\$60,000.” He will report the note instead as “Increase in payables—\$60,000” and treat it as an adjustment of net income in the operating activities section. He returns to the president saying, “You can tell the board to declare their usual dividend. Our net cash flow provided by operating activities is \$1,030,000.” “Good man, Rick! I knew I could count on you,” exults the president.

Instructions

- (a) Who are the stakeholders in this situation?
- (b) Was there anything unethical about the president’s actions? Was there anything unethical about the controller’s actions?
- (c) Are the board members or anyone else likely to discover the misclassification?



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

FINANCIAL STATEMENT ANALYSIS



THE NAVIGATOR ✓

- Understand *Concepts for Review*
- Read *Feature Story*
- Scan *Study Objectives*
- Read *Preview*
- Read text and answer *Before You Go On*
p. 212 p. 222 p. 223
- Work *Demonstration Problem*
- Review *Summary of Study Objectives*
- Complete *Assignments*

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. The contents and classification of a balance sheet. (Ch. 5, pp. 154–159)
- b. The contents and classification of an income statement. (Ch. 6, pp. 170–177)
- c. The various users of financial statement information. (Ch. 1, pp. 33–35)



F E A T U R E S T O R Y

“Follow That Stock!”

If you thought cab drivers with cell phones were scary, how about a cab driver with a trading desk in the front seat?

When a stoplight turns red or traffic backs up, New York City cabbie Carlos Rubino morphs into a day trader, scanning real-time quotes of his favorite stocks as they spew across a PalmPilot mounted next to the steering wheel. “It’s kind of stressful,” he says. “But I like it.”

Itching to know how a particular stock is doing? Mr. Rubino is happy to look up quotes for passengers.

Yahoo!, **Amazon.com**, and **America Online** are the most requested ones. He even lets customers use his **Hitachi** Traveler laptop to send urgent e-mails from the back seat. Aware of a new local law prohibiting cabbies from using cell phones while they’re driving, Mr. Rubino extends that rule to his trading. “I stop the cab at the side of the road if I have to make a trade,” he says. “Safety first.”

Originally from São Paulo, Brazil, Mr. Rubino has been driving

his cab since 1987 and started trading stocks a few years ago. His curiosity grew as he began to educate himself by reading business publications. The Wall Street brokers he picks up are usually impressed with his knowledge, he says. But the feeling generally isn’t mutual. Some of them “don’t know much,” he says. “They buy what people tell them to buy—they’re like a toll collector.”

Mr. Rubino is an enigma to his fellow cab drivers. A lot of his colleagues say they want to trade, too. “But cab drivers are a little cheap,” he says. “The [real-time] quotes cost \$100 a month. The wireless Internet access is \$54 a month.”

Will he give up his brokerage firm on wheels for a stationary job? Not likely. Though he claims a 70 percent return on his investments in some months, he says he makes



\$1,300 and up a week driving his cab—more than he does trading. Besides, he adds, “Why go somewhere and have a boss?”

SOURCE: Excerpted from Barbara Boydston, “With this Cab, People Jump in and Shout, ‘Follow that Stock!’,” *Wall Street Journal*, August 18, 1999, p. C1. Reprinted by permission of the *Wall Street Journal* © 1999 Dow Jones & Company, Inc. All Rights Reserved Worldwide.



S T U D Y O B J E C T I V E S

After studying this chapter, you should be able to:

1. Discuss the need for comparative analysis.
2. Identify the tools of financial statement analysis.
3. Explain and apply horizontal analysis.
4. Describe and apply vertical analysis.
5. Identify and compute ratios; and describe their purpose and use in analyzing a firm’s liquidity, profitability, and solvency.
6. Recognize the limitations of financial statement analysis.

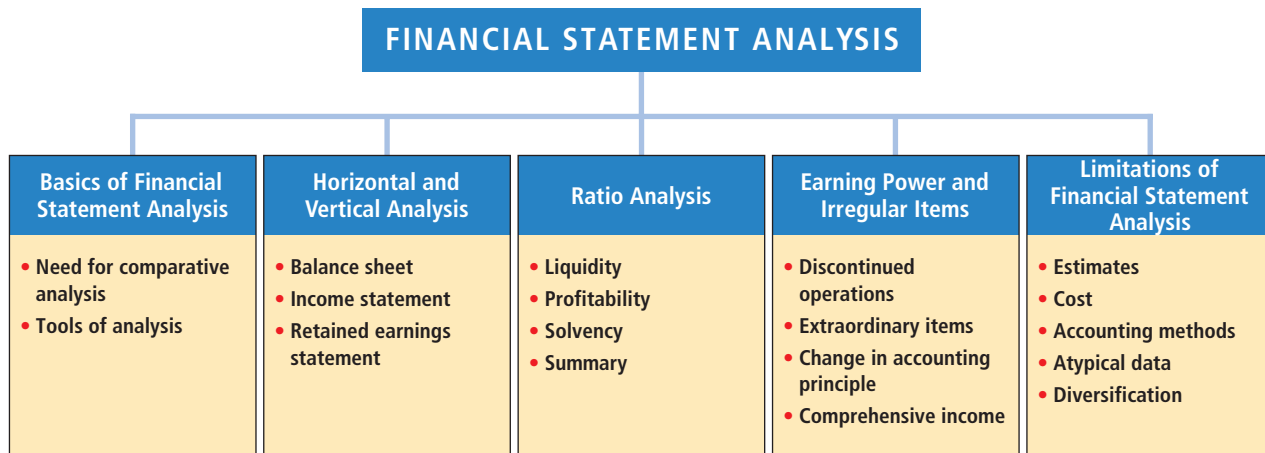


PREVIEW OF CHAPTER 7

An important lesson can be learned from the Feature Story: Follow That Stock!. By now you have learned a significant amount about financial reporting by U.S. corporations. Using some of the basic decision tools presented in this book, you can perform a rudimentary analysis on any U.S. company and draw basic conclusions about its financial health. Although it would not be wise for you to bet your life savings on a company's stock relying solely on your current level of knowledge, we strongly encourage you to practice your new skills wherever possible. Only with practice will you improve your ability to interpret financial numbers.

Before unleashing you on the world of high finance, we will present a few more important concepts and techniques, as well as provide you with one more comprehensive review of corporate financial statements. We use all the decision tools presented in this text to analyze a single company—**Brinker International**, one of the country's more successful international restaurant chains.

The content and organization of Chapter 7 are as follows:



BASICS OF FINANCIAL STATEMENT ANALYSIS

Analyzing financial statements involves evaluating three characteristics of a company: its liquidity, its profitability, and its solvency. A **short-term creditor**, such as a bank, is primarily interested in the ability of the borrower to pay obligations when they come due. The liquidity of the borrower is extremely important in evaluating the safety of a loan. A **long-term creditor**, such as a bondholder, however, looks to profitability and solvency measures that indicate the company's ability to survive over a long period of time. Long-term creditors consider such measures as the amount of debt in the company's capital structure and its ability to meet interest payments. Similarly, **stockholders** are interested in the profitability and the solvency of the company. They want to assess the likelihood of dividends and the growth potential of the stock.

NEED FOR COMPARATIVE ANALYSIS

Every item reported in a financial statement has significance. When **Brinker International** reports cash \$55.6 million on its balance sheet, we know the company had that amount of cash on the balance sheet date. But we do not know whether the amount represents an increase over prior years or whether it is

STUDY OBJECTIVE 1

Discuss the need for comparative analysis.

adequate in relation to the company's need for cash. To obtain such information, it is necessary to compare the amount of cash with other financial statement data.

Comparisons can be made on a number of different bases. Three are illustrated in this chapter.

1. **Intracompany basis.** This basis compares an item or a financial relationship **within a company** in the current year with the same item or relationship in one or more prior years. For example, Brinker can compare its cash balance at the end of the current year with last year's balance to find the amount of the increase or decrease. Likewise, Brinker can compare the percentage of cash to current assets at the end of the current year with the percentage in one or more prior years. Intracompany comparisons are useful in detecting changes in financial relationships and significant trends.
2. **Industry averages.** This basis compares an item or a financial relationship of a company with **industry averages** (or **norms**) published by financial ratings organizations such as **Dun & Bradstreet**, **Robert and Morris Associates**, **Moody's**, and **Standard & Poor's**. For example, Brinker's net income can be compared with the average net income of all companies in the restaurant industry. Comparisons with industry averages provide information as to a company's relative performance within the industry.
3. **Intercompany basis.** This basis compares an item or a financial relationship of one company with the same item or relationship in **one or more competing companies**. The comparisons are made on the basis of the published financial statements of the individual companies. For example, Brinker's total sales for the year can be compared with the total sales of a major competitor, such as **Landry's**. Intercompany comparisons are useful in determining a company's competitive position.

TOOLS OF FINANCIAL STATEMENT ANALYSIS

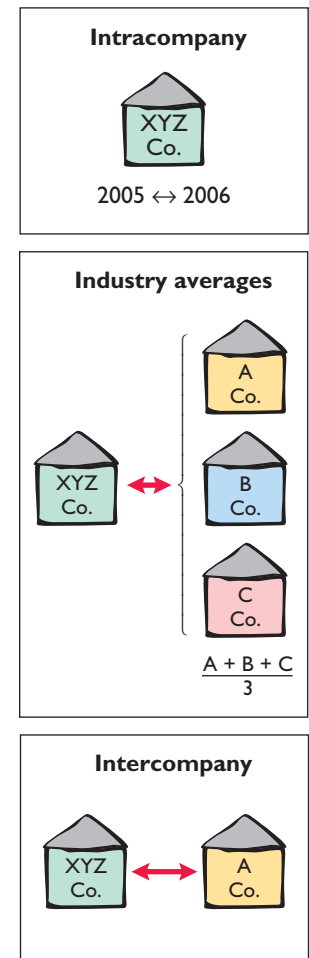
Various tools are used to evaluate the significance of financial statement data. Three commonly used tools are these:

1. **Horizontal analysis** evaluates a series of financial statement data over a period of time.
2. **Vertical analysis** evaluates financial statement data by expressing each item in a financial statement as a percent of a base amount.
3. **Ratio analysis** expresses the relationship among selected items of financial statement data.

Horizontal analysis is used primarily in intracompany comparisons. Two features in published financial statements facilitate this type of comparison. First, each of the basic financial statements is presented on a comparative basis for a minimum of two years. Second, a summary of selected financial data is presented for a series of five to ten years or more. Vertical analysis is used in both intra- and intercompany comparisons. Ratio analysis is used in all three types of comparisons. In the following sections we will explain and illustrate each of the three types of analysis.

HORIZONTAL ANALYSIS

Horizontal analysis, also called trend analysis, is a technique for evaluating a series of financial statement data over a period of time. Its purpose is to determine the increase or decrease that has taken place. This change may be expressed as either an amount or a percentage. For example, the recent net sales figures of **Brinker International** are as shown in Illustration 7-1.



STUDY OBJECTIVE 2

Identify the tools of financial statement analysis.

STUDY OBJECTIVE 3

Explain and apply horizontal analysis.

Illustration 7-1

Brinker International's net sales

BRINKER INTERNATIONAL Revenues (in thousands)		
<u>2006</u>	<u>2005</u>	<u>2004</u>
\$4,151,291	\$3,749,539	\$3,541,005

If we assume that 2004 is the base year, we can measure all percentage increases or decreases from this base period amount as shown in Illustration 7-2.

Illustration 7-2

Formula for horizontal analysis of changes since base period

$$\text{Change Since Base Period} = \frac{\text{Current Year Amount} - \text{Base Year Amount}}{\text{Base Year Amount}}$$

For example, we can determine that net sales for Brinker increased from 2004 to 2005 approximately 5.89 percent $[(\$3,749,539 - \$3,541,005) \div \$3,541,005]$. Similarly, we can determine that net sales increased from 2004 to 2006 approximately 17.23 percent $[(\$4,151,291 - \$3,541,005) \div \$3,541,005]$.

Alternatively, we can express current year sales as a percentage of the base period. This is done by dividing the current year amount by the base year amount, as shown in Illustration 7-3.

Illustration 7-3

Formula for horizontal analysis of current year in relation to base year

$$\text{Current Results in Relation to Base Period} = \frac{\text{Current Year Amount}}{\text{Base Year Amount}}$$

Illustration 7-4 presents this analysis for Brinker for a three-year period using 2004 as the base period.

Illustration 7-4

Horizontal analysis of net sales of **Brinker International** in relation to base period

BRINKER INTERNATIONAL Revenues (in thousands) In relation to base period 2004		
<u>2006</u>	<u>2005</u>	<u>2004</u>
\$4,151,291	\$3,749,539	\$3,541,005
117.23%	105.89%	100%

BALANCE SHEET

To further illustrate horizontal analysis, we will use the financial statements of Sofia's Place, a family-style independent restaurant in a southwestern city. A horizontal analysis of its two-year condensed balance sheets, showing dollar and percentage changes, is presented in Illustration 7-5.

The comparative balance sheets in Illustration 7-5 show that a number of significant changes have occurred in Sofia's financial structure from 2005 to 2006. In the assets section, plant assets (net) increased \$2,019, or 0.31 percent. In the liabilities section, current liabilities increased \$2,213, or 0.72 percent. In the stockholders' equity section, retained earnings increased \$7931, or 2.26 percent. This suggests that the company did not see much growth from 2005 to 2006.

INCOME STATEMENT

Illustration 7-6 presents a horizontal analysis of the two-year condensed income statements of Sofia's for the years 2004 and 2005.

Illustration 7-5

Horizontal analysis of balance sheets

SOFIA'S PLACE				
Balance Sheet December 31				
	2006	2005	Increase (or Decrease)	
			during 2006	
			Amount	Percent
Assets				
Current assets	\$ 26,062	\$ 26,001	\$ 61	0.24%
Accounts receivables	39,093	37,916	1,177	3.11%
Inventories	28,638	28,021	617	2.20%
Prepaid expenses	45,188	27,938	17,250	61.74%
Total current assets	138,982	119,876	19,106	15.94%
Plant assets (net)	651,891	649,872	2,019	0.31%
Intangible assets	77,870	87,580	(9,710)	-11.09%
Total assets	<u>\$868,743</u>	<u>\$857,328</u>	<u>\$11,415</u>	1.33%
Liabilities				
Current liabilities	\$311,325	\$309,112	\$ 2,213	0.72%
Long-term liabilities	192,546	191,280	1,266	0.66%
Total liabilities	\$503,871	\$500,392	\$ 3,479	0.70%
Stockholders' Equity				
Common stock, \$1 par	6,000	6,000	-0-	0.00%
Retained earnings	358,872	350,936	7,936	2.26%
Total stockholders' equity	364,872	356,936	7,936	2.22%
Total liabilities and stockholders' equity	<u>\$868,743</u>	<u>\$857,328</u>	<u>\$11,415</u>	1.33%

Horizontal analysis of the income statements shows the following changes:

1. Revenues increased \$161,112, or 13.32 percent ($\$161,112 \div \$1,209,876$).
2. Cost of sales increased \$60,426, or 15.41 percent ($\$60,426 \div \$392,000$).
3. Total other expenses also increased \$101,803, or 13.29 percent ($\$101,803 \div \$765,743$).

Illustration 7-6

Horizontal analysis of income statement

SOFIA'S PLACE				
Income Statement				
For the Years Ended December 31				
	2006	2005	Increase (or Decrease)	
			during 2006	
			Amount	Percent
Revenues	\$1,370,988	\$1,209,876	\$161,112	13.32%
Cost of sales	452,426	392,000	60,426	15.41%
Gross profit	918,562	817,876	100,686	12.31%
Other expenses	867,546	765,743	101,803	13.29%
Operating income	51,016	52,133	(1,117)	-2.14%
Interest expense	3,600	4,000	(400)	-10.00%
Other, net	1,254	544	710	130.51%
Income before income tax	46,162	47,589	(1,427)	-3.00%
Income tax	11,540	12,373	(833)	-6.73%
Net income	<u>\$ 34,621</u>	<u>\$ 35,216</u>	<u>\$ (595)</u>	-1.69%

HELPFUL HINT

Note that though the amount column is additive (the total is -\$595), the percentage column is not additive (-1.69% is not the total). A separate percentage has been calculated for each item.

Overall, gross profit was up, while net income was down slightly. Gross profit increased 12.31 percent, but net income decreased 1.69 percent.

RETAINED EARNINGS STATEMENT

A horizontal analysis of Sofia's comparative retained earnings statements is presented in Illustration 7-7. Analyzed horizontally, net income decreased \$595, or 1.69 percent, whereas dividends on the common stock increased \$6,135, or 29.86 percent.

Illustration 7-7

Horizontal analysis of retained earnings statements

SOFIA'S PLACE Retained Earnings Statements For the Years Ended December 31				
	<u>2006</u>	<u>2005</u>	Increase (or Decrease) during 2006	
			<u>Amount</u>	<u>Percent</u>
Retained earnings, Jan. 1	\$350,936	\$406,702	\$(55,766)	-13.71%
Add: Net income	34,621	35,216	(595)	-1.69%
	385,557	371,486	14,071	3.79%
Less: Dividends	26,685	20,550	6,135	29.86%
Retained earnings, Dec. 31	<u>\$358,872</u>	<u>\$350,936</u>	<u>\$ 7,936</u>	2.26%

Horizontal analysis of changes from period to period is relatively straightforward and is quite useful. But complications can occur in making the computations. If an item has no value in a base year or a preceding year and a value in the next year, no percentage change can be computed. Similarly, if a negative amount appears in the base or the preceding period and a positive amount exists the following year (or vice versa), no percentage change can be computed.

VERTICAL ANALYSIS

STUDY OBJECTIVE 4

Describe and apply vertical analysis.

Vertical analysis, also called common size analysis, is a technique for evaluating financial statement data that express each item within a financial statement as a percent of a base amount. On a balance sheet, we might say that current assets are 22 percent of total assets (total assets being the base amount). Or on an income statement, we might say that selling expenses are 16 percent of net sales (net sales being the base amount).

BALANCE SHEET

Presented in Illustration 7-8 is the vertical analysis of Sofia's Place comparative balance sheets. The base for the asset items is **total assets**. The base for the liability and stockholders' equity items is **total liabilities and stockholders' equity**.

Vertical analysis shows the relative size of each category in the balance sheet. It also can show the **percentage change** in the individual asset, liability, and stockholders' equity items. For example, we can see that current assets increased from 13.98 percent of total assets in 2005 to 16.00 percent in 2006 (with the absolute dollar amount increased \$19,106 in that time). Plant assets (net) have decreased slightly from 75.80 to 75.04 percent of total assets. Retained earnings have increased from 40.93 to 41.31 percent of total liabilities and stockholders' equity. These results reinforce the earlier observations that **Sofia's is choosing to finance its growth through retention of earnings rather than through issuing additional debt**.

SOFIA'S PLACE				
Balance Sheet December 31				
	2006		2005	
	Amount	Percent	Amount	Percent
Assets				
Current assets	\$ 26,062	3.00%	\$ 26,001	3.03%
Accounts receivables	39,094	4.50%	37,916	4.42%
Inventories	28,638	3.30%	28,021	3.27%
Prepaid expenses	45,188	5.20%	27,938	3.26%
Total current assets	138,982	16.00%	119,876	13.98%
Plant assets (net)	651,891	75.04%	649,872	75.80%
Intangible assets	77,870	8.96%	87,580	10.22%
Total assets	<u>\$868,743</u>	<u>100.00%</u>	<u>\$857,328</u>	<u>100.00%</u>
Liabilities				
Current liabilities	\$311,325	35.84%	\$309,112	36.06%
Long-term liabilities	192,546	22.16%	191,280	22.31%
Total liabilities	\$503,871	58.00%	\$500,392	58.37%
Stockholders' Equity				
Common stock, \$1 par	6,000	0.69%	6,000	0.70%
Retained earnings	358,872	41.31%	350,936	40.93%
Total stockholders' equity	364,872	42.00%	356,936	41.63%
Total liabilities and stockholders' equity	<u>\$868,743</u>	<u>100.00%</u>	<u>\$857,328</u>	<u>100.00%</u>

Illustration 7-8

Vertical analysis of balance sheets

HELPFUL HINT

The formula for calculating these balance sheet (B/S) percentages is

$$\frac{\text{Each item on B/S}}{\text{Total assets}} = \%$$

INCOME STATEMENT

Vertical analysis of Sofia's income statements is shown in Illustration 7-9. We see that cost of goods sold as a percentage of net sales increased 0.6 percent (33 versus 32.4 percent) and total other expenses stayed stable. As a result, it is not surprising not to see a big change in net income as a percent of net sales increase. Sofia's appears to be keeping pace but not at a growth mode that is becoming even more successful.

SOFIA'S PLACE				
Balance Sheet For the Years Ended December 31				
	2006		2005	
	Amount	Percent	Amount	Percent
Revenues	\$1,370,988	100.00%	\$1,209,876	100.00%
Cost of sales	452,426	33.00%	392,000	32.40%
Gross profit	918,562	67.00%	817,876	67.60%
Other expenses	867,546	63.28%	765,743	63.29%
Operating income	51,016	3.72%	52,133	4.31%
Interest expense	3,600	0.26%	4,000	0.33%
Other, net	1,254	0.09%	544	0.04%
Income before income tax	46,162	3.37%	47,589	3.93%
Income tax	11,570	0.84%	12,373	1.02%
Net income	<u>\$ 34,621</u>	<u>2.53%</u>	<u>\$ 35,216</u>	<u>2.91%</u>

Illustration 7-9

Vertical analysis of income statements

HELPFUL HINT

The formula for calculating these income statement percentages is

$$\frac{\text{Each item on I/S}}{\text{Net sales}} = \%$$

An associated benefit of vertical analysis is that it enables you to compare companies of different sizes. For example, Sofia's main competitor is a Brinker International in a nearby town. Using vertical analysis, the condensed income statements of the small local food enterprise, Sofia's Place, can be more meaningfully compared with the 2006 income statement of the giant restaurateur, Brinker International, as shown in Illustration 7-10.

Illustration 7-10

Intercompany income statement comparison

	Sofia's Place		Brinker International (in thousands)	
	2006		2006	
	Amount	Percent	Amount	Percent
Revenues	\$1,370,988	100.00%	\$4,151,291	100.00%
Cost of sales	452,426	33.00%	1,160,931	27.97%
Gross profit	918,562	67.00%	\$2,990,360	72.03%
Other expenses	867,546	63.28%	2,663,761	64.17%
Operating income	51,016	3.72%	326,599	7.87%
Interest expense	3,600	0.26%	22,857	0.55%
Other, net	1,254	0.09%	(1,656)	-0.04%
Income before income tax	46,162	3.37%	305,398	7.36%
Income tax	11,540	0.84%	91,448	2.20%
Income from continuing operations			213,950	5.15%
(Loss) Income from discontinued operations, net of taxes			(1,555)	-0.04%
Net income	\$ 34,621	2.53%	\$ 212,395	5.12%

Brinker's net sales are over 3,000 times as great as the net sales of relatively tiny Sofia's Place. But vertical analysis eliminates this difference in size. The percentages show that Sofia's and Brinker's gross profit rates were comparable at 67 and 72 percent. However, Brinker has income from discontinuing operations while it closed 12 operations in 2006. In the same period, Brinker also opened 159 units, and Sofia's is still one independent restaurant.

BEFORE YOU GO ON...

► **REVIEW IT**

1. What are the different tools that might be used to compare financial information?
2. What is horizontal analysis?
3. What is vertical analysis?
4. Identify the specific sections in **PepsiCo's** 2006 Annual Report where horizontal and vertical analyses of financial data are presented.

► **DO IT**

Summary financial information for Rosepatch Company is as follows:

	December 31, 2008	December 31, 2007
Current assets	\$234,000	\$180,000
Plant assets (net)	756,000	420,000
Total assets	\$990,000	\$600,000



Compute the amount and the percentage changes in 2008 using horizontal analysis, assuming 2007 is the base year.

ACTION PLAN

- Find the percentage change by dividing the amount of the increase by the 2007 amount (base year).

SOLUTION

	Increase in 2006	
	Amount	Percent
Current assets	\$ 54,000	30% $[(\$234,000 - \$180,000) \div \$180,000]$
Plant assets (net)	336,000	80% $[(\$756,000 - \$420,000) \div \$420,000]$
Total assets	<u>\$390,000</u>	65% $[(\$990,000 - \$600,000) \div \$600,000]$



RATIO ANALYSIS


Ratio analysis expresses the relationship among selected items of financial statement data. A **ratio** expresses the mathematical relationship between one quantity and another. The relationship is expressed in terms of either a percentage, a rate, or a simple proportion. To illustrate, in 2003, **Motorola, Inc.**, had current assets of \$17,907 million and current liabilities of \$9,433 million. The relationship is determined by dividing current assets by current liabilities. The alternative means of expression are

- Percentage:** Current assets are 190 percent of current liabilities.
- Rate:** Current assets are 1.9 times current liabilities.
- Proportion:** The relationship of current assets to liabilities is 1.9:1.

For analysis of the primary financial statements, ratios can be used to evaluate liquidity, profitability, and solvency. These classifications are described and pictured in Illustration 7-11.


STUDY OBJECTIVE 5


Identify and compute ratios, and describe their purpose and use in analyzing a firm's liquidity, profitability, and solvency.



Liquidity Ratios

Measures of short-term ability of the enterprise to pay its maturing obligations and to meet unexpected needs for cash





Profitability Ratios

Measures of the income or operating success of an enterprise for a given period of time

Solvency Ratios

Measures of the ability of the enterprise to survive over a long period of time

Illustration 7-11

Financial ratio classifications

Ratios can provide clues to underlying conditions that may not be apparent from individual financial statement components. However, a single ratio by itself is not very meaningful. Accordingly, in the discussion of ratios we will use the following types of comparisons:

1. **Intracompany comparisons** for two years for Sofia's Place
2. **Industry average comparisons** based on median ratios for restaurants
3. **Intercompany comparisons** based on Brinker International as Sofia's Place's principal competitor

LIQUIDITY RATIOS

Liquidity ratios measure the short-term ability of the enterprise to pay its maturing obligations and to meet unexpected needs for cash. Short-term creditors such as bankers and suppliers are particularly interested in assessing liquidity. The ratios that can be used to determine the enterprise's short-term debt-paying ability are the current ratio, the acid-test ratio, receivables turnover, and inventory turnover.

HELPFUL HINT

Can any company operate successfully without working capital? Yes, if it has very predictable cash flows and solid earnings. A number of companies (e.g., **Whirlpool**, **American Standard**, and **Campbell's Soup**) are pursuing this goal. The rationale: Less money tied up in working capital means more money to invest in the business.

1. Current Ratio

The **current ratio** is a widely used measure for evaluating a company's liquidity and short-term debt-paying ability. The ratio is computed by dividing current assets by current liabilities.

The 2006 and 2005 current ratios for Sofia's Place and comparative data are shown in Illustration 7-12.

Illustration 7-12

Current ratio

Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$									
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center; border-bottom: 1px solid black;">Sofia's Place</th> </tr> <tr> <th style="text-align: center; border-bottom: 1px solid black;">2006</th> <th style="text-align: center; border-bottom: 1px solid black;">2005</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; border-bottom: 1px solid black;">$\frac{\\$138,982}{\\$311,325} = 0.45:1$</td> <td style="text-align: center; border-bottom: 1px solid black;">$\frac{\\$119,876}{\\$309,112} = 0.39:1$</td> </tr> <tr> <td style="text-align: center; border-bottom: 1px solid black;"><u>Industry average</u> 0.50:1</td> <td style="text-align: center; border-bottom: 1px solid black;"><u>Brinker</u> 0.49:1</td> </tr> </tbody> </table>		Sofia's Place		2006	2005	$\frac{\$138,982}{\$311,325} = 0.45:1$	$\frac{\$119,876}{\$309,112} = 0.39:1$	<u>Industry average</u> 0.50:1	<u>Brinker</u> 0.49:1
Sofia's Place									
2006	2005								
$\frac{\$138,982}{\$311,325} = 0.45:1$	$\frac{\$119,876}{\$309,112} = 0.39:1$								
<u>Industry average</u> 0.50:1	<u>Brinker</u> 0.49:1								

What does the ratio actually mean? The 2006 ratio of 0.45:1 means that for every dollar of current liabilities, Sofia's has \$0.45 of current assets. Sofia's current ratio has increased in the current year. But compared with the industry average of 0.50:1 and Brinker's 0.49:1 current ratio, Sofia's appears to be slightly behind.

The current ratio is sometimes referred to as the **working capital ratio** because **working capital** is the excess of current assets over current liabilities. The current ratio is a more dependable indicator of liquidity than working capital. Two companies with the same amount of working capital may have significantly different current ratios.

The current ratio is only one measure of liquidity. It does not take into account the composition of the current assets. For example, a satisfactory current ratio does not disclose the fact that a portion of the current assets may be tied up in slow-moving inventory. A dollar of cash would be more readily available to pay the bills than a dollar of slow-moving inventory.

ACCOUNTING MATTERS! *Business Insight*



The apparent simplicity of the current ratio can have real-world limitations. An addition of equal amounts to both the numerator and the denominator causes the ratio to decrease. Assume, for example, that a company has \$2 million of current assets and \$1 million of current liabilities. Its current ratio is 2:1. If it purchases \$1 million of inventory on account, it will have \$3 million of current assets and \$2 million of current liabilities. Its current ratio will decrease to 1.5:1. If, instead, the company pays off \$500,000 of its current liabilities, it will have \$1.5 million of current assets and \$500,000 of current liabilities, and its current ratio will increase to 3:1. Any trend analysis should be done with care because the ratio is susceptible to quick changes and is easily influenced by management.

How might management influence the company's current ratio?

2. Acid-Test Ratio

The **acid-test (quick) ratio** is a measure of a company's immediate short-term liquidity. It is computed by dividing the sum of cash, short-term investments, and net receivables by current liabilities. Thus it is an important complement to the current ratio. For example, assume that the current assets of Sofia's Place for 2006 and 2005 consist of the items listed in Illustration 7-13.

ALTERNATIVE TERMINOLOGY

The acid-test ratio is also called the *quick ratio*.

SOFIA'S PLACE Balance Sheet December 31		
	2006	2005
Assets		
Current assets	\$ 26,062	\$ 26,001
Accounts receivables	39,093	37,916
Inventories	28,638	28,021
Prepaid expenses	45,188	27,938
Total current assets	<u>\$138,981</u>	<u>\$119,876</u>

Illustration 7-13

Current assets of Sofia's Place

Cash, short-term investments, and receivables (net) are highly liquid compared with inventory and prepaid expenses. The inventory may not be readily saleable, and the prepaid expenses may not be transferable to others. Thus the acid-test ratio measures **immediate** liquidity. In Sofia's case, since there are no short-term investments, the 2006 and 2005 acid-test ratios for Sofia's Place and comparative data are as shown in Illustration 7-14.

Sofia's Place		
2006		2005
$\frac{\$26,062 + \$39,094}{\$311,325}$	=	$\frac{\$26,001 + \$37,916}{\$309,112}$
0.21:1		0.21:1
Industry average		Brinker
0.20:1		0.22:1

Illustration 7-14

Acid-test ratio

The ratio has remained constant in the two years. Is an acid-test ratio of 0.20:1 adequate? When compared with the industry average of 0.20:1 and Brinker's of 0.22:1, Sofia's acid-test ratio seems adequate.

3. Receivables Turnover

Liquidity may be measured by how quickly certain assets can be converted to cash. How liquid, for example, are the receivables? The ratio used to assess the liquidity of the receivables is **receivables turnover**. It measures the number of times, on average, receivables are collected during the period. Receivables turnover is computed by dividing net credit sales (net sales less cash sales) by the average net receivables. Unless seasonal factors are significant, average net receivables can be computed from the beginning and ending balances of the net receivables.¹ In the restaurant industry, most payments are made in cash or by credit card, so direct billing or accounts receivable is normally quite low compared with manufacturing industries. Therefore, we are able to collect our receivables in a more timely manner.

Since credit sales are not separated here, we will use the revenue amount as the numerator. The data are shown in Illustration 7-15. Sofia's receivables for 2004 were \$28,640, and its receivables turnover did not improve in 2006. The turnover of 35.6 times compares unfavorably with Brinker's 86.37 times and with the industry's average of 80.0 times.

Illustration 7-15

Receivables turnover

Receivables Turnover = $\frac{\text{Net Credit Sales}}{\text{Average Net Receivables}}$	
Sofia's Place	
<u>2006</u>	<u>2005</u>
$\frac{\$1,370,988}{\left(\frac{\$39,094 + \$37,916}{2}\right)} = 35.61 \text{ times}$	$\frac{\$1,209,876}{\left(\frac{\$37,916 + \$28,640}{2}\right)} = 36.36 \text{ times}$
<u>Industry average</u>	<u>Brinker</u>
80 times	86.37 times

AVERAGE COLLECTION PERIOD. A popular variant of the receivables turnover ratio is to convert it to an **average collection period** in terms of days. This is done by dividing the receivables turnover ratio into 365 days. For example, the receivables turnover of 35.61 times is divided into 365 days to obtain approximately 10.25 days. This means that receivables are collected on average every 10 days. The average collection period is frequently used to assess the effectiveness of a company's credit and collection policies. The general rule is that the collection period should not greatly exceed the credit term period (the time allowed for payment).

4. Inventory Turnover

Inventory turnover measures the number of times, on average, the inventory is sold during the period. Its purpose is to measure the liquidity of the inventory. The inventory turnover is computed by dividing cost of goods sold by the average inventory. Unless seasonal factors are significant, average inventory can be computed from the beginning and ending inventory balances.

¹If seasonal factors are significant, the average receivables balance might be determined by using monthly amounts.

Assuming that the inventory balance for Sofia's Place at the beginning of 2005 was \$78,750, its inventory turnover and comparative data are as shown in Illustration 7-16. Sofia's inventory turnover declined slightly in 2006. The turnover of 15.97 times is relatively low compared with the industry average of 34.8 and Brinker's 26.10. Generally, the faster the inventory turnover, the less cash that is tied up in inventory and the less the chance of inventory obsolescence. Inventory turnover ratios vary considerably among industries. For example, grocery store chains have a turnover of 10 times and an average selling period of 37 days. In contrast, jewelry stores have an average turnover of 1.3 times and an average selling period of 281 days.

Inventory Turnover = $\frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$	
Sofia's Place	
<u>2006</u> $\frac{\$452,426}{\left(\frac{\$28,638 + \$28,021}{2}\right)} = 15.97 \text{ times}$	<u>2005</u> $\frac{\$392,000}{\left(\frac{\$28,021 + \$18,750}{2}\right)} = 16.76 \text{ times}$
<u>Industry average</u> 34.8 times	<u>Brinker</u> 26.10 times

Illustration 7-16

Inventory turnover

AVERAGE DAYS TO SELL INVENTORY. A variant of inventory turnover is the **average days to sell the inventory**. It is calculated by dividing the inventory turnover into 365. For example, Sofia's 2006 inventory turnover of 15.97 times divided into 365 is approximately 23 days. An average selling time of 23 days is also relatively high compared with the industry average of 10.5 days ($365 \div 34.8$) and Brinker's 14 days ($365 \div 26.10$).

PROFITABILITY RATIOS

Profitability ratios measure the income or operating success of an enterprise for a given period of time. Income, or the lack of it, affects the company's ability to obtain debt and equity financing. It also affects the company's liquidity position and the company's ability to grow. As a consequence, both creditors and investors are interested in evaluating earning power—profitability. Profitability is frequently used as the ultimate test of management's operating effectiveness.

5. Profit Margin

Profit margin is a measure of the percentage of each dollar of sales that results in net income. It is computed by dividing net income by net sales. Sofia's profit margin and comparative data are shown in Illustration 7-17.

ALTERNATIVE TERMINOLOGY

Profit margin is also called the *rate of return on sales*.

Profit Margin on Sales = $\frac{\text{Net Income}}{\text{Net Sales}}$	
Sofia's Place	
<u>2006</u> $\frac{\$34,621}{\$1,370,988} = 2.53\%$	<u>2005</u> $\frac{\$35,216}{\$1,209,876} = 2.91\%$
<u>Industry average</u> 2.9%	<u>Brinker</u> 5.12%

Illustration 7-17

Profit margin

Sofia's experienced a slight decline in its profit margin from 2005 to 2006. Its profit margin is slightly low in comparison with the industry average of 2.90 percent and Brinker's of 5.12 percent.

High-volume (high inventory turnover) enterprises such as grocery stores (**Safeway** or **Kroger**) and discount stores (**Kmart** or **Wal-Mart**) generally experience low profit margins. In contrast, low-volume enterprises such as jewelry stores (**Tiffany & Co.**) or airplane manufacturers (**Boeing Co.**) have high profit margins.

6. Asset Turnover

Asset turnover measures how efficiently a company uses its assets to generate sales. It is determined by dividing net sales by average assets. The resulting number shows the dollars of sales produced by each dollar invested in assets. Unless seasonal factors are significant, average total assets can be computed from the beginning and ending balances of total assets. Assuming that total assets at the beginning of 2005 were \$795,640, the 2006 and 2005 asset turnover for Sofia's Place and comparative data are as shown in Illustration 7-18.

Illustration 7-18

Asset turnover

Asset Turnover = $\frac{\text{Net Sales}}{\text{Average Assets}}$	
Sofia's Place	
2006	2005
$\frac{\$1,370,988}{\left(\frac{\$868,743 + \$857,328}{2}\right)} = 1.59 \text{ times}$	$\frac{\$1,209,876}{\left(\frac{\$857,328 + \$795,640}{2}\right)} = 1.46 \text{ times}$
<u>Industry average</u> 1.60 times	<u>Brinker</u> 1.90 times

Asset turnover shows that in 2006 Sofia's generated sales of \$1.59 for each dollar it had invested in assets. The ratio changed little from 2005 to 2006. Sofia's asset turnover is at par with the industry average of 1.60 times but below Brinker's ratio of 1.90 times.

Asset turnover ratios vary considerably among industries. For example, a large utility company such as **Consolidated Edison** (New York) has a ratio of 0.49 times, and a large grocery chain such as **Kroger Stores** has a ratio of 4.34 times.

7. Return on Assets

An overall measure of profitability is **return on assets**. This ratio is computed by dividing net income by average assets. The 2006 and 2005 return on assets for Sofia's and comparative data are shown in Illustration 7-19.

Illustration 7-19

Return on assets

Return on Assets = $\frac{\text{Net Income}}{\text{Average Assets}}$	
Sofia's Place	
2006	2005
$\frac{\$34,621}{\left(\frac{\$868,743 + \$857,328}{2}\right)} = 4.01\%$	$\frac{\$35,216}{\left(\frac{\$857,328 + \$795,640}{2}\right)} = 4.26\%$
<u>Industry average</u> 6.40%	<u>Brinker</u> 9.70%

Sofia's return on assets decreased from 2005 to 2006. Its return of 4.01 percent is low compared with the industry average of 6.40 percent and Brinker's of 9.70 percent.

8. Return on Common Stockholders' Equity

Another widely used profitability ratio is **return on common stockholders' equity**. It measures profitability from the common stockholders' viewpoint. This ratio shows how many dollars of net income were earned for each dollar invested by the owners. It is computed by dividing net income by average common stockholders' equity. Assuming that common stockholders' equity at the beginning of 2005 was \$322,080, the 2006 and 2005 ratios for Sofia's Place and comparative data are shown in Illustration 7.20.

Return on Common Stockholders' Equity	=	$\frac{\text{Net Income}}{\text{Average Common Stockholders' Equity}}$
Sofia's Place		
2006 $\frac{\$34,621}{\left(\frac{\$364,872 + \$356,936}{2}\right)} = 9.59\%$		2005 $\frac{\$35,216}{\left(\frac{\$356,936 + \$322,080}{2}\right)} = 10.37\%$
<u>Industry average</u> 14.00%		<u>Brinker</u> 19.52%

Illustration 7-20

Return on common stockholders' equity

Sofia's rate of return on common stockholders' equity is good at 9.59 percent. However, compared with the industry average of 14.00 percent and the 19.52 percent for Brinker, it is not doing as well.

ACCOUNTING IN ACTION *Business Insight*



Many companies with stable earnings have high payout ratios. Some may pay out extraordinarily high ratios to reward their shareholders, whereas others deliberately do not pay out any dividends so as to reinvest in the company for future growth. The payout ratio is computed by dividing cash dividends by net income. Each company has its own dividend payout policy, but one can find most companies paying out in the 10-to-20 percent range. Recall the ten companies in Chapter 6 (p.181), where we compared their net income and their net cash from operations. The following is an extension of the same ten companies with their dividends and dividend payout ratio for their 2005–2006 fiscal year.

RESTAURANTS

Company	Date	Dividends	Dividend Payout Ratio
Brinker	6/28/2006	\$25,417,000	12.0%
Darden	5/28/2006	59,206,000	17.5%
Landry's	12/31/2005	4,611,364	10.3%
Morton's	1/1/2006	1,456,000	209.5%
OSI Restaurant Partners	12/31/2005	38,753,000	25.9%

HOTELS

Company	Date	Dividends	Dividend Payout Ratio
Choice	12/31/2005	30,241,000	34.5%
Hilton	12/31/2005	46,000,000	10.0%
Intercontinental	12/31/2005	£81,000,000	15.7%
Marriott	12/30/2005	84,000,000	12.6%
Starwood	12/31/2005	–0–	0.0%

SOURCE: Securities and Exchange Commission, www.sec.gov.

SOLVENCY RATIOS

Solvency ratios measure the ability of a company to survive over a long period of time. Long-term creditors and stockholders are particularly interested in a company's ability to pay interest as it comes due and to repay the face value of debt at maturity. Debt to total assets and times interest earned are two ratios that provide information about debt-paying ability.

9. Debt to Total Assets Ratio

The **debt to total assets ratio** measures the percentage of the total assets provided by creditors. It is computed by dividing total debt (both current and long-term liabilities) by total assets. This ratio indicates the company's degree of leverage. It also can indicate the company's ability to withstand losses without impairing creditors' interests. The higher the percentage of debt to total assets, the greater is the risk that the company may be unable to meet its maturing obligations. The 2006 and 2005 ratios for Sofia's Place and comparative data are as shown in Illustration 7-21.

Illustration 7-21

Debt to total assets ratio

Debt to Total Assets		=	$\frac{\text{Total Debt}}{\text{Total Assets}}$																	
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center; border-bottom: 1px solid black;">2006</th> <th colspan="2" style="text-align: center; border-bottom: 1px solid black;">2005</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; border-right: 1px solid black;">$\frac{\\$503,871}{\\$868,743}$</td> <td style="text-align: center;">= 58.0%</td> <td style="text-align: center; border-right: 1px solid black;">$\frac{\\$500,392}{\\$857,328}$</td> <td style="text-align: center;">= 58.37%</td> </tr> <tr> <td colspan="2" style="text-align: center; border-top: 1px solid black;">Industry average</td> <td colspan="2" style="text-align: center; border-top: 1px solid black;">Brinker</td> </tr> <tr> <td colspan="2" style="text-align: center;">45.8%</td> <td colspan="2" style="text-align: center;">51.58%</td> </tr> </tbody> </table>					2006		2005		$\frac{\$503,871}{\$868,743}$	= 58.0%	$\frac{\$500,392}{\$857,328}$	= 58.37%	Industry average		Brinker		45.8%		51.58%	
2006		2005																		
$\frac{\$503,871}{\$868,743}$	= 58.0%	$\frac{\$500,392}{\$857,328}$	= 58.37%																	
Industry average		Brinker																		
45.8%		51.58%																		

A ratio of 58.0 percent means that creditors have provided 58.0 percent of Sofia's total assets. Sofia's 58.0 percent is above the industry average of 45.8 percent, and it is also higher than Brinker's 51.58 percent. The lower the ratio, the more equity "buffer" there is available to the creditors. Thus, from the creditors' point of view, a low ratio of debt to total assets is usually desirable.

The adequacy of this ratio is often judged in light of the company's earnings. Generally, companies with relatively stable earnings (such as public utilities) have higher debt to total assets ratios than cyclic companies with widely fluctuating earnings (such as many high-tech companies).

10. Times Interest Earned

ALTERNATIVE TERMINOLOGY

Times interest earned is also called *interest coverage*.

Times interest earned provides an indication of the company's ability to meet interest payments as they come due. It is computed by dividing income before interest expense and income taxes by interest expense. The 2006 and 2005 ratios for Sofia's and comparative data are shown in Illustration 7-22. Note that times interest earned uses income before income taxes and interest expense. This represents the amount available to cover interest. For Sofia's the 2006 amount of \$49,762 is computed by taking the income before income taxes of \$46,162 and adding back the \$3,600 of interest expense.

Both Sofia's and Brinker's interest expenses are well covered at 13.82 times and 14.29 times, respectively, compared with the industry average of 1.5 times.

$$\text{Times Interest Earned} = \frac{\text{Income before Income Taxes and Interest Expense}}{\text{Interest Expense}}$$

Sofia's Place	
2006	2005
$\frac{\$49,762}{\$3,600} = 13.82 \text{ times}$	$\frac{\$51,589}{\$4,000} = 12.90 \text{ times}$
Industry average 1.5 times	Brinker 14.29 times

Illustration 7-22

Times interest earned

ACCOUNTING IN ACTION *Business Insight*



Savvy investors today use many forms of technology to obtain the latest updated financial information on their chosen companies. Hospitality companies are also at the cutting edge of providing the desired product. **Darden Restaurants** offers conference call and other events for their investors. **Landry's Restaurants** has several archived Webcasts listed on its Web site. **Choice Hotels** has presentations and conference calls also linked to its Web site. The same can be found at **Hilton** and **Marriott**. Many companies also offer e-mail updates. Any interested individuals simply can register with such companies to receive the latest press releases. Now, who can say that we are not living in a technology world?



SUMMARY OF RATIOS

A summary of the ratios discussed in the chapter is presented in Illustration 7-23. The summary includes the formula and the purpose or use of each ratio.

Illustration 7-23

Summary of liquidity, profitability, and solvency ratios

Ratio	Formula	Purpose or Use
Liquidity Ratios		
1. Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	Measures short-term debt-paying ability.
2. Acid-test (quick) ratio	$\frac{\text{Cash} + \text{Short-term investments} + \text{Receivables (net)}}{\text{Current liabilities}}$	Measures immediate short-term liquidity.
3. Receivables turnover	$\frac{\text{Net credit sales}}{\text{Average net receivables}}$	Measures liquidity of receivables.
4. Inventory turnover	$\frac{\text{Cost of goods sold}}{\text{Average inventory}}$	Measures liquidity of inventory.
Profitability Ratios		
5. Profit margin	$\frac{\text{Net income}}{\text{Net sales}}$	Measures net income generated by each dollar of sales.
6. Asset turnover	$\frac{\text{Net sales}}{\text{Average assets}}$	Measures how efficiently assets are used to generate sales.
7. Return on assets	$\frac{\text{Net income}}{\text{Average assets}}$	Measures overall profitability of assets.
8. Return on common stockholders' equity	$\frac{\text{Net income}}{\text{Average common stockholders' equity}}$	Measures profitability of owners' investment.

Solvency Ratios

9. Debt to total assets	$\frac{\text{Total debt}}{\text{Total assets}}$	Measures the percentage of total assets provided by creditors.
10. Times interest earned	$\frac{\text{Income before income taxes and interest expense}}{\text{Interest expense}}$	Measures ability to meet interest payments as they come due.

BEFORE YOU GO ON...**▶ REVIEW IT**

1. What are liquidity ratios? Explain the current, acid-test, receivables turnover, and inventory turnover ratios.
2. What are profitability ratios? Explain the profit margin, asset turnover, return on assets, and return on common stockholders' equity ratios.
3. What are solvency ratios? Explain the debt to total assets and times interest earned ratios.

▶ DO IT

Selected financial data for Drummond Company on December 31, 2006, are as follows: cash \$60,000; receivables (net) \$80,000; inventory \$70,000; and current liabilities \$140,000. Compute the current and acid-test ratios.

ACTION PLAN

- Use the formula for the current ratio: Current assets ÷ Current liabilities.
- Use the formula for the acid-test ratio: [Cash + Short-term investments + Receivables (net)] ÷ Current liabilities.

SOLUTION

The current ratio is 1.5:1 (\$210,000 ÷ \$140,000). The acid-test ratio is 1:1 (\$140,000 ÷ \$140,000).



LIMITATIONS OF FINANCIAL STATEMENT ANALYSIS

STUDY OBJECTIVE 6

Recognize the limitations of financial statement analysis.

Significant business decisions are frequently made using one or more of the analytical tools illustrated in this chapter. But you should be aware of the limitations of these tools and of the financial statements on which they are based.

ESTIMATES

Financial statements contain numerous estimates. Estimates are used in determining the allowance for uncollectible receivables, periodic depreciation, and contingent losses. To the extent that these estimates are inaccurate, the financial ratios and percentages are inaccurate.

COST

Traditional financial statements are based on cost. They are not adjusted for price-level changes. Comparisons of unadjusted financial data from different periods may be rendered invalid by significant inflation or deflation. For example, a five-year comparison of Brinker's revenues might show a growth of 36 percent. But this growth trend would be misleading if the general price level had increased significantly during the same period.

ALTERNATIVE ACCOUNTING METHODS

Companies vary in the generally accepted accounting principles they use. Such variations may hamper comparability. For example, one company may use the first-in, first-out (FIFO) method of inventory costing; another company in the same industry may use last-in, first-out (LIFO). If inventory is a significant asset to both companies, it is unlikely that their current ratios are comparable. For example, if **General Motors Corporation** had used FIFO instead of LIFO in valuing its inventories, its inventories would have been 26 percent higher. This difference would significantly affect the current ratio (and other ratios as well). In addition to differences in inventory costing methods, differences also exist in reporting such items as depreciation, depletion, and amortization. These differences in accounting methods might be detectable from reading the notes to the financial statements. But adjusting the financial data to compensate for the different methods is difficult, if not impossible, in some cases.

ATYPICAL DATA

Fiscal year-end data may not be typical of the financial condition during the year. Firms frequently establish a fiscal year-end that coincides with the low point in operating activity or in inventory levels. Therefore, certain account balances (cash, receivables, payables, and inventories) may not be representative of the balances in the accounts during the year.

DIVERSIFICATION OF FIRMS

Diversification within a global environment also limits the usefulness of financial analysis. Many firms today are so diversified that they cannot be classified by a single industry—they are true conglomerates. Others appear to be comparable but are not.

ETHICS NOTE

When investigating diversified firms, investors are often most interested to learn about the results of particular divisions. Firms are required to disclose the results of distinct lines of business separately if they are a material part of operations. Unfortunately, shifting revenues and expenses across divisions to achieve desired results reduces the usefulness of this information for financial statement analysis.

BEFORE YOU GO ON...

▶ REVIEW IT

1. What are some limitations of financial statement analysis?
2. Give examples of alternative accounting methods that hamper comparability.
3. In what way does diversification limit the usefulness of financial statement analysis?



DEMONSTRATION PROBLEM

The condensed financial statements of Landry's Restaurant, Inc., for the years ended December 31, 2004 and 2005, are presented below.

LANDRY'S RESTAURANTS, INC. Consolidated Balance Sheets

	December 31	
	2005	2004
Assets		
Current assets:		
Cash and cash equivalents	\$ 39,215,562	\$ 201,394,032
Accounts receivable—trade and other, net	21,973,228	18,595,531
Inventories	59,716,920	55,004,153
Deferred taxes	12,763,948	10,859,160
Other current assets	12,768,611	11,630,527
Total current assets	146,438,269	297,483,403

Property and equipment, net	1,380,258,684	1,007,296,936
Goodwill and trademarks	46,716,151	20,225,297
Other intangible assets, net	3,459,417	216,806
Other assets, net	35,706,292	19,729,829
Total assets	<u>\$1,612,578,813</u>	<u>\$1,344,952,271</u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 90,489,190	\$ 48,341,318
Accrued liabilities	123,098,491	84,955,488
Income taxes payable	5,060,885	971,175
Current portion of long-term notes and other obligations	1,851,741	1,700,496
Total current liabilities	<u>220,500,307</u>	<u>135,968,477</u>
Long-term notes, net of current portion	816,043,799	559,545,092
Deferred taxes	21,635,903	13,343,631
Other liabilities	37,628,343	35,198,105
Total liabilities	<u>1,095,808,352</u>	<u>744,055,305</u>
Commitments and contingencies		
Stockholders' equity		
Common stock, \$0.01 par value, 60,000,000 shares authorized, 21,593,823 and 25,607,573 issued and outstanding, respectively	215,938	256,076
Additional paid-in capital	324,570,406	401,228,736
Deferred stock compensation	(6,392,177)	(4,281,670)
Retained earnings	198,376,294	203,693,824
Total stockholders' equity	<u>516,770,461</u>	<u>600,896,966</u>
Total liabilities and stockholders' equity	<u>\$1,612,578,813</u>	<u>\$1,344,952,271</u>

LANDRY'S RESTAURANTS, INC.
Consolidated Statements of Income

	<u>Year Ended December 31</u>	
	<u>2005</u>	<u>2004</u>
Revenues	\$1,254,805,671	\$1,167,475,165
Operating costs and expenses:		
Cost of revenues	333,027,693	326,108,007
Labor	377,215,289	337,633,530
Other operating expenses	311,647,878	282,411,954
General and administrative expenses	57,693,473	58,319,642
Depreciation and amortization	63,492,747	57,294,123
Asset impairment expense	–0–	1,708,654
Preopening expenses	4,772,425	5,203,518
Total operating costs and expenses	<u>1,147,849,505</u>	<u>1,068,679,428</u>
Operating income	106,956,166	98,795,737
Other expense (income):		
Interest expense, net	41,437,790	15,185,605
Other, net	95,196	13,543,626
	<u>41,532,986</u>	<u>28,729,231</u>
Income before income tax	65,423,180	70,066,506
Income tax	20,608,144	3,544,778
Net income	<u>\$ 44,815,036</u>	<u>\$ 66,521,728</u>

SOURCE: <http://www.landrysrestaurants.com/pdf/financial/2005AnnualReport.pdf>.

Instructions

Compute the following ratios for 2005.

- (a) Current ratio
- (b) Inventory turnover
- (c) Profit margin
- (d) Return on assets
- (e) Return on common stockholders' equity
- (f) Debt to total assets ratio
- (g) Times interest earned

SOLUTION TO DEMONSTRATION PROBLEM

- (a) Current ratio

$$\$146,438,269 / \$220,550,307 = 0.66$$

- (b) Inventory turnover

Average inventory

$$\frac{\$59,716,920 + \$55,004,153}{2} = \$57,360,537$$

$$\$333,027,693 / \$57,360,537 = 5.81 \text{ times}$$

- (c) Profit margin

$$\$44,815,036 / \$1,254,805,671 = 3.57\%$$

- (d) Return on assets

Average assets

$$\frac{\$1,612,578,813 + \$1,344,952,271}{2} = \$1,478,765,542$$

$$\$44,815,036 / \$1,478,765,542 = 3.03\%$$

- (e) Return on common stockholders' equity

Average stockholders' equity

$$\frac{\$516,770,461 + \$600,896,966}{2} = \$558,833,714$$

$$\$44,815,036 / \$558,833,714 = 8.02\%$$

- (f) Debt to total asset ratio

$$\$1,095,808,352 / \$1,612,578,813 = 67.95\%$$

- (g) Times interest earned

$$(\$65,423,180 + \$41,437,790) / \$41,437,790 = 2.58 \text{ times}$$

ACTION PLAN

- Remember that the current ratio includes all current assets. The acid-test ratio uses only cash, short-term investments, and net receivables.
- Use average balances for turnover ratios like inventory, receivables, and assets.
- Remember that return on assets is less than or equal to return on common stockholders' equity, depending on cost of debt.



SUMMARY OF STUDY OBJECTIVES

1. Discuss the need for comparative analysis. There are three bases of comparison: (1) Intracompany, which compares an item or financial relationship with other data within a company. (2) Industry, which compares company data with industry averages. (3) Intercompany, which compares an item or a financial relationship of a company with data of one or more competing companies.

2. Identify the tools of financial statement analysis. Financial statements can be analyzed horizontally, vertically, and with ratios.

3. Explain and apply horizontal (trend) analysis. Horizontal analysis is a technique for evaluating a series of data over a period of time to determine the increase or decrease that has taken place, expressed as either an amount or a percentage.

4. Describe and apply vertical analysis. Vertical analysis is a technique that expresses each item within a financial statement in terms of a percentage of a relevant total or a base amount.

5. Identify and compute ratios; and describe their purpose and use in analyzing a firm's liquidity, profitability, and solvency. The formula and purpose of each ratio was presented in Illustration 7-23.

6. Recognize the limitations of financial statement analysis.

The usefulness of analytical tools is limited by the use of estimates, the cost basis, the application of alternative accounting methods, atypical data at year-end, and the diversification of firms.



GLOSSARY

Acid-test (quick) ratio A measure of a company's immediate short-term liquidity; computed by dividing the sum of cash, short-term investments, and net receivables by current liabilities. (p. 215).

Asset turnover A measure of how efficiently a company uses its assets to generate sales; computed by dividing net sales by average assets. (p. 218).

Current ratio A measure used to evaluate a company's liquidity and short-term debt-paying ability; computed by dividing current assets by current liabilities. (p. 214).

Debt to total assets ratio Measures the percentage of total assets provided by creditors; computed by dividing total debt by total assets. (p. 220).

Horizontal analysis A technique for evaluating a series of financial statement data over a period of time to determine the increase (decrease) that has taken place; expressed as either an amount or a percentage. (p. 207)

Inventory turnover A measure of the liquidity of inventory; computed by dividing cost of goods sold by average inventory. (p. 216).

Liquidity ratios Measures of the short-term ability of the enterprise to pay its maturing obligations and to meet unexpected needs for cash. (p. 214).

Profit margin Measures the percentage of each dollar of sales that results in net income; computed by dividing net income by net sales. (p. 217).

Profitability ratios Measures of the income or operating success of an enterprise for a given period of time. (p. 217).

Ratio An expression of the mathematical relationship between one quantity and another; the relationship may be expressed either as a percentage, a rate, or a simple proportion. (p. 213).

Ratio analysis A technique for evaluating financial statements that expresses the relationship between selected financial statement data. (p. 213).

Receivables turnover A measure of the liquidity of receivables; computed by dividing net credit sales by average net receivables. (p. 216).

Return on assets An overall measure of profitability; computed by dividing net income by average assets. (p. 218).

Return on common stockholders' equity Measures the dollars of net income earned for each dollar invested by the owners; computed by dividing net income by average common stockholders' equity. (p. 219).

Solvency ratios Measures of the ability of the enterprise to survive over a long period of time. (p. 220).

Times interest earned Measures a company's ability to meet interest payments as they come due; computed by dividing income before interest expense and income taxes by interest expense. (p. 220).

Vertical analysis A technique for evaluating financial statement data that expresses each item within a financial statement as a percent of a base amount. (p. 210).

EXERCISES

7-1 Using the following data from the comparative balance sheet of Solais Bed & Breakfast, illustrate horizontal analysis.

	<u>December 31, 2008</u>	<u>December 31, 2007</u>
Accounts receivable	\$ 540,000	\$ 400,000
Inventory	\$ 840,000	\$ 600,000
Total assets	\$ 3,640,000	\$2,800,000

Prepare horizontal analysis.
(SO 3)

7-2 Using the same data presented above in 7-1 for Solais, illustrate vertical analysis.

Prepare vertical analysis.
(SO 4)

7-3 Net income was \$500,000 in 2006; \$400,000 in 2007; and \$508,000 in 2008. What is the percentage of change from (a) 2006 to 2007 and (b) 2007 to 2008? Is the change an increase or a decrease?

Calculate percentage of change.
(SO 3)

7-4 If Helene Cruises had net income of \$650,000 in 2008 and it experienced a 30 percent increase in net income over 2007, what was its 2007 net income?

Calculate net income.
(SO 3)

7-5 Vertical analysis (common size) percentages for Osborne Hot Dogs' sales, cost of goods sold, and expenses are as follows:

<u>Vertical Analysis</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>
Sales	100.0	100.0	100.0
Cost of goods sold	59.2	62.4	64.5
Expenses	25.0	26.6	27.5

Calculate change in net income.
(SO 4)

Did Osborne's net income as a percent of sales increase, decrease, or remain unchanged over the three-year period? Provide numerical support for your answer.

7-6 Selected condensed data taken from a recent balance sheet of **Kutenai Luau, Inc.**, are as follows:

Calculate liquidity ratios.
(SO 5)

KUTENAI LUAU, INC.

Balance Sheet (partial)

Cash	\$ 8,041,000
Short-term investments	1,947,000
Accounts receivable	12,545,000
Inventories	14,814,000
Other current assets	5,571,000
Total current assets	<u>\$42,918,000</u>
Total current liabilities	<u>\$40,644,000</u>

What are the (a) working capital, (b) current ratio, and (c) acid-test ratio?

7-7 Augusta Catering had net income of \$11.44 million and net revenue of \$88 million in 2008. Its assets were \$14 million at the beginning of the year and \$18 million at the end of the year. What were (a) Augusta's asset turnover and (b) profit margin for 2006?

Calculate profitability ratios.
(SO 5)

7-8 The following data are taken from the financial statements of Mercado Decorations:

Evaluate collection of accounts receivable.
(SO 5)

	<u>2009</u>	<u>2008</u>
Accounts receivable (net), end of year	\$ 550,000	\$ 520,000
Net sales on account	3,850,000	3,100,000

- (a) Compute for each year (1) the receivables turnover and (2) the average collection period. At the end of 2007, accounts receivable (net) was \$490,000.
(b) What conclusions about the management of accounts receivable can be drawn from these data?

7-9 The following data are from the income statements of Ellen Noodles Company:

Evaluate management of inventory.
(SO 5)

	<u>2009</u>	<u>2008</u>
Sales	\$6,420,000	\$6,240,000
Beginning inventory	960,000	860,000
Purchases	4,540,000	4,661,000
Ending inventory	1,020,000	960,000

(a) Compute for each year (1) the inventory turnover and (2) the average days to sell the inventory.

(b) What conclusions concerning the management of the inventory can be drawn from these data?

7-10 The comparative balance sheets of Ramsey Egyptian Buffet are presented below.

Prepare horizontal and vertical analyses.
(SO 3, 4)

RAMSEY EGYPTIAN BUFFET

Comparative Balance Sheets

December 31

	<u>2009</u>	<u>2008</u>
Assets		
Current assets	\$ 76,000	\$ 80,000
Property, plant, and equipment (net)	99,000	90,000
Intangibles	25,000	40,000
Total assets	<u>\$200,000</u>	<u>\$210,000</u>

(continues)

Liabilities and stockholders' equity		
Current liabilities	\$ 40,800	\$ 48,000
Long-term liabilities	143,000	150,000
Stockholders' equity	16,200	12,000
Total liabilities and stockholders' equity	<u>\$200,000</u>	<u>\$210,000</u>

Instructions

- (a) Prepare a horizontal analysis of the balance sheet data for Ramsey using 2008 as a base.
 (b) Prepare a vertical analysis of the balance sheet data for Ramsey in columnar form for 2009.

Prepare horizontal and vertical analyses.

(SO 3, 4)

- 7-11** The comparative income statements of Accra Pies are shown below.

ACCRA PIES
 Comparative Income Statements
 For the Years Ended December 31

	<u>2009</u>	<u>2008</u>
Net sales	\$600,000	\$500,000
Cost of goods sold	<u>480,000</u>	<u>420,000</u>
Gross profit	120,000	80,000
Operating expenses	<u>57,200</u>	<u>44,000</u>
Net income	<u>\$ 62,800</u>	<u>\$ 36,000</u>

Instructions

- (a) Prepare a horizontal analysis of the income statement data for Accra using 2008 as a base. (Show the amounts of increase or decrease.)
 (b) Prepare a vertical analysis of the income statement data for Accra in columnar form for both years.

Compute liquidity ratios.

(SO 5)

- 7-12** Selected financial statement data for Jamestown Resorts for the year ending January 31, 2008, are as follows:

JAMESTOWN RESORTS, INC.

Balance Sheet (partial)
 (in millions)

	<u>End of Year</u>	<u>Beginning of Year</u>
Cash and cash equivalents	\$ 331	\$ 25
Receivables (less allowance of \$23 and \$17)	699	722
Merchandise inventory	888	946
Prepaid expenses	37	29
Other current assets	<u>102</u>	<u>91</u>
Total current assets	<u>\$2,057</u>	<u>\$1,813</u>
Total current liabilities	<u>\$ 950</u>	<u>\$ 951</u>

For the year, net sales were \$5,634 million, and cost of goods sold was \$3,766 million.

Instructions

Compute the four liquidity ratios at the end of the current year.

Perform current and acid-test ratio analysis.

(SO 5)

- 7-13** Wolfe Hospitality Consulting had the following transactions occur involving current assets and current liabilities during February 2008:

- Feb. 3 Accounts receivable of \$15,000 are collected.
 7 Equipment is purchased for \$28,000 cash.
 11 Paid \$3,000 for a three-year insurance policy.
 14 Accounts payable of \$12,000 are paid.
 18 Cash dividends of \$5,000 are declared.

Additional information:

- As of February 1, 2008, current assets were \$140,000, and current liabilities were \$50,000.
- As of February 1, 2008, current assets included \$15,000 of inventory and \$2,000 of prepaid expenses.

Instructions

- Compute the current ratio as of the beginning of the month and after each transaction.
- Compute the acid-test ratio as of the beginning of the month and after each transaction.

7-14 Sophia Gourmet has the following comparative balance sheet data.

Compute selected ratios.
(SO 5)

SOPHIA GOURMETBalance Sheets
December 31

	<u>2008</u>	<u>2007</u>
Cash	\$ 15,000	\$ 30,000
Receivables (net)	70,000	60,000
Inventories	60,000	50,000
Plant assets (net)	200,000	180,000
	<u>\$345,000</u>	<u>\$320,000</u>
Accounts payable	\$ 40,000	\$ 60,000
Mortgage payable (15%)	100,000	100,000
Common stock, \$10 par	140,000	120,000
Retained earnings	65,000	40,000
	<u>\$345,000</u>	<u>\$320,000</u>

Additional information for 2008:

- Net income was \$25,000.
- Sales on account were \$420,000. Sales returns and allowances were \$20,000.
- Cost of goods sold was \$198,000.
- The allowance for doubtful accounts was \$2,500 on December 31, 2008, and \$2,000 on December 31, 2007.

Instructions

Compute the following ratios on December 31, 2008:

- Current
- Acid-test
- Receivables turnover
- Inventory turnover

7-15 Selected comparative statement data for Isabel Wedding Consultant are presented below. All balance sheet data are as of December 31.

Compute selected ratios.
(SO 5)

	<u>2008</u>	<u>2007</u>
Net sales	\$800,000	\$720,000
Cost of goods sold	480,000	440,000
Interest expense	7,000	5,000
Net income	60,000	42,000
Accounts receivable	120,000	100,000
Inventory	85,000	75,000
Total assets	580,000	500,000
Total common stockholders' equity	430,000	325,000

Instructions

Compute the following ratios for 2008:

- Profit margin
- Asset turnover
- Return on assets
- Return on common stockholders' equity

Compute selected ratio.
(SO 5)

7-16 The income statement for J and T Seafood appears below.

J AND T SEAFOOD	
Income Statement	
For the Year Ended December 31, 2008	
Sales	\$400,000
Cost of goods sold	230,000
Gross profit	<u>170,000</u>
Expenses (including \$16,000 interest and \$24,000 income taxes)	<u>100,000</u>
Net income	<u>\$ 70,000</u>

Additional information:

1. The weighted average common shares outstanding in 2008 were 30,000 shares.
2. The market price of J and T Seafood stock was \$13 in 2008.
3. Cash dividends of \$23,000 were paid, \$5,000 of which were to preferred stockholders.

Instructions

Compute the times interest earned ratio for 2008.

FINANCIAL REPORTING PROBLEM: PepsiCo, Inc.



7-17 Your parents are considering investing in **PepsiCo, Inc.**, common stock. They ask you, as an accounting expert, to make an analysis of the company for them. Fortunately, excerpts from a current annual report of PepsiCo are presented in Appendix A of this textbook. Note that all dollar amounts are in millions.

Instructions

(Follow the approach in the chapter for rounding numbers.)

- (a) Make a three-year trend analysis, using 2004 as the base year, of (1) net sales and (2) net income. Comment on the significance of the trend results.
- (b) Compute for 2006 and 2005 the (1) profit margin, (2) asset turnover, (3) return on assets, and (4) return on common stockholders' equity. How would you evaluate PepsiCo's profitability? Total assets on December 31, 2004, were \$27,987,000,000; and total stockholders' equity on December 31, 2005, was \$13,572,000,000.
- (c) Compute for 2006 and 2005 the (1) debt to total assets ratio and (2) times interest earned ratio. How would you evaluate PepsiCo's long-term solvency?
- (d) What information outside the annual report may also be useful to your parents in making a decision about PepsiCo, Inc.?

ETHICS CASE

7-18 Ross Clark, president of Clark Hotels, wishes to issue a press release to bolster his company's image and maybe even its stock price, which has been gradually falling. As controller, you have been asked to provide a list of twenty financial ratios along with some other operating statistics relative to Clark's first-quarter financials and operations.

Two days after you provide the ratios and data requested, Alysa Jones, the public relations director of Clark, asks you to prove the accuracy of the financial and operating data contained in the press release written by the president and edited by Jones. In the news release, the president highlights the sales increase of 25 percent over last year's first quarter and the positive change in the current ratio from 1.5:1 last year to 3:1 this year. He also emphasizes that production was up 50 percent over the prior year's first quarter.

You note that the press release contains only positive or improved ratios and none of the negative or deteriorated ratios. For instance, no mention is made that the debt to total assets ratio has increased from 35 to 55 percent; that inventories are up 89 percent; and that while the current ratio improved, the acid-test ratio fell from 1:1 to 0.5:1. Nor is there any mention that the reported profit for the quarter would have been a loss had not the estimated lives of Clark's building and land been increased by 30 percent. Jones emphasized, "The prez wants this release by early this afternoon."

Instructions

- (a) Who are the stakeholders in this situation?
- (b) Is there anything unethical in President Clark's actions?
- (c) Should you as controller remain silent? Does Jones have any responsibility?



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

ACCOUNTING FOR MERCHANTISING OPERATIONS IN HOSPITALITY



THE NAVIGATOR

- Understand *Concepts for Review*

- Read *Feature Story*

- Scan *Study Objectives*

- Read *Preview*

- Read text and answer *Before You Go On*
p. 243 p. 245 p. 250

- Work *Demonstration Problem*

- Review *Summary of Study Objectives*

- Complete *Assignments*

ONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. How to close revenue, expense, and dividend accounts. (Ch. 5, pp. 145–150)
- b. The steps in the accounting cycle. (Ch. 5, pp. 150–151)

F E A T U R E S T O R Y

Selling Dollars for 85 Cents

For most of the last decade, **Wal-Mart** has set the rules of the retail game. Entrepreneur Scott Blum, founder and CEO of **Buy.com**, has a different game plan. He is selling consumer products at or below cost. Buy.com is trying to create an outlet synonymous with low prices—in the hope of becoming the leading e-commerce portal on the Internet. He plans to make up the losses from sales by selling advertising on the company's Web site and in a magazine to be mailed to Buy.com customers.

As if the idea of selling below cost weren't unusual enough, Blum has added another twist to merchandising: Unlike **Amazon.com**, he doesn't want to handle inventory. So he has wholesalers and distributors ship the products directly to his Web site customers.

Buy.com's slogan, "The lowest prices on earth," may be the most eye-catching sales pitch ever. The company is ruthlessly committed to

being the price leader—even if it means losing money on every sale. Its own computers search competitors' Web sites to make sure that Buy.com has the lowest prices on the Internet. When Amazon.com, in June 2002, reduced its minimum-purchase order for free shipping to \$49 (from \$99), Buy.com one-upped that move a day later by offering free shipping with no minimum purchase.

eToys, **Pets.com**, and **Cyberian Outpost** all went under during the dot-com wreck of 2000–2001; and Amazon.com, after seven years, had yet to turn a profit. Only **eBay**, an auction site, is consistently profitable. Still, Scott Blum stretches for a bigger portion of a \$50 billion online sales market by being the low-cost e-tailer.

Consider the implications if Buy.com is successful: Buy.com's success could change the very way wholesalers and

distributors view their businesses. Its success may have an impact on all kinds of retailers—starting with Buy.com itself. If Buy.com proves that the ad space on a product order form—its Web site—is almost as valuable as the product being ordered, another virtual reseller is sure to enter the market with even lower prices.

Of course, there is one big winner if Buy.com succeeds: you. It has never been a better time to be a customer.

SOURCE: Quentin Hardy, "The Death and Life of Buy.com," *Forbes*, January 21, 2002, pp. 86–89.

www.buy.com



S T U D Y O B J E C T I V E S

After studying this chapter, you should be able to

1. Identify the differences between a service enterprise and a merchandiser.
2. Explain the entries for purchases under a perpetual inventory system.
3. Explain the entries for sales revenues under a perpetual inventory system.
4. Explain the steps in the accounting cycle for a merchandiser.
5. Prepare a work sheet for a merchandiser.

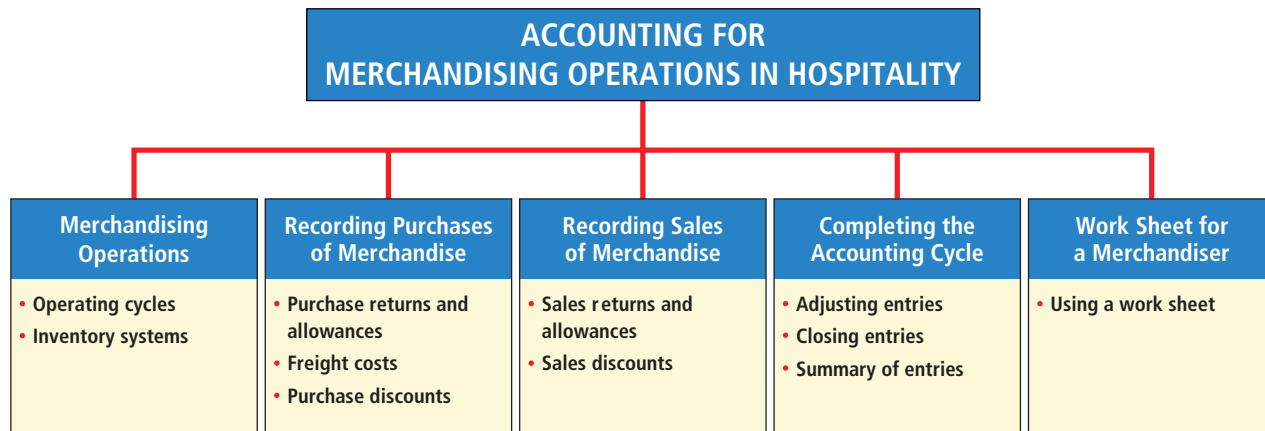


PREVIEW OF CHAPTER 8

As indicated in the Feature Story, selling below cost or having a “lost-leader” item as a special on a restaurant menu is not a new concept. Hotels often offer free weekends to special targeted guests so as to sell them vacation packages and timeshare units. At the same time, restaurants, hotels, country clubs, and theme parks also sell merchandise in addition to food, room, membership, and an entrance fee to a fun day at the park. Merchandise can be in any form from food items, such as those sold by PepsiCo, to souvenirs and T-shirts that bear a hotel, club, or park logo. Merchandisers that purchase and sell directly to consumers—such as **Wendy’s**, **Burger King**, and **McDonald’s**—are called *retailers*. In contrast, merchandisers that sell to retailers, such as **PepsiCo** or **SYSCO**, are called *wholesalers*.

The steps in the accounting cycle for a merchandiser are the same as the steps for a service enterprise. But merchandisers use additional accounts and entries that are required in recording merchandising transactions.

The content and organization of Chapter 8 are as follows:



MERCHANDISING OPERATIONS

STUDY OBJECTIVE 1

Identify the differences between a service enterprise and a merchandiser.

Measuring net income for a merchandiser is conceptually the same as for a service enterprise. That is, net income (or loss) results from the matching of expenses with revenues. For a merchandiser, the primary source of revenues is the sale of merchandise. This revenue source is often referred to as **sales revenue** or **sales**. Unlike expenses for a service company, expenses for a merchandiser are divided into two categories: (1) the cost of goods sold and (2) operating expenses.

The **cost of goods sold** is the total cost of merchandise sold during the period. This expense is directly related to the revenue recognized from the sale of the goods. Sales revenue less cost of goods sold is called **gross profit** on sales. For example, when a calculator costing \$15 is sold for \$25, the gross profit is \$10. Merchandisers report gross profit on sales in the income statement.

After gross profit is calculated, operating expenses are deducted to determine net income (or net loss). **Operating expenses** are expenses incurred in the process of earning sales revenue. Examples of operating expenses are sales salaries, advertising expense, and insurance expense. The operating expenses of a merchandiser include many of the expenses found in a service company.

The income measurement process for a merchandiser is diagrammed in Illustration 8-1. The items in the three blue boxes are peculiar to a merchandiser. They are not used by a service company.

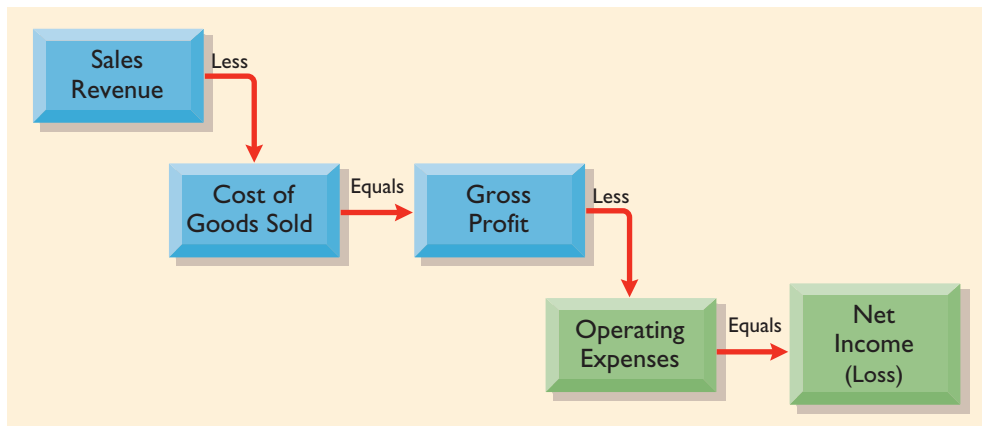


Illustration 8-1

Income measurement process for a merchandiser

In hospitality, the *cost of goods sold* concept is further divided into cost of *food sold* and cost of *beverage sold*. All food items, including all meat products, produce, coffee, baked goods, tea, candy, cigarettes, and soft drinks and other non-alcoholic beverages are considered food. Only alcoholic beverages, namely, liquor, beer, and wine, are included as beverages. These two items have to be separated and accounted for differently because they have unique cost structure and tax implications.

Food cost percentage can be anywhere from 20 percent to more than 50 percent, depending on the type of establishment. Quick-service restaurants and cafeterias normally have lower food costs, whereas country clubs have higher food costs. This is the case because members pay their monthly dues to the club. Thus, to encourage members to dine at the club, the menu prices are often lower than those of a freestanding restaurant or a restaurant in a hotel. Therefore, with the same quality of food served, the food cost percentage is higher at the club. As for beverages, each state alcoholic beverage commission needs to keep track of alcohol sales and consumption. Therefore, alcoholic beverages must be accounted for separately.

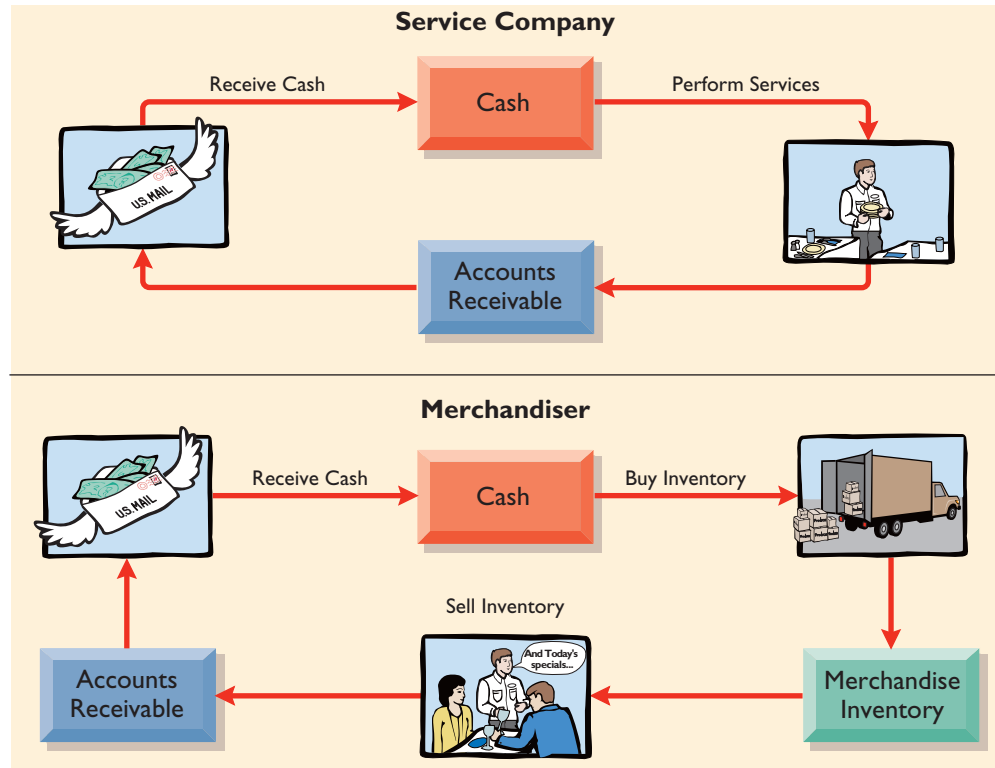
As for the accounting procedure, the calculation is the same as cost of goods sold. Sales less cost is gross profit on sales. For example, if a prime rib dinner is sold for \$19.95 and the plate cost is \$8.00, then food sales is \$19.95, cost of food sold is \$8.00, and gross profit on food is \$11.95. Similarly, if a bottle of wine that costs \$7.25 is sold for \$25.00, then beverage sales is \$25.00, cost of beverage sold is \$7.25, and gross profit on beverages is \$17.75.

OPERATING CYCLES

The operating cycle of a merchandiser differs from that of a service company, as shown in Illustration 8-2. The operating cycle of a merchandiser ordinarily is longer than that of a service company. The purchase of merchandise inventory and its eventual sale lengthen the cycle. Note that the added asset account for a merchandising company is an **inventory** account. It is usually titled Merchandise Inventory. Merchandise inventory is reported as a current asset on the balance sheet.

Illustration 8-2

Operating cycles for a service company and a merchandiser



INVENTORY SYSTEMS

A merchandiser keeps track of its inventory to determine what is available for sale and what has been sold. One of two systems is used to account for inventory: a perpetual inventory system or a periodic inventory system.

Perpetual System

In a **perpetual inventory system**, detailed records of the cost of each inventory purchase and sale are maintained. This system continuously—perpetually—shows the inventory that should be on hand for every item. For example, a wine cellar has separate inventory records for each variety of Chardonnay, Merlot, Beaujolais, or Cabernet. With the use of bar codes and optical scanners, a grocery store can keep a daily running record of every box of cereal and every jar of jelly that it buys and sells. Under a perpetual inventory system, the cost of goods sold is determined *each time a sale occurs*.

Many software companies have products for perpetual inventory usage for the hospitality industry to use in office supply rooms, storerooms for hotel guests’ amenities, food service outlets, freestanding restaurants, and grocery stores and meat companies.

With today’s technology, storeroom inventory software is quite affordable and easy to use. In dry storerooms, canned goods can be scanned as they are stocked. The software maintains a perpetual inventory of the number of cans so that when items are received, inventory levels go up, and when items are issued, inventory levels go down. Some software even can include other functions, such as triggering automatic reorder points, reminding the purchaser of set expiration dates, and tracking lot code in the case of a recall. In this last function of recalls for food items, not only can an automatic system prevent financial loss, but more important, it can protect the health of guests. In some hotel engineering departments,

HELPFUL HINT

For control purposes, a physical inventory count is taken under the perpetual system, even though it is not needed to determine cost of goods sold.

especially in the megahotels that have a few thousand rooms, a perpetual inventory system can help to track spare parts and supplies so that engineers will always be able to have the tools available to take care of any problems. Just imagine not having the right parts to fix an air-conditioning system in a hotel in Las Vegas during the summer months. This is not a problem that anyone would like to experience.

There is also certain software that is specifically designed for performing perpetual inventory on perishable items, such as meat and baked goods. This type of software is very useful for food service outlets and especially for food retail grocery places, where ready-to-eat food, from lasagna to stuffed veal chops and take-home meals, are sold to customers. Any items received, produced, sold, marked down, and thrown away can be tracked with a client Web-browser in-store user interface. Some of this software even will print cut lists, cutting tests, cost analyses, and at-case bar-coded markdown labels from hand-held Web-browser scanners. This actually can help in production planning and thus minimize waste.

TECHNOLOGY IN ACTION



What's in a bar code? First, the bar code usually doesn't contain descriptive data (just as your Social Security number or car's license plate number doesn't have anything about your name or where you live). For example, the bar codes found on food items at grocery stores don't contain the price or description of the food item. Instead, the bar code has a 12-digit "product number" in it. When read by a bar code reader and transmitted to the computer, the computer finds the disk file item record(s) associated with that item number. In the disk file is the price, vendor name, quantity on hand, description, and so on. The computer does a "price lookup" by reading the bar code, and then it creates a register of the items and adds the price to the subtotal of the groceries sold. It also subtracts the quantity from the "on-hand" total.

How is a grocery store's accounting equation changed by the computer's bar code actions?

SOURCE: Excerpted from *A Bar Code Primer*, © 1997 Worth Data.



Periodic System

In a **periodic inventory system**, detailed inventory records of the goods on hand are not kept throughout the period. The cost of goods sold is determined *only at the end of the accounting period*—that is, periodically. At that time, a physical inventory count is taken to determine the cost of goods on hand (Merchandise Inventory). To determine the cost of goods sold under a periodic inventory system, the following steps are necessary: (1) Determine the cost of goods on hand at the beginning of the accounting period. (2) Add to it the cost of goods purchased. (3) Subtract the cost of goods on hand at the end of the accounting period.

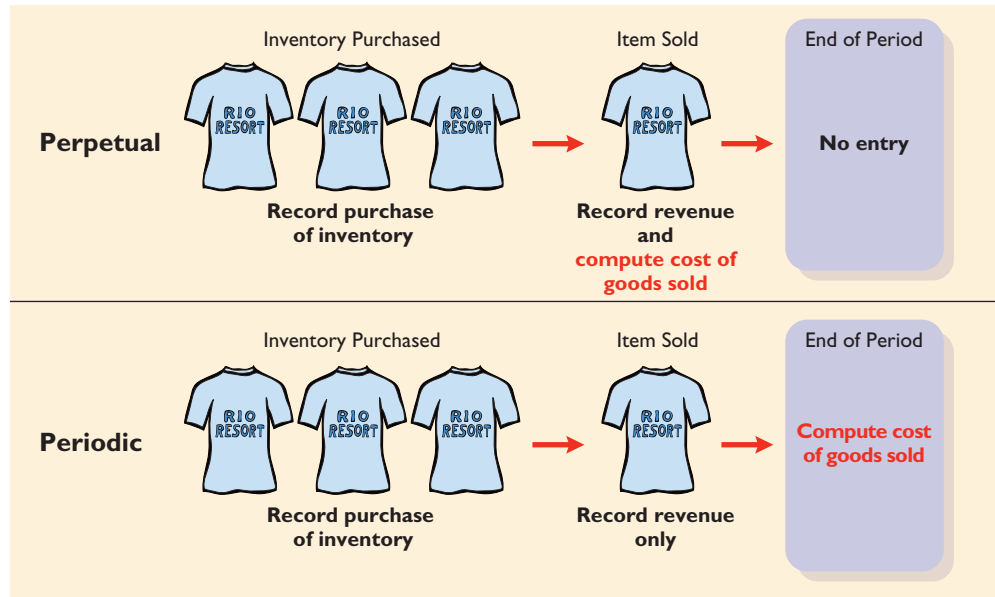
Illustration 8-3 graphically compares the sequence of activities and the timing of the cost of goods sold computation under the two inventory systems.

Additional Considerations

Perpetual systems traditionally have been used by companies that sell merchandise with high unit values. Examples are automobiles, furniture, and major home appliances. The widespread use of computers and electronic scanners now enables

Illustration 8-3

Comparing periodic and perpetual inventory systems



many more companies to install perpetual inventory systems. The perpetual inventory system is so named because the accounting records continuously—perpetually—show the quantity and the cost of the inventory that should be on hand at any time.

A perpetual inventory system provides better control over inventories than a periodic system does. The inventory records show the quantities that should be on hand. So the goods can be counted at any time to see whether the amount of goods actually on hand agrees with the inventory records. Any shortages uncovered can be investigated immediately. A perpetual inventory system does require additional clerical work and additional cost to maintain the subsidiary records. But a computerized system can minimize this cost.

RECORDING PURCHASES OF MERCHANDISE

STUDY OBJECTIVE 2


Explain the entries for purchases under a perpetual inventory system.

Purchases of inventory may be made for cash or on account (credit). Purchases are normally recorded when the goods are received from the seller. Every purchase should be supported by business documents that provide written evidence of the transaction. Each cash purchase should be supported by a canceled check or a cash register receipt indicating the items purchased and amounts paid. Cash purchases are recorded by an increase in Merchandise Inventory and a decrease in Cash.

Each credit purchase should be supported by a **purchase invoice**. This document indicates the total purchase price and other relevant information. But the purchaser does not prepare a separate purchase invoice. Instead, the copy of the sales invoice sent by the seller is used by the buyer as a purchase invoice. Illustration 8-4, for example, describes a transaction between Beyer Theme Park and Sellers T-Shirts. Beyer purchases logo T-shirts and other merchandise from Sellers to be sold in its retail outlets throughout the theme park. The sales invoice prepared by Sellers T-Shirts (the seller) is used as a purchase invoice by Beyer (the buyer).

Illustration 8-4

Sales invoice used as purchase invoice by Beyer Theme Park



SELLERS T-SHIRTS
27 CIRCLE DRIVE
HARDING, MICHIGAN 48281

INVOICE NO. 731

**S
O
L
D
T
O** Firm Name Beyer Theme Park

Attention of James Hoover, Purchasing Agent

Address 125 Main Street

Chelsea Illinois 60915
City State Zip

Date	5/4/08	Salesperson	Malone	Terms	2/10, n/30	Freight Paid by Buyer	
Catalog No.		Description		Quantity	Price	Amount	
X572Y9820		Logo T-shirts		1000	5.00	\$5,000	
A2547Z45		Logo Baseball Caps		500	6.00	3,000	
IMPORTANT: ALL RETURNS MUST BE MADE WITHIN 10 DAYS						TOTAL	\$8,000

HELPFUL HINT

To better understand the contents of this invoice, identify these items:

1. Seller
2. Invoice date
3. Purchaser
4. Salesperson
5. Credit terms
6. Freight terms
7. Goods sold: catalog number, description, quantity, price per unit
8. Total invoice amount

The associated entry for Beyer Theme Park for the invoice from Sellers T-Shirts looks like this:

May 4	Merchandise Inventory Accounts Payable (To record goods purchased on account from Sellers T-Shirts)	8,000	8,000
-------	---	-------	-------

A	=	L	+	SE
+8,000		+8,000		

Under the perpetual inventory system, purchases of merchandise for sale are recorded in the Merchandise Inventory account. Thus a retailer of general merchandise, such as **Wal-Mart**, would debit Merchandise Inventory for clothing, sporting goods, and anything else purchased for resale to customers.

Not all purchases are debited to Merchandise Inventory, however. Purchases of assets acquired for use and not for resale (such as supplies, equipment, and similar items) are recorded as increases to specific asset accounts rather than to Merchandise Inventory. Beyer would increase Supplies to record the purchase of materials used to make shelf signs or of cash register receipt paper.

PURCHASE RETURNS AND ALLOWANCES

A purchaser may be dissatisfied with the merchandise received. The goods may be damaged or defective, of inferior quality, or perhaps do not meet the purchaser’s specifications. In such cases, the purchaser may return the goods to the seller. The purchaser is granted credit if the sale was made on credit or a cash refund if the purchase was for cash. This transaction is known as a **purchase return**. Or the purchaser may choose to keep the merchandise if the seller is willing to grant an allowance (deduction) from the purchase price. This transaction is known as a **purchase allowance**.

The purchaser initiates the request for a reduction of the balance due through the issuance of a **debit memorandum**. A debit memorandum is a document issued by a purchaser to inform a supplier that a debit has been made to the supplier’s account on the purchaser’s books. The original copy of the memorandum is sent to the supplier, and one copy is retained by the purchaser. The information contained in a debit memorandum is shown in Illustration 8-5; it relates to the sales invoice shown in Illustration 8-4.

Illustration 8-5
Debit memorandum

DEBIT-DM126

Beyer Theme Park
125 Main Street
Chelsea, IL 60915

Purchased From:

Firm Name Sellers T-Shirts

Attention of Susan Malone, Sales Representative

Address 27 Circle Drive

Harding MI 48281

City State Zip

Date	5/8/08	Salesperson	Malone	Invoice No.	731	Invoice Date	5/4/08	Approved	Reid
Catalogue No.	A2547Z45	Description	Logo Baseball Caps (Beyer's name was misspelled)	Quantity	500	Price	6.00	Amount	\$3,000

Cash Refund Debit Account Other

HELPFUL HINT

Note that the debit memorandum is prenumbered to help ensure that all memoranda are accounted for.

As shown in the debit memorandum, Beyer returned goods costing \$3,000 to Sellers on May 8. The entry by Beyer Theme Park for the returned merchandise looks like this:

A	=	L	+	SE
-3,000		-3,000		

May 8	Accounts Payable Merchandise Inventory (To record return of defective logo caps received from Sellers T-Shirts, DM No. 126)	3,000	3,000
-------	---	-------	-------

Beyer Theme Park increased Merchandise Inventory when the goods were received. So Beyer decreases Merchandise Inventory when it returns the goods or when it is granted an allowance.

FREIGHT COSTS

The sales agreement should indicate whether the seller or the buyer is to pay the cost of transporting the goods to the buyer's place of business. When a common carrier such as a railroad, a trucking company, or an airline is used, the transportation company prepares a freight bill (often called a *bill of lading*) in accordance with the sales agreement. Freight terms are expressed as either **FOB shipping point** or **FOB destination**. The letters FOB mean *free on board*. Thus *FOB shipping point* means that goods are placed free on board the carrier by the seller, and the buyer pays the freight costs. Conversely, *FOB destination* means that the goods are placed free on board to the buyer's place of business, and the seller pays the freight. For example, the sales invoice in Illustration 8-4 on page 239 indicates that the buyer (Beyer Theme Park) pays the freight charges.

When the purchaser directly incurs the freight costs, the account Merchandise Inventory is debited. For example, if on delivery of the goods on May 6, Beyer pays Acme Freight Company \$150 for freight charges, the entry on Beyer's books looks like this:

May 6	Merchandise Inventory	150	
	Cash		150
	(To record payment of freight on goods purchased)		

HELPFUL HINT

Freight terms may be stated by location. A Chicago seller may use "FOB Chicago" for FOB shipping point and the buyer's city for FOB destination.

A	=	L	+	SE
+150				
-150				

In contrast, **freight costs incurred by the seller on outgoing merchandise are an operating expense to the seller**. These costs increase an expense account titled Freight-out or Delivery Expense. If the freight terms on the invoice in Illustration 8-4 had required that Sellers T-Shirts pay the \$150 freight charges, the entry by Sellers would look like this:

May 4	Freight-out (or Delivery Expense)	150	
	Cash		150
	(To record payment of freight on goods sold)		

A	=	L	+	SE
-150				-150

When the freight charges are paid by the seller, the seller will usually establish a higher invoice price for the goods to cover the expense of shipping.

PURCHASE DISCOUNTS

The credit terms of a purchase on account may permit the buyer to claim a cash discount for prompt payment. The buyer calls this cash discount a **purchase discount**. This incentive offers advantages to both parties: The purchaser saves money, and the seller is able to shorten the operating cycle by converting the accounts receivable into cash earlier.

The **credit terms** specify the amount of the cash discount and the time period during which it is offered. They also indicate the length of time in which the purchaser is expected to pay the full invoice price. In the sales invoice in

HELPFUL HINT

The term *net* in “net 30” means the remaining amount due after subtracting any sales returns and allowances and partial payments.

Purchase Discount



Merchandise Inventory
XXX

Illustration 8-4, credit terms are 2/10, n/30. This is read “two-ten, net thirty.” It means that a 2 percent cash discount may be taken on the invoice price, less (“net of”) any returns or allowances, if payment is made within 10 days of the invoice date (the *discount period*). If payment is not made in that time, the invoice price, less any returns or allowances, is due 30 days from the invoice date. Or the discount period may extend to a specified number of days after the month in which the sale occurs. For example, 1/10 EOM (end of month) means that a 1 percent discount is available if the invoice is paid within the first 10 days of the next month.

The seller may elect not to offer a cash discount for prompt payment. In that case, credit terms will specify only the maximum time period for paying the balance due. For example, the time period may be stated as n/30, n/60, or n/10 EOM. These mean, respectively, that the net amount must be paid in 30 days, 60 days, or within the first 10 days of the next month.

When an invoice is paid within the discount period, the amount of the discount decreases Merchandise Inventory. Inventory is recorded at its cost; and by paying within the discount period, the merchandiser has reduced its cost. To illustrate, assume Beyer Theme Park pays the balance due of \$5,000 (gross invoice price of \$8,000 less purchase returns and allowances of \$3,000) on May 14, the last day of the discount period. The cash discount is \$100 ($\$5,000 \times 2\%$), and the amount of cash paid by Beyer is \$4,900 ($\$5,000 - \100). The entry to record the May 14 payment by Beyer looks like this:

A	=	L	+	SE
-4,900		-5,000		
-100				

May 14	Accounts Payable	5,000	
	Cash		4,900
	Merchandise Inventory		100
	(To record payment within discount period)		

If Beyer failed to take the discount and instead made full payment on June 3, Beyer’s entry would be

A	=	L	+	SE
-5,000		-5,000		

June 3	Accounts Payable	5,000	
	Cash		5,000
	(To record payment with no discount taken)		

ACCOUNTING MATTERS! *Ethics Insight*



How high is too high? Returns can become so high that it is questionable whether sales revenue should have been recognized in the first place. An example of high returns is **Florafax International, Inc.**, a floral supply company, which was alleged to have shipped its product without customer authorization on ten holiday occasions, including 8,562 shipments of flowers to customers for Mother’s Day and 6,575 for Secretary’s Day. The return rate on these shipments went as high as 69 percent of sales. As one employee noted, “Products went out the front door and came in the back door.”

How does management know the amount of sales returns? Would returns for a floral supply company have a greater negative impact on earnings than returns for a department store?



A merchandiser usually should take all available discounts. Passing up the discount may be viewed as *paying interest* for use of the money. For example, if Beyer passed up the discount, it would be like paying an interest rate of 2 percent for the use of \$5,000 for 20 days. This is the equivalent of an annual interest rate of approximately 36.5 percent ($2\% \times 365/20$). Obviously, it would be better for Beyer to borrow at prevailing bank interest rates of 8 percent to 12 percent than to lose the discount.

HELPFUL HINT

So as not to miss purchase discounts, unpaid invoices should be filed by due dates. This procedure helps the purchaser to remember the discount date, prevents early payment of bills, and maximizes the time that cash can be used for other purposes.

BEFORE YOU GO ON...**REVIEW IT**

1. How does the measurement of net income in a merchandising company differ from that in a service enterprise?
2. In what ways is a perpetual inventory system different from a periodic system?
3. Under the perpetual inventory system, what entries are made to record purchases, purchase returns and allowances, purchase discounts, and freight costs?



RECORDING SALES OF MERCHANDISE

Sales revenues, like service revenues, are recorded when earned. This is done in accord with the revenue recognition principle. Typically, sales revenues are earned when the goods are transferred from the seller to the buyer. At this point, the sales transaction is completed, and the sales price has been established.

Sales may be made on credit or for cash. Every sales transaction should be supported by a business document that provides written evidence of the sale. **Cash register tapes** provide evidence of cash sales. A **sales invoice**, like the one that was shown in Illustration 8-4 (page 239), provides support for a credit sale. The original copy of the invoice goes to the customer. A copy is kept by the seller for use in recording the sale. The invoice shows the date of sale, customer name, total sales price, and other relevant information.

Two entries are made for each sale. The first entry records the sale: Cash (or Accounts Receivable, if a credit sale) is increased by a debit, and Sales is increased by a credit at the selling (invoice) price of the goods. The second entry records the cost of the merchandise sold: Cost of Goods Sold is increased by a debit, and Merchandise Inventory is decreased by a credit for the cost of those goods. As a result, the Merchandise Inventory account will show at all times the amount of inventory that should be on hand.

To illustrate a credit sales transaction, Sellers sale of \$8,000 on May 4 to Beyer (see Illustration 8-4, page 239) is recorded as follows (assume the merchandise cost Sellers \$1,600):

May 4	Accounts Receivable	8,000	
	Sales		8,000
	(To record credit sale to Beyer Theme Park per invoice #731)		

STUDY OBJECTIVE 3

Explain the entries for sales revenues under a perpetual inventory system.

A	=	L	+	SE
+8,000				+8,000

A	=	L	+	SE
-1,600				-1,600

May 4	Cost of Goods Sold	1,600	
	Merchandise Inventory		1,600
	(To record cost of merchandise sold on invoice #731 to Beyer Theme Park)		

HELPFUL HINT

The Sales account is credited only for sales of goods held for resale. Sales of assets not held for resale (such as equipment or land) are credited directly to the asset account.

For internal decision-making purposes, merchandisers may use more than one sales account. For example, Sellers T-Shirts may keep separate sales accounts for its key chains, sweatshirts, and pens. By using separate sales accounts for major product lines, company management can monitor sales trends more closely and respond more strategically to changes in sales patterns. For example, if key chain sales are increasing while sweatshirt sales are decreasing, the company could reevaluate its advertising and pricing policies on each of these items.

However, on its income statement presented to outside investors, a merchandiser normally would provide only a single sales figure—the sum of all its individual sales accounts. This is done for two reasons: First, providing detail on individual sales accounts would add length to the income statement. Second, companies do not want their competitors to know the details of their operating results.

SALES RETURNS AND ALLOWANCES

We now look at the “flip side” of purchase returns and allowances, which are **sales returns and allowances** recorded on the books of the seller.

To grant the customer a sales return or an allowance, the seller normally prepares a **credit memorandum**. This document informs a customer that a credit has been made to the customer’s account receivable for a sales return or an allowance. The information contained in a credit memorandum is similar to the information found in the debit memorandum in Illustration 8-5 (page 240). The original copy of the credit memorandum is sent to the customer, and a copy is kept by the seller as evidence of the transaction.

Sellers T-Shirts’ entries to record credit for returned goods involve two entries: (1) The first is an increase in Sales Returns and Allowances and a decrease in Accounts Receivable at the \$3,000 selling price. (2) The second is an increase in Merchandise Inventory (assume a \$900 cost) and a decrease in Cost of Goods Sold. The entries are as follows:

A	=	L	+	SE
-3,000				-3,000

May 8	Sales Returns and Allowances	3,000	
	Accounts Receivable		3,000
	(To record credit granted to Beyer Theme Park for returned goods)		

A	=	L	+	SE
+900				+900

8	Merchandise Inventory	900	
	Cost of Goods Sold		900
	(To record cost of goods returned)		

HELPFUL HINT

Remember that the increases, decreases, and normal balances of contra accounts are the opposite of the accounts to which they correspond.

If goods are returned because they are damaged or defective, then the entry to Merchandise Inventory and Cost of Goods Sold should be for the estimated value of the returned goods rather than their cost. For example, if the goods returned to Sellers were defective and had a scrap value of \$50, Merchandise Inventory would be debited for \$50, and Cost of Goods Sold would be credited for \$50.

Sales Returns and Allowances is a **contra revenue account** to Sales. The normal balance of Sales Returns and Allowances is a debit. A contra account is used, instead of debiting Sales, to disclose in the accounts the amount of sales returns and allowances. This information is important to management. Excessive returns and allowances suggest inferior merchandise, inefficiencies in filling orders, errors in billing customers, and mistakes in delivery or shipment of goods. Also, a debit recorded directly to Sales could distort comparisons between total sales in different accounting periods.

SALES DISCOUNTS

As mentioned in our discussion of purchase transactions, the seller may offer the customer a cash discount for the prompt payment of the balance due. From the seller's point of view, this is called a **sales discount**. Like a purchase discount, a sales discount is based on the invoice price less returns and allowances, if any. The Sales Discounts account is debited for discounts that are taken. The entry by Sellers T-Shirts to record the cash receipt on May 15 from Beyer Theme Park within the discount period looks like this:

May 15	Cash	4,900	
	Sales Discounts	100	
	Accounts Receivable		5,000
	(To record collection within 2/10, n/30 discount period from Beyer Theme Park)		



A	=	L	+	SE
+4,900				-100
-5,000				

Like Sales Returns and Allowances, Sales Discounts is a contra revenue account to Sales. Its normal balance is a debit. This account is used, instead of debiting Sales, to disclose cash discounts taken by customers. If the discount is not taken, Sellers T-Shirts debits Cash for \$5,000 and credits Accounts Receivable for the same amount at the date of collection.

BEFORE YOU GO ON...

▶ REVIEW IT

- Under a perpetual inventory system, what are the two entries that must be recorded at the time of each sale?
- Why is it important to use the Sales Returns and Allowances account, rather than simply reducing the Sales account, when goods are returned?

▶ DO IT

On September 5, De La Hoya Hotels buys merchandise on account from Junot Diaz Company. The selling price of the goods is \$1,500, and the cost to Diaz Company was \$800. On September 8, defective goods with a selling price of \$200 and a scrap value of \$80 are returned. Record the transaction on the books of both companies.

ACTION PLAN

- Purchaser: Record purchases of inventory at its cost and directly reduce the Merchandise Inventory account for returned goods.
- Seller: Record both the sale and the cost of goods sold at the time of the sale. Record returns in a contra account, Sales Returns and Allowances.

SOLUTION

De La Hoya Hotels

Sept. 5	Merchandise Inventory Accounts Payable (To record goods purchased on account)	1,500	1,500
8	Accounts Payable Merchandise Inventory (To record return of defective goods)	200	200

Junot Diaz Company

Sept. 5	Accounts Receivable Sales (To record credit sale)	1,500	1,500
5	Cost of Goods Sold Merchandise Inventory (To record cost of goods sold on account)	800	800
8	Sales Returns and Allowances Accounts Receivable (To record credit granted for receipt of returned goods)	200	200
8	Merchandise Inventory Cost of Goods Sold (To record scrap value of goods returned)	80	80



COMPLETING THE ACCOUNTING CYCLE

STUDY OBJECTIVE 4

Explain the steps in the accounting cycle for a merchandiser.

Up to this point we have illustrated the basic entries in recording transactions relating to purchases and sales in a perpetual inventory system. Now we consider the remaining steps in the accounting cycle for a merchandiser. Each of the required steps described in Chapter 5 for a service company applies to a merchandising company. Use of a work sheet by a merchandiser (an optional step) is shown in the next section.

ADJUSTING ENTRIES

A merchandiser generally has the same types of adjusting entries as a service company. But a merchandiser using a perpetual system will require one additional adjustment to make the records agree with the actual inventory on hand. Here's why: At the end of each period, a merchandiser using a perpetual system will take a physical count of its goods on hand for control purposes. A company's unadjusted balance in Merchandise Inventory usually will not agree with the actual amount of inventory on hand at year-end. The perpetual inventory records may be incorrect

HELPFUL HINT

The steps required to determine the actual inventory on hand are discussed in Chapter 9.

owing to a variety of causes such as recording errors, theft, or waste. As a result, the perpetual records need adjustment to ensure that the recorded inventory amount agrees with the actual inventory on hand. **This involves adjusting Merchandise Inventory and Cost of Goods Sold.**

For example, suppose that the records of Sellers T-Shirts report an unadjusted balance in Merchandise Inventory of \$40,500. Through a physical count, the company determines that its actual merchandise inventory on hand at year-end is \$40,000. The adjusting entry would be to debit Cost of Goods Sold for \$500 and to credit Merchandise Inventory for \$500.

CLOSING ENTRIES

For a merchandiser, like a service enterprise, all accounts that affect the determination of net income are closed to Income Summary. In journalizing, all temporary accounts with debit balances are credited, and all temporary accounts with credit balances are debited, as shown below for Sellers T-Shirts. Cost of goods sold is a new account that must be closed to Income Summary.

Dec. 31	Sales	480,000	
	Income Summary		480,000
	(To close income statement accounts with credit balances)		
31	Income Summary	450,000	
	Sales Returns and Allowances		12,000
	Sales Discounts		8,000
	Cost of Goods Sold		316,000
	Store Salaries Expense		45,000
	Salaries Expense		19,000
	Freight-out		7,000
	Advertising Expense		16,000
	Utilities Expense		17,000
	Depreciation Expense		8,000
	Insurance Expense		2,000
	(To close income statement accounts with debit balances)		
31	Income Summary	30,000	
	Retained Earnings		30,000
	(To close net income to retained earnings)		
31	Retained Earnings	15,000	
	Dividends		15,000
	(To close dividends to retained earnings)		

HELPFUL HINT

The easiest way to prepare the first two closing entries is to identify the temporary accounts by their balances and then prepare one entry for the credits and one for the debits.

After the closing entries are posted, all temporary accounts have zero balances. In addition, Retained Earnings has a credit balance of \$48,000: beginning balance + net income – dividends (\$33,000 + \$30,000 – \$15,000).

SUMMARY OF MERCHANDISING ENTRIES

The entries for the merchandising accounts using a perpetual inventory system are summarized in Illustration 8-6.

Illustration 8-6

Daily recurring and adjusting and closing entries

	<u>Transactions</u>	<u>Daily Recurring Entries</u>	<u>Dr.</u>	<u>Cr.</u>
Sales Transactions	Sell merchandise to customers.	Cash or Accounts Receivable Sales Cost of Goods Sold Merchandise Inventory	XX XX	 XX XX
	Grant sales returns or allowances to customers.	Sales Returns and Allowances Cash or Accounts Receivable Merchandise Inventory Cost of Goods Sold	XX XX XX	 XX XX
	Pay freight costs on sales; FOB destination.	Freight-out Cash	XX XX	 XX
	Receive payment from customers within discount period.	Cash Sales Discounts Accounts Receivable	XX XX XX	 XX
	Purchase merchandise for resale.	Merchandise Inventory Cash or Accounts Payable	XX XX	 XX
Purchase Transactions	Pay freight costs on merchandise purchased; FOB shipping point.	Merchandise Inventory Cash	XX XX	 XX
	Receive purchase returns or allowances from suppliers.	Cash or Accounts Payable Merchandise Inventory	XX XX	 XX
	Pay suppliers within discount period.	Accounts Payable Merchandise Inventory Cash	XX XX	 XX XX
	<u>Events</u>	<u>Adjusting and Closing Entries</u>		
	Adjust because book amount is higher than the inventory amount determined to be on hand.	Cost of Goods Sold Merchandise Inventory	XX XX	 XX
	Close temporary accounts with credit balances.	Sales Income Summary	XX XX	 XX
	Close temporary accounts with debit balances.	Income Summary Sales Returns and Allowances Sales Discounts Cost of Goods Sold Freight-out Expenses	XX XX	 XX XX XX XX XX

WORK SHEET FOR A MERCHANTISER

USING A WORK SHEET

STUDY OBJECTIVE 5

Prepare a work sheet for a merchandiser.

As indicated in Chapter 5, a work sheet enables financial statements to be prepared before the adjusting entries are journalized and posted. The steps in preparing a work sheet for a merchandiser are the same as they are for a service enterprise (see page 139). The work sheet for Sellers T-Shirts is shown in Illustration 8-7. The unique accounts for a merchandiser using a perpetual inventory system are shown in capital letters in green.

Illustration 8-7

Work sheet for merchandiser

SELLERS T-SHIRTS										
Work Sheet										
For the Year Ended December 31, 2008										
	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash	9,500				9,500				9,500	
Accounts Receivable	16,100				16,100				16,100	
MERCHANDISE INVENTORY	40,500			(a) 500	40,000				40,000	
Prepaid Insurance	3,800			(b) 2,000	1,800				1,800	
Equipment	80,000				80,000				80,000	
Accumulated Depreciation		16,000		(c) 8,000		24,000				24,000
Accounts Payable		20,400				20,400				20,400
Common Stock		50,000				50,000				50,000
Retained Earnings		33,000				33,000				33,000
Dividends	15,000				15,000				15,000	
SALES		480,000				480,000	480,000			
SALES RETURNS AND ALLOWANCES	12,000				12,000		12,000			
SALES DISCOUNTS	8,000				8,000		8,000			
COST OF GOODS SOLD	315,500		(a) 500		316,000		316,000			
Freight-out	7,000				7,000		7,000			
Advertising Expense	16,000				16,000		16,000			
Salaries Expense	19,000				19,000		19,000			
Store Salaries Expense	40,000			(d) 5,000	45,000		45,000			
Utilities Expense	17,000				17,000		17,000			
Totals	<u>599,400</u>	<u>599,400</u>								
Insurance Expense			(b) 2,000		2,000		2,000			
Depreciation Expense			(c) 8,000		8,000		8,000			
Salaries Payable				(d) 5,000		5,000				5,000
Totals			<u>15,500</u>	<u>15,500</u>	<u>612,400</u>	<u>612,400</u>	<u>450,000</u>	<u>480,000</u>	<u>162,400</u>	<u>132,400</u>
Net Income							30,000			30,000
Totals							<u>480,000</u>	<u>480,000</u>	<u>162,400</u>	<u>162,400</u>

Key: (a) Adjustment to inventory on hand, (b) Insurance expired, (c) Depreciation expense, (d) Salaries accrued.

Trial Balance Columns

Data for the trial balance are obtained from the ledger balances of Sellers T-Shirts on December 31. The amount shown for Merchandise Inventory, \$40,500, is the year-end inventory amount from the perpetual inventory system.

Adjustments Columns

A merchandiser generally has the same types of adjustments as a service company. As you see in the work sheet, adjustments (b), (c), and (d) are for insurance, depreciation, and salaries. These adjustments also were required for

Premier Staffing Agency, as illustrated in previous chapters. Adjustment (a) was required to adjust the perpetual inventory carrying amount to the actual count.

After all adjustments data are entered on the work sheet, the equality of the adjustments column totals is established. The balances in all accounts are then extended to the adjusted trial balance columns.

Adjusted Trial Balance

The adjusted trial balance shows the balance of all accounts after adjustment at the end of the accounting period.

Income Statement Columns

The accounts and the balances that affect the income statement are transferred from the adjusted trial balance columns to the income statement columns. For Sellers T-Shirts, Sales of \$480,000 is shown in the credit column. The contra revenue accounts Sales Returns and Allowances \$12,000 and Sales Discounts \$8,000 are shown in the debit column.

Finally, all the credits in the income statement column should be totaled and compared to the total of the debits in the income statement column. If the credits exceed the debits, the company has net income. In Sellers T-Shirts' case, there was net income of \$30,000. If the debits exceed the credits, the company would report a net loss.

Balance Sheet Columns

The major difference between the balance sheets of a service company and a merchandiser is inventory. For Sellers T-Shirts, the ending inventory amount of \$40,000 is shown in the balance sheet debit column. The information to prepare the retained earnings statement is also found in these columns. That is, the retained earnings account beginning balance is \$33,000. The dividends are \$15,000. Net income results when the total of the debit column exceeds the total of the credit column in the balance sheet columns. A net loss results when the total of the credits exceeds the total of the debit balances.

BEFORE YOU GO ON...

► REVIEW IT

1. Why is an adjustment to the Merchandise Inventory account usually needed?
2. What merchandising account(s) will appear in the postclosing trial balance?

► DO IT

The trial balance of Revere Finest Foods on December 31 shows Merchandise Inventory \$25,000; Sales \$162,400; Sales Returns and Allowances \$4,800; Sales Discounts \$3,600; Cost of Goods Sold \$110,000; Rental Revenue \$6,000; Freight-out \$1,800; Rent Expense \$8,800; and Salaries and Wages Expense \$22,000. Prepare the closing entries for the above accounts.

ACTION PLAN

- Close all temporary accounts with credit balances to Income Summary by debiting these accounts.
- Close all temporary accounts with debit balances to Income Summary by crediting these accounts.

SOLUTION

The two closing entries are

Dec. 31	Sales	162,400	
	Rental Revenue	6,000	
	Income Summary		168,400
	(To close accounts with credit balances)		
Dec. 31	Income Summary	151,000	
	Cost of Goods Sold		110,000
	Sales Returns and Allowances		4,800
	Sales Discounts		3,600
	Freight-out		1,800
	Rent Expense		8,800
	Salaries and Wages Expense		22,000
	(To close accounts with debit balances)		



D

EMONSTRATION PROBLEM

Gregory Scott, a former professional golf star, operates Greg's Pro Shop at Bay Golf Course. At the beginning of the current season on April 1, the ledger of Greg's Pro Shop showed Cash \$2,500; Merchandise Inventory \$3,500; and Common Stock \$6,000. The following transactions were completed during April:

- Apr. 5 Purchased golf bags, clubs, and balls on account from Hardy Co., \$1,600, FOB shipping point, terms 2/10, n/60.
- 7 Paid freight on Hardy purchase, \$80.
- 9 Received credit from Hardy Co. for merchandise returned, \$100.
- 10 Sold merchandise on account to members, \$1,100, terms n/30. The merchandise sold had a cost of \$730.
- 12 Purchased golf shoes, sweaters, and other accessories on account from Titleist Sportswear, \$660, terms 1/10, n/30.
- 14 Paid Hardy Co. in full, less discount.
- 17 Received credit from Titleist Sportswear for merchandise returned, \$60.
- 20 Made sales on account to members, \$700, terms n/30. The cost of the merchandise sold was \$490, less discount.
- 21 Paid Titleist Sportswear in full.
- 27 Granted an allowance to members for clothing that did not fit properly, \$30.
- 30 Received payments on account from members, \$1,200.

The chart of accounts for the pro shop includes the following: No. 101 Cash, No. 112 Accounts Receivable, No. 120 Merchandise Inventory, No. 201 Accounts Payable, No. 311 Common Stock, No. 401 Sales, No. 412 Sales Returns and Allowances, No. 505 Cost of Goods Sold.

Instructions

- (a) Journalize the April transactions using a perpetual inventory system.
- (b) Enter the beginning balances in the ledger accounts and post the April transactions. (Use J1 for the journal reference.)
- (c) Prepare a trial balance on April 30, 2008.

SOLUTION TO DEMONSTRATION PROBLEM

(a)		GENERAL JOURNAL			J1
Date	Account Titles and Explanation	Ref.	Debit	Credit	
Apr. 5	Merchandise Inventory	120	1,600		
	Accounts Payable	201		1,600	
7	Merchandise Inventory	120	80		
	Cash	101		80	
9	Accounts Payable	201	100		
	Merchandise Inventory	120		100	
10	Accounts Receivable	112	1,100		
	Sales	401		1,100	
	Cost of Goods Sold	505	730		
	Merchandise Inventory	120		730	
12	Merchandise Inventory	120	660		
	Accounts Payable	201		660	
14	Accounts Payable (\$1,600 – \$100)	201	1,500		
	Merchandise Inventory (\$1,500 × 2%)	120		30	
	Cash	101		1,470	
17	Accounts Payable	201	60		
	Merchandise Inventory	120		60	
20	Accounts Receivable	112	700		
	Sales	401		700	
	Cost of Goods Sold	505	490		
	Merchandise Inventory	120		490	
21	Accounts Payable (\$660 – \$60)	201	600		
	Merchandise Inventory (\$600 × 1%)	120		6	
	Cash	101		594	
27	Sales Returns and Allowances	412	30		
	Accounts Receivable	112		30	
30	Cash	101	1,200		
	Accounts Receivable	112		1,200	

(b)						GENERAL LEDGER					
Cash			No. 101			Accounts Payable			No. 201		
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
Apr. 1	Balance	✓			2,500	Apr. 5		J1		1,600	1,600
7		J1		80	2,420	9		J1	100		1,500
14		J1		1,470	950	12		J1		660	2,160
21		J1		594	356	14		J1	1,500		660
30		J1	1,200		1,556	17		J1	60		600
						21		J1	600		-0-
Accounts Receivable			No. 112			Common Stock			No. 311		
Date	Explanation	Ref.	Debit	Credit	Balance	Date	Explanation	Ref.	Debit	Credit	Balance
Apr. 10		J1	1,100		1,100	Apr. 1	Balance	✓			6,600
20		J1	700		1,800						
27		J1		30	1,770	Sales			No. 401		
30		J1		1,200	570	Date	Explanation	Ref.	Debit	Credit	Balance
Merchandise Inventory			No. 120			Apr. 10		J1		1,100	1,100
Date	Explanation	Ref.	Debit	Credit	Balance	20		J1		700	1,800
Apr. 1	Balance	✓			3,500	Sales Returns and Allowances			No. 412		
5		J1	1,600		5,100	Date	Explanation	Ref.	Debit	Credit	Balance
7		J1	80		5,180	Apr. 27		J1	30		30
9		J1		100	5,080	Cost of Goods Sold			No. 505		
10		J1		730	4,350	Date	Explanation	Ref.	Debit	Credit	Balance
12		J1	660		5,010	Apr. 10		J1	730		730
14		J1		30	4,980	20		J1	490		1,220
17		J1		60	4,920						
20		J1		490	4,430						
21		J1		6	4,424						

(c)			GREG'S PRO SHOP		
			Trial Balance		
			April 30, 2008		
		<u>Debit</u>	<u>Credit</u>		
Cash		\$1,556			
Accounts Receivable		570			
Merchandise Inventory		4,424			
Common Stock			\$6,000		
Sales			1,800		
Sales Returns and Allowances		30			
Cost of Goods Sold		<u>1,220</u>			
		<u>\$7,800</u>	<u>\$7,800</u>		



SUMMARY OF STUDY OBJECTIVES

1. Identify the differences between a service enterprise and a merchandiser. Because of inventory, a merchandiser has sales revenue, cost of goods sold, and gross profit. To account for inventory, a merchandiser must choose between a perpetual inventory system and a periodic inventory system.

2. Explain the entries for purchases under a perpetual inventory system. The Merchandise Inventory account is debited for all purchases of merchandise, freight-in, and other costs; and it is credited for purchase discounts and purchase returns and allowances.

3. Explain the entries for sales revenues under a perpetual inventory system. When inventory is sold, Accounts Receivable (or Cash) is debited, and Sales is credited for the *selling price* of the merchandise. At the same time, Cost of Goods

Sold is debited, and Merchandise Inventory is credited for the cost of the inventory items sold.

4. Explain the steps in the accounting cycle for a merchandiser. Each of the required steps in the accounting cycle for a service enterprise applies to a merchandiser. A work sheet is again an optional step. Under a perpetual inventory system, the Merchandise Inventory account must be adjusted to agree with the physical count.

5. Prepare a work sheet for a merchandiser. The steps in preparing a work sheet for a merchandiser are the same as they are for a service company. The unique accounts for a merchandiser are Merchandise Inventory, Sales, Sales Returns and Allowances, Sales Discounts, and Cost of Goods Sold.



GLOSSARY

Contra revenue account An account that is offset against a revenue account on the income statement (p. 245).

Cost of goods sold The total cost of merchandise sold during the period (p. 234).

Credit memorandum A document issued by a seller to inform a customer that a credit has been made to the customer's account receivable for a sales return or an allowance (p. 244).

Credit terms Conditions specified on a sales invoice as to when and in what amount a cash discount will be offered (p. 241).

Debit memorandum A document issued by a buyer to inform a seller that a debit has been made to the seller's account because of unsatisfactory merchandise (p. 240).

FOB destination Freight terms indicating that the goods will be placed free on board at the buyer's place of business and that the seller pays the freight costs (p. 241).

FOB shipping point Freight terms indicating that goods are placed free on board the carrier by the seller and that the buyer pays the freight costs (p. 241).

Gross profit The excess of net sales over the cost of goods sold (p. 234).

Operating expenses Expenses incurred in the process of earning sales revenues that are deducted from gross profit in the income statement (p. 234).

Periodic inventory system An inventory system in which detailed records are not maintained throughout the accounting period and the cost of goods sold is determined only at the end of an accounting period (p. 237).

Perpetual inventory system An inventory system in which the cost of each inventory item is maintained throughout the accounting period and detailed records continuously show the inventory that should be on hand (p. 236).

Purchase allowance A transaction in which the seller deducts from the purchase price to compensate the buyer for less-than-satisfactory merchandise (p. 240).

Purchase discount A cash discount claimed by a buyer for prompt payment of a balance due (p. 241).

Purchase invoice A document that supports each credit purchase (p. 238).

Purchase return A transaction in which a dissatisfied purchaser returns the goods for credit or cash (p. 240).

Sales discount A reduction given by a seller for prompt payment of a credit sale (p. 245).

Sales invoice A document that supports each credit sale (p. 243).

Sales revenue (sales) Primary source of revenue in a merchandising company (p. 234).

EXERCISES

Journalize purchase transactions.

(SO 2)

8-1 Information related to Giberto Pizza and Games is presented below.

- On April 5, purchased merchandise from Allman Company for \$20,000 terms 2/10, net/30, FOB shipping point.
- On April 6, paid freight costs of \$900 on merchandise purchased from Allman.
- On April 7, purchased equipment on account for \$26,000.

4. On April 8, returned damaged merchandise to Allman Company and was granted a \$4,000 allowance for returned merchandise.
5. On April 15, paid the amount due to Allman Company in full.

Instructions

- (a) Prepare the journal entries to record these transactions on the books of Gilberto Pizza and Games under a perpetual inventory system.
- (b) Assume that Gilberto Pizza and Games paid the balance due to Allman Company on May 4 instead of April 15. Prepare the journal entry to record this payment.

8-2 On September 1, Eden County Club had an inventory of 30 golf shirts at a cost of \$18 each. The company uses a perpetual inventory system. During September, the following transactions occurred.

Journalize perpetual inventory entries.
(SO 2, 3)

- Sept. 6 Purchased 80 golf shirts at \$17 each from Mozart Co. for cash.
 9 Paid freight of \$80 on golf shirts purchased from Mozart Co.
 10 Returned 2 golf shirts to Mozart Co. for \$36 credit (including freight) because they did not meet specifications.
 12 Sold 26 golf shirts costing \$18 (including freight) for \$31 each to the Annual Golf Tournament, terms n/30.
 14 Granted credit of \$31 to the Annual Golf Tournament for the return of one shirt that was not ordered.
 20 Sold 30 golf shirts costing \$18 for \$31 each to Mr. Sox, terms n/30.

Instructions

Journalize the September transactions.

8-3 On June 10, Lippizan Crab Shack purchased \$6,000 of merchandise from Bristol Company FOB shipping point, terms 2/10, n/30. Lippizan pays the freight costs of \$400 on June 11. Damaged goods totaling \$300 are returned to Bristol for credit on June 12. The scrap value of these goods is \$150. On June 19, Lippizan pays Bristol Company in full, less the purchase discount. Both companies use a perpetual inventory system.

Prepare purchase and sale entries.
(SO 2, 3)

Instructions

- (a) Prepare separate entries for each transaction on the books of Lippizan.
- (b) Prepare separate entries for each transaction for Bristol Company. The merchandise purchased by Lippizan on June 10 had cost Bristol \$3,000.

8-4 Presented below are transactions related to Rebecca Company.

Journalize sales transactions.
(SO 3)

1. On December 3, Rebecca Company sold \$480 of merchandise to Simonis Putt Putt Golf, terms 2/10, n/30, FOB shipping point. The cost of the merchandise sold was \$350.
2. On December 8, Simonis was granted an allowance of \$27 for merchandise purchased on December 3.
3. On December 13, Rebecca Company received the balance due from Simonis.

Instructions

- (a) Prepare the journal entries to record these transactions on the books of Rebecca Company using a perpetual inventory system.
- (b) Assume that Rebecca Company received the balance due from Simonis Putt Putt Golf on January 2 of the following year instead of on December 13. Prepare the journal entry to record the receipt of payment on January 2.

8-5 The adjusted trial balance of Schinzer Gourmet Deli shows the following data pertaining to sales at the end of its fiscal year October 31, 2006: Sales \$800,000; Freight-out \$16,000; Sales Returns and Allowances \$20,000; and Sales Discounts \$15,000.

Prepare sales revenues section and closing entries.
(SO 3, 4)

Instructions

- (a) Prepare the sales revenues section of the income statement.
- (b) Prepare separate closing entries for (1) sales and (2) the contra accounts to sales.

Prepare adjusting and closing entries. (SO 4)

8-6 Presented is information related to Taylor Memories, Inc., for the month of January 2006.

Ending inventory per perpetual records	\$21,600	Insurance expense	\$12,000
Ending inventory actually on hand	21,000	Rent expense	20,000
Cost of goods sold	208,000	Salary expense	61,000
Freight-out	7,000	Sales discounts	10,000
		Sales returns and allowances	13,000
		Sales	350,000

Instructions

- (a) Prepare the necessary adjusting entry for inventory.
- (b) Prepare the necessary closing entries.

Prepare correcting entries for sales and purchases. (SO 2, 3)

8-7 An inexperienced accountant for Gulliver Company made the following errors in recording merchandising transactions.

1. A \$175 refund to a customer for faulty merchandise was debited to Sales \$175 and credited to Cash \$175.
2. A \$160 credit purchase of supplies was debited to Merchandise Inventory \$160 and credited to Cash \$160.
3. A \$110 sales discount was debited to Sales.
4. A cash payment of \$30 for freight on merchandise purchases was debited to Freight-out \$300 and credited to Cash \$300.

Instructions

Prepare separate correcting entries for each error, assuming that the incorrect entry is not reversed. (Omit explanations.)

Compute missing amounts. (SO 5)

8-8 Presented below is financial information for two different companies.

	<u>Lee Company</u>	<u>Chan Company</u>
Sales	\$90,000	(d)
Sales returns	(a)	\$ 5,000
Net sales	81,000	95,000
Cost of goods sold	56,000	(e)
Gross profit	(b)	41,500
Operating expenses	15,000	(f)
Net income	(c)	15,000

Instructions

Determine the missing amounts.

Journalize, post, and prepare a trial balance. (SO 2, 3, 4)

8-9 J. Ackbar, a former professional tennis star, operates Ackbar's Tennis Shop at the Miller Lake Resort. At the beginning of the current season, the ledger of Ackbar's Tennis Shop showed Cash \$2,500; Merchandise Inventory \$1,700; and Common Stock \$4,200. The following transactions were completed during April.

- Apr. 4 Purchased racquets and balls from Jay-Mac Co. \$640, FOB shipping point, terms 2/10, n/30.
- 6 Paid freight on purchase from Jay-Mac Co. \$40.
- 8 Sold merchandise to members \$1,150, terms n/30. The merchandise sold had a cost of \$790.
- 10 Received credit of \$40 from Jay-Mac Co. for a damaged racquet that was returned.
- 11 Purchased tennis shoes from Venus Sports for cash, \$420.
- 13 Paid Jay-Mac Co. in full.

- 14 Purchased tennis shirts and shorts from Serena's Sportswear \$700, FOB shipping point, terms 3/10, n/60.
- 15 Received cash refund of \$50 from Venus Sports for damaged merchandise that was returned.
- 17 Paid freight on Serena's Sportswear purchase \$30.
- 18 Sold merchandise to members \$760, terms n/30. The cost of the merchandise sold was \$530.
- 20 Received \$500 in cash from members in settlement of their accounts.
- 21 Paid Serena's Sportswear in full.
- 27 Granted an allowance of \$30 to members for tennis clothing that did not fit properly.
- 30 Received cash payments on account from members, \$660.

The chart of accounts for the tennis shop includes the following: No. 101 Cash, No. 112 Accounts Receivable, No. 120 Merchandise Inventory, No. 201 Accounts Payable, No. 311 Common Stock, No. 401 Sales, No. 412 Sales Returns and Allowances, No. 505 Cost of Goods Sold.

Instructions

- (a) Journalize the April transactions using a perpetual inventory system.
- (b) Enter the beginning balances in the ledger accounts and post the April transactions. (Use J1 for the journal reference.)
- (c) Prepare a trial balance on April 30, 2008.

EXPLORING THE WEB

8-10 No financial decision maker should ever rely solely on the financial information reported in the annual report to make decisions. It is important to keep abreast of financial news. This activity demonstrates how to search for financial news on the Web.

Address: biz.yahoo.com/i

Steps

1. Type in either Hilton Hotels or Disney.
2. Choose **News**.
3. Select an article that sounds interesting to you.

Instructions

- (a) What was the source of the article? (For example, Reuters, Businesswire, PR Newswire.)
- (b) Pretend that you are a personal financial planner and that one of your clients owns stock in the company you chose. Write a brief memo to your client, summarizing the article and explaining the implications of the article for his or her investment.

ETHICS CASE

8-11 Rita Pelzer was just hired as the assistant controller of Yorkshire Inns. The company is a specialty chain hotel with nine hotels concentrated in one metropolitan area. Among other things, the payment of all invoices is centralized. Her primary responsibility is to maintain the hotels high credit rating by paying all bills when due and to take advantage of all cash discounts.

Jamie Caterino, the former assistant controller who has been promoted to controller, is training Rita in her new duties. He instructs Rita that she is to continue the practice of preparing all checks "net of discount" and dating the checks the last day of the discount period. "But," Jamie continues, "we always hold the checks at least four days beyond the discount period before mailing them. That way we get another four days of interest on our money. Most of our creditors need our business and don't complain. And if they scream about our missing the discount period, we blame it on the mail room or the post office. We've only lost one discount out of every hundred we take that way. I think everybody does it. By the way, welcome to our team!"

Instructions

- (a) What are the ethical considerations in this case?
- (b) Who are the stakeholders that are harmed or benefited in this situation?
- (c) Should Rita continue the practice started by Jamie? Does she have any choice?



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

INVENTORIES AND COST OF GOODS CALCULATION



THE NAVIGATOR ✓

- Understand *Concepts for Review*

- Read *Feature Story*

- Scan *Study Objectives*

- Read *Preview*

- Read text and answer *Before You Go On*
p. 265 p. 272 p. 280 p. 283

- Work *Demonstration Problem*

- Review *Summary of Study Objectives*

- Complete *Assignments*

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. The cost principle (Ch. 1, p. 9) and matching principle of accounting. (Ch. 4, p. 106)
- b. How to record purchases, sales, and cost of goods sold under a perpetual inventory system. (Ch. 8, pp. 234–245)
- c. How to prepare multiple-step income statements. (Ch. 6, pp. 170–174)
- d. How to prepare a classified balance sheet. (Ch. 5, pp. 154–159)
- e. The limitations of financial statements analysis. (Ch. 7, pp. 222–223)



F E A T U R E S T O R Y

\$12,800 Worth of Blueberry Muffins!

Doing physical inventory is not as simple as counting boxes and cans, especially when this involves staying in the freezer for hours in a heavy parka and gloves. As accurate as one can be, a purchasing or store-room staff, sometimes accompanied by a manager, will count all items and record the amount in the inventory book. At the end of the day, someone in the accounting office will enter in the amounts on a spreadsheet or manually extend the amounts and unit prices to get to the total value of inventory on hand. A lot of mistakes and human error can happen, and they do.

About twenty years ago, a staff member of a foodservice operation at a university did the inventory. After spending hours in the dry store-room, the walk-in refrigerators, and the freezer, he finally got all the numbers into the inventory book and passed that along to an accounting clerk to tabulate the values. The regular accounting clerk was on vacation that week, so a part-time worker was asked to extend the amounts and eventually transfer them to the cost calculation of the inventory cost of the week so as to complete the weekly operating

report and compute the hoped-for profits, for the week.

When the report was complete, although that particular week was a good one in terms of business and a profit should be realized, the foodservice operation recorded a very high profit. The assistant food and beverage director went over the weekly operation report line by line and noticed that the labor cost was in check, but the food cost saw a dramatic decrease when compared with the week before or any other week. She then started to look into the various categories of food, such as meat, dairy, poultry, coffee, baked goods, dry goods, frozen products, and the like. She finally found that the cost of the frozen products was very low. How could that be when the amount of business for the week had not fluctuated that much from other weeks?

Well, the conscientious part-time worker entered in her calculator a unit price of \$128 for the blueberry muffins rather than \$1.28. Thus the 100 units of muffins that were to be used for a big breakfast for 500



people in a few days were counted correctly by the storeroom staff, but the true cost value of \$128 now became \$12,800. With such a huge inflated inventory, of course, the cost of food used was a lot smaller, thus resulting in a very low food cost and high profits. If this was not detected, this huge value, once corrected, would greatly hurt the food cost for that operating period.

As mentioned in Chapter 8, technology has advanced to the extent that bar codes can be scanned and errors such as this can be eliminated. However, for many smaller restaurants out there, manual accounting is still being performed. So watch out for those decimal points when extending the cost of your inventories.



S T U D Y O B J E C T I V E S

After studying this chapter, you should be able to

1. Describe the steps in determining inventory quantities.
2. Prepare the entries for purchases and sales of inventory under a periodic inventory system.

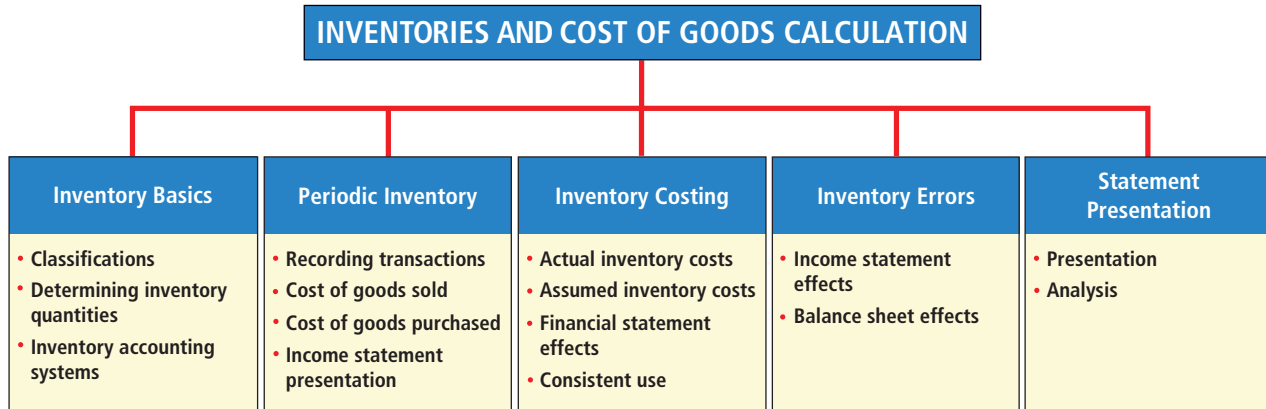
Continued

PREVIEW OF CHAPTER 9

Who would have thought that 100 boxes of (or 600 individual) blueberry muffins that are going to be used to feed 500 college students would mess up profit and loss of a foodservice unit just because of a simple data-entry and calculation error? Inventory costing and calculation are very important. They also have tax effects that can be carried to other accounting periods.

In this chapter we will first explain the methods used in determining the cost of inventory on hand on the balance sheet date. Then we will discuss the differences in perpetual and periodic inventory systems and the effects of inventory errors on a company's financial statements.

The content and organization of Chapter 9 are as follows:



STUDY OBJECTIVES (CONTINUED)

3. Determine cost of goods sold under a periodic inventory system.
4. Identify the unique features of the income statement for a merchandiser using a periodic inventory system.
5. Explain the basis of accounting for inventories, and describe the inventory cost-flow methods.
6. Explain the financial statement and the tax effects of each of the inventory cost-flow methods.
7. Indicate the effects of inventory errors on financial statements.
8. Compute and interpret inventory turnover.



INVENTORY BASICS

In our economy, inventories are an important barometer of business activity. The U.S. Commerce Department publishes monthly inventory data for retailers, wholesalers, and manufacturers. The amount of inventories and the time required to sell the goods on hand are two closely watched indicators. During downturns in the economy, there is an initial buildup of inventories because it takes longer to sell existing quantities. Inventories generally decrease with an upturn in business activity.

A delicate balance must be maintained between too little inventory and too much. A company with too little inventory to meet demand will have dissatisfied customers and sales personnel. One with too much inventory will be burdened with unnecessary carrying costs.

Inventories affect both the balance sheet and the income statement. On the **balance sheet** of merchandising companies, inventory is frequently the most significant current asset. Of course, its amount and relative importance can vary, even for companies in the same industry. For example, in 2005, **Marriott** reported inventory of \$555 million, representing 27.6 percent of total current assets. For the same period, **Starwood Hotels and Resorts Worldwide, Inc.**, reported \$280 million of inventory, representing 12.3 percent of total current assets. In the **income statement**, inventory is vital in determining the results of operations for a particular period. Also, gross profit (net sales less cost of goods sold) is closely watched by management, owners, and other interested parties.

CLASSIFYING INVENTORY

How a company classifies its inventory depends on whether the firm is a merchandiser or a manufacturer. A *merchandiser's* inventory consists of many different items. For example, in a grocery store, canned goods, dairy products, meats, and produce are just a few of the inventory items on hand. These items have two common characteristics: (1) They are owned by the company, and (2) they are in a form ready for sale in the ordinary course of business. Only one inventory classification, **merchandise inventory**, is needed to describe the many different items that make up the total inventory.

A *manufacturer's* inventories are also owned by the company, but some goods may not yet be ready for sale. As a result, inventory is usually classified into three categories: finished goods, work in process, and raw materials. For example, **General Motors** classifies vehicles completed and ready for sale as **finished goods**. The vehicles in various stages of production are classified as **work in process**. The steel, glass, upholstery, and other components that are on hand waiting to be used in production are **raw materials**.

DETERMINING INVENTORY QUANTITIES

Many businesses take a physical inventory count on the last day of the year. Businesses using the periodic inventory system must make such a count to determine the inventory on hand at the balance sheet date and to compute cost of goods sold. Even businesses using a perpetual inventory system must take a physical inventory at some time during the year.

Determining inventory quantities consists of two steps: (1) taking a physical inventory of goods on hand and (2) determining the ownership of goods.

Taking a Physical Inventory

Taking a physical inventory involves actually counting, weighing, or measuring each kind of inventory on hand. In many companies, taking an inventory is a formidable task. An inventory count is generally more accurate when goods are not being sold or received during the counting. So companies often “take inventory” when the business is closed or when business is slow. This, however, is difficult in the hospitality business because most are open 365 days a year.

To minimize errors in taking the inventory, a company should adhere to **internal control principles** and practices that safeguard inventory:

1. The counting should be done by employees who do not have custodial responsibility for the inventory.

HELPFUL HINT

Regardless of the classification, all inventories are reported under current assets on the balance sheet

STUDY OBJECTIVE 1

Describe the steps in determining inventory quantities.

2. Each counter should establish the authenticity of each inventory item. For example, does each box contain four sheetcakes? Is each bottle of liquor a full or a partial?
3. There should be a second count by another employee.
4. Prenumbered inventory tags should be used. All inventory tags should be accounted for.
5. At the end of the count, a designated supervisor should check that all inventory items are tagged and that no items have more than one tag.

After the physical inventory is taken, the quantity of each kind of inventory is listed on **inventory summary sheets**. To ensure accuracy, the listing should be verified by a second employee. Later, unit costs will be applied to the quantities in order to determine a total cost of the inventory—which is the topic of later sections.¹

ACCOUNTING IN ACTION *Business Insight*



Failure to observe the foregoing internal control procedures contributed to the Great Salad Oil Swindle. In this case, management intentionally overstated its salad oil inventory, which was stored in large holding tanks. Three procedures contributed to overstating the oil inventory: (1) Water added to the bottom of the holding tanks caused the oil to float to the top. Inventory-taking crews who viewed the holding tanks from the top observed only salad oil. In fact, as much as 37 of 40 feet of many of the holding tanks contained water. (2) The company's inventory records listed more holding tanks than it actually had. The company repainted numbers on the tanks after inventory crews examined them, so the crews counted the same tanks twice. (3) Underground pipes pumped oil from one holding tank to another during the inventory taking. Therefore, the same salad oil was counted more than once. Although the salad oil swindle was unusual, it demonstrates the complexities involved in ensuring that inventory is properly counted.



Determining Ownership of Goods

Before we can begin to calculate the cost of inventory, we need to consider the ownership of goods. Specifically, we need to be sure that we have not included in the inventory any goods that do not belong to the company.

GOODS IN TRANSIT. Goods are considered *in transit* when they are in the hands of a public carrier (such as a railroad, trucking, or airline company) on the statement date. Goods in transit should be included in the inventory of the party that has legal title to the goods. Legal title is determined by the terms of sale, as shown in Illustration 9-1 and described below.

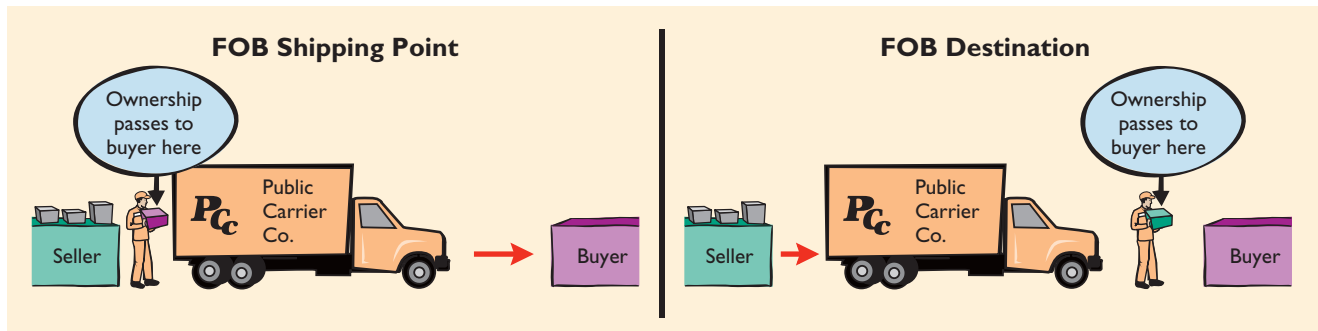
1. **FOB (free on board) shipping point.** Ownership of the goods passes to the buyer when the public carrier accepts the goods from the seller.
2. **FOB destination.** Legal title to the goods remains with the seller until the goods reach the buyer.

Inventory quantities may be seriously miscounted if goods in transit on the statement date are ignored. Assume that Hargrove Meat Company has 20,000 units of inventory on hand on December 31. It also has the following goods in transit: (1) **sales** of 1,500 units shipped December 31 FOB destination and (2) **purchases** of 2,500 units shipped FOB shipping point by the seller on

¹To estimate the cost of inventory when a physical inventory cannot be taken (the inventory is destroyed) or when it is inconvenient (during interim periods), estimating methods are applied.

Illustration 9-1

Terms of sale.



December 31. Hargrove has legal title to both the units sold and the units purchased. If units in transit are ignored, inventory quantities would be understated by 4,000 units (1,500 + 2,500).

TECHNOLOGY IN ACTION



Many companies have invested large amounts of time and money in automated inventory systems. One of the most sophisticated is **Federal Express's** Digitally Assisted Dispatch System (DADS). It uses handheld "Super-Trackers" to transmit data about the packages and documents to the firm's computer system. Based on bar codes, the system allows the firm to know where any package is at any time to prevent losses and to fulfill the firm's delivery commitments. More recently, FedEx's software enables customers to track shipments on their own PCs.

INVENTORY ACCOUNTING SYSTEMS

One of two basic systems of accounting for inventories may be used: (1) the perpetual inventory system or (2) the periodic inventory system. Chapter 8 discusses and illustrates the perpetual inventory system. This chapter discusses and illustrates the **periodic inventory system** and compares the periodic inventory system with the perpetual inventory system. The chapter then continues coverage of the perpetual inventory system.

Some businesses find it either unnecessary or uneconomical to invest in a computerized perpetual inventory system. As illustrated in Chapter 8, a perpetual inventory system keeps track of inventory in number of units *and* in dollar costs per unit. Many small merchandising business managers still feel that a perpetual inventory system costs more than it is worth. These managers can control merchandise and manage day-to-day operations either without detailed inventory records or with a perpetual **units only** inventory system.

BEFORE YOU GO ON...

▶ REVIEW IT

1. What steps are involved in determining inventory quantities?
2. How is ownership determined for goods in transit on the balance sheet date?

▶ DO IT

Hasbeen Company completed its inventory count. It arrived at a total inventory value of \$200,000. You have been informed of the information listed below. Discuss how this information affects the reported cost of inventory.

1. Purchased goods of \$10,000 that were in transit (terms: FOB shipping point) were not included in the count.

- Sold inventory with a cost of \$12,000 that was in transit (terms: FOB shipping point) was not included in the count.

ACTION PLAN

- Apply the rules of ownership to goods held on consignment.
- Apply the rules of ownership to goods in transit FOB shipping point.

SOLUTION

The goods of \$10,000 purchased FOB shipping point should be added to the inventory count. Sold goods of \$12,000 that were in transit FOB shipping point should not be included in the ending inventory. Thus, inventory should be carried at \$198,000 (\$200,000 + \$10,000 – \$12,000).



PERIODIC INVENTORY SYSTEM

STUDY OBJECTIVE 2

Prepare the entries for purchases and sales of inventory under a periodic inventory system.

In a periodic inventory system, revenues from the sale of merchandise are recorded when sales are made, in the same way as in a perpetual system. But no attempt is made on the date of sale to record the cost of the merchandise sold. Instead, a physical inventory count is taken at the end of the period. This count determines (1) the cost of the merchandise on hand and (2) the cost of the goods sold during the period. There are other key differences: Under a periodic system, purchases of merchandise are recorded in a Purchases account rather than a Merchandise Inventory account. Also, under a periodic system, it is customary to record the following in separate accounts: purchase returns and allowances, purchase discounts, and freight-in on purchases. That way, accumulated amounts for each are known.

RECORDING TRANSACTIONS

To illustrate the recording of merchandise transactions under a periodic inventory system, we will use the purchase/sale transactions between Sellers T-Shirts and Beyer Theme Park discussed in Chapter 8.

RECORDING PURCHASES OF MERCHANDISE

On the basis of the sales invoice (Illustration 8-4 shown on page 239) and receipt of the merchandise ordered from Sellers T-Shirts, Beyer Theme Park records the \$8,000 purchase as follows:

HELPFUL HINT
Be careful not to fall into the trap of debiting purchases of equipment or supplies to Purchases.

A	=	L	+	SE
		+8,000		-8,000

May 4	Purchases	8,000	
	Accounts Payable		8,000
	(To record goods purchased on account, terms 2/10, n/30)		

Purchases is a temporary account whose normal balance is a debit.

Purchase Returns and Allowances

Some of the merchandise received from Sellers T-Shirts is defective. Beyer Theme Park returns \$3,000 worth of the goods and prepares the following entry to recognize the purchase return:

A	=	L	+	SE
		-3,000		+3,000

May 8	Accounts Payable	3,000	
	Purchase Returns and Allowances		3,000
	(To record return of defective goods purchased from Sellers T-Shirts)		

Purchase Returns and Allowances is a temporary account whose normal balance is a credit.

Freight Costs

When the purchaser directly incurs the freight costs, the account Freight-In is debited. For example, on delivery of the goods on May 6, Beyer pays Acme Freight Company \$150 for freight charges on its purchase from Sellers. The entry on Beyer's books looks like this:

May 6	Freight-In	150	
	Cash		150
	(To record payment of freight, terms FOB shipping point)		

A	=	L	+	SE
-150				-150

Like Purchases, Freight-In is a temporary account whose normal balance is a debit. **Freight-In is part of cost of goods purchased.** In accordance with the cost principle, cost of goods purchased should include any freight charges necessary to bring the goods to the purchaser. Freight costs are not subject to a purchase discount. Purchase discounts apply only on the invoice cost of the merchandise.

ALTERNATIVE TERMINOLOGY
Freight-In is frequently called *transportation-in*.

Purchase Discounts

On May 14, Beyer Theme Park pays the balance due on account to Sellers. Beyer takes the 2 percent cash discount allowed by Sellers for payment within 10 days. The payment and the discount are recorded by Beyer as follows:

May 14	Accounts Payable	5,000	
	Purchase Discounts		100
	Cash		4,900
	(To record payment to Sellers T-Shirts within the discount period)		

A	=	L	+	SE
-4,900		-5,000		+100

Purchase Discounts is a temporary account whose normal balance is a credit.

RECORDING SALES OF MERCHANDISE

The sale of \$8,000 of merchandise to Beyer on May 4 (sales invoice No. 731, Illustration 8-4 on page 239) is recorded by Sellers T-Shirts as follows:

May 4	Accounts Receivable	8,000	
	Sales		8,000
	(To record credit sales per invoice #731 to Beyer Theme Park)		

A	=	L	+	SE
+8,000				+8,000

Sales Returns and Allowances

Based on the receipt of returned goods from Beyer on May 8, Sellers records the \$3,000 sales return as follows:

May 8	Sales Returns and Allowances	3,000	
	Accounts Receivable		3,000
	(To record return of goods from Beyer Theme Park)		

A	=	L	+	SE
-3,000				-3,000

Sales Discounts

On May 15, Sellers receives payment of \$5,000 on account from Beyer. Sellers honors the 2 percent cash discount and records the payment of Beyer's account receivable in full as follows:

A	=	L	+	SE
+4,900				-100
-5,000				

May 15	Cash	4,900	
	Sales Discounts	100	
	Accounts Receivable		5,000
	(To record collection from Beyer Theme Park within 2/10, n/30 discount period)		

STUDY OBJECTIVE 3

Determine cost of goods sold under a periodic inventory system.

COST OF GOODS SOLD

As the previous entries indicate, under a periodic inventory system a running account of the changes in inventory is not recorded as either purchases or sales transactions occur. Neither the daily amount of merchandise on hand is known, nor cost of goods sold. **To determine cost of goods sold under a periodic inventory system, three steps are required:** (1) Record purchases of merchandise (as shown above). (2) Determine cost of goods purchased. (3) Determine cost of goods on hand at the beginning and end of the accounting period. Cost of goods on hand must be determined by a physical inventory count and application of the cost to the items counted in the inventory. In this section we look in more detail at this process.

HELPFUL HINT

Beginning inventory + Purchases	=	Cost of goods sold
Goods available for sale - Ending inventory		

DETERMINING COST OF GOODS PURCHASED

Earlier in this chapter we used four accounts to record the purchase of inventory under a periodic inventory system. These accounts are illustrated in Illustration 9-2.

Illustration 9-2

Normal balances: cost of goods purchased accounts

Account	Normal Balance
Purchases	Debit
Purchase Returns and Allowances	Credit
Purchase Discounts	Credit
Freight-In	Debit

All of these accounts are **temporary accounts**. They are used to determine cost of goods sold, which is an expense disclosed on the income statement. Therefore, the balances in these accounts must be reduced to zero at the end of each accounting period. Information about cost of goods sold then can be accumulated for the next accounting period.

The procedure for determining cost of goods purchased is as follows:

1. The accounts with credit balances (Purchase Returns and Allowances, Purchase Discounts) are subtracted from Purchases. The result is **net purchases**.
2. Freight-In is then added to net purchases. The result is **cost of goods purchased**.

To illustrate, assume that Sellers T-Shirts shows the following balances for the four accounts: Purchases \$325,000; Purchase Returns and Allowances \$10,400; Purchase Discounts \$6,800; and Freight-In \$12,200. Net purchases is \$307,800, and cost of goods purchased is \$320,000, as computed in Illustration 9-3.

Purchases		\$325,000
(1) Less: Purchase returns and allowances	\$10,400	
Purchase discounts	<u>6,800</u>	<u>17,200</u>
Net purchases		307,800
(2) Add: Freight-in		<u>12,200</u>
Cost of goods purchased		\$320,000

Illustration 9-3

Computation of net purchases and cost of goods purchased

Determining Cost of Goods on Hand

To determine the cost of inventory on hand, Sellers T-Shirts must take a **physical inventory**. Taking a physical inventory involves three steps:

1. Counting the units on hand for each item of inventory.
2. Applying unit costs to the total units on hand for each item.
3. Totaling the costs for each item of inventory to determine the total cost of goods on hand.

A physical inventory should be taken on or near the balance sheet date. In the hospitality industry, owing to the perishable nature of our inventory, taking inventory on a weekly or monthly basis is quite common and often necessary.

The account Merchandise Inventory is used to record the cost of inventory on hand at the balance sheet date. This amount becomes the beginning inventory for the next accounting period. For Sellers T-Shirts, the balance in Merchandise Inventory on December 31, 2007, is \$36,000. This amount is also the January 1, 2008, balance in Merchandise Inventory. During the year, *no entries are made to Merchandise Inventory*. At the end of the year, entries are made to eliminate the beginning inventory and to record the ending inventory. We will assume that Sellers' ending inventory on December 31, 2008, is \$40,000.

Computing Cost of Goods Sold

We have now reached the point where we can compute cost of goods sold. Doing so involves two steps:

1. Add cost of goods purchased to cost of goods on hand at the beginning of the period (beginning inventory). The result is **cost of goods available for sale**.
2. Subtract cost of goods on hand at the end of the period (ending inventory) from cost of goods available for sale. The result is **cost of goods sold**.

ALTERNATIVE TERMINOLOGY
Some use the term *cost of sales* instead of *cost of goods sold*.

For Sellers T-Shirts, cost of goods available for sale is \$356,000, and cost of goods sold is \$316,000, as shown in Illustration 9-4.

Beginning inventory	\$ 36,000
(1) Add: Cost of goods purchased	<u>320,000</u>
Cost of goods available for sale	356,000
(2) Less: Ending inventory	<u>40,000</u>
Cost of goods sold	\$316,000

Illustration 9-4

Computation of cost of goods available for sale and cost of goods sold

Gross profit, operating expenses, and net income are computed and reported in a periodic inventory system in the same manner as under a perpetual inventory system, as shown in Illustration 9-5.

Illustration 9-5

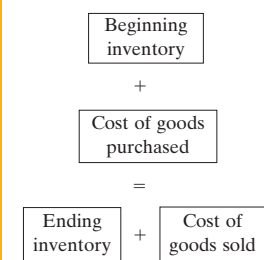
Income statement for a merchandiser using a periodic inventory system

HELPFUL HINT

The far right column identifies the major subdivisions of the income statement. The next column identifies the primary items comprising cost of goods sold of \$316,000 and operating expenses of \$114,000; in addition, contra revenue items of \$20,000 are reported. The third column from the right explains cost of goods purchased of \$320,000. The fourth column reports contra purchase items of \$17,200.

SELLERS T-SHIRTS			
Income Statement			
For the Year Ended December 31, 2008			
Sales revenue			
Sales			\$480,000
Less: Sales returns and allowances		\$ 12,000	
Sales discounts		8,000	20,000
Net sales			460,000
Cost of goods sold			
Inventory, January 1			36,000
Purchases		\$325,000	
Less: Purchase returns and allowances	\$10,400		
Purchase discounts	6,800	17,200	
Net purchases		307,800	
Add: Freight-in		12,200	
Cost of goods purchased		320,000	
Cost of goods available for sale		356,000	
Inventory, December 31		40,000	
Cost of goods sold			316,000
Gross profit			144,000
Operating expenses			
Store salaries expense		45,000	
Salaries expense		19,000	
Utilities expense		17,000	
Advertising expense		16,000	
Depreciation expense—store equipment		8,000	
Freight-out		7,000	
Insurance expense		2,000	
Total operating expenses			114,000
Net income			\$ 30,000

HELPFUL HINT



TRANSFERS IN AND OUT

As suggested by the Helpful Hint sidebar, you can simply add beginning inventory to cost of goods purchased and then deduct from this total the ending inventory amount to get to cost of goods sold. The same formula can be slightly modified for food or for beverage in the hospitality industry. In such cases, changing the word *goods* to *food* or to *beverage* will provide you with the result. Yet, owing to the complexity of the hospitality industry (e.g., a hospitality operation can be departmentalized, and it is customary that a meal be provided to its employees during a shift), the formula to compute the true and accurate cost of food sold needs to be modified a bit more.

A hotel may be divided into banquet and room service operations; or banquet, restaurant, lounge, and room service operations; or any different venues of food and beverage operations. As such, although each operation may order its food supplies from the central storage area, there are times that things may run out and an employee may need to “borrow” items from another outlet so as to be able to fill the order of the guests. Take an example where a bartender at a lounge forgets to order lemons for the evening shift. The storeroom is now closed, and he cannot make another requisition. He therefore asks the restaurant chef to give him ten lemons to carry him over to finish his shift. This transfer of food is known as a *transfer out* from the restaurant and a *transfer in* for the lounge. Although these two operations are in the same hotel, it is important to do a separate cost calculation for each food and beverage outlet so that managers can better assess

the efficiency and the profitability of each operation. It also should be expected that if everything is performed correctly, such transfers in and out should be minimal or zero.

In this case, a more complete formula for the calculation of cost of food sold would be as shown below:

Beginning inventory	\$ 4,000
(1) Add: Cost of food purchased	12,500
(2) Add: Transfers in	50
	<hr/>
Cost of food available for sale	16,550
(3) Less: Transfer out	73
(4) Less: Ending inventory	3,540
	<hr/>
Cost of food consumed	\$12,937

Notice that the ending number is only known as cost of food *consumed* and not cost of food *sold*. As mentioned, it is customary in the hospitality business, especially in any establishment that serves food, that the employees are provided a meal during their shift. Of course, there is a cost of food involved. However, the cost of employee meals is part of employee benefits and should not be added to the cost of the food sold to the guests. Thus an extra step needs to be added:

Cost of food consumed	\$12,937
(5) Less: Employee meals	854
	<hr/>
Cost of food sold	\$12,083

This final amount, \$12,083, now can be used by management to calculate food cost percentages and other meaningful tracking and assessment data.

FOOD COST CALCULATIONS

Besides figuring out cost of inventories, it is also useful in the hospitality industry to be able to calculate and track food cost, beverage cost, and labor cost. These costs are often known as the *prime costs* of a food and beverage operation. The calculation for food cost is very similar to that of regular inventory cost.

However, in a hospitality business, if you are a manager of a restaurant and somebody asks you about the food cost of your operation, you will not quote them a dollar amount. Rather, you will give them a percentage, such as 30 or 35 percent. Why? Percentages are better for comparison and tracking purposes. The more food you are able to sell, the higher will be the sales dollar amount, and so will the cost. Thus the cost varies with sales; and therefore, food cost is called a *variable cost*.

So how is food cost percentage calculated? Simply, it is the cost of food sold divided by total sales. For example, if your food cost is \$4,146.50 and the total sales amount generated by that cost is \$11,847, then the food cost percentage would be 35 percent. Most fast food restaurants are able to maintain a food cost percentage in the 15 to 25 percent range depending on the menu items; most freestanding restaurants or those in hotels will run 30 to 40 percent. The food cost percentage is highest in clubs, as high as 50 percent. This is so because club members pay a membership fee every month already. Some clubs even require members to pay a food and beverage minimum. Thus menu prices at clubs are normally lower to offset the other revenues collected from members. With lower sales figures but the same cost to produce food items, the food cost percentage is higher.

BEVERAGE COST CALCULATIONS

The calculation of beverage cost and beverage cost percentage is exactly the same as that of food cost. First, you need to compute the inventory amounts, calculate the cost of beverage sold, and then divide the cost by the total sales dollars to

HELPFUL HINT

$$\text{Food cost \%} = \frac{\text{Cost of food sold}}{\text{Food sales}}$$

$$\text{Beverage cost \%} = \frac{\text{Cost of beverage sold}}{\text{Beverage sales}}$$

obtain the percentage. However, what should be included in beverage cost? Should all soft drinks and coffee be included since they are beverages? What about liquor, beer, and wine?

There are good reasons why food and beverage are separated. Beverage costs only include alcoholic beverages, such as liquor, beer, and wine, since taxes need to be paid by the establishments to the government. In Texas, for instance, the tax is 14 percent. Iced tea, soft drinks, milk, and coffee, although they are beverages, are considered food items and they are not taxable. The markup and pricing of beverages are always higher than food. Beverage cost percentages run in the 15 to 25 percent range. They might be higher if a restaurant is running a special at a lower price or trying to sell inventory.

INCOME STATEMENT PRESENTATION

The income statement for merchandisers under a periodic inventory system contains three features not found in the income statement of a service enterprise. These features are (1) a sales revenue section, (2) a cost of goods sold section, and (3) gross profit. These same three features appear for a merchandiser under a perpetual inventory system. But under a periodic inventory system, the cost of goods sold section generally will contain more detail. Using assumed data for specific operating expenses, the income statement for Sellers T-Shirts using a periodic inventory system is shown in Illustration 9-5. Whether the periodic or the perpetual inventory system is used, merchandise inventory is reported at the same amount in the current assets section.

STUDY OBJECTIVE 4

Identify the unique features of the income statement for a merchandiser using a periodic inventory system.

ALTERNATIVE TERMINOLOGY
Gross profit is sometimes referred to as *merchandising profit* or *gross margin*.

BEFORE YOU GO ON...

▶ REVIEW IT

1. Name two basic systems of accounting for inventory.
2. Identify the three steps in determining cost of goods sold.
3. What accounts are used in determining cost of goods purchased?
4. What is included in cost of goods available for sale?

▶ DO IT

Aerosmith Company's accounting records show the following at year-end: Purchase discounts, \$3,400; Freight-in, \$6,100; Sales, \$240,000; Purchases, \$162,500; Beginning inventory, \$18,000; Ending inventory, \$20,000; Sales discounts, \$10,000; Purchase returns, \$5,200; and Operating expenses, \$57,000. Compute the following amounts for Aerosmith Company: net sales, cost of goods purchased, cost of goods sold, gross profit, and net income.

ACTION PLAN

- Understand the relationships of the cost components in measuring net income for a merchandising company.
- Compute net sales.
- Compute cost of goods purchased.
- Compute cost of goods sold.
- Compute gross profit.
- Compute net income.

SOLUTION

Net sales: $\$240,000 - \$10,000 = \$230,000$

Cost of goods purchased: $\$162,500 - \$5,200 - \$3,400 + \$6,100 = \$160,000$

Cost of goods sold: $\$18,000 + \$160,000 - \$20,000 = \$158,000$

Gross profit: $\$230,000 - \$158,000 = \$72,000$

Net income: $\$72,000 - \$57,000 = \$15,000$



INVENTORY COSTING UNDER A PERIODIC INVENTORY SYSTEM

All expenditures needed to acquire goods and to make them ready for sale are included as inventoriable costs. **Inventoriable costs** may be regarded as a pool of costs that consists of two elements: (1) the cost of the beginning inventory and (2) the cost of goods purchased during the year. The sum of these two equals the cost of goods available for sale.

Conceptually, the costs of the purchasing, receiving, and warehousing departments (whose efforts make the goods available for sale) also should be included in inventoriable costs. But there are practical difficulties in allocating these costs to inventory. So these costs are generally accounted for as **operating expenses** in the period in which they are incurred.

Inventoriable costs are allocated either to ending inventory or to cost of goods sold. Under a periodic inventory system, the allocation is made at the end of the accounting period. First, the costs for the ending inventory are determined. Then, the cost of the ending inventory is subtracted from the cost of goods available for sale, to determine the cost of goods sold.

To illustrate, assume that General Suppliers has a cost of goods available for sale of \$120,000. This amount is based on a beginning inventory of \$20,000 and cost of goods purchased of \$100,000. The physical inventory indicates that 5,000 units are on hand. The costs applicable to the units are \$3.00 per unit. The allocation of the pool of costs is shown in Illustration 9-6. As shown, the \$120,000 of goods available for sale is allocated \$15,000 to ending inventory ($5,000 \times \$3.00$) and \$105,000 to cost of goods sold.

Pool of Costs				
Cost of Goods Available for Sale				
			Beginning inventory	\$ 20,000
			Cost of goods purchased	100,000
			Cost of goods available for sale	<u>\$120,000</u>
Step 1		Step 2		
Ending Inventory		Cost of Goods Sold		
	Unit	Total	Cost of goods available for sale	\$120,000
	Cost	Cost	Less: Ending inventory	15,000
<u>5,000</u>	<u>\$3.00</u>	<u>\$15,000</u>	Cost of goods sold	<u>\$105,000</u>

USING ACTUAL PHYSICAL FLOW COSTING—SPECIFIC IDENTIFICATION

Costing of the inventory is complicated because specific items of inventory on hand may have been purchased at different prices. For example, a company may experience several increases in the cost of identical goods within a given year; or unit costs may decline. Under such circumstances, how should different unit costs be allocated between ending inventory and cost of goods sold?

One answer is to use the **specific identification method** of the units purchased. This method tracks the *actual physical flow* of the goods. **Each item of inventory is marked, tagged, or coded with its “specific” unit cost.** At the end of the year,

STUDY OBJECTIVE 5

Explain the basis of accounting for inventories, and describe the inventory cost-flow methods.

HELPFUL HINT

Under a perpetual inventory system, described in Chapter 8, the allocation of costs is recognized continuously as purchases and sales are made.

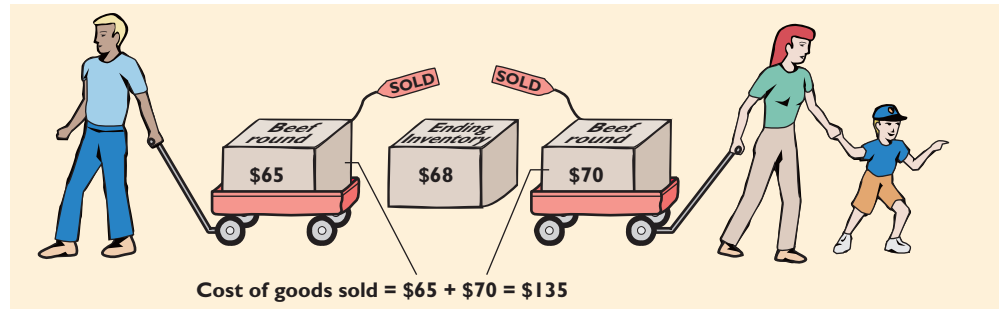
Illustration 9-6

Allocation (matching) of pool of costs

the specific costs of items still in inventory make up the total cost of the ending inventory (Illustration 9-7). This method is most accurate because it looks at the exact cost of every single item. At any point in time, as long as you count the inventory and add up all the tags, you will get the exact cost of inventory. However, for the hospitality industry, this method is not the most practical. Imagine tagging every can of tomato juice at a restaurant. Imagine putting a price on each bar of soap a hotel puts in guest rooms. Imagine having to put a tag on each bottle of beer at a piano lounge in a casino. These items are often indistinguishable from one another. In such cases (as the next section will show), we must make assumptions about which units were sold.

Illustration 9-7

Specific identification method



The general rule is this: When feasible, specific identification is the ideal method of allocating cost of goods available for sale. It reports ending inventory at actual cost and matches the actual cost of goods sold against sales revenue.

HELPFUL HINT

A major disadvantage of the specific identification method is that management may be able to manipulate net income through specific identification of items sold.

USING ASSUMED COST-FLOW METHODS—FIFO, LIFO, AND AVERAGE COST

Because specific identification is often impractical, other cost-flow methods are allowed. These assume flows of costs that may be unrelated to the physical flow of goods. For this reason, we call them **assumed cost-flow methods** or **cost-flow assumptions**:

1. First-in, first-out (FIFO)
2. Last-in, first-out (LIFO)
3. Average cost

To illustrate these three inventory cost-flow methods, we will assume that Bow Foods uses a *periodic inventory system*. The information shown in Illustration 9-8 relates to one of its products, cheddar cheese.

INTERNATIONAL NOTE

A survey of accounting standards in 21 major industrial countries found that all three methods were permissible. In Ireland and the United Kingdom, LIFO is permitted only in extreme circumstances.

Illustration 9-8

Inventoriable units and costs for Bow Foods

BOW FOODS Cheddar Cheese Blocks				
Date	Explanation	Units	Unit Cost	Total Cost
1/1	Beginning inventory	100	\$10	\$ 1,000
4/15	Purchase	200	11	2,200
8/24	Purchase	300	12	3,600
11/27	Purchase	400	13	5,200
	Total	1,000		\$12,000

During the year, 550 units were sold, and 450 units are on hand at 12/31.

There is no accounting requirement that the cost-flow assumption be consistent with the physical movement of the goods. Management selects the

appropriate cost-flow method. Even in the same industry, different companies may reach different conclusions as to the most appropriate method.

First-in, First-out (FIFO)

The **first-in, first-out (FIFO) method** assumes that the *earliest goods* purchased are the first to be sold. FIFO often parallels the actual physical flow of merchandise because it generally is good business practice to sell the earliest units first. Under the FIFO method, the *costs* of the earliest goods purchased are the first to be recognized as cost of goods sold. (Note that this does not necessarily mean that the earliest units *are* sold first but that the costs of the earliest units are recognized first. In a bin of sunglasses at a theme park souvenir shop, for example, no one really knows, nor would it matter, which sunglasses are sold first.) The allocation of the cost of goods available for sale at Bow Foods under FIFO is shown in Illustrations 9-9 and 9-10.

Note that the ending inventory is based on the latest units purchased. That is, **under FIFO, the cost of the ending inventory is found by taking the unit cost of the most recent purchase and working backward until all units of inventory are costed.**

Pool of Costs				
Cost of Goods Available for Sale				
Date	Explanation	Units	Unit Cost	Total Cost
1/1	Beginning inventory	100	\$10	\$ 1,000
4/15	Purchase	200	11	2,200
8/24	Purchase	300	12	3,600
11/27	Purchase	400	13	5,200
	Total	1,000		<u>\$12,000</u>

Step 1		Step 2		
Ending Inventory		Cost of Goods Sold		
Date	Units	Unit Cost	Total Cost	
11/27	400	\$13	\$5,200	Cost of goods available for sale
8/24	50	12	600	Less: Ending inventory
Total	<u>450</u>		<u>\$5,800</u>	Cost of goods sold
				<u>\$ 6,200</u>

Illustration 9-9

Allocation of costs—FIFO method

HELPFUL HINT

Note the sequencing of the allocation: (1) Compute ending inventory. (2) Determine cost of goods sold.

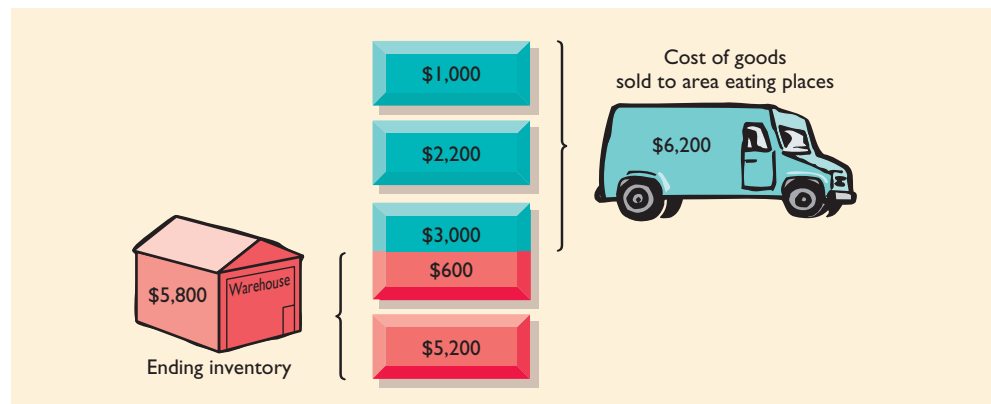


Illustration 9-10

FIFO—First costs in are first costs out in computing cost of goods sold

We can verify the accuracy of the cost of goods sold by recognizing that the *first units acquired are the first units sold*. The computations for the 550 units sold are shown in Illustration 9-11.

Illustration 9-11

Proof of cost of goods sold

Date	Units	Unit Cost	Total Cost
1/1	100 ×	\$10	= \$1,000
4/15	200 ×	11	= 2,200
8/24	250 ×	12	= 3,000
Total	550		<u>\$6,200</u>

Last-in, First-out (LIFO)

The **last-in, first-out (LIFO) method** assumes that the *latest goods* purchased are the first to be sold. LIFO seldom coincides with the actual physical flow of inventory. Only for goods in piles, such as hay, coal, or produce at the grocery store, would LIFO match the physical flow of inventory. Under the LIFO method, the *costs* of the latest goods purchased are the first to be assigned to cost of goods sold (CGS). The allocation of the cost of goods available for sale (CGAS) at Bow Foods under LIFO is shown in Illustration 9-12.

Illustration 9-12

Allocation of costs—LIFO method

Pool of Costs				
Cost of Goods Available for Sale				
Date	Explanation	Units	Unit Cost	Total Cost
1/1	Beginning inventory	100	\$10	\$ 1,000
4/15	Purchase	200	11	2,200
8/24	Purchase	300	12	3,600
11/27	Purchase	400	13	5,200
	Total	1,000		<u>\$12,000</u>

Step 1		Step 2			
Ending Inventory		Cost of Goods Sold			
Date	Units	Unit Cost	Total Cost		
1/1	100	\$10	\$1,000	Cost of goods available for sale	\$12,000
4/15	200	11	2,200	Less: Ending inventory	<u>5,000</u>
8/24	150	12	1,800	Cost of goods sold	<u>\$ 7,000</u>
Total	450		<u>\$5,000</u>		

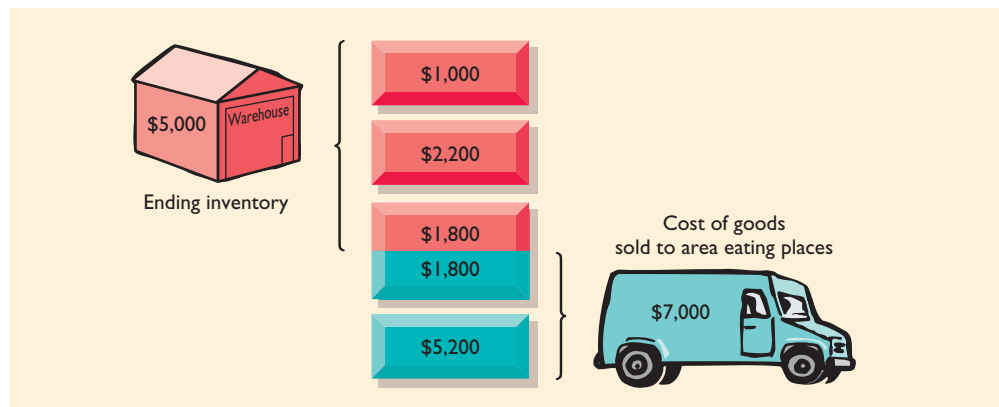
HELPFUL HINT

The costs allocated to ending inventory (\$5,000) plus the costs allocated to CGS (\$7,000) must equal CGAS (\$12,000).

Illustration 9-13 graphically displays the LIFO cost flow.

Illustration 9-13

LIFO—Last costs in are first costs out in computing cost of goods sold



Under the LIFO method, **the cost of the ending inventory is found by taking the unit cost of the oldest goods and working forward until all units of inventory**

are costed. As a result, the first costs assigned to ending inventory are the costs of the beginning inventory. Proof of the costs allocated to cost of goods sold is shown in Illustration 9-14.

Date	Units	Unit Cost	Total Cost
11/27	400	× \$13	= \$5,200
8/24	150	× 12	= 1,800
Total	550		<u>\$7,000</u>

Illustration 9-14

Proof of cost of goods sold

Under a periodic inventory system, **all goods purchased during the period are assumed to be available for the first sale, regardless of the date of purchase.**

Average Cost

The **average-cost method** assumes that the goods available for sale have the same (average) cost per unit. Generally such goods are identical. Under this method, the cost of goods available for sale is allocated on the basis of the **weighted-average unit cost**. Illustration 9-15 shows the formula and a sample computation of the weighted-average unit cost.



Illustration 9-15

Formula for weighted-average unit cost

The weighted-average unit cost is then applied to the units on hand. This computation determines the cost of the ending inventory. The allocation of the cost of goods available for sale at Bow Foods using average cost is shown in Illustrations 9-16 and 9-17.

Pool of Costs				
Cost of Goods Available for Sale				
Date	Explanation	Units	Unit Cost	Total Cost
1/1	Beginning inventory	100	\$10	\$ 1,000
4/15	Purchase	200	11	2,200
8/24	Purchase	300	12	3,600
11/27	Purchase	400	13	5,200
	Total	1,000		<u>\$12,000</u>

Step 1			Step 2	
Ending Inventory			Cost of Goods Sold	
\$12,000	÷ 1,000	= \$12.00	Cost of goods available for sale	\$12,000
	Unit	Total	Less: Ending inventory	<u>5,400</u>
Units	Cost	Cost	Cost of goods sold	<u>\$ 6,600</u>
450	× \$12.00	= <u>\$5,400</u>		

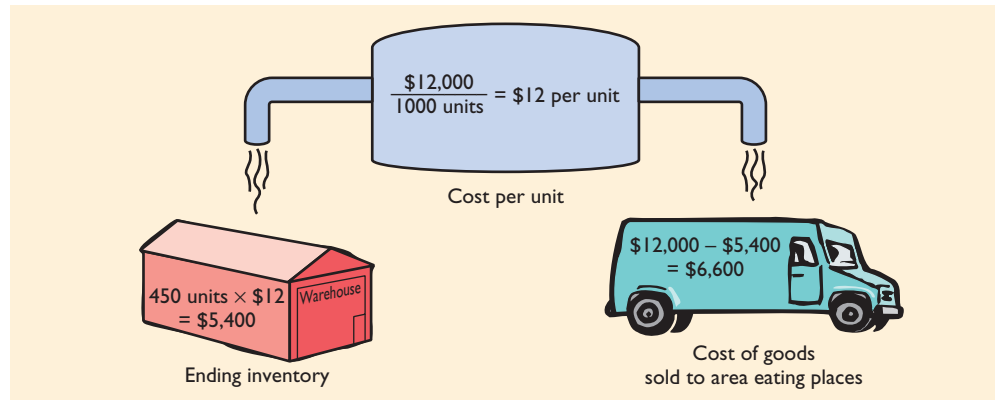
Illustration 9-16

Allocation of costs—average-cost method

To verify the cost of goods sold data in Illustration 9-16, multiply the units sold by the weighted-average unit cost (550 × \$12 = \$6,600). Note that this method

Illustration 9-17

Average cost—the average cost of the goods available for sale during the period is the cost used to compute cost of goods sold



does not use the average of the unit costs. That average is \$11.50 ($\$10 + \$11 + \$12 + \$13 = \46; $\$46 \div 4$). Instead, the average-cost method uses the average *weighted* by the quantities purchased at each unit cost.

FINANCIAL STATEMENT EFFECTS OF COST-FLOW METHODS

Each of the three cost-flow methods is acceptable. For example, **Wendy's International** currently uses the FIFO method. **Campbell Soup Company** uses LIFO, whereas **Isle of Capri Casinos** uses the average-cost method. A company also may use more than one cost-flow method at the same time. **Del Monte Corporation** uses LIFO for domestic inventories and FIFO for foreign inventories. Companies adopt different inventory cost-flow methods for various reasons. Usually, one of the following factors is involved:

1. Income statement effects
2. Balance sheet effects
3. Tax effects

STUDY OBJECTIVE 6

Explain the financial statement and tax effects of each of the inventory cost-flow methods.

Income Statement Effects

To understand why companies might choose a particular cost-flow method, let's compare their effects on the financial statements of Bow Foods. The condensed income statements in Illustration 9-18 assume that Bow Foods sold its 550 units for \$11,500 and that its operating expenses were \$2,000. Its income tax rate is 30 percent.

Illustration 9-18

Comparative effects of cost-flow methods

BOW FOODS			
Condensed Income Statements			
	FIFO	LIFO	Average Cost
Sales	\$11,500	\$11,500	\$11,500
Beginning inventory	1,000	1,000	1,000
Purchases	11,000	11,000	11,000
Cost of goods available for sale	12,000	12,000	12,000
Ending inventory	5,800	5,000	5,400
Cost of goods sold	6,200	7,000	6,600
Gross profit	5,300	4,500	4,900
Operating expenses	2,000	2,000	2,000
Income before income taxes ²	3,300	2,500	2,900
Income tax expense (30%)	990	750	870
Net income	\$ 2,310	\$ 1,750	\$ 2,030

²It is assumed that Bow Foods is a corporation, and corporations are required to pay income taxes.

The cost of goods available for sale (\$12,000) is the same under each of the three inventory cost-flow methods. But the ending inventory is different in each method, and this difference affects cost of goods sold. Each dollar of difference in ending inventory therefore results in a corresponding dollar difference in income before income taxes. For Bow Foods, there is an \$800 difference between FIFO and LIFO.

In a period of rising prices, FIFO produces a higher net income. This happens because the expenses matched against revenues are the lower unit costs of the first units purchased. In a period of rising prices (as is the case here), FIFO reports the highest net income (\$2,310) and LIFO the lowest (\$1,750); average cost falls in the middle (\$2,030). To management, higher net income is an advantage: It causes external users to view the company more favorably. Also, if management bonuses are based on net income, FIFO will provide the basis for higher bonuses.

Some argue that the use of LIFO in a period of rising prices enables the company to avoid reporting **paper** or **phantom profit** as economic gain. To illustrate, assume that Kralik Resorts buys golf shirts to be sold to its guests at \$20 per unit on January 10. It buys 200 more on December 31 at \$24 each. During the year, it sells 200 units at \$30 each. The results under FIFO and LIFO are shown in Illustration 9-19.

	<u>FIFO</u>	<u>LIFO</u>
Sales (200 × \$30)	\$6,000	\$6,000
Cost of goods sold	4,000 (200 × \$20)	4,800 (200 × \$24)
Gross profit	<u>\$2,000</u>	<u>\$1,200</u>

HELPFUL HINT

If prices are falling, the results from the use of FIFO and LIFO are reversed: FIFO will report the lowest net income and LIFO the highest.

Illustration 9-19

Income statement effects compared

Under LIFO, the company has recovered the current replacement cost (\$4,800) of the units sold. The gross profit in economic terms under LIFO is real. Under FIFO, the company has recovered only the January 10 cost (\$4,000). To replace the units sold, it must reinvest \$800 (200 × \$4) of the gross profit. Thus \$800 of the gross profit under FIFO is phantom or illusory. As a result, reported net income under FIFO is also overstated in real terms.

Balance Sheet Effects

A major advantage of FIFO is that in a period of rising prices, the costs allocated to ending inventory will be close to their current cost. For Bow Foods, for example, 400 of the 450 units in the ending inventory are costed at the November 27 unit cost of \$13.

A major shortcoming of LIFO is that in a period of rising prices, the costs allocated to ending inventory may be understated in terms of current cost. This is true for Bow Foods: The cost of the ending inventory includes the \$10 unit cost of the beginning inventory. The understatement becomes even greater if the inventory includes goods purchased in one or more prior accounting periods.

Tax Effects

We have seen that both inventory on the balance sheet and net income on the income statement are higher when FIFO is used in a period of rising prices. Why, then, would a company use LIFO? The reason is that LIFO results in the lowest income taxes during times of rising prices. The lower net income reported by LIFO translates to a lower tax liability. For example, at Bow Foods, income taxes are \$750 under LIFO, compared with \$990 under FIFO. The tax saving of \$240 makes more cash available for use in the business.


USING INVENTORY COST-FLOW METHODS CONSISTENTLY

Whatever cost-flow method a company chooses, it should be used consistently from one period to another. Consistent application makes financial statements more comparable over successive time periods. In contrast, using FIFO in one year and LIFO in the next would make it difficult to compare the net incomes of the two years.

Although consistent application is preferred, a company *may* change its method of inventory costing. Such a change and its effects on net income should be disclosed in the financial statements. A typical disclosure is shown in Illustration 9-20, using information from recent financial statements of **Quaker Oats Company**.

Illustration 9-20

Disclosure of change in cost-flow method



QUAKER OATS COMPANY

Notes to the Financial Statements

Note 1 Effective July 1, the Company adopted the LIFO cost flow assumption for valuing the majority of U.S. Grocery Products inventories. The Company believes that the use of the LIFO method better matches current costs with current revenues. The effect of this change on the current year was to decrease net income by \$16.0 million.

BEFORE YOU GO ON...

▶ REVIEW IT

1. How do the cost and matching principles apply to inventoriable costs?
2. How are the three assumed cost-flow methods applied in allocating inventoriable costs?
3. What factors should be considered by management in selecting an inventory cost-flow method?
4. Which inventory cost-flow method produces (a) the highest net income in a period of rising prices and (b) the lowest income taxes?

▶ DO IT

The accounting records of Shumway Eggrolls show the following data:

Beginning inventory	4,000 units at \$3
Purchases	6,000 units at \$4
Sales	5,000 units at \$12

Determine the cost of goods sold during the period under a periodic inventory system using (a) the FIFO method, (b) the LIFO method, and (c) the average-cost method.

ACTION PLAN

- Understand the periodic inventory system.
- Compute cost of goods sold under the periodic inventory system using the FIFO cost-flow method.
- Compute cost of goods sold under the periodic inventory system using the LIFO cost-flow method.
- Compute cost of goods sold under the periodic inventory system using the average-cost method.

SOLUTION

(a) FIFO: $(4,000 @ \$3) + (1,000 @ \$4) = \$12,000 + \$4,000 = \$16,000$

(b) LIFO: $5,000 @ \$4 = \$20,000$

(c) Average cost: $[(4,000 @ \$3) + (6,000 @ \$4)] \div 10,000 = (\$12,000 + \$24,000) \div 10,000 = \$3.60 \text{ per unit}; 5,000 @ \$3.60 = \$18,000$



INVENTORY ERRORS

Unfortunately, errors occasionally occur in taking or costing inventory. Some errors are caused by counting or pricing the inventory incorrectly. Others occur because of improper recognition of the transfer of legal title to goods in transit. When errors occur, they affect both the income statement and the balance sheet.

INCOME STATEMENT EFFECTS

Remember that both the beginning and the ending inventories are used to determine cost of goods sold in a periodic system. The ending inventory of one period automatically becomes the beginning inventory of the next period. Inventory errors thus affect the determination of cost of goods sold and net income.

The effects on cost of goods sold can be determined by using the formula in Illustration 9-21. First, enter the incorrect data in the formula. Then substitute the correct data, and find the difference between the two CGS amounts.

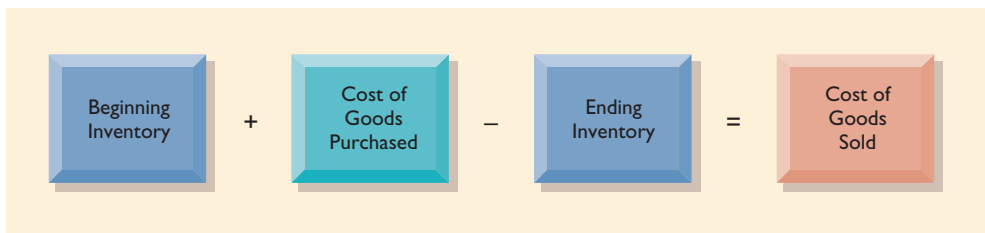


Illustration 9-21

Formula for cost of goods sold

If beginning inventory is understated, cost of goods sold will be understated. If ending inventory is understated, cost of goods sold will be overstated. The effects of inventory errors on the current year's income statement are shown in Illustration 9-22.

<u>Inventory Error</u>	<u>Cost of Goods Sold</u>	<u>Net Income</u>
Beginning inventory understated	Understated	Overstated
Beginning inventory overstated	Overstated	Understated
Ending inventory understated	Overstated	Understated
Ending inventory overstated	Understated	Overstated

Illustration 9-22

Effects of inventory errors on current year's income statement

An error in ending inventory in the current period will have a *reverse effect on net income of the next period*. This is shown in Illustration 9-23. Note that understating ending inventory in 2008 understates beginning inventory in 2009 and overstates net income in 2009.

Over the two years, total net income is correct. The errors offset one another. Notice that for 2008 and 2009, total income using incorrect data is \$35,000 (\$22,000 + \$13,000). This is the same as the total income of \$35,000 (\$25,000 + \$10,000) using correct data. Also note in this example that an error in the beginning inventory does not result in a corresponding error in the ending inventory. The correctness of the ending inventory depends entirely on the accuracy of taking and costing the inventory at the balance sheet date.

ETHICS NOTE

Inventory fraud includes pricing inventory at amounts in excess of their actual value or claiming to have inventory when no inventory exists. Inventory fraud is usually done to overstate ending inventory, which understates cost of goods sold and creates higher income.

Illustration 9-23

Effects of inventory errors
on two years' income
statements

Condensed Income Statement				
	2008		2009	
	Incorrect	Correct	Incorrect	Correct
Sales	\$80,000	\$80,000	\$90,000	\$90,000
Beginning inventory	\$20,000	\$20,000	\$12,000	\$15,000
Cost of goods purchased	40,000	40,000	68,000	68,000
Cost of goods available for sale	60,000	60,000	80,000	83,000
Ending inventory	12,000	15,000	23,000	23,000
Cost of goods sold	48,000	45,000	57,000	60,000
Gross profit	32,000	35,000	33,000	30,000
Operating expenses	10,000	10,000	20,000	20,000
Net income	\$22,000	\$25,000	\$13,000	\$10,000
		(\$3,000) Net income understated		\$3,000 Net income overstated
		Total income for two years correct		

BALANCE SHEET EFFECTS

The effect of ending-inventory errors on the balance sheet can be determined by the basic accounting equation: Assets = Liabilities + Stockholders' Equity. Errors in the ending inventory have the effects on these components shown in Illustration 9-24.

Illustration 9-24

Ending-inventory error—
balance sheet effects

Ending-Inventory Error	Assets	Liabilities	Stockholders' Equity
Overstated	Overstated	None	Overstated
Understated	Understated	None	Understated

The effect of an error in ending inventory on the next period was shown in Illustration 9-23. If the error is not corrected, total net income for the two periods would be correct. Thus, total stockholders' equity reported on the balance sheet at the end of the next period will also be correct.

STATEMENT PRESENTATION AND ANALYSIS**PRESENTATION**

As indicated in Chapter 8, inventory is classified as a current asset after receivables in the balance sheet. In a multiple-step income statement, cost of goods sold is subtracted from sales. There also should be disclosure of (1) the major inventory classifications, (2) the basis of accounting (cost, or lower of cost or market), and (3) the costing method (FIFO, LIFO, or average).

Disney, for example, in its September 30, 2000, consolidated balance sheet, reported inventory of \$702 million under current assets. The accompanying notes to

the financial statements, as shown in Illustration 9-25, disclosed the following information.

THE WALT DISNEY COMPANY AND SUBSIDIARIES Notes to the Financial Statements
Note 1. Description of the Business and Summary of Significant Accounting Policies
Inventories
Carrying amounts of merchandise, materials and supplies inventories are generally determined on a moving-average cost basis and are stated at the lower of cost or market.

Illustration 9-25

Inventory disclosures by **The Walt Disney Company**. Information from Disney Worldwide Industries

ANALYSIS

The amount of inventory carried by a company has significant economic consequences. And inventory management is a double-edged sword that requires constant attention. On the one hand, management wants to have a great variety and quantity on hand so that customers have a wide selection and items are always in stock. But such a policy may incur high carrying costs (e.g., investment, storage, insurance, obsolescence, and damage). On the other hand, low inventory levels lead to stockouts and lost sales.

Common ratios used to manage and evaluate inventory levels are inventory turnover and a related measure, average days to sell the inventory.

Inventory turnover measures the number of times, on average, the inventory is sold during the period. Its purpose is to measure the liquidity of the inventory. The inventory turnover is computed by dividing cost of goods sold by the average inventory during the period. Unless seasonal factors are significant, average inventory can be computed from the beginning and ending inventory balances. For example, **Darden Restaurants** reported in its 2002 Annual Report a beginning inventory of \$148,429,000 and an ending inventory of \$172,413,000 and cost of goods sold for the year ended May 26, 2002, of \$1,384,481,000. The inventory turnover formula and computation for Darden are shown in Illustration 9-26.

Cost of Goods Sold	÷	Average Inventory	=	Inventory Turnover
\$1,384,481,000	÷	$\frac{\$148,429,000 + \$172,413,000}{2}$	=	8.63 times

Illustration 9-26

Inventory turnover formula and computation for **Darden Restaurants**

A variant of the inventory turnover ratio is the **average days to sell inventory**. For example, the inventory turnover for Darden of 8.63 times divided into 365 is approximately 42 days. This is the approximate age of the inventory.

There are typical levels of inventory in every industry. Companies that are able to keep their inventory at lower levels and higher turnovers and still satisfy customer needs are the most successful.

BEFORE YOU GO ON...▶ **REVIEW IT**

1. Why is it appropriate to report inventories at the lower of cost or market?
2. How do inventory errors affect financial statements?
3. What does inventory turnover reveal?



DEMONSTRATION PROBLEM

Gerald D. Englehart Steakhouse has the following inventory, purchases, and sales data on its premium individually packaged beef for the month of March:

Inventory:	March 1	200 lbs @ \$4.00	\$ 800
Purchases:			
	March 10	500 lbs @ \$4.50	2,250
	March 20	400 lbs @ \$4.75	1,900
	March 30	300 lbs @ \$5.00	1,500
Sales:			
	March 15	500 lbs	
	March 25	400 lbs	

The physical inventory count on March 31 shows 500 pounds on hand.

Instructions

Under a *periodic inventory system*, determine the cost of inventory on hand at March 31 and the cost of goods sold for March under the (a) first-in, first-out (FIFO) method, (b) last-in, first-out (LIFO) method, and (c) average-cost method.

SOLUTION TO DEMONSTRATION PROBLEM

The cost of goods available for sale is \$6,450, as follows:

Inventory:	200 lbs @ \$4.00		\$ 800
Purchases:			
	March 10	500 lbs @ \$4.50	2,250
	March 20	400 lbs @ \$4.75	1,900
	March 30	300 lbs @ \$5.00	1,500
			<u>\$6,450</u>

Under a *periodic inventory system*, cost of goods sold under each cost-flow method is as follows.

FIFO Method

Ending inventory:

Date	Units	Unit Cost	Total Cost
March 30	300	\$5.00	\$1,500
March 20	200	4.75	950
			<u>\$2,450</u>

$$\text{Cost of goods sold: } \$6,450 - \$2,450 = \underline{\underline{\$4,000}}$$

LIFO Method

Ending inventory:

Date	Units	Unit Cost	Total Cost
March 1	200	\$4.00	\$ 800
March 10	300	4.50	1,350
			<u>\$2,150</u>

$$\text{Cost of goods sold: } \$6,450 - \$2,150 = \underline{\underline{\$4,300}}$$

Weighted-Average Cost Method

$$\text{Weighted-average unit cost: } \$6,450 \div 1,400 = \$4.607$$

$$\text{Ending inventory: } 500 \times \$4.607 = \underline{\underline{\$2,303.50}}$$

$$\text{Cost of goods sold: } \$6,450 - \$2,303.50 = \underline{\underline{\$4,146.50}}$$

ACTION PLAN

- Compute the cost of inventory under the periodic FIFO method by allocating to the units on hand the *latest costs*.
- Compute the cost of inventory under the periodic LIFO method by allocating to the units on hand the *earliest costs*.
- Compute the cost of inventory under the periodic average-cost method by allocating to the units on hand a *weighted-average cost*.



SUMMARY OF STUDY OBJECTIVES

1. Describe the steps in determining inventory quantities. The steps in determining inventory quantities are (1) taking a physical inventory of goods on hand and (2) determining the ownership of goods in transit.

2. Prepare the entries for purchases and sales of inventory under a periodic inventory system. In recording purchases, entries are required for (a) cash and credit purchases, (b) purchase returns and allowances, (c) purchase discounts, and (d) freight costs. In recording sales, entries are required for (a) cash and credit sales, (b) sales returns and allowances, and (c) sales discounts.

3. Determine cost of goods sold under a periodic inventory system. The steps in determining cost of goods sold are (a) record the purchases of merchandise, (b) determine cost of goods purchased, and (c) determine cost of goods on hand at the beginning and the end of the accounting period.

4. Identify the unique features of the income statement for a merchandiser using a periodic inventory system. The income statement for a merchandiser contains three sections: sales revenue, cost of goods sold, and operating expenses. The cost of goods sold section under a periodic inventory system generally reports beginning and ending inventory, cost of goods purchased, and cost of goods available for sale.

5. Explain the basis of accounting for inventories, and describe the inventory cost-flow methods. The primary basis of accounting for inventories is cost. Cost includes all expenditures necessary to acquire goods and to make them ready for sale. Inventoriable costs include (1) cost of beginning inventory and (2) cost of goods purchased. The inventory cost-flow methods are specific identification, FIFO, LIFO, and average cost.

6. Explain the financial statement and tax effects of each of the inventory cost-flow methods. The cost of goods available for sale may be allocated to cost of goods sold and ending inventory by specific identification or by a method based on an assumed cost flow. These methods have different effects on financial statements during periods of changing prices. When prices are rising, FIFO results in lower cost of goods sold and higher net income than the average-cost and the LIFO methods. LIFO results in the lowest income taxes (because of lower net income). In the balance sheet, FIFO results in an ending inventory that is closest to current value. The inventory under LIFO is the farthest from current value.

7. Indicate the effects of inventory errors on the financial statements. In the income statement of the current year, (a) an error in beginning inventory will have a reverse effect on net income (overstatement of inventory results in understatement of net income); and (b) an error in ending inventory will have a similar effect on net income (overstatement of inventory results in overstatement of net income). If ending inventory errors are not corrected in the next period, their effect on net income for that period is reversed, and total net income for the two years will be correct. In the balance sheet, ending inventory errors will have the same effect on total assets and total stockholders' equity and no effect on liabilities.

8. Compute and interpret inventory turnover. Inventory turnover is calculated as cost of goods sold divided by average inventory. It can be converted to average days in inventory by dividing 365 days by the inventory turnover ratio. A higher turnover or lower average days in inventory suggests that management is trying to keep inventory levels low relative to sales.



GLOSSARY

Average-cost method Inventory costing method that assumes that the goods available for sale have the same (average) cost per unit; generally the goods are identical (p. 277).

Cost of goods available for sale The sum of the beginning merchandise inventory plus cost of goods purchased (p. 269).

Cost of goods purchased The sum of net purchases plus freight-in (p. 268).

Cost of goods sold The total cost of merchandise sold during the period, determined by subtracting ending inventory from cost of goods available for sale (p. 269).

First-in, first-out (FIFO) method Inventory costing method that assumes that the costs of the earliest goods acquired are the first to be recognized as cost of goods sold (p. 275).

Inventoriable costs All expenditures needed to acquire goods and to make them ready for sale. The pool of costs consists of two elements: (1) the cost of the beginning inventory and (2) the cost of goods purchased during the period (p. 273).

Inventory turnover A measure of the number of times on average the inventory is sold during the period; computed

by dividing cost of goods sold by the average inventory during the period (p. 283).

Last-in, first-out (LIFO) method Inventory costing method that assumes that the costs of the latest units purchased are the first to be allocated to cost of goods sold (p. 276).

Net purchases Purchases less purchase returns and allowances and purchase discounts (p. 268).

Periodic inventory system An inventory system in which inventoriable costs are allocated to ending inventory and cost of goods sold at the end of the period. Cost of goods sold is computed at the end of the period by subtracting the ending inventory (costs are assigned based on a physical count of items on hand) from the cost of goods available for sale (p. 265).

Specific identification method An actual, physical flow inventory costing method in which items still in inventory are specifically costed to arrive at the total cost of the ending inventory (p. 273).

EXERCISES

Identify the components of inventoriable costs.

(SO 2)

Compute ending inventory using FIFO and LIFO.

(SO 2)

Compute the ending inventory using average cost.

(SO 2)

Explain the financial statement effect of inventory cost-flow assumptions.

(SO 3)

Determine correct income statement amounts.

(SO 5)

Compute inventory turnover and days in inventory.

(SO 6)

Apply cost flow methods to perpetual inventory records.

(SO 7)

Apply the gross profit method.

(SO 8)

Compute inventory and cost of goods sold using FIFO and LIFO.

(SO 2)

9-1 The ledger of Perez Company includes the following items: **(a)** Freight-in, **(b)** Purchase Returns and Allowances, **(c)** Purchases, **(d)** Sales Discounts, and **(e)** Purchase Discounts. Identify the items that are included in inventoriable costs.

9-2 In its first month of operations Rusch BBQ made three purchases of sausages in the following sequence: **(1)** 300 pounds at \$6, **(2)** 400 pounds at \$7, and **(3)** 200 pounds at \$8. Assuming there are 450 pounds on hand, compute the cost of the ending inventory under the **(a)** FIFO method and **(b)** LIFO method. Rusch uses a periodic inventory system.

9-3 Data for Rusch BBQ are presented in 9-2. Compute the cost of the ending inventory under the average-cost method, assuming there are 450 pounds on hand.

9-4 The management of Muni Corp. is considering the effects of various inventory costing methods on its financial statements and its income tax expense. Assuming that the price the company pays for inventory is increasing, which method will:

- (a)** provide the highest net income?
- (b)** provide the highest ending inventory?
- (c)** result in the lowest income tax expense?
- (d)** result in the most stable earnings over a number of years?

9-5 Farr Company reports net income of \$90,000 in 2008. However, ending inventory was understated \$5,000. What is the correct net income for 2008? What effect, if any, will this error have on total assets as reported in the balance sheet at December 31, 2008.

9-6 On December 31, 2008, the following information was available for Simon Hotels: ending inventory \$40,000; beginning inventory \$60,000; cost of goods sold \$300,000; and sales revenue \$380,000. Calculate inventory turnover and days in inventory for Simon Hotels.

9-7 Abbott's Liquor Store uses a perpetual inventory system. Data for the Texas Chardonnay include the following purchases:

<u>Date</u>	<u>Number of Bottles</u>	<u>Unit Price</u>
May 7	50	\$10
July 28	30	13

On June 1, Abbott's sold 30 bottles, and on August 27, 35 more bottles. Prepare the perpetual inventory calculations for the above transactions using **(a)** FIFO, **(b)** LIFO, and **(c)** average cost.

9-8 On May 31, Stuart Dining has net sales of \$330,000 and cost of goods available for sale of \$230,000. Compute the estimated cost of the ending inventory, assuming the gross profit is 40 percent.

9-9 Sherpers carries a special French wine that is popular with wine enthusiasts. Below is information relating to Sherper's purchases of this wine during September. During the same month, 124 bottles were sold. Sherpers uses a periodic inventory system.

<u>Date</u>	<u>Explanation</u>	<u>Bottles</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Sept. 1	Inventory	26	\$ 97	\$ 2,522
Sept. 12	Purchases	45	102	4,590
Sept. 19	Purchases	20	104	2,080
Sept. 26	Purchases	50	105	5,250
	Totals	141		<u>\$14,442</u>

Instructions

- (a)** Compute the ending inventory at September 30 using the FIFO and the LIFO methods. Prove the amount allocated to cost of goods sold under each method.
- (b)** For both FIFO and LIFO, calculate the sum of ending inventory and cost of goods sold. What do you notice about the answers you found for each method?

9-10 Zambia Pastry uses a periodic inventory system. Its records show the following for the month of May, in which 70 units were sold.

		<u>Units</u>	<u>Unit Cost</u>	<u>Total Cost</u>
May 1	Inventory	30	\$ 8	\$240
15	Purchases	25	11	275
24	Purchases	<u>35</u>	12	<u>420</u>
	Totals	<u>90</u>		<u>\$935</u>

Compute inventory and cost of goods sold using FIFO and LIFO.
(SO 2)

Instructions

Compute the ending inventory at May 31 using the FIFO and the LIFO methods. Prove the amount allocated to cost of goods sold under each method.

EXPLORING THE WEB

9-11 A company's annual report usually will identify the inventory method used. Knowing that, you can analyze the effects of the inventory method on the income statement and the balance sheet.

Address: www.darden.com

Steps

1. From Darden Restaurants' homepage, choose **Investor Relations**.
2. Choose **Annual Report & Financials**.
3. Choose **Annual Report 2006—HTML version**.
4. Click on **Financial Renew** under the Table of Contents.
5. Click on **Consolidated Balance Sheets**.

Instructions

Answer the following questions based on the 2006 Annual Report.

- (a) At Darden's fiscal year-end, what was the net inventory on the balance sheet?
- (b) How has this changed from the previous fiscal year-end?
- (c) What inventory method does Darden use (see notes to Consolidated Financial Statements)?

ETHICS CASE

9-12 J. K. Leask Wholesale Corp. uses the LIFO method of inventory costing. In the current year, profit at J. K. Leask is running unusually high. The corporate tax rate is also high this year, but it is scheduled to decline significantly next year. In an effort to lower the current year's net income and to take advantage of the changing income tax rate, the president of J. K. Leask Wholesale instructs the accountant to recommend to the purchasing department a large purchase of inventory for delivery three days before the end of the year. The price of the inventory to be purchased has doubled during the year, and the purchase will represent a major portion of the ending inventory value.

Instructions

- (a) What is the effect of this transaction on this year's and next year's income statement and income tax expense? Why?
- (b) If J. K. Leask Wholesale had been using the FIFO method of inventory costing, would the president give the same directive?
- (c) Should the plant accountant order the inventory purchase to lower income? What are the ethical implications of this order?



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

INTERNAL CONTROL AND CASH

10

THE NAVIGATOR ✓

- Understand *Concepts for Review*
- Read *Feature Story*
- Scan *Study Objectives*
- Read *Preview*
- Read text and answer *Before You Go On*
p. 296 p. 301 p. 309
- Work *Demonstration Problem*
- Review *Summary of Study Objectives*
- Complete *Assignments*

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. The role ethics plays in proper financial reporting. (Ch. 1, p. 8)
- b. The qualitative characteristics of accounting information. (Ch. 2, pp. 34–35)
- c. Accrual basis versus cash basis of accounting. (Ch. 4, pp. 105–106)
- d. The limitations of financial statements analysis. (Ch. 7, pp. 222–223)

F E A T U R E S T O R Y

Minding the Money in Moose Jaw

If you're ever looking for a cappuccino in Moose Jaw, Saskatchewan, stop by **Stephanie's Gourmet Coffee and More**, located on Main Street. Staff there serve, on average, 646 cups of coffee a day—including both regular and specialty coffees—not to mention soups, Italian sandwiches, and a wide assortment of gourmet cheesecakes.

"We've got high school students who come here and students from the community college," says owner/manager Stephanie Mintenko, who has run the place since opening it in 1995. "We have customers who are retired and others who are working people and have only 30 minutes for lunch. We have to be pretty quick."

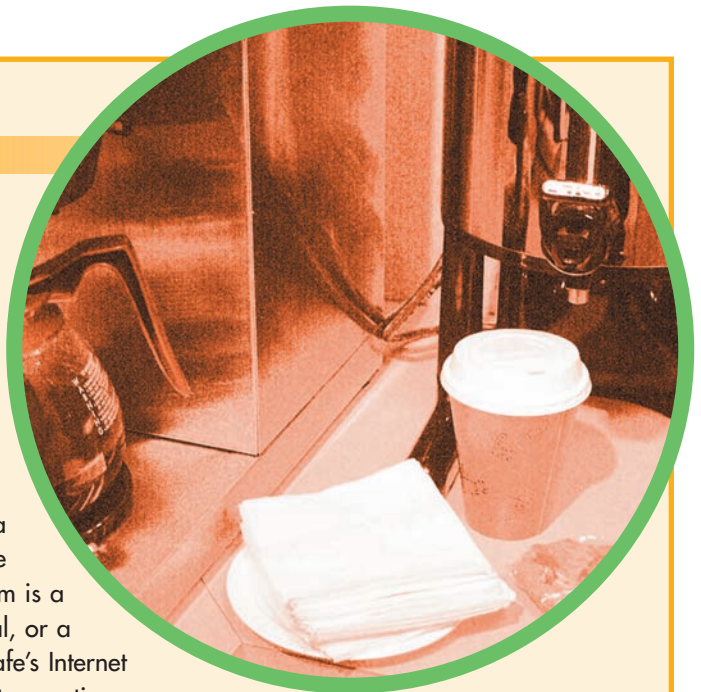
That means that the cashiers have to be efficient. Like most businesses where purchases are low-cost and high-volume, cash control has to be simple.

"We have an electronic cash register, but it's not the fancy new kind where you just punch in the item,"

explains Ms. Mintenko. "You have to punch in the prices." The machine does keep track of sales in several categories, however. Cashiers punch a button to indicate whether each item is a beverage, a meal, or a charge for the cafe's Internet connections. All transactions are recorded on an internal tape in the machine; the customer receives a receipt only on request.

There is only one cash register. "Up to three of us might operate it on any given shift, including myself," says Ms. Mintenko.

She and her staff do two "cashouts" each day—one with the shift change at 5:00 P. M. and one when the shop closes at 10:00. The cash in the register drawer is counted. That amount, minus the cash change carried forward (the float), should match the shift total on the register tape. If there's a dis-



crepancy, they do another count. Then, if necessary, "we go through the whole tape to find the mistake," she explains. "It usually turns out to be someone who punched in \$18 instead of \$1.80, or something like that."

Ms. Mintenko sends all the cash tapes and float totals to a bookkeeper, who double-checks everything and provides regular reports. "We try to keep the accounting simple so we can concentrate on making great coffee and food."



S T U D Y O B J E C T I V E S

After studying this chapter, you should be able to

1. Define internal control.
2. Identify the principles of internal control.
3. Explain the applications of internal control principles to cash receipts.
4. Explain the applications of internal control principles to cash disbursements.
5. Indicate the control features of a bank account.
6. Prepare a bank reconciliation.

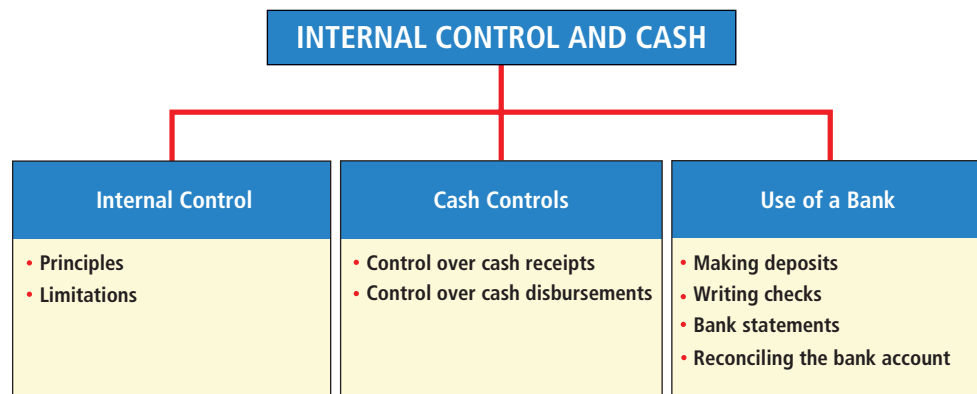


PREVIEW OF CHAPTER 10

As the story about recording cash sales at **Stephanie's Gourmet Coffee and More** indicates, control of cash is important. Equally important is the control of inventories. Controls are needed to safeguard all types of assets. For example, Stephanie's undoubtedly has controls to prevent the theft of its food and supplies inventories and the theft of silverware and dishes from its kitchen.

In this chapter, we will explain the essential features of an internal control system and describe how those controls apply to cash. The applications include some controls with which you may already be familiar. Toward the end of the chapter we describe the use of a bank and explain how cash is reported on the balance sheet.

The content and organization of Chapter 10 are as follows.



INTERNAL CONTROL

STUDY OBJECTIVE 1

Define internal control.

Could there be dishonest employees where you work? Unfortunately, the answer sometimes is yes. For example, the press recently reported the following:¹

- A restaurateur in New York was arrested along with his bookkeeper and charged with stealing \$185,000 by adding thousands of dollars in tips to credit card charges.
- A new manager, taking over a fast-food restaurant, took inventory of the food items in the freezer and found that the previous manager had filled four hamburger-patty boxes with rocks.
- A bar manager, after receiving complaints from guests about the diluted drinks, found that bottles of clear liquor were mostly water.
- A controller found “faked” invoices submitted for payment by a company that only exists at a post office box address.

These situations emphasize the need for a good system of internal control.

¹Milford Prewitt, “In the Soup: Ruggerio Charged in Tip Fraud,” *Nation's Restaurant News* 32(46) (1998): 1, 2.

Internal control consists of the plan of organization and all the related methods and measures adopted within a business to do the following:

1. **Safeguard its assets** from employee theft, robbery, and unauthorized use.
2. **Enhance the accuracy and reliability of its accounting records.** This is done by reducing the risk of errors (unintentional mistakes) and irregularities (intentional mistakes and misrepresentations) in the accounting process.

The Foreign Corrupt Practices Act of 1977 requires all major U.S. corporations to maintain an adequate system of internal control. Companies that fail to comply are subject to fines, and company officers may be imprisoned. Also, the National Commission on Fraudulent Financial Reporting concluded that all companies whose stock is publicly traded should maintain internal controls that can provide reasonable assurance that fraudulent financial reporting will be prevented or subject to early detection.²

ACCOUNTING IN ACTION *Ethics Insight*



Fraud takes many forms. Here are two of the dumbest: (1) In Wichita, Kansas, police arrested a 22-year-old male who tried to pass two counterfeit \$16 bills at an airport hotel. (2) And in Newport, Pennsylvania, a new-accounts bank clerk accepted for deposit a fake \$1 million bill, which was 10 times the value of the largest bill ever printed by the government (a \$100,000 bill existed for three weeks in the 1930s) and 10,000 times larger than the \$100 bill, which is the largest bill now in circulation. While the bank clerk learned a hard lesson, the fake bill passer learned about “hard time.”

What could the Newport, Pennsylvania, bank have done to prevent such an error?

SOURCE: Joseph R. Wells, “The World’s Dumbest Fraudsters,” *Journal of Accountancy*, May 2003, p. 55. Copyright © 2003 from the *Journal of Accountancy by the American Institute of Certified Public Accountants, Inc.* Opinions of the authors are their own and do not necessarily reflect policies of the AICPA. Reprinted with permission.

INTERNATIONAL NOTE

U.S. companies also adopt model business codes that guide their international operations to provide for a safe and healthful workplace, avoid child and forced labor, abstain from bribes, and follow sound environmental practices.



PRINCIPLES OF INTERNAL CONTROL

To safeguard its assets and to enhance the accuracy and reliability of its accounting records, a company follows specific control principles. Of course, internal control measures vary with the size and the nature of the business and with management’s control philosophy. The six principles listed in Illustration 10-1 apply to most enterprises. Each principle is explained in the following sections.

Establishment of Responsibility

An essential characteristic of internal control is the assignment of responsibility to specific employees. **Control is most effective when only one person is responsible for a given task.** To illustrate, assume that the cash on hand at the end of the day in a breakfast restaurant is \$10 short of the cash rung up on the cash register. If only one person has operated the register, responsibility for the shortage can be assessed quickly. If two or more individuals have worked the register, it may be impossible to determine who is responsible for the error unless each person is assigned a separate cash drawer and register key. The principle of establishing responsibility does not appear to be strictly applied by **Stephanie’s** (in the Feature

STUDY OBJECTIVE 2

Identify the principles of internal control.

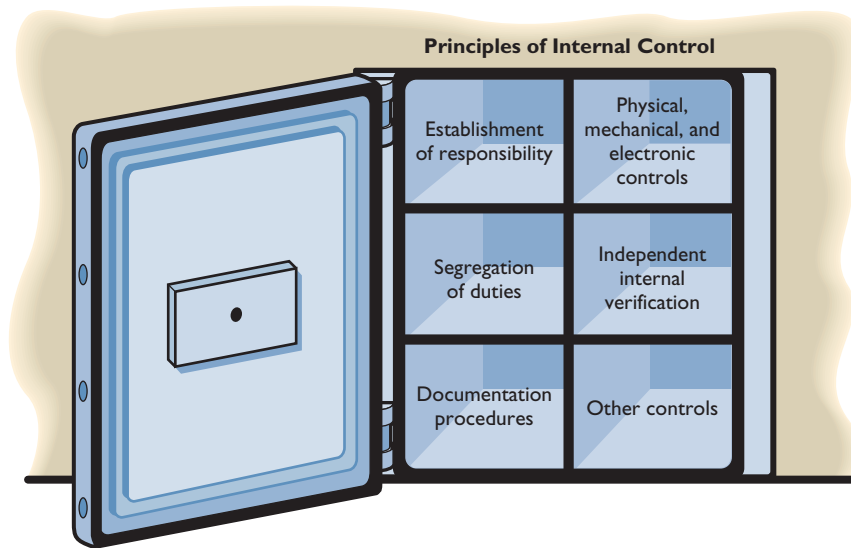


Transfer of cash drawers

²Report of the National Commission on Fraudulent Financial Reporting, October 1987, p. 11.

Illustration 10-1

Principles of internal control



Story) because three people operate the cash register on any given shift. To identify any shortages quickly at Stephanie’s, two cashouts are performed each day.

Establishing responsibility includes the authorization and approval of transactions. For example, the vice president of sales should have the authority to establish policies for making credit sales. The policies ordinarily will require written credit department approval of credit sales.

Segregation of Duties

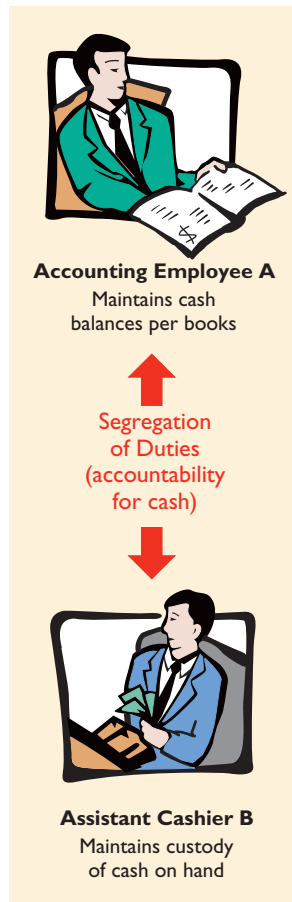
Segregation of duties (also called *separation of functions* or *division of work*) is indispensable in a system of internal control. There are two common applications of this principle:

1. Related activities should be assigned to different individuals.
2. Establishing the accountability (keeping the records) for an asset should be separate from the physical custody of that asset.

The rationale for segregation of duties is this: **The work of one employee should, without a duplication of effort, provide a reliable basis for evaluating the work of another employee.**

RELATED ACTIVITIES. Related activities that should be assigned to different individuals arise in both purchasing and selling. **When one individual is responsible for all the related activities, the potential for errors and irregularities is increased.** Related purchasing activities include ordering merchandise, receiving the goods, and paying (or authorizing payment) for the merchandise. In purchasing, for example, orders could be placed with friends or with suppliers who give kick-backs. Or only a cursory count and inspection could be made on receiving the goods, which could lead to errors and poor-quality merchandise. Payment might be authorized without a careful review of the invoice. Even worse, fictitious invoices might be approved for payment. When the ordering, receiving, and paying are assigned to different individuals, the risk of such abuses is minimized.

Similarly, related sales activities should be assigned to different individuals. Related selling activities include making a sale, shipping (or delivering) the goods to the customer, billing the customer, and receiving payment. When one person handles related sales transactions, a salesperson could make sales at unauthorized prices to increase sales commissions; a shipping clerk could ship goods to himself; a billing clerk could understate the amount billed for sales made to friends and



relatives. These abuses are reduced by dividing the sales tasks: The salespeople make the sale; the shipping department ships the goods on the basis of the sales order; and the billing department prepares the sales invoice after comparing the sales order with the report of goods shipped.

ACCOUNTABILITY FOR ASSETS. To provide a valid basis of accountability for an asset, the accountant should have neither physical custody of the asset nor access to it. Likewise, the custodian of the asset should not maintain or have access to the accounting records. **When one employee maintains the record of the asset that should be on hand and a different employee has physical custody of the asset, the custodian of the asset is not likely to convert the asset to personal use.** The separation of accounting responsibility from the custody of assets is especially important for cash and inventories because these assets are vulnerable to unauthorized use or misappropriation.

TECHNOLOGY IN ACTION



Saving Cash through Controls

If control is so important in the hospitality business and if technology is supposed to make things better, is technology used in helping operators and businesses control their costs? **Chevys**, a restaurant chain that owns 131 Chevys Fresh Mex restaurants, 33 Rio Bravos, and 9 Fuzio Universal Pasta restaurants, has the answer. They installed a system that has resulted in at least a 1 percent savings in food costs. With average sales at a Chevys Fresh Mex of over \$2.5 million a year, 1 percent of sales translates to \$25,000 and thus close to \$3.3 million just for the Fresh Mex brand. The system allows management to do correct pricing with updated information from the vendor.

There are many available technology systems of which restaurateurs, big or small, can take advantage and better operate their businesses. They can track menu additions, product mix, takeout orders, complimentary meals, voids, specialty requests, and so forth, so that management and owners can stay competitive.

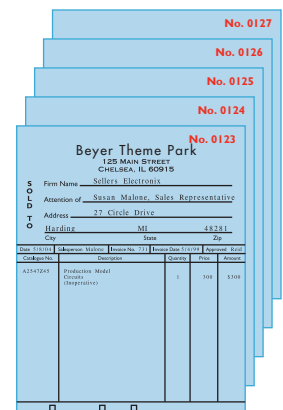
SOURCE: E. Rubenstein, "The Menu Is Served," *Hospitality Technology* pp. 19–21 (April 2003); and D. Kelley, "Analyze This," *Hospitality Technology* pp. 32–32 (April 2003).

Documentation Procedures

Documents provide evidence that transactions and events have occurred. At **Stephanie's Gourmet Coffee and More**, the cash register tape was the restaurant's documentation for the sale and the amount of cash received. Similarly, a shipping document indicates that goods have been shipped, and a sales invoice indicates that a customer has been billed for goods. By adding signatures (or initials) to the documents, the individual(s) responsible for the transaction or event can be identified. Documentation of transactions should be made when the transaction occurs. Documentation of events, such as those leading to adjusting entries, is generally developed when the adjustments are made.

Two procedures should be established for documents:

1. **Whenever possible, documents should be prenumbered, and all documents should be accounted for.** Prenumbering helps to prevent a transaction from being recorded more than once. It also helps to prevent the transactions from not being recorded.
2. **Documents that are source documents for accounting entries should be promptly forwarded to the accounting department.** This control measure helps to ensure timely recording of the transaction and contributes directly to the accuracy and the reliability of the accounting records.



Prenumbered invoices

HELPFUL HINT

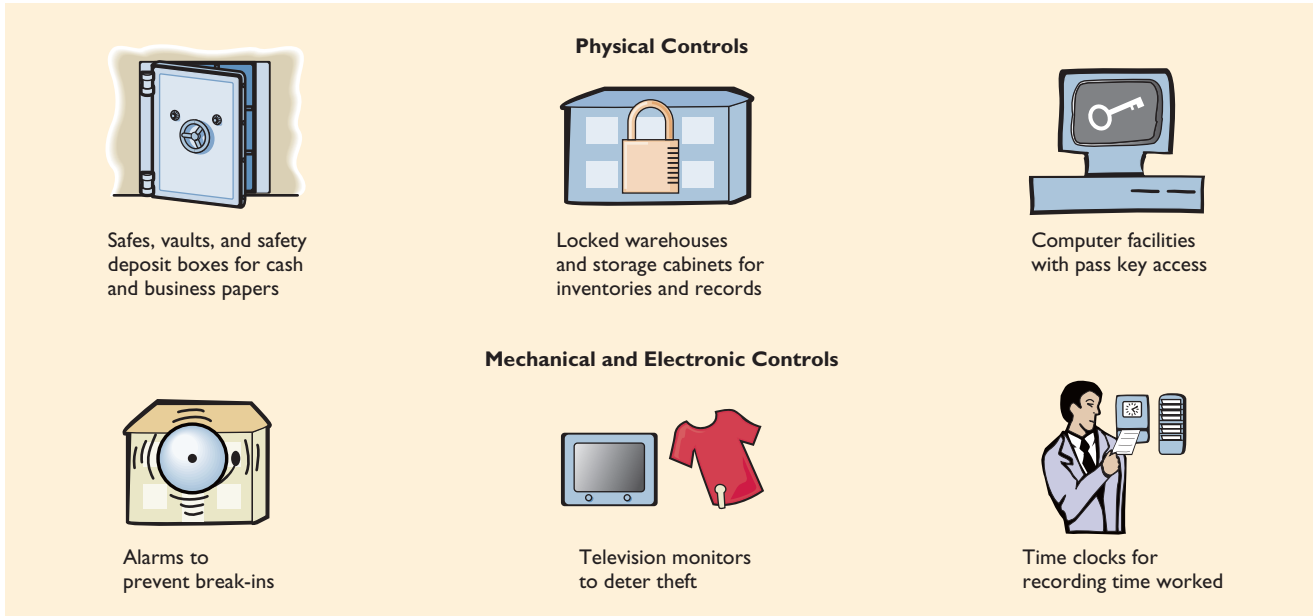
An important corollary to prenumbering is that voided documents be kept until all documents are accounted for.

Physical, Mechanical, and Electronic Controls

Use of physical, mechanical, and electronic controls is essential. Physical controls relate primarily to the safeguarding of assets. Mechanical and electronic controls also safeguard assets; some enhance the accuracy and the reliability of the accounting records. Examples of these controls are shown in Illustration 10-2.

Illustration 10-2

Physical, mechanical, and electronic controls



ACCOUNTING IN ACTION Business Insight

Unfortunately, computer-related frauds have become a major concern. The average computer fraud loss is \$650,000, compared with an average loss of only \$19,000 resulting from other types of white-collar crime.

Computer fraud can be perpetrated almost invisibly and with electronic speed. Psychologically, stealing with impersonal computer tools can seem far less criminal to some people. Therefore, the moral threshold to commit computer fraud is lower than that for fraud involving person-to-person contact.

Preventing and detecting computer fraud represent a major challenge. One of the best ways for a company to minimize the likelihood of computer fraud is to have a good system of internal control that allows the benefits of computerization to be gained without opening the possibility for rampant fraud.

Is a computer capable of committing fraud? Discuss.

Independent Internal Verification

Most internal control systems provide for **independent internal verification**. This principle involves the review, comparison, and reconciliation of data prepared by other employees. To obtain maximum benefit from independent internal verification, three features must be present:

1. The verification should be made periodically or on a surprise basis.
2. The verification should be done by someone who is independent of the employee responsible for the information.

- Discrepancies and exceptions should be reported to a management level that can take appropriate corrective action.

Independent internal verification is especially useful in comparing recorded accountability with existing assets. The reconciliation of the cash register tape with the cash in the register at **Stephanie's Gourmet Coffee and More** is an example of this internal control principle. Another common example is the reconciliation by an independent person of the cash balance per books with the cash balance per bank. The relationship between this principle and the segregation of duties principle is shown graphically in Illustration 10-3.

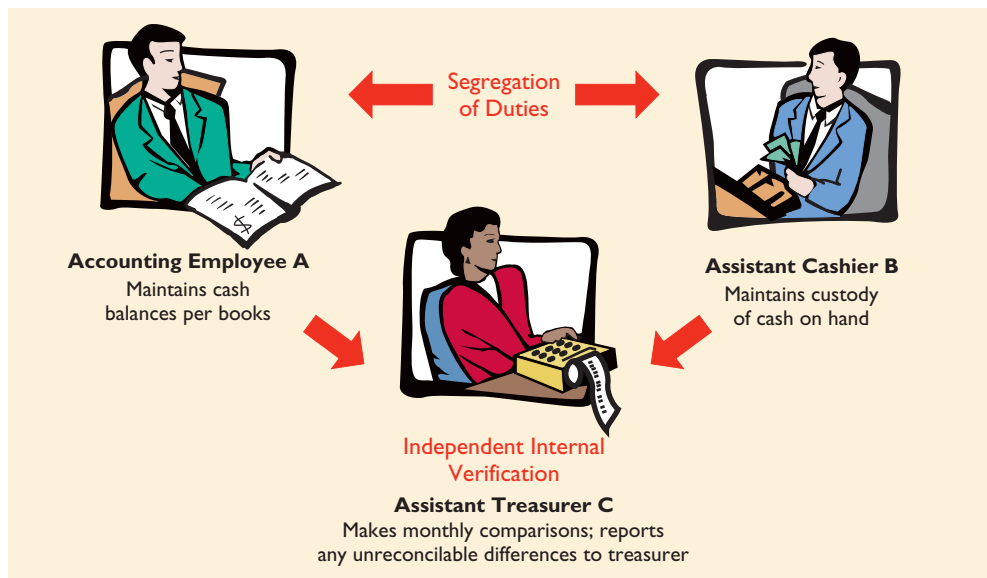


Illustration 10-3

Comparison of segregation of duties principle with independent internal verification principle

In large companies, independent internal verification is often assigned to internal auditors. **Internal auditors** are company employees who evaluate on a continuous basis the effectiveness of the company's system of internal control. They periodically review the activities of departments and individuals to determine whether prescribed internal controls are being followed. They also recommend improvements when needed. The importance of this function is illustrated by the number of internal auditors employed by companies.

Other Controls

Other control measures include the following:

- Bonding of employees who handle cash.** Bonding involves obtaining insurance protection against misappropriation of assets by dishonest employees. This measure contributes to the safeguarding of cash in two ways: First, the insurance company carefully screens all individuals before adding them to the policy and may reject risky applicants. Second, bonded employees know that the insurance company will vigorously prosecute all offenders.
- Rotating employees' duties and requiring employees to take vacations.** These measures are designed to deter employees from attempting any thefts because they will not be able to permanently conceal their improper actions. Many bank embezzlements, for example, have been discovered when the perpetrator was on vacation or assigned to a new position.



HELPFUL HINT

Controls may vary with the risk level of the activity. For example, management may consider cash to be high risk and maintaining inventories in the stock room as low risk. Thus management would have stricter controls for cash.

LIMITATIONS OF INTERNAL CONTROL

A company's system of internal control is generally designed to provide *reasonable* assurance that assets are properly safeguarded and that the accounting records are reliable. **The concept of reasonable assurance rests on the premise that the costs of establishing control procedures should not exceed their expected benefit.** To illustrate, consider shoplifting losses in retail stores. Such losses could be eliminated by having a security guard stop and search customers as they leave the store. But store managers have concluded that the negative effects of adopting such a procedure cannot be justified. Instead, stores have attempted to “control” shoplifting losses by less costly procedures such as (1) posting signs saying, “We reserve the right to inspect all packages” and “All shoplifters will be prosecuted,” (2) using hidden TV cameras and store detectives to monitor customer activity, and (3) using sensing equipment at exits.

The **human element** is an important factor in every system of internal control. A good system can become ineffective as a result of employee fatigue, carelessness, or indifference. For example, a receiving clerk might not bother to count goods received or might just “fudge” the counts. Occasionally, two or more individuals may work together to get around prescribed controls. Such collusion can significantly impair the effectiveness of a system, eliminating the protection offered by segregation of duties. If a supervisor and a cashier collaborate to understate cash receipts, the system of internal control may be negated (at least in the short run). No system of internal control is perfect.

In addition, the size of the business may impose limitations on internal control. In a small company, for example, it may be difficult to segregate duties or to provide for independent internal verification.

BEFORE YOU GO ON...▶ **REVIEW IT**

1. What are the two primary objectives of internal control?
2. Identify and describe the principles of internal control.
3. What are the limitations of internal control?

▶ **DO IT**

Li Song owns a small restaurant. Li wants to establish good internal control procedures but is confused about the difference between segregation of duties and independent internal verification. Explain the differences to Li.

ACTION PLAN

- Understand and explain the differences between (1) segregation of duties and (2) independent internal verification.

SOLUTION

Segregation of duties involves assigning responsibility so that the work of one employee evaluates the work of another employee. Segregation of duties occurs daily in executing and recording transactions. In contrast, independent internal verification involves reviewing, comparing, and reconciling data prepared by one or several employees. Independent internal verification occurs after the fact, as in the case of reconciling cash register totals at the end of the day with cash on hand.

INTERNATIONAL NOTE

Other countries also have control problems. For example, a judge in France has issued a thirty-six-page “book” detailing many of the scams that are widespread, such as kickbacks in public works contracts, the skimming of development aid money to Africa, and bribes on arms sales.

**CASH CONTROLS**

Just as cash is the beginning of a company's operating cycle, it is also usually the starting point for a company's system of internal control. Cash is the one asset that is readily convertible into any other type of asset. It is easily concealed and

transported, and it is highly desired. Because of these characteristics, **cash is the asset most susceptible to improper diversion and use**. Moreover, because of the large volume of cash transactions, numerous errors may occur in executing and recording them. To safeguard cash and to ensure the accuracy of the accounting records for cash, effective internal control over cash is imperative.

Cash consists of coins, currency (paper money), checks, money orders, and money on hand or on deposit in a bank or similar depository. The general rule is that if the bank will accept it for deposit, it is cash. Items such as postage stamps and postdated checks (checks payable in the future) are not cash. Stamps are a prepaid expense; the postdated checks are accounts receivable. In the following sections we explain the application of internal control principles to cash receipts and cash disbursements.

INTERNAL CONTROL OVER CASH RECEIPTS

Cash receipts come from a variety of sources: cash sales; collections on account from customers; the receipt of interest, rent, and dividends; investments by owners; bank loans; and proceeds from the sale of noncurrent assets. Illustration 10-4 shows how the internal control principles explained earlier apply to cash receipts transactions.

STUDY OBJECTIVE 3

Explain the applications of internal control principles to cash receipts.


Illustration 10-4

Application of internal control principles to cash receipts

Internal Control over Cash Receipts

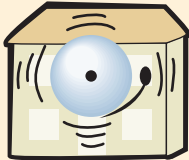
Establishment of Responsibility

Only designated personnel and authorized to handle cash receipts (cashiers)



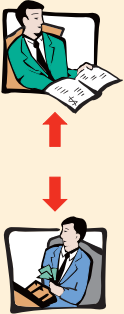
Physical, Mechanical, and Electronic Controls

Store cash in safes and bank vaults; limit access to storage areas; use cash registers




Segregation of Duties

Different individuals receive cash, record cash receipts, and hold the cash



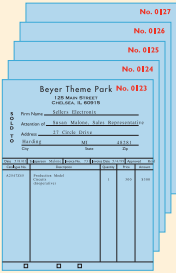
Independent Internal Verification

Supervisors count cash receipts daily; treasurer compares total receipts to bank deposits daily




Documentation Procedures

Use remittance advice (mail receipts), cash register tapes, and deposit slips



Other Controls

Bond personnel who handle cash; require employees to take vacations; deposit all cash in bank daily



As might be expected, companies vary considerably in how they apply these principles. To illustrate internal control over cash receipts, we will examine control measures for a retail store with both over-the-counter and mail receipts.

Over-the-Counter Receipts

Control of over-the-counter receipts in retail businesses is centered on cash registers that are visible to customers. In supermarkets and in variety stores, cash registers are placed in checkout lines near the exit. In hotels such as **Hilton** and **Marriott**, each department has its own cash register. A cash sale is “rung up” on a cash register *with the amount clearly visible to the customer*. This measure prevents the cashier from ringing up a lower amount and pocketing the difference. The customer receives an itemized cash register receipt slip and is expected to count the change received. A cash register tape is locked into the register until removed by a supervisor or manager. This tape accumulates the daily transactions and totals. When the tape is removed, the supervisor compares the total with the amount of cash in the register. The tape should show all registered receipts accounted for. The supervisor’s findings are reported on a cash count sheet, which is signed by both the cashier and the supervisor. The cash count sheet used by Al-rite Food is shown in Illustration 10-5.

Illustration 10-5

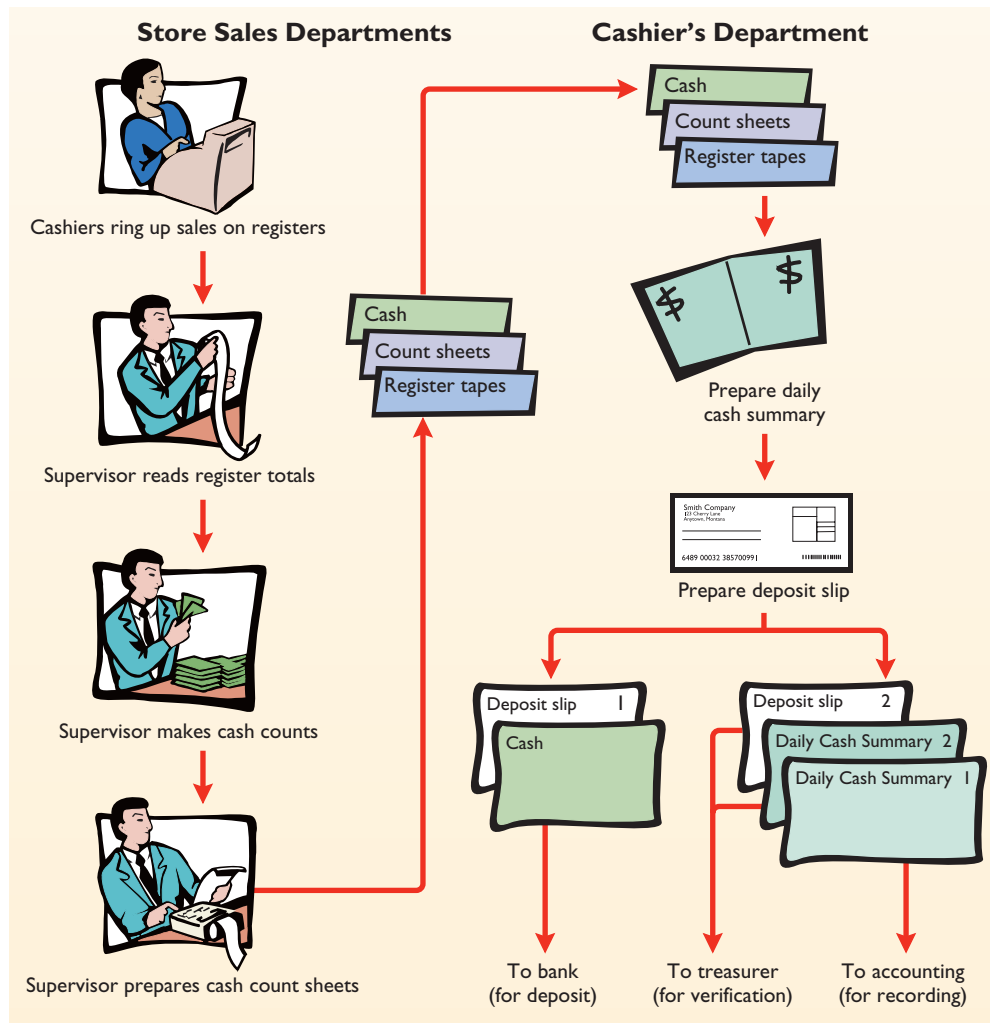
Cash count sheet

Store No. <u> 8 </u>	Date <u> March 8, 2008 </u>
1. Opening cash balance	\$ 50.00
2. Cash sales per tape (attached)	<u>6,956.20</u>
3. Total cash to be accounted for	<u>7,006.20</u>
4. Cash on hand (see list)	<u>6,996.10</u>
5. Cash (short) or over	<u>\$ (10.10)</u>
6. Ending cash balance	<u>\$ 50.00</u>
7. Cash for deposit (Line 4 – Line 6)	<u>\$6,946.10</u>
Cashier <u>J. Cruise</u>	Supervisor <u>M. Braun</u>

The count sheets, register tapes, and cash are then given to the head cashier. This individual prepares a daily cash summary showing the total cash received and the amount from each source, such as cash sales and collections on account. The head cashier sends one copy of the summary to the accounting department for entry into the cash receipts journal. The other copy goes to the treasurer’s office for later comparison with the daily bank deposit.

Next, the head cashier prepares a deposit slip (see Illustration 10-8 on page 303) and makes the bank deposit. The total amount deposited should be equal to the total receipts on the daily cash summary. This will ensure that all receipts have been placed in the custody of the bank. In accepting the bank deposit, the bank stamps (authenticates) the duplicate deposit slip and sends it to the company treasurer, who makes the comparison with the daily cash summary.

These measures for cash sales are graphically presented in Illustration 10-6. The activities of the sales department are shown separately from those of the cashier’s department to indicate the segregation of duties in handling cash.

**Illustration 10-6**

Executing over-the-counter cash sales

HELPFUL HINT

Flowcharts such as this one enhance the understanding of the flow of documents, the processing steps, and the internal control procedures.

Mail Receipts

As an individual customer, you may be more familiar with over-the-counter receipts than with mail receipts. However, mail receipts resulting from billings and credit sales are by far the most common way cash is received by businesses. Think, for example, of the number of checks received through the mail daily by an international company such as **Disney**, **Marriott**, **Hilton**, or **Six Continents**.

All mail receipts should be opened in the presence of two mail clerks. These receipts are generally in the form of checks or money orders. They frequently are accompanied by a remittance advice stating the purpose of the check (sometimes attached to the check, but often a part of the bill that the customer tears off and returns). Each check should be promptly endorsed "For Deposit Only" by use of a company stamp. This **restrictive endorsement** reduces the likelihood that the check will be diverted to personal use. Banks will not give an individual any cash under this type of endorsement.

A list of the checks received each day should be prepared in duplicate. This list shows the name of the issuer of the check, the purpose of the payment, and the amount of the check. Each mail clerk should sign the list to establish responsibility for the data. The original copy of the list, along with the checks and remittance advices, are then sent to the cashier's department. There they are added to over-the-counter receipts (if any) in preparing the daily cash summary and in mak-

ing the daily bank deposit. Also, a copy of the list is sent to the treasurer’s office for comparison with the total mail receipts shown on the daily cash summary. This copy ensures that all mail receipts have been included.

STUDY OBJECTIVE 4

Explain the applications of internal control principles to cash disbursements.

Illustration 10-7

Application of internal control principles to cash disbursements

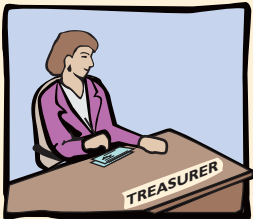
INTERNAL CONTROL OVER CASH DISBURSEMENTS

Cash may be disbursed for a variety of reasons, such as to pay expenses and liabilities or to purchase assets. **Generally, internal control over cash disbursements is more effective when payments are made by check rather than by cash.** One exception is for incidental amounts that are paid out of *petty cash*. Payment by check generally occurs only after specified control procedures have been followed. In addition, the “paid” check provides proof of payment. Illustration 10-7 shows how principles of internal control apply to cash disbursements.

Internal Control over Cash Disbursements

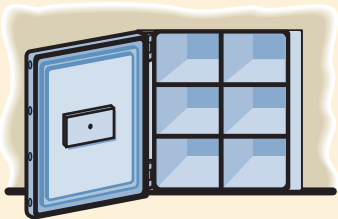
Establishment of Responsibility

Only designated personnel are authorized to sign checks (treasurer)



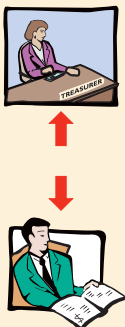
Physical, Mechanical, and Electronic Controls

Store blank checks in safes, with limited access; print check amounts by machine in indelible ink




Segregation of Duties

Different individuals approve and make payments; check signers do not record disbursements




Independent Internal Verification

Compare checks to invoices; reconcile bank statement monthly



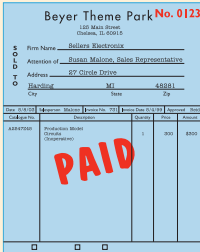
Documentation Procedures

Use prenumbered checks and account for them in sequence; each check must have approved invoice



Other Controls

Stamp invoices PAID



Voucher System

Most medium and large companies use vouchers as part of their internal control over cash disbursements. A **voucher system** is a network of approvals by authorized individuals acting independently to ensure that all disbursements by check are proper.

The system begins with the authorization to incur a cost or an expense. It ends with the issuance of a check for the liability incurred. A **voucher** is an authorization form prepared for each expenditure. Vouchers are required for all types of cash disbursements except those from petty cash. The voucher generally is prepared in the accounts payable department.

The starting point in preparing a voucher is to fill in the appropriate information about the liability on the face of the voucher. The vendor's invoice provides most of the needed information. Then the voucher must be recorded (in the journal called a **voucher register**) and filed according to the date on which it is to be paid. A check is sent on that date, the voucher is stamped "Paid," and the paid voucher is sent to the accounting department for recording (in a journal called the **check register**). A voucher system involves two journal entries, similar to any accounts payable transaction, one to issue the voucher and a second to pay the voucher.

Electronic Funds Transfer (EFT) System

To account for and to control cash is an expensive and time-consuming process. It was estimated recently that the cost to process a check through a bank system ranges from \$0.55 to \$1.00 and is increasing. It is not surprising that new approaches are being developed to transfer funds among parties without the use of paper (deposit tickets, checks, etc.). Such a procedure is called **electronic funds transfer (EFT)**. This disbursement system uses wire, telephone, telegraph, or computer to transfer cash from one location to another. Use of EFT is quite common. For example, the authors receive no formal payroll checks from their universities, which instead send magnetic tapes to the appropriate banks for deposit. Regular payments, such as those for house, car, and utilities, are frequently made by EFT.

ACCOUNTING IN ACTION *Business Insight*



A study by the Association of Certified Fraud Examiners indicates that businesses with fewer than 100 employees are most at risk for employee theft. Also, the average loss per incident for small companies—\$127,500—was actually higher than the average loss for larger companies. The high degree of trust often found in small companies makes them more vulnerable to dishonest employees. For example, in one small company, the employee responsible for paying bills would intentionally ask the owner to sign checks only when the owner was extremely busy. The employee would slip in one check that was made out to himself, and the owner didn't notice because he was too busy to carefully review each check.

Which principles of internal control should have prevented such fraud?

SOURCE: Joseph T. Wells, "Occupational Fraud: The Audit as Deterrent," *Journal of Accountancy*, April 2002, pp. 24–28.

BEFORE YOU GO ON...

▶ REVIEW IT

1. How do the principles of internal control apply to cash receipts?
2. How do the principles of internal control apply to cash disbursements?

▶ DO IT

L. R. Cortez is concerned about the control over cash receipts in his fast-food restaurant, Big Cheese. The restaurant has two cash registers. At no time do more than two employees take customer orders and ring up sales. Work shifts for employees range from four to eight hours. Cortez asks your help in installing a good system of internal control over cash receipts.

ACTION PLAN

- Differentiate among the internal control principles of (1) establishing responsibility, (2) using electronic controls, and (3) providing for independent internal verification.
- Design an effective system of internal control over cash receipts.

SOLUTION

Cortez should assign a cash register to each employee at the start of each work shift, with register totals set at zero. Each employee should be instructed to use only the assigned register and to ring up all sales. At the end of each work shift, Cortez or a supervisor/manager should total the register and make a cash count to see whether all cash is accounted for.



USE OF A BANK

STUDY OBJECTIVE 5

Indicate the control features of a bank account.

The use of a bank contributes significantly to good internal control over cash. A company can safeguard its cash by using a bank as a depository and as a clearing house for checks received and checks written. Use of a bank minimizes the amount of currency that must be kept on hand. Also, the use of a bank facilitates the control of cash because it creates a double record of all bank transactions—one by the business and the other by the bank. The asset account Cash maintained by the depositor is the reciprocal of the bank's liability account for each depositor. It should be possible to *reconcile these accounts* (make them agree) at any time.

Opening a bank checking account is a relatively simple procedure. Typically, the bank makes a credit check on the new customer, and the depositor is required to sign a **signature card**. The card contains the signature of each person authorized to sign checks on the account. The signature card is used by bank employees to validate signatures on the checks.

Soon after an account is opened, the bank provides the depositor with serially numbered checks and deposit slips imprinted with the depositor's name and address. Each check and deposit slip is imprinted with both a bank and a depositor identification number. This number, printed in magnetic ink, permits computer processing of transactions.

Many companies have more than one bank account. For efficiency of operations and better control, national hospitality companies may have regional bank accounts. A large company such as **Starwood**, with more than 115,000 employees, may have a payroll bank account and one or more general bank accounts. Also, a company may maintain several bank accounts in order to have more than one source for short-term loans when needed.

MAKING BANK DEPOSITS

Bank deposits should be made by an authorized employee, such as the head cashier. Each deposit must be documented by a deposit slip (ticket), as shown in Illustration 10-8.

Deposit slips are prepared in duplicate. The original is retained by the bank; the duplicate, machine-stamped by the bank to establish its authenticity, is retained by the depositor.

WRITING CHECKS

A **check** is a written order signed by the depositor directing the bank to pay a specified sum of money to a designated recipient. There are three parties to a check: (1) the **maker** (or drawer), who issues the check, (2) the **bank** (or payer) on which the check is drawn, and (3) the **payee** to whom the check is payable. A check is a **negotiable instrument** that can be transferred to another party by endorsement.

Illustration 10-8

Deposit slip

Bank code numbers

Front side

Reverse side

CHECKS	LIST SINGLY	DOLLARS	CENTS
1	74 - 331/724	175	40
2	61 - 157/220	292	60
3	19 - 401/710	337	55
4	22 - 815/666	165	72
5	15 - 360/011	145	53
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
TOTAL		1116	80

ENTER TOTAL ON THE FRONT OF THIS TICKET

Each check should be accompanied by an explanation of its purposes. In many businesses, this is done by a remittance advice attached to the check, as shown in Illustration 10-9

Illustration 10-9

Check with remittance advice

Check

Maker → W.A. LAIRD COMPANY
77 West Central Avenue,
Midland, Michigan 48654

No. 448
April 16 2008 74-102724

Payee → Pay to the order of Watkins Wholesale Supply \$ 1525.00
Fifteen hundred twenty-five and 00/100 Dollars

Payer → **NB National Bank & Trust**
Midland, Michigan 48654
W.F. Paine

Memo _____

Remittance Advice

Detach this portion before cashing.

Date	Description	Gross Amount	Discount	Net Amount
4-16-08	Invoice No. 27662	1525.00	----	1525.00

W. A. Laird Company, Midland, MI

It is important to know the balance in the checking account at all times. To keep the balance current, each deposit and check should be entered on running balance memorandum forms provided by the bank or on the check stubs contained in the checkbook.

ACCOUNTING IN ACTION Business Insight



Cash is virtually obsolete. We use debit cards and credit cards to pay for most of our purchases. But debit cards are usable only at specified locations, and credit cards are cumbersome for small transactions. They are no good for transferring cash between individuals or to small companies that don't want to pay credit card fees. Digital cash is the next online wave.

There are many digital-cash companies. One of the most flexible appears to be **PayPal.com**. PayPal has become popular with users of the auction site **eBay** because it allows them to transfer funds to each other as easily as sending e-mail.

SOURCE: Mathew Ingram, "Will Digital Cash Work This Time?" *The Globe and Mail*, March 18, 2000, p. N4.

HELPFUL HINT


Essentially, the bank statement is a copy of the bank's records sent to the customer for periodic review.

BANK STATEMENTS

Each month, the depositor receives a bank statement from the bank. A **bank statement** shows the depositor's bank transactions and balances. A typical statement is presented in Illustration 10-10. It shows (1) checks paid and other debits that reduce the balance in the depositor's account, (2) deposits and other credits that

Illustration 10-10

Bank statement



National Bank & Trust

Midland, Michigan 48654 Member FDIC

ACCOUNT STATEMENT

W. A. LAIRD COMPANY
77 WEST CENTRAL AVENUE
MIDLAND, MICHIGAN 48654

Statement Date/Credit Line Closing Date
April 30, 2008

457923

ACCOUNT NUMBER

Balance Last Statement	Deposits and Credits		Checks and Debits		Balance This Statement	
	No.	Total Amount	No.	Total Amount		
13,256.90	20	34,806.10	26	32,164.65	15,907.45	
CHECKS AND DEBITS			DEPOSITS AND CREDITS		DAILY BALANCE	
Date	No.	Amount	Date	Amount	Date	Amount
4-2	435	644.95	4-2	4,276.85	4-2	16,888.80
4-5	436	3,260.00	4-3	2,137.50	4-3	18,249.65
4-4	437	1,185.79	4-5	1,350.47	4-4	17,063.86
4-3	438	776.65	4-7	982.46	4-5	15,154.33
4-8	439	1,781.70	4-8	1,320.28	4-7	14,648.89
4-7	440	1,487.90	4-9 CM	1,035.00	4-8	11,767.47
4-8	441	2,420.00	4-11	2,720.00	4-9	12,802.47
4-11	442	1,585.60	4-12	757.41	4-11	13,936.87
4-12	443	1,226.00	4-13	1,218.56	4-12	13,468.28
4-29	NSF	425.60	4-27	1,545.57	4-27	13,005.45
4-29	459	1,080.30	4-29	2,929.45	4-29	14,429.00
4-30	DM	30.00	4-30	2,128.60	4-30	15,907.45
4-30	461	620.15				

Symbols: **CM** Credit Memo **EC** Error Correction **NSF** Not Sufficient Funds Reconcile Your Account Promptly
DM Debit Memo **INT** Interest Earned **SC** Service Charge

HELPFUL HINT

Every deposit received by the bank is *credited* to the customer's account. The reverse occurs when the bank "pays" a check issued by a company on its checking account balance: Payment reduces the bank's liability. Thus it is *debited* to the customer's account with the bank.

increase the balance in the depositor's account, and (3) the account balance after each day's transactions.

All "paid" checks are listed in numerical sequence on the bank statement along with the date the check was paid and its amount. On paying a check, the bank stamps the check "Paid"; a paid check is sometimes referred to as a **can-celed** check. Most banks offer depositors the option of receiving "paid" checks with their bank statements. For those who decline, the bank keeps a record of each check on microfilm.

The bank also includes on the bank statement memoranda explaining other debits and credits made by the bank to the depositor's account.

Debit Memorandum

Banks charge a monthly fee for their services. Often the fee is charged only when the average monthly balance in a checking account falls below a specified amount. The fee, called a **bank service charge**, is identified on the bank statement by a code symbol such as SC. A debit memorandum explaining the charge is included with the bank statement and noted on the statement. Separate debit memoranda may also be issued for other bank services, such as the cost of printing checks, issuing traveler's checks, and wiring funds to other locations. The symbol DM is often used for such charges.

A debit memorandum is also used by the bank when a deposited check from a customer "bounces" because of insufficient funds. In such a case, the check is marked "NSF" (not sufficient funds) by the customer's bank and is returned to the depositor's bank. The bank then debits the depositor's account, as shown by the symbol NSF on the bank statement in Illustration 10-10. The bank sends the **NSF check** and debit memorandum to the depositor as notification of the charge. The NSF check creates an account receivable for the depositor and reduces cash in the bank account.

Credit Memorandum

A depositor may ask the bank to collect its notes receivable. In such a case, the bank will credit the depositor's account for the cash proceeds of the note. This is illustrated on the W. A. Laird Company bank statement by the symbol CM. The bank will issue a credit memorandum, which is sent with the statement to explain the entry. Many banks also offer interest on checking accounts. The interest earned may be indicated on the bank statement by the symbol CM or INT.

RECONCILING THE BANK ACCOUNT

The bank and the depositor maintain independent records of the depositor's checking account. If you've never had a checking account, you might assume that the respective balances will always agree. In fact, the two balances are seldom the same at any given time. It is therefore necessary to make the balance per books agree with the balance per bank—a process called *reconciling the bank account*. The lack of agreement between the two balances is due to

1. **Time lags** that prevent one of the parties from recording the transaction in the same period.
2. **Errors** by either party in recording transactions.

Time lags occur frequently. For example, several days may elapse between the time a check is mailed to a payee and the date the check is paid by the bank.

STUDY OBJECTIVE 6

Prepare a bank reconciliation.



ACCOUNTING IN ACTION *Ethics Insight*



During a class lecture, Mr. Alan E. Gallo, chief financial officer of Redstone Hospitality, shared some controls incidents with the students. He mentioned that a hotel received a complaint letter and a laundry bill from a guest. This guest claimed that food was spilled on his wife's dress, and he would like the hotel to pay for the laundry bill of an amount less than \$10. To make the case more convincing, the guest also mentioned that he was a friend of another frequent guest of this establishment. When investigating the matter, the controller called the number on the laundry bill, trying to confirm the incident with the cleaner, and found that the cleaner did not exist. Most people will pay the small bill to take care of the complaint and move on to the next issue. The moral of the story: It is not the amount that matters; it is the principle. Follow set procedures and catch those crooks.

Similarly, when the depositor uses the bank's night depository to make its deposits, there will be a difference of at least one day between the time the receipts are recorded by the depositor and the time they are recorded by the bank. A time lag also occurs whenever the bank mails a debit or credit memorandum to the depositor.

Also, errors sometimes occur. The incidence of errors depends on the effectiveness of the internal controls of the depositor and the bank. Bank errors are infrequent. However, either party could inadvertently record a \$450 check as \$45 or \$540. In addition, the bank might mistakenly charge a check drawn by C. D. Berg to the account of C. D. Burg.

Reconciliation Procedure

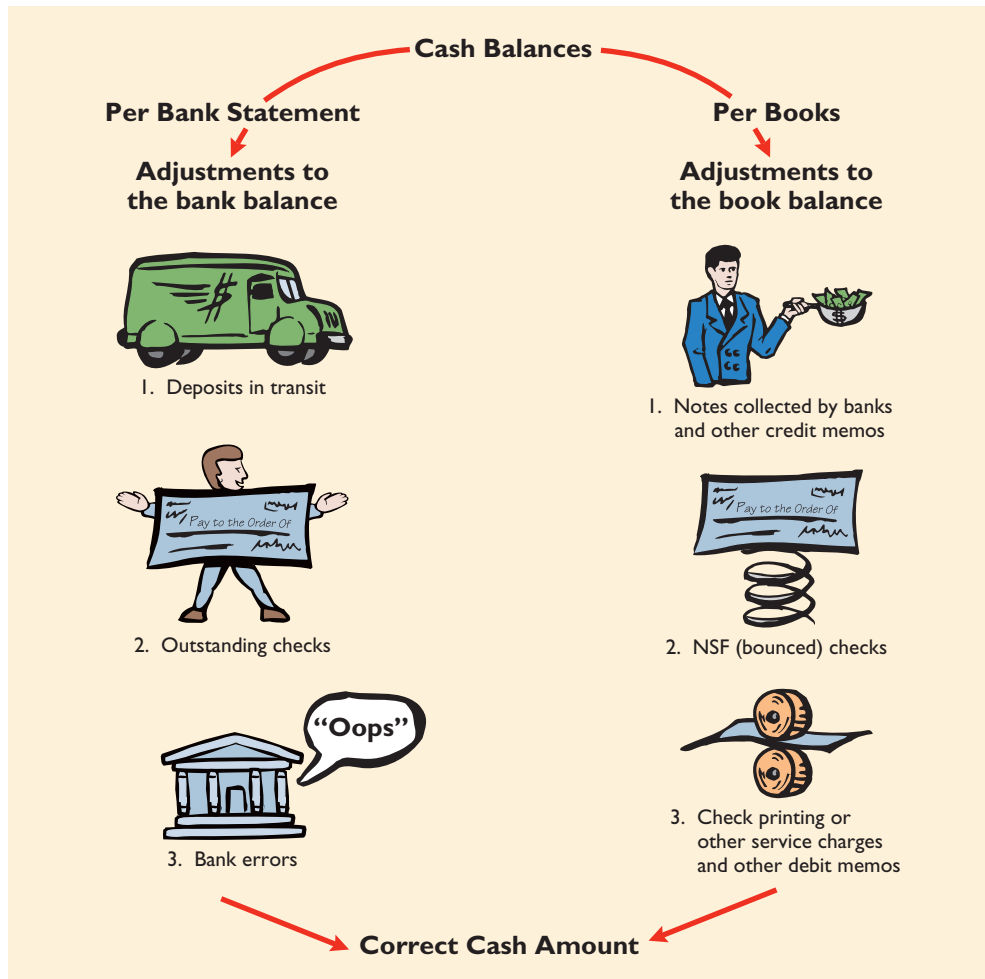
To obtain maximum benefit from a bank reconciliation, the reconciliation should be prepared by an employee who has no other responsibilities pertaining to cash. When the internal control principle of independent internal verification is not followed in preparing the reconciliation, cash embezzlements may go unnoticed. For example, a cashier who prepares the reconciliation can embezzle cash and conceal the embezzlement by misstating the reconciliation. Thus the bank accounts would reconcile, and the embezzlement would not be detected.

In reconciling the bank account, it is customary to reconcile the balance per books and the balance per bank to their adjusted (correct or true) cash balances. The reconciliation schedule is divided into two sections. The starting point in preparing the reconciliation is to enter the balance per bank statement and the balance per books on the schedule. Adjustments are then made to each section, as shown in Illustration 10-11. Four steps should reveal all the reconciling items that cause the difference between the two balances:

- 1. Deposits in transit.** Compare the individual deposits on the bank statement with deposits in transit from the preceding bank reconciliation and with the deposits per company records or duplicate deposit slips. Deposits recorded by the depositor that have not been recorded by the bank represent **deposits in transit**. They are added to the balance per bank.
- 2. Outstanding checks.** Compare the paid checks shown on the bank statement or the paid checks returned with the bank statement with (a) checks outstanding from the preceding bank reconciliation and (b) checks issued by the company as recorded in the cash payments journal. Issued checks recorded by the company that have not been paid by the bank represent **outstanding checks**. They are deducted from the balance per bank.

HELPFUL HINT

Deposits in transit and outstanding checks are reconciling items because of time lags.

**Illustration 10-11**

Bank reconciliation procedures

3. **Errors.** Note any errors discovered in the foregoing steps. List them in the appropriate section of the reconciliation schedule. For example, if a paid check correctly written by the company for \$195 was mistakenly recorded by the company for \$159, the error of \$36 is deducted from the balance per books. All errors made by the depositor are reconciling items in determining the adjusted cash balance per books. In contrast, all errors made by the bank are reconciling items in determining the adjusted cash balance per bank.
4. **Bank memoranda.** Trace bank memoranda to the depositor's records. Any unrecorded memoranda should be listed in the appropriate section of the reconciliation schedule. For example, a \$5 debit memorandum for bank service charges is deducted from the balance per books, and \$32 of interest earned is added to the balance per books.

Bank Reconciliation Illustrated

The bank statement for the W. A. Laird Company was shown in Illustration 10-10. It shows a balance per bank of \$15,907.45 on April 30, 2008. On this date, the balance of cash per books is \$11,589.45. From the foregoing steps, the following reconciling items are determined:

1. **Deposits in transit:** April 30 deposit (received by bank on May 1). \$2,201.40

HELPFUL HINT

Note in the bank statement that checks no. 459 and 461 have been paid but check no. 460 is not listed. Thus, this check is outstanding. If a complete bank statement were provided, checks no. 453 and 457 would also not be listed. The amounts for these three checks are obtained from the company's cash payments records.

- | | |
|---|----------|
| 2. Outstanding checks: No. 453, \$3,000.00; no. 457, \$1,401.30; no. 460, \$1,502.70. | 5,904.00 |
| 3. Errors: Check no. 443 was correctly written by Laird for \$1,226.00 and was correctly paid by the bank. However, it was recorded for \$1,262.00 by Laird Company. | 36.00 |
| 4. Bank memoranda: | |
| a. Debit—NSF check from J. R. Baron for \$425.60 | 425.60 |
| b. Debit—Printing company checks charge \$30.00 | 30.00 |
| c. Credit—Collection of note receivable for \$1,000 plus interest earned \$50, less bank collection fee \$15 | 1,035.00 |

The bank reconciliation is shown in Illustration 10-12.

Illustration 10-12

Bank reconciliation

ALTERNATIVE TERMINOLOGY

The terms *adjusted balance*, *true cash balance*, and *correct cash balance* may be used interchangeably.

W. A. LAIRD COMPANY		
Bank Reconciliation		
April 30, 2008		
Cash balance per bank statement		\$15,907.45
Add: Deposits in transit		2,201.40
		18,108.85
Less: Outstanding checks		
No. 453	\$3,000.00	
No. 457	1,401.30	
No. 460	1,502.70	
		5,904.00
Adjusted cash balance per bank		\$12,204.85
Cash balance per books		\$11,589.45
Add: Collection of note receivable \$1,000, plus interest earned \$50, less collection fee \$15	\$1,035.00	
Error in recording check no. 443	36.00	
		1,071.00
		12,660.45
Less: NSF check	425.60	
Bank service charge	30.00	
		455.60
Adjusted cash balance per books		\$12,204.85

Entries from Bank Reconciliation

Each reconciling item in determining the **adjusted cash balance per books** should be recorded by the depositor. If these items are not journalized and posted, the Cash account will not show the correct balance. The entries for W. A. Laird Company on April 30 are as follows.

COLLECTION OF NOTE RECEIVABLE. This entry involves four accounts. Assuming that the interest of \$50 has not been accrued and the collection fee is charged to Miscellaneous Expense, the entry looks like this:

HELPFUL HINT

The entries that follow are adjusting entries. In prior chapters, Cash was an account that did not require adjustment. That was a simplifying assumption for learning purposes because a bank reconciliation had not been explained.

A	=	L	+	SE
+1,035				-15
-1,000				+50

Apr. 30	Cash	1,035.00	
	Miscellaneous Expense	15.00	
	Notes Receivable		1,000.00
	Interest Revenue		50.00
	(To record collection of notes receivable by bank)		

BOOK ERROR. The cash disbursements journal shows that check no. 443 was a payment on account to Andrea Company, a supplier. Now there is a correcting entry:

Apr. 30	Cash	36.00		
	Accounts Payable—Andrea Company		36.00	
	(To correct error in recording check no. 443)			

A	=	L	+	SE
+36		+36		

NSF CHECK. As indicated earlier, an NSF check becomes an account receivable to the depositor:

Apr. 30	Accounts Receivable—J. R. Baron	425.60		
	Cash		425.60	
	(To record NSF check)			

A	=	L	+	SE
+425.60				
-425.60				

BANK SERVICE CHARGES. Check printing charges (DM) and other bank service charges (SC) are debited to Miscellaneous Expense. They are usually nominal in amount. The entry looks like this:

Apr. 30	Miscellaneous Expense	30.00		
	Cash		30.00	
	(To record charge for printing company checks)			

A	=	L	+	SE
+30				-30

The foregoing four entries also could be combined into one compound entry. After the entries are posted, the cash account will look like Illustration 10-13.

Cash			
Apr. 30 Bal.	11,589.45	Apr. 30	425.60
30	1,035.00	30	30.00
30	36.00		
Apr. 30 Bal.	12,204.85		

Illustration 10-13

Adjusted balance in cash account

The adjusted cash balance in the ledger should agree with the adjusted cash balance per books in the bank reconciliation in Illustration 10-12.

What entries does the bank make? If any bank errors are discovered in preparing the reconciliation, the bank should be notified. It then can make the necessary corrections on its records. The bank does not make any entries for deposits in transit or for outstanding checks. Only when these items reach the bank will the bank record these items.

BEFORE YOU GO ON...

► **REVIEW IT**

1. Why is it necessary to reconcile a bank account?
2. What steps are involved in the reconciliation procedure?
3. What information is included in a bank reconciliation?

► **DO IT**

Sally Kist owns Linen Kist Fabrics, which supplies fabrics for table linen in hotels and restaurants. Sally asks you to explain how the following reconciling items should be treated in reconciling the bank account: (1) a debit memorandum for an NSF check, (2) a credit memorandum for a note collected by the bank, (3) outstanding checks, and (4) a deposit in transit.

ACTION PLAN

- Understand the purpose of a bank reconciliation.
- Identify time lags, and explain how they cause reconciling items.

SOLUTION

In reconciling the bank account, the reconciling items are treated as follows:

- NSF check: Deducted from balance per books
- Collection of note: Added to balance per books
- Outstanding checks: Deducted from balance per bank
- Deposit in transit: Added to balance per bank



LOOK BACK AT OUR FEATURE STORY

Refer back to the Feature Story about **Stephanie’s Gourmet Coffee and More** at the beginning of the chapter, and answer the following questions:

1. Does Stephanie Mintenko have a valid basis for establishing responsibility for overages or shortages? Why or why not?
2. What internal control principles are applicable to reconciling the cash register tape and the amount of cash in the cash drawer at the end of each shift?
3. What internal control principle is violated by not printing a receipt for each customer who purchases beverages or a meal or uses the café’s computers?
4. Do you think cashiers are, or should be, bonded (insured against misappropriation of assets)?
5. What adjusting entry would the bookkeeper likely make to record a cash shortage of \$5?

SOLUTION

1. Establishing responsibility for overages or shortages occurs twice a day: at the end of the 5:00 P.M. shift and at closing. This procedure provides a valid basis for evaluation only if one person worked an assigned register since the last reconciliation. Since up to three people work a single register during a shift, there is no valid basis for establishing who is responsible for any overage or shortage.
2. Internal control principles are (a) authorization—not applicable because cashiers are not assigned to a specific cash register for their shift; (b) segregation of duties—cashiers (other than the owner/manager) are not involved in performing the reconciliation; (c) documentation—the cash register tape provides the documentation for total receipts for the shift; (d) safeguard assets—an electronic cash register is used with an internal tape, whose access presumably is restricted; (e) independent verification—a bookkeeper, in addition to Stephanie Mintenko, performs the reconciliation regularly.
3. The principle of documentation procedures is involved. If a customer making a purchase sees that a sale isn’t rung up or if the customer doesn’t request a receipt, there is a possibility that the transaction has not been recorded. But the internal control does not reside in the receipt itself. The control is forcing the cashier to ring up each sale so that a receipt is produced. Each receipt is recorded on an internal cash register tape. At the end of the day, the tape is used in determining overages or shortages.
4. It is doubtful that Stephanie’s café would bond part-time employees. From the employer’s standpoint, bonding is protection against major embezzlements by dishonest employees. The risk of this occurring in a small café, with the active participation of the owner/manager, is relatively low.

5. Cash Over and Short (miscellaneous expense account)	5	5
Cash		



DEMONSTRATION PROBLEM

Trillo Beds and Mattresses sells beddings to resort and lodging operations. Its bank statement for May 2008 shows the following data:

Balance 5/1	\$12,650	Balance 5/31	\$14,280
Debit memorandum:		Credit memorandum:	
NSF check	\$175	Collection of note receivable	\$505

The cash balance per books at May 31 is \$13,319. Your review of the data reveals the following:

1. The NSF check was from Hup Hotel Co., a customer.
2. The note collected by the bank was a \$500, three-month, 12 percent note. The bank charged a \$10 collection fee. No interest has been accrued.
3. Outstanding checks at May 31 total \$2,410.
4. Deposits in transit at May 31 total \$1,752.
5. A Trillo check for \$352 dated May 10 cleared the bank on May 25. This check, which was a payment on account, was journalized for \$325.

Instructions

- (a) Prepare a bank reconciliation at May 31.
- (b) Journalize the entries required by the reconciliation.

SOLUTION TO DEMONSTRATION PROBLEM

(a) TRILLO BEDS AND MATTRESSES Bank Reconciliation May 31, 2008

Cash balance per bank statement		\$14,280
Add: Deposits in transit		<u>1,752</u>
		16,032
Less: Outstanding checks		<u>2,410</u>
Adjusted cash balance per bank		<u>\$13,622</u>
Cash balance per books		\$13,319
Add: Collection of note receivable \$500, plus \$15 interest, less collection fee \$10		<u>505</u>
		13,824
Less: NSF check	\$175	
Error in recording check	<u>27</u>	<u>202</u>
Adjusted cash balance per books		<u>\$13,622</u>

(b)			
May 31	Cash	505	
	Miscellaneous Expense	10	
	Notes Receivable		500
	Interest Revenue		15
	(To record collection of note by bank)		
31	Accounts Receivable—Hup Hotel Co.	175	
	Cash		175
	(To record NSF check from Hup Hotel Co.)		
31	Accounts Payable	27	
	Cash		27
	(To correct error in recording check)		

ACTION PLAN

- Follow the four steps in the reconciliation procedure. (pp. 306–307).
- Work carefully to minimize mathematical errors in the reconciliation.
- Prepare adjusting entries from reconciling items per books.
- Make sure the cash ledger balance after posting the reconciling entries agrees with the adjusted cash balance per books.

SUMMARY OF STUDY OBJECTIVES

1. Define internal control. Internal control is the plan of organization and related methods and procedures adopted within a business to safeguard its assets and to enhance the accuracy and reliability of its accounting records.

2. Identify the principles of internal control. The principles of internal control are establishment of responsibility; segregation of duties; documentation procedures; physical, mechanical, and electronic controls; independent internal verification; and other controls.

3. Explain the applications of internal control principles to cash receipts. Internal controls over cash receipts include (a) designating only personnel such as cashiers to handle cash; (b) assigning the duties of receiving cash, recording cash, and custody of cash to different individuals; (c) obtaining remittance advices for mail receipts, cash register tapes for over-the-counter receipts, and deposit slips for bank deposits; (d) using company safes and bank vaults to store cash, with access limited to authorized personnel, and using cash registers in executing over-the-counter receipts; (e) making independent daily counts of register receipts and daily comparisons of total receipts with total deposits; and (f) bonding personnel who handle cash and requiring them to take vacations.

4. Explain the applications of internal control principles to cash disbursements. Internal controls over cash disbursements

include (a) having only specified individuals such as the treasurer authorized to sign checks; (b) assigning the duties of approving items for payment, paying the items, and recording the payment to different individuals; (c) using prenumbered checks and accounting for all checks, with each check supported by an approved invoice; (d) storing blank checks in a safe or vault, with access restricted to authorized personnel, and using a checkwriter to imprint amounts on checks; (e) comparing each check with the approved invoice before issuing the check, and making monthly reconciliations of bank and book balances; and (f) after payment, stamping each approved invoice "Paid."

5. Indicate the control features of a bank account. A bank account contributes to good internal control by providing physical controls for the storage of cash. It minimizes the amount of currency that must be kept on hand, and it creates a double record of a depositor's bank transactions.

6. Prepare a bank reconciliation. It is customary to reconcile the balance per books and the balance per bank to their adjusted balances. The steps in determining the reconciling items are to ascertain deposits in transit, outstanding checks, errors by the depositor or the bank, and unrecorded bank memoranda.



GLOSSARY

Bank service charge A fee charged by a bank for the use of its services (p. 305).

Bank statement A statement received monthly from the bank that shows the depositor's bank transactions and balances (p. 304).

Cash Resources that consist of coins, currency, checks, money orders, and money on hand or on deposit in a bank or similar depository (p. 297).

Check A written order signed by the depositor directing the bank to pay a specified sum of money to a designated recipient (p. 302).

Deposits in transit Deposits recorded by the depositor that have not been recorded by the bank (p. 306).

Electronic funds transfer (EFT) A disbursement system that uses wire, telephone, telegraph, or computer to transfer cash from one location to another (p. 301).

Internal auditors Company employees who evaluate on a continuous basis the effectiveness of the company's system of internal control (p. 295).

Internal control The plan of organization and all the related methods and measures adopted within a business to safeguard its assets and to enhance the accuracy and reliability of its accounting records (p. 291).

NSF check A check that is not paid by a bank because of insufficient funds in a customer's bank account (p. 305).

Outstanding checks Checks issued and recorded by a company that have not been paid by the bank (p. 306).

Segregation of duties A separation of functions or a division of work so as to provide a reliable basis of evaluating the work of each employee (p. 292).

Voucher An authorization form prepared for each payment by check in a voucher system (p. 301).

Voucher system A network of approvals by authorized individuals acting independently to ensure that all disbursements by check are proper (p. 300).

EXERCISES

Identify the internal control principles applicable to cash receipts.

(SO 3)

10-1 Sycamore Resorts has the following internal control procedures over cash receipts. Identify the internal control principle that is applicable to each procedure.

- All over-the-counter receipts are registered on cash registers.

2. All cashiers are bonded.
3. Daily cash counts are made by cashier department supervisors.
4. The duties of receiving cash, recording cash, and having custody of cash are assigned to different individuals.
5. Only cashiers may operate cash registers.

10-2 George Hunting Lodge has the following internal control procedures over cash disbursements. Identify the internal control principle that is applicable to each procedure.

1. Company checks are prenumbered.
2. The bank statement is reconciled monthly by an internal auditor.
3. Blank checks are stored in a safe in the treasurer's office.
4. Only the treasurer or the assistant treasurer may sign checks.
5. Check signers are not allowed to record cash disbursement transactions.

Identify the internal control principles applicable to cash disbursements.

(SO 4)

10-3 Sue Ernesto is the owner of Ernesto's Pizza. Ernesto's is operated strictly on a carryout basis. Customers pick up their orders at a counter where a clerk exchanges the pizza for cash. While at the counter, the customer can see other employees making the pizzas and the large ovens in which the pizzas are baked.

Identify the principles of internal control.

(SO 2)

Instructions

Identify the six principles of internal control, and give an example of each principle that you might observe when picking up your pizza. (*Note:* It may not be possible to observe all the principles.)

10-4 The following control procedures are used at Sandwich Company for over-the-counter cash receipts.

1. To minimize the risk of robbery, cash in excess of \$100 is stored in an unlocked attaché case in the stock room until it is deposited in the bank.
2. All over-the-counter receipts are registered by three clerks who use a cash register with a single cash drawer.
3. The company accountant makes the bank deposit and then records the day's receipts.
4. At the end of each day, the total receipts are counted by the cashier on duty and reconciled to the cash register total.
5. Cashiers are experienced; they are not bonded.

Identify internal control weaknesses over cash receipts and suggest improvements.

(SO 2, 3)

Instructions

- (a) For each procedure, explain the weakness in internal control, and identify the control principle that is violated.
- (b) For each weakness, suggest a change in procedure that will result in good internal control.

10-5 The following control procedures are used in Morgan's Fishing Excursions for cash disbursements:

1. The company accountant prepares the bank reconciliation and reports any discrepancies to the owner.
2. The store manager personally approves all payments before signing and issuing checks.
3. Each week, Morgan leaves 100 company checks in an unmarked envelope on a shelf behind the cash register.
4. After payment, bills are filed in a paid invoice folder.
5. The company checks are unnumbered.

Identify internal control weaknesses over cash disbursements and suggest improvements.

(SO 2, 4)

Instructions

- (a) For each procedure, explain the weakness in internal control, and identify the internal control principle that is violated.
- (b) For each weakness, suggest a change in the procedure that will result in good internal control.

Prepare bank reconciliation and adjusting entries. (SO 7)

10-6 Lisa Ceja is unable to reconcile the bank balance for her catering company on January 31. Lisa’s reconciliation is as follows:

Cash balance per bank	\$3,660.20
Add: NSF check	590.00
Less: Bank service charge	25.00
Adjusted balance per bank	\$4,225.20
Cash balance per books	\$3,875.20
Less: Deposits in transit	530.00
Add: Outstanding checks	930.00
Adjusted balance per books	\$4,275.20

Instructions

- (a) Prepare a correct bank reconciliation.
- (b) Journalize the entries required by the reconciliation.

Determine outstanding checks. (SO 7)

10-7 On April 30, the bank reconciliation of Ottawa Travel shows three outstanding checks: no. 254, \$650; no. 255, \$720; and no. 257, \$410. The May bank statement and the May cash payments journal show the following:

Bank Statement			Cash Payments Journal		
Checks Paid			Checks Issued		
Date	Check No.	Amount	Date	Check No.	Amount
5/4	254	650	5/2	258	159
5/2	257	410	5/5	259	275
5/17	258	159	5/10	260	790
5/12	259	275	5/15	261	500
5/20	261	500	5/22	262	750
5/29	263	480	5/24	263	480
5/30	262	750	5/29	264	560

Instructions

Using step 2 in the reconciliation procedure, list the outstanding checks on May 31.

Prepare bank reconciliation and adjusting entries. (SO 7)

10-8 The following information pertains to Worthy Tours:

1. Cash balance per bank, July 31, \$7,263.
2. July bank service charge not recorded by the depositor \$28.
3. Cash balance per books, July 31, \$7,284.
4. Deposits in transit, July 31, \$1,500.
5. Bank collected \$800 note for Worthy in July, plus interest \$36, less collection fee \$20. The collection has not been recorded by Worthy, and no interest has been accrued.
6. Outstanding checks, July 31, \$691.

Instructions

- (a) Prepare a bank reconciliation at July 31.
- (b) Journalize the adjusting entries at July 31 on the books of Worthy Tours.

Prepare bank reconciliation and adjusting entries. (SO 7)

10-9 The following information relates to the Cash account in the ledger of Dick Wasson Company:

Balance September 1—\$17,150; Cash deposited—\$64,000
 Balance September 30—\$17,404; Checks written—\$63,746

The September bank statement shows a balance of \$16,422 on September 30 and the following memoranda:

Credits		Debits	
Collection of \$1,500 note plus interest \$30	\$1,530	NSF check: J. E. Hoover	\$725
Interest earned on checking account	\$45	Safety deposit box rent	\$65

On September 30, deposits in transit were \$4,150, and outstanding checks totaled \$2,383.

Instructions

- (a) Prepare the bank reconciliation at September 30.
- (b) Prepare the adjusting entries at September 30, assuming (1) the NSF check was from a customer on account, and (2) no interest had been accrued on the note.

10-10 The cash records of Sugar Land Country Club (SLCC) show the following four situations:

1. The June 30 bank reconciliation indicated that deposits in transit total \$920. During July the general ledger account Cash shows deposits of \$15,750, but the bank statement indicates that only \$15,600 in deposits was received during the month.
2. The June, 30 bank reconciliation also reported outstanding checks of \$880. During the month of July, SLCC books show that \$17,200 of checks were issued. The bank statement showed that \$16,400 of checks cleared the bank in July.
3. In September, deposits per bank statement totaled \$26,700; deposits per books were \$25,400; and deposits in transit at September 30 were \$2,600.
4. In September, cash disbursements per books were \$23,700; checks clearing the banks were \$24,000; and outstanding checks at September 30 were \$2,100.

Compute deposits in transit and outstanding checks for two bank reconciliations.
(SO 7)

There were no bank debit or credit memoranda. No errors were made by either the bank or SLCC.

Instructions

Answer the following questions.

- (a) In situation (1), what were the deposits in transit at July 31?
- (b) In situation (2), what were the outstanding checks at July 31?
- (c) In situation (3), what were the deposits in transit at August 31?
- (d) In situation (4), what were the outstanding checks at August 31?

EXPLORING THE WEB

10-11 All organizations should have systems of internal control. Universities are no exception. This site discusses the basics of internal control in a university setting.

Address: www.bc.edu/offices/audit/controls

Steps: Go to the bc.edu site.

Instructions

The front page of this site provides links to pages that answer six critical questions. Use these links to answer the following questions:

- (a) In a university setting who has responsibility for evaluating the adequacy of the system of internal control?
- (b) What do reconciliations ensure in the university setting? Who should review the reconciliation?
- (c) What are some examples of physical controls?
- (d) What are two ways to accomplish inventory counts?

ETHICS CASES

10-12 You are the assistant controller in charge of general ledger accounting at Springtime Bottling Company. Your company has a large loan from an insurance company. The loan agreement requires that the company's cash account balance be maintained at \$200,000 or more, as reported monthly.

On June 30, the cash balance is \$80,000, which you report to Anne Shirley, the financial vice president. Anne excitedly instructs you to keep the cash receipts book open for one additional day for purposes of the June 30 report to the insurance company. Anne says, “If we don’t get that cash balance over \$200,000, we’ll default on our loan agreement. They could close us down, put us all out of our jobs!” Anne continues, “I talked to Oconto Distributors (one of Spring-time’s largest customers) this morning. They said they sent us a check for \$150,000 yesterday. We should receive it tomorrow. If we include just that one check in our cash balance, we’ll be in the clear. It’s in the mail!”

Instructions

- (a) Who will suffer negative effects if you do not comply with Anne Shirley’s instructions?
Who will suffer if you do comply?
- (b) What are the ethical considerations in this case?
- (c) What alternatives do you have?



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

PAYROLL



THE NAVIGATOR ✓

- Understand *Concepts for Review*
- Read *Feature Story*
- Scan *Study Objectives*
- Read *Preview*
- Read text and answer *Before You Go On*
p. 336 p. 339
- Work *Demonstration Problem*
- Review *Summary of Study Objectives*
- Complete *Assignments*

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. The assumptions and principles of accounting. (Ch. 2, pp. 36–41)
- b. The difference between the accrual basis and the cash basis of accounting. (Ch. 4, pp. 105–106)
- c. The accounting and financial management departments in hospitality organizations. (Ch. 1, pp. 17–24)

F FEATURE STORY

Payroll: A Manageable Cost in the Hospitality Industry

Payroll and related fringe benefits often make up a large percentage of the total revenue in any hospitality business. Why? The answer is quite simple: The hospitality industry is a people industry. Even supplemented by the latest technology, our guests still love the friendly hellos at the door and the turn-down service with a small piece of chocolate on the pillow. It is no secret that the products that we offer are very important. Our food has to be cooked just right, our rooms have to be clean and comfortable, and our golf courses have to be well maintained with perfect greens and fairways. Yet a great meal can be ruined by an ill-trained waitperson, an impeccably maintained golf course can be destroyed by an employee who puts on the wrong fertilizer or chemical, and a \$1,000 weekend stay at a spa can be ruined by rude employees.

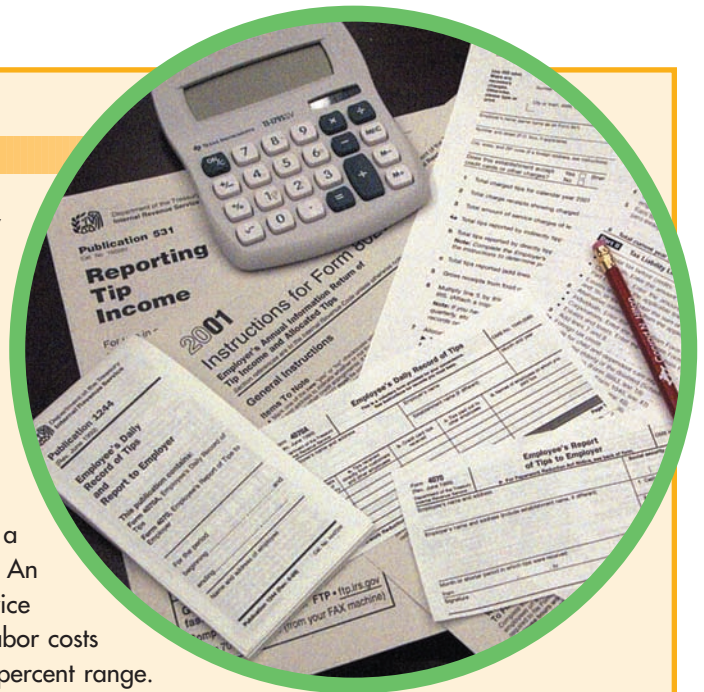
Service is key to the hospitality industry. Service and product go hand in hand. Employee compensation is often the most significant expense a company incurs. An average full-service restaurant has labor costs in the 30 to 35 percent range. Such percentages may fall a bit in quick-service restaurants. In other words, for every dollar that a restaurant brings in through the sale of food, more than 30 cents go toward paying its labor to service the guests. Considering that the entire restaurant industry has over \$537 billion in sales, over 935,000 locations, and 12.8 million workers, labor cost is an important line item on any income statement.

It is also important to understand that labor cost is not limited to salary and wages. Labor cost includes benefits such as vacation, holiday pay, health insurance, dental insurance, life insurance, disability

insurance, and so on. Therefore, you can see why proper accounting and control of payroll are stressed in this chapter.

Companies are also required by law to maintain payroll records for each employee, to file and pay payroll taxes, and to comply with numerous state and federal tax laws related to employee compensation. Accounting for payroll has become much more complex because of these regulations.

SOURCE: www.restaurant.org/research/ind_glance/cmfi.



S STUDY OBJECTIVES

After studying this chapter, you should be able to

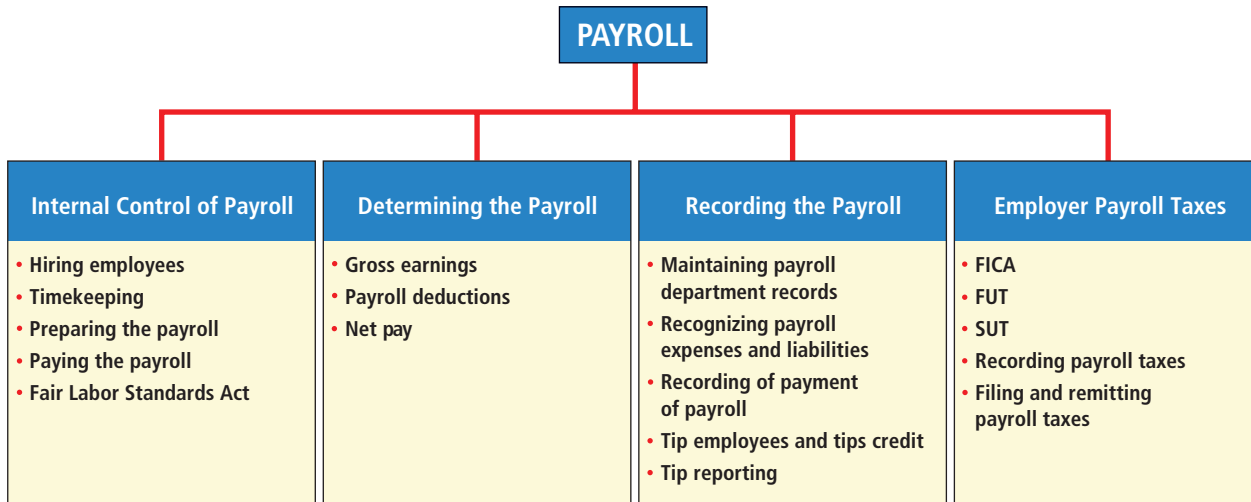
1. Discuss the objectives of internal control for payroll.
2. Compute and record the payroll for a pay period.
3. Compute and record tips under the 8 percent tip regulation.
4. Describe and record employer payroll taxes.



PREVIEW OF CHAPTER 11

What you see from the feature story is the magnitude of the cost of labor in the restaurant business. Imagine adding the lodging business, the casino business, the club business, the tourism business, and other hospitality enterprises; and you get the picture. In this chapter we will discuss the reasons for payroll and its internal control mechanisms, determination of payroll with all the rules and regulations, the recording and payment of payroll of regular and tipped employees, and the recording and filing of payroll taxes.

The content and organization of Chapter 11 are as follows:



PAYROLL DEFINED

The term *payroll* pertains to both salaries and wages. Managerial, administrative, and sales personnel are generally paid **salaries**. Salaries are often expressed in terms of a specified amount per month or per year rather than an hourly rate. For example, the faculty and the administrative personnel at the college or university you are attending are paid salaries. In contrast, wait staff, line cooks, room attendants, and bell staff are normally paid **wages**. Wages are based on a rate per hour or on a piecework basis (such as per room cleaned). Frequently, the terms *salaries* and *wages* are used interchangeably.

Payroll does not apply to payments made for services of professionals, such as certified public accountants, attorneys, and architects. Such professionals are independent contractors rather than salaried employees. Payments to them are called **fees** rather than salaries or wages. This distinction is important because government regulations relating to the payment and reporting of payroll taxes apply only to employees.

INTERNAL CONTROL OF PAYROLL

STUDY OBJECTIVE 1

Discuss the objectives of internal control for payroll.

Internal control was discussed in depth in Chapter 10. As applied to payrolls, the objectives of internal control are (1) to safeguard company assets against unauthorized payments of payrolls and (2) to ensure the accuracy and the reliability of the accounting records pertaining to payrolls.

Irregularities often result if internal control is lax. Overstating hours, using unauthorized pay rates, adding fictitious employees to the payroll, continuing

terminated employees on the payroll, and distributing duplicate payroll checks are all methods of stealing from a company. Moreover, inaccurate records will result in incorrect paychecks, financial statements, and payroll tax returns.

TECHNOLOGY IN ACTION



No, it is not Halloween, but you can get spooked by a ghost employee! In the old days, when businesses were small and payroll was given in cash or paychecks were given to employees in person, this was not a problem. With technology and direct deposits, ghost employees seem to surface. Who are ghost employees? They are people who do not exist in your casino, cruise ship, theme park, or hotel but are being paid. They are fictitious employees created by the perpetrator or terminated or deceased employees who are not removed from payroll records. Some dishonest person continues to collect and cash paychecks for people who do not exist. What can be done? Detecting fraud takes a team. Always check bank account numbers, Social Security or identification numbers, addresses, deductions, work location and department, and the like. It may not be a bad idea to also look at sick leave and vacation. Even ghosts need a break. If someone on your payroll is not taking the normal level of sick leave and vacations, you either have a very dedicated employee or a dead one. Either way, it is good for you to find out so that you can reward the former or delete the latter.



Payroll activities involve four functions: hiring employees, timekeeping, preparing the payroll, and paying the payroll. For effective internal control, these four functions should be assigned to different departments or individuals. To illustrate these functions, we will examine the case of Academy Waterparks and one of its employees, Mark Jordan.

HIRING EMPLOYEES

The human resources (personnel) department is responsible for posting job openings, screening and interviewing applicants, and hiring employees. From a control standpoint, this department provides significant documentation and authorization. When an employee is hired, the human resources department prepares an authorization form. The one used by Academy Waterparks for Mark Jordan is shown in Illustration 11-1 on page 322.

The authorization form is sent to the payroll department, where it is used to place the new employee on the payroll. A chief concern of the human resources department is ensuring the accuracy of this form. The reason is quite simple: One of the most common types of payroll frauds is adding fictitious employees to the payroll.

The human resources department is also responsible for authorizing changes in employment status. Specifically, it must authorize (1) changes in pay rates and (2) terminations of employment. Every authorization should be in writing, and a copy of the change in status should be sent to the payroll department. Notice in Illustration 11-1 that Jordan received a pay increase of \$2 per hour.



TIMEKEEPING

Another area in which internal control is important is timekeeping. Hourly employees are usually required to record time worked by punching a time clock. Times of arrival and departure are automatically recorded by the employee by inserting a time card into the clock. Mark Jordan's time card is shown in Illustration 11-2 on page 322.

In large companies, time clock procedures are often monitored by a supervisor or security guard to make sure that an employee punches only one card. At the end of the pay period, each employee's supervisor approves the hours shown by signing the time card. When overtime hours are involved, approval by a

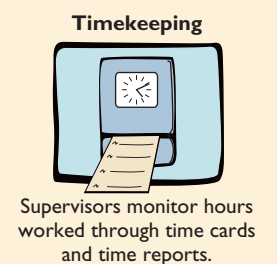


Illustration 11-1

Authorization form prepared by the human resources department

ACADEMY WATERPARKS

Employee Name Jordan, Mark Starting Date 9/01/05
LAST FIRST MI

Classification Skilled-Level 10 Social Security No. 329-36-9547

Department Guest Relations Division Entertainment

NEW HIRE	Classification <u>Guest Service Agent</u> Salary Grade <u>Level 10</u> Trans. from Temp. <input type="checkbox"/> Rate \$ <u>10.00</u> per <u>hour</u> Bonus <u>N/A</u> Non-exempt <input checked="" type="checkbox"/> Exempt <input type="checkbox"/>						
RATE CHANGE	New Rate \$ <u>12.00</u> Effective Date <u>9/1/07</u> Present Rate \$ <u>10.00</u> Merit <input checked="" type="checkbox"/> Promotion <input type="checkbox"/> Decrease <input type="checkbox"/> Other _____ Previous Increase Date <u>None</u> Amount \$ _____ per _____ Type _____						
SEPARATION	Resignation <input type="checkbox"/> Discharge <input type="checkbox"/> Retirement <input type="checkbox"/> Reason _____ Leave of absence <input type="checkbox"/> From _____ to _____ Type _____ Last Day Worked _____						
APPROVALS	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"><u>BEW</u> <u>9/1/07</u></td> <td style="width: 50%; border: none;"><u>EMW</u> <u>9-1-07</u></td> </tr> <tr> <td style="border: none; text-align: center;">BRANCH OR DEPT. MANAGER DATE</td> <td style="border: none; text-align: center;">DIVISION V.P. DATE</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none; text-align: right;"><u>James E. Speer</u> PERSONNEL DEPARTMENT</td> </tr> </table>	<u>BEW</u> <u>9/1/07</u>	<u>EMW</u> <u>9-1-07</u>	BRANCH OR DEPT. MANAGER DATE	DIVISION V.P. DATE		<u>James E. Speer</u> PERSONNEL DEPARTMENT
<u>BEW</u> <u>9/1/07</u>	<u>EMW</u> <u>9-1-07</u>						
BRANCH OR DEPT. MANAGER DATE	DIVISION V.P. DATE						
	<u>James E. Speer</u> PERSONNEL DEPARTMENT						

Illustration 11-2

Time card

		PAY PERIOD ENDING	
No. 17		1/14/08	
NAME <u>Mark Jordan</u>			
		EXTRA TIME	REGULAR TIME
	1st Day	A.M. IN OUT	8:58
		NOON IN OUT	12:00
		P.M. IN OUT	1:00
		P.M. IN OUT	5:01
	2nd Day	A.M. IN OUT	9:00
		NOON IN OUT	11:59
		NOON IN OUT	12:59
		P.M. IN OUT	5:00
	3rd Day	A.M. IN OUT	8:59
		NOON IN OUT	12:01
		NOON IN OUT	1:01
		P.M. IN OUT	5:00
5:00	4th Day	A.M. IN OUT	9:00
9:00		NOON IN OUT	12:00
		NOON IN OUT	1:00
		P.M. IN OUT	5:00
	5th Day	A.M. IN OUT	8:57
		NOON IN OUT	11:58
		NOON IN OUT	1:00
		P.M. IN OUT	5:01
	6th Day	A.M. IN OUT	8:00
		NOON IN OUT	1:00
	7th Day	A.M. IN OUT	
		NOON IN OUT	
		P.M. IN OUT	
TOTAL	4	TOTAL	40

supervisor is usually mandatory. This guards against unauthorized overtime. The approved time cards then are sent to the payroll department. For salaried employees, a manually prepared weekly or monthly time report kept by a supervisor may be used to record time worked.

PREPARING THE PAYROLL

The payroll is prepared in the payroll department on the basis of two inputs: (1) human resources department authorizations and (2) approved time cards. Numerous calculations are involved in determining gross wages and payroll deductions. Therefore, a second payroll department employee, working independently, verifies all calculated amounts; and a payroll department supervisor then approves the payroll. The payroll department is also responsible for preparing (but not signing) payroll checks, maintaining payroll records, and preparing payroll tax returns.

PAYING THE PAYROLL

The payroll is paid by the treasurer's department. **Payment by check minimizes the risk of loss from theft, and the endorsed check provides proof of payment.** For good internal control, payroll checks should be prenumbered, and all checks should be accounted for. All checks must be signed by the treasurer (or a designated agent). Distribution of the payroll checks to employees should be controlled by the treasurer's department. Checks may be distributed by the treasurer or the paymaster.

Occasionally, the payroll is paid in currency. In such cases, it is customary to have a second person count the cash in each pay envelope. The paymaster should obtain a signed receipt from the employee on payment. If alleged discrepancies arise, adequate safeguards have been established to protect each party involved.

FAIR LABOR STANDARDS ACT

The **Fair Labor Standards Act** was instituted in 1938 and was amended with additional provisions in 1977. It is commonly known as **FLSA**, and it provides minimum standards for both wages and overtime entitlement. It also spells out administrative procedures by which covered work time must be compensated. Included in the act are other provisions, such as equal pay and child labor. Although you might think that an act or any law applies to everyone, the FLSA exempts specified employees or groups of employees from certain of its provisions. According to the FLSA, employees can be covered by the law under the *enterprise coverage* or *individual coverage*. Therefore, in the hospitality industry, if an enterprise has two or fewer employees and less than \$500,000 a year in business, those two employees will not be covered. As you can see, the act does apply to most hospitality businesses.

The FLSA began applying to employees of the U.S. federal government in 1974. The U.S. Office of Personnel Management works with federal agencies to apply the act to employees of the U.S. federal government.

As mentioned, one item the FLSA regulates is overtime. For the hospitality industry, this means that all employees covered by the act will get one and a half times their regular pay for all hours worked over 40 hours per week. The FLSA, however, does not require extra pay for Saturdays and Sundays and makes no special provisions for vacation pay, sick pay, holiday pay, or severances. Of course, certain union contracts or states have established more advantageous overtime provisions than those stipulated by the FLSA, and these are the ones that will be in effect. This also holds true for conflicting state and federal regulations. In addition, the FLSA has certain rules such as requiring employers to maintain records of worked time of hourly employees. The form of recordkeeping used is up to the employer. In today's technologically advanced world, some businesses have replaced signing in and out on time cards with a fingerprint as a record of clocking in and out.

As of August 23, 2004, a new provision came into effect under the FLSA by which all workers earning less than \$23,660 per year are guaranteed overtime.

Preparing the Payroll



Two (or more) employees verify payroll amounts; supervisor approves.

Paying the Payroll



Treasurer signs and distributes checks.

Also, more definition was given under Section 13(a)(1) of the FLSA, which provides an exemption from both overtime and minimum wage to employees who are bona fide professional, administrative, executive, computer, and outside sales employees. It is also stated that simply calling someone an executive or giving someone a title that suggests the aforementioned categories is not sufficient. The specific job duties and salary must meet all the requirements, and the salary should be at least \$455 per week. In the case of the computer employee exemption, the \$455 rate also can be compensated at a rate not less than \$27.63 per hour.

In 2006, owing to the FLSA regulations, over 222,000 employees received \$135.7 million in minimum wage and overtime back wages because of violations. There were over 4,300 cases in the restaurant sector and over 860 cases in the lodging sector. The good news is that the number of these cases has dropped in the past few years. It is therefore important for hospitality managers and owners to be aware of labor rules and regulations. Such updates can be obtained easily from the Web site of the U.S. Department of Labor at www.dol.gov. For specific information regarding wage and hour information, please visit www.wagehour.dol.gov.

DETERMINING THE PAYROLL

STUDY OBJECTIVE 2

Compute and record the payroll for a pay period.

HELPFUL HINT

The law that governs pay rates is the Federal Fair Labor Standards Act. It applies to all companies involved in interstate commerce.

Determining the payroll involves computing three amounts: (1) gross earnings, (2) payroll deductions, and (3) net pay.

GROSS EARNINGS

Gross earnings is the total compensation earned by an employee. It consists of wages or salaries plus any bonuses and commissions.

Total *wages* for an employee are determined by multiplying the hours worked by the hourly rate of pay. In addition to the hourly pay rate, most companies are required by law to pay hourly workers a minimum of one and a half times the regular hourly rate for overtime work in excess of 8 hours per day or 40 hours per week. In addition, many employers pay overtime rates for work done at night, on weekends, and on holidays.

Mark Jordan's time card shows that he worked 44 hours for the weekly pay period ending January 14. The computation of his gross earnings (total wages) is shown in Illustration 11-3.

Illustration 11-3

Computation of total wages

Type of Pay	Hours	×	Rate	=	Gross Earnings
Regular	40	×	\$12.00	=	\$480.00
Overtime	4	×	18.00	=	72.00
Total wages					\$552.00

ETHICS NOTE

Bonuses often reward outstanding individual performance, but successful corporations also need considerable teamwork. A challenge is to motivate individuals while preventing an unethical employee from taking another's idea for his or her own advantage.

This computation assumes that Jordan receives one and a half times his regular hourly rate ($\$12.00 \times 1.5$) for his overtime hours. Union contracts often require that overtime rates be as much as twice the regular rates.

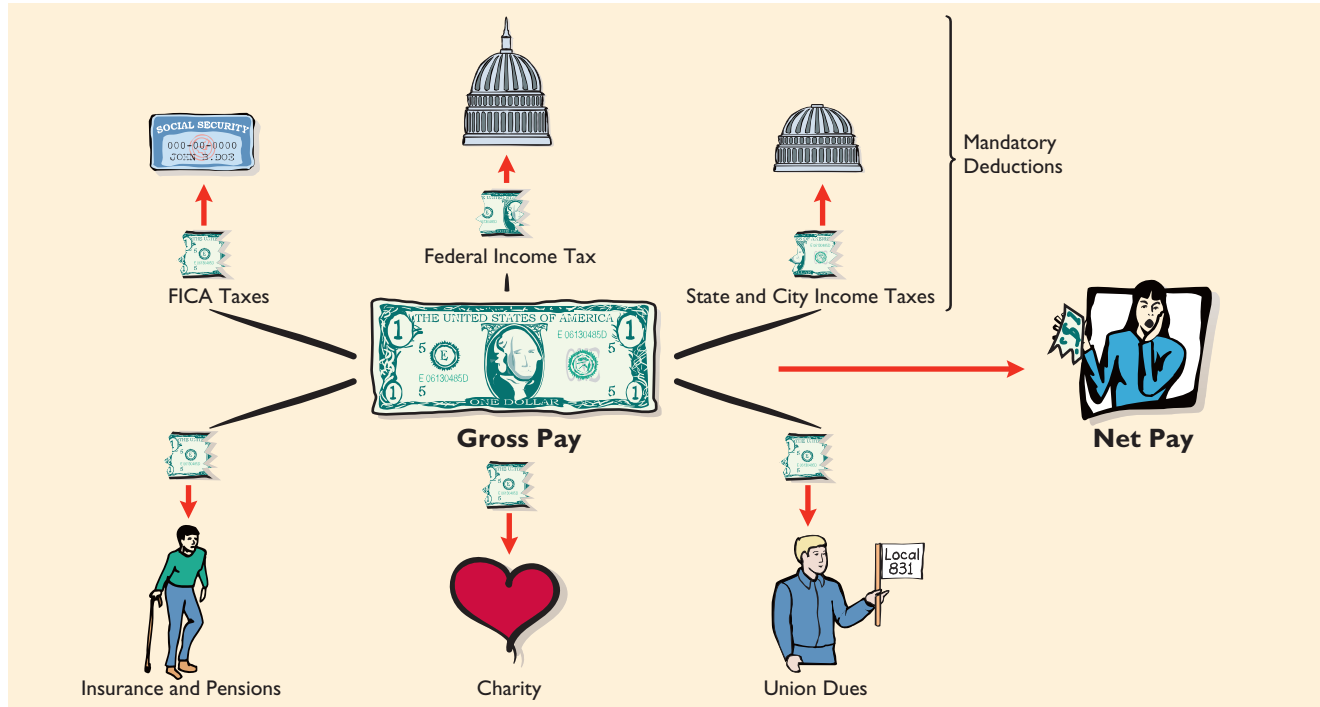
The *salary* for an employee is generally based on a monthly or yearly rate. These rates are then prorated to the payroll periods used by the company. Most executive and administrative positions are salaried. Federal law does not require overtime pay for employees in such positions.

Many companies have **bonus** agreements for management personnel and other employees. Bonus arrangements may be based on such factors as increased sales or net income. Bonuses may be paid in cash and/or by granting executives and employees the opportunity to acquire shares of company stock at favorable prices (called *stock option plans*).

PAYROLL DEDUCTIONS

As anyone who has received a paycheck knows, gross earnings are usually very different from the amount actually received. The difference is due to **payroll deductions**. Such deductions do not result in payroll tax expense to the employer. The employer is merely a collection agent, who subsequently transfers the amounts deducted to the government and designated recipients. Payroll deductions may be mandatory or voluntary. Mandatory deductions are required by law and consist of Federal Insurance Contribution Act (FICA) taxes and income taxes. Voluntary deductions are at the option of the employee. Illustration 11-4 summarizes the types of payroll deductions.

Illustration 11-4
Payroll deductions



FICA Taxes

In 1937, Congress enacted the Federal Insurance Contribution Act. **FICA taxes are designed to provide workers with supplemental retirement, employment disability, and medical benefits.** In 1965, benefits were expanded to include Medicare for individuals 65 years of age and older. The benefits are financed by a tax levied on employees' earnings. FICA taxes are commonly referred to as *Social Security taxes*.

The tax rate and the tax base for FICA taxes are set by Congress. When FICA taxes were first imposed, the rate was 1 percent on the first \$3,000 of gross earnings, or a maximum of \$30 per year. The rate and the base have changed dramatically since that time! In 2002, the rate was 7.65 percent (6.2 percent Social Security plus 1.45 percent Medicare) on the first \$84,900 of gross earnings for each employee.¹ For purposes of illustration in this chapter, we will assume a rounded rate of 8 percent on the first \$65,000 of gross earnings, or a maximum of \$5,200. Using the 8 percent rate, the FICA withholding for Jordan for the weekly pay period ending January 14 is \$44.16 (wages of \$552 × 8%).

Income Taxes

Under the U.S. pay-as-you-go system of federal income taxes, employers are required to withhold income taxes from employees each pay period. The amount to

¹The Medicare provision also includes a tax of 1.45 percent on gross earnings in excess of \$84,900. In the interest of simplification, we ignore this 1.45 percent charge in our end-of-chapter assignment material. We assume zero FICA withholdings on gross earnings above \$65,000.

be withheld is determined by three variables: (1) the employee's gross earnings, (2) the number of allowances claimed by the employee, and (3) the length of the pay period. The number of allowances claimed typically includes the employee, his or her spouse, and other dependents. To indicate to the Internal Revenue Service the number of allowances claimed, the employee must complete an **Employee's Withholding Allowance Certificate (Form W-4)**. As shown in Illustration 11-5, Mark Jordan claims two allowances on his W-4.

Illustration 11-5

W-4 form

Withholding tables furnished by the Internal Revenue Service (IRS) indicate the amount of income tax to be withheld. Withholding amounts are based on gross wages and the number of allowances claimed. Separate tables are provided for weekly, bi-weekly, semimonthly, and monthly pay periods. The withholding tax table for Mark Jordan (assuming he earns \$552 per week) is shown in Illustration 11-6. For a weekly salary of \$552 with two allowances, the federal income tax to be withheld is \$49.

Illustration 11-6

Federal-withholding tax table

MARRIED Persons — WEEKLY Payroll Period (For Wages Paid in 2008)												
If the wages are –		And the number of withholding allowances claimed is –										
At least	But less than	0	1	2	3	4	5	6	7	8	9	10
		The amount of income tax to be withheld is –										
490	500	56	48	40	32	24	17	9	1	0	0	0
500	510	57	49	42	34	26	18	10	3	0	0	0
510	520	59	51	43	35	27	20	12	4	0	0	0
520	530	60	52	45	37	29	21	13	6	0	0	0
530	540	62	54	46	38	30	23	15	7	0	0	0
540	550	63	55	48	40	32	24	16	9	1	0	0
550	560	65	57	49	41	33	26	18	10	2	0	0
560	570	66	58	51	43	35	27	19	12	4	0	0
570	580	68	60	52	44	36	29	21	13	5	0	0
580	590	69	61	54	46	38	30	22	15	7	0	0
590	600	71	63	55	47	39	32	24	16	8	1	0
600	610	72	64	57	49	41	33	25	18	10	2	0
610	620	74	66	58	50	42	35	27	19	11	4	0
620	630	75	67	60	52	44	36	28	21	13	5	0
630	640	77	69	61	53	45	38	30	22	14	7	0
640	650	78	70	63	55	47	39	31	24	16	8	0
650	660	80	72	64	56	48	41	33	25	17	10	2
660	670	81	73	66	58	50	42	34	27	19	11	3
670	680	83	75	67	59	51	44	36	28	20	13	5
680	690	84	76	69	61	53	45	37	30	22	14	6

Most states (and some cities) also require *employers* to withhold income taxes from employees' earnings. As a rule, the amounts withheld are a percentage (specified in the state revenue code) of the amount withheld for the federal income tax. Or they may be a specified percentage of the employee's earnings. For the sake of simplicity, we have assumed that Jordan's wages are subject to state income taxes of 2 percent, or \$11.04 ($2\% \times \552) per week.

There is no limit on the amount of gross earnings subject to income tax withholdings. In fact, the higher the earnings, the higher the amount of taxes withheld.

Other Deductions

Employees may voluntarily authorize withholdings for charitable, retirement, and other purposes. All voluntary deductions from gross earnings should be authorized in writing by the employee. The authorization(s) may be made individually or as part of a group plan. Deductions for charitable organizations, such as the United Fund, or for financial arrangements, such as U.S. Savings Bonds and repayment of loans from company credit unions, are made individually. Deductions for union dues, health and life insurance, and pension plans are often made on a group basis. We will assume that Jordan has weekly voluntary deductions of \$10 for the United Fund and \$5 for union dues.

NET PAY

Net pay is determined by subtracting payroll deductions from gross earnings. For Mark Jordan, net pay for the pay period is \$432.80, computed in Illustration 11-7.

ALTERNATIVE TERMINOLOGY

Net pay is also called *take-home pay*.

Gross earnings		\$552.00
Payroll deductions:		
FICA taxes	\$44.16	
Federal income taxes	49.00	
State income taxes	11.04	
United Fund	10.00	
Union dues	5.00	
		<u>119.20</u>
Net pay		<u>\$432.80</u>

Illustration 11-7

Computation of net pay

Assuming that Mark Jordan's wages for each week during the year are \$552, total wages for the year are \$28,704 ($52 \times \552). Thus all of Jordan's wages are subject to FICA tax during the year. Let's assume that Jordan's department head earns \$1,350 per week, or \$70,200 for the year. Since only the first \$65,000 is subject to FICA taxes, the maximum FICA withholdings on the department head's earnings would be \$5,200 ($\$65,000 \times 8\%$).

RECORDING THE PAYROLL

Recording the payroll involves maintaining payroll department records, recognizing payroll expenses and liabilities, and recording payment of the payroll.

MAINTAINING PAYROLL DEPARTMENT RECORDS

To comply with state and federal laws, an employer must keep a cumulative record of each employee's gross earnings, deductions, and net pay during the year. The record that provides this information is the **employee earnings record**. Mark Jordan's employee earnings record is shown in Illustration 11-8.

Illustration 11-8

Employee earnings record

ACADEMY WATERPARKS Employee Earnings Record For the Year 2008													
Name	Mark Jordan				Address	2345 Mifflin Ave.							
Social Security Number	329-36-9547				Hampton, Michigan 48292								
Date of Birth	December 24, 1962				Telephone	555-238-9051							
Date Employed	September 1, 2005				Date Employment Ended								
Sex	Male				Exemptions	2							
Single	<input type="checkbox"/>				Married	<input checked="" type="checkbox"/>							
2008 Period Ending	Total Hours	Gross Earnings				Deductions						Payment	
		Regular	Overtime	Total	Cumulative	FICA	Fed. Inc. Tax	State Inc. Tax	United Fund	Union Dues	Total	Net Amount	Check No.
1/7	42	480.00	36.00	516.00	516.00	41.28	43.00	10.32	10.00	5.00	109.60	406.40	974
1/14	44	480.00	72.00	552.00	1,068.00	44.16	49.00	11.04	10.00	5.00	119.20	432.80	1028
1/21	43	480.00	54.00	534.00	1,602.00	42.72	46.00	10.68	10.00	5.00	114.40	419.60	1077
1/28	42	480.00	36.00	516.00	2,118.00	41.28	43.00	10.32	10.00	5.00	109.60	406.40	1133
Jan.													
Total		1,920.00	198.00	2,118.00		169.44	181.00	42.36	40.00	20.00	452.80	1,665.20	

A separate earnings record is kept for each employee. It is updated after each pay period. The cumulative payroll data on the earnings record are used by the employer to (1) determine when an employee has earned the maximum earnings subject to FICA taxes, (2) file state and federal payroll tax returns (as explained later in the chapter), and (3) provide each employee with a statement of gross earnings and tax withholdings for the year. Illustration 11-10 on page 330 shows this statement.

In addition to employee earnings records, many companies find it useful to prepare a **payroll register**. This record accumulates the gross earnings, deductions, and net pay by employee for each pay period. It provides the documentation for preparing a paycheck for each employee. Academy's payroll register is presented in Illustration 11-9. It shows the data for Mark Jordan in the wages section. In this

Illustration 11-9

Payroll register

ACADEMY WATERPARKS Payroll Register For the Week Ending January 14, 2008															
Employee	Total Hours	Earnings			Deductions						Paid		Accounts Debited		
		Regular	Over- time	Gross	FICA	Federal Income Tax	State Income Tax	United Fund	Union Dues	Total	Net Pay	Check No.	Office Salaries Expense	Wages Expense	
Office Salaries															
Arnold, Patricia	40	580.00		580.00	46.40	61.00	11.60	15.00		134.00	446.00	998	580.00		
Canton, Matthew	40	590.00		590.00	47.20	63.00	11.80	20.00		142.00	448.00	999	590.00		
Mueller, William	40	530.00		530.00	42.40	54.00	10.60	11.00		118.00	412.00	1000	530.00		
Subtotal		5,200.00		5,200.00	416.00	1,090.00	104.00	120.00		1,730.00	3,470.00		5,200.00		
Wages															
Bennett, Robin	42	480.00	36.00	516.00	41.28	43.00	10.32	18.00	5.00	117.60	398.40	1025		516.00	
Jordan, Mark	44	480.00	72.00	552.00	44.16	49.00	11.04	10.00	5.00	119.20	432.80	1028		552.00	
Milroy, Lee	43	480.00	54.00	534.00	42.72	46.00	10.68	10.00	5.00	114.40	419.60	1029		534.00	
Subtotal		11,000.00	1,010.00	12,010.00	960.80	2,400.00	240.20	301.50	115.00	4,017.50	7,992.50			12,010.00	
Total		16,200.00	1,010.00	17,210.00	1,376.80	3,490.00	344.20	421.50	115.00	5,747.50	11,462.50		5,200.00	12,010.00	

example, Academy Waterparks' total weekly payroll is \$17,210, as shown in the gross earnings column.

Note that this record is a listing of each employee's payroll data for the pay period. In some companies, a payroll register is a journal or a book of original entry. Postings are made from it directly to ledger accounts. In other companies, the payroll register is a memorandum record that provides the data for a general journal entry and subsequent posting to the ledger accounts. At Academy Waterparks, the latter procedure is followed.

RECOGNIZING PAYROLL EXPENSES AND LIABILITIES

From the payroll register in Illustration 11-9, a journal entry is made to record the payroll. For the week ending January 14, the entry is

Jan. 14	Office Salaries Expense	5,200.00	
	Wages Expense	12,010.00	
	FICA Taxes Payable		1,376.80
	Federal Income Taxes Payable		3,490.00
	State Income Taxes Payable		344.20
	United Fund Payable		421.50
	Union Dues Payable		115.00
	Salaries and Wages Payable	11,462.50	
	(To record payroll for the week ending January 14)		

<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">A</td> <td style="width: 10%; text-align: center;">=</td> <td style="width: 10%;">L</td> <td style="width: 10%; text-align: center;">+</td> <td style="width: 10%;">SE</td> <td style="width: 10%;"></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">+1,376.80</td> <td></td> <td style="text-align: right;">-5,200.00</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">+3,490.00</td> <td></td> <td style="text-align: right;">-12,010.00</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">+344.20</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">+421.50</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">+115.00</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">+11,462.50</td> <td></td> <td></td> <td></td> </tr> </table>	A	=	L	+	SE				+1,376.80		-5,200.00				+3,490.00		-12,010.00				+344.20						+421.50						+115.00						+11,462.50			
A	=	L	+	SE																																						
		+1,376.80		-5,200.00																																						
		+3,490.00		-12,010.00																																						
		+344.20																																								
		+421.50																																								
		+115.00																																								
		+11,462.50																																								

Specific liability accounts are credited for the mandatory and the voluntary deductions made during the pay period. In the example, debits to Office Salaries and Wages Expense are used for gross earnings because office workers are on a salary and other employees are paid on an hourly rate. In other companies, there may be debits to other accounts, such as Store Salaries or Sales Salaries. The amount credited to Salaries and Wages Payable is the sum of the individual checks the employees will receive.

RECORDING PAYMENT OF THE PAYROLL

Payment by check is made from either the employer's regular bank account or a payroll bank account. Each paycheck is usually accompanied by a detachable **statement of earnings** document. This shows the employee's gross earnings, payroll deductions, and net pay for the period and for the year to date. The Academy Waterparks uses its regular bank account for payroll checks. The paycheck and the statement of earnings for Mark Jordan are shown in Illustration 11-10.

Following payment of the payroll, the check numbers are entered in the payroll register. The entry to record payment of the payroll for Academy Waterparks is as follows:

Jan. 14	Salaries and Wages Payable	11,462.50	
	Cash		11,462.50
	(To record payment of payroll)		

<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">A</td> <td style="width: 10%; text-align: center;">=</td> <td style="width: 10%;">L</td> <td style="width: 10%; text-align: center;">+</td> <td style="width: 10%;">SE</td> <td style="width: 10%;"></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">-11,462.50</td> <td></td> <td style="text-align: right;">-11,462.50</td> <td></td> </tr> </table>	A	=	L	+	SE				-11,462.50		-11,462.50	
A	=	L	+	SE								
		-11,462.50		-11,462.50								

When currency is used in payment, one check is prepared for the payroll's total amount of net pay. This check is then cashed, and the coins and currency are inserted in individual pay envelopes for disbursement to individual employees.

Illustration 11-10

Paycheck and statement of earnings

HELPFUL HINT

Do any of the income tax liabilities result in payroll tax expense for the employer? Answer: No. The employer is acting only as a collection agent for the government.

AW ACADEMY WATERPARKS No. 1028
 19 Center St.
 Hampton, MI 48291 *January 14, 2008* 62-1113
 610

Pay to the order of Mark Jordan \$ 432.80
Four Hundred Thirty-two and 80/100 Dollars

City Bank & Trust
 P.O. Box 3000
 Hampton, MI 48291

For Payroll Randall C. Barnes

00324477* ? 1 10

DETACH AND RETAIN THIS PORTION FOR YOUR RECORDS

NAME				SOC. SEC. NO.	EMPL. NUMBER	NO. EXEMP	PAY PERIOD ENDING
Mark Jordan				329-36-9547		2	1/14/08
REG. HRS.	O.T. HRS.	OTH. HRS. (1)	OTH. HRS. (2)	REG. EARNINGS	O.T. EARNINGS	OTH. EARNINGS (1)	OTH. EARNINGS (2)
40	4			480.00	72.00		
OTHER DEDUCTIONS							GROSS
FED. W/H TAX	FICA	STATE TAX	LOCAL TAX	(1) 10.00	(2) 5.00	(3)	(4)
49.00	44.16	11.04					
							NET PAY
							\$432.80

YEAR TO DATE								
FED. W/H TAX	FICA	STATE TAX	LOCAL TAX	OTHER DEDUCTIONS				NET PAY
92.00	85.44	21.36		(1) 20.00	(2) 10.00	(3)	(4)	
							\$839.20	

TECHNOLOGY IN ACTION



In addition to supplying the entry to record the payroll, the output for a computerized payroll system would include (1) payroll checks, (2) a payroll check register sorted by check and department, and (3) updated employee earnings records. Those employee records become the source for monthly, quarterly, and annual reporting of wages to taxing agencies.

TIPPED EMPLOYEES

Although other industries pay straight wages to their employees, the hospitality industry has regular-wage employees and tipped employees. It is said that TIPS is the acronym for “To insure prompt service.” A tipped employee earns wages from two sources: a specified rate from the employer and tips from guests. All income earned by an employee, whether it is a wage from the employer or tips from guests, is taxable. Employers need to record tip amounts carefully because such amounts affect the amount of tax the business will pay on behalf of the employee.

What is considered a tip? In a restaurant, any amount left by a guest for the waitstaff or any billed service charge distributed to the waitstaff is defined as a tip. Such tip payments can be in the form of cash or a check or on a charge card or house account, which would be collected by the establishment and paid to the employees later. There are payments that appear to be tips but are really wages and should be classified as such. For instance, if an employer collects all tips and then redistributes the tip payments to all employees, this is wages. This happens mostly in clubs in which the club bills the members for all services with a mandatory gratuity amount. This also applies to hotel banquet departments, which collect a service charge from all customers and redistribute it to all employees. Should an employee receive less than \$20 in “cash” tips during a calendar month, he or she is not required to report the tip amount.

As for wages, as mentioned earlier, the FLSA specifies the amount of minimum wage. The act also allows an employer to take a \$3.02 tip credit on tipped employees. In other words, if the minimum wage set by the act is \$5.15 an hour, an employer need only pay a tipped employee \$2.13 an hour as long as the actual tips earned by the employee are not less than the FLSA maximum allowable tip credit. For example, if a tipped employee earns only \$2.00 in tips rather than the allowable credit of \$3.02, the employer has to pay the employee \$3.15 for the hour. Thus, with the tip of \$2.00 and the employer's wage of \$3.15, the employee will still make the minimum wage of \$5.15 an hour.

As mentioned, the FLSA is strictly federal. Many states have variations of this \$3.02 credit. The Department of Labor Web site does offer a minimum wage and tip credit table that spells out the details of each state (www.dol.gov). Since this information changes according to the state and federal legislatures, please refer to the latest information on the Internet as guidelines.

TIP REPORTING

Obviously, not all food and beverage operations are the same. You would likely tip in a full-service restaurant but would not leave a tip if you are picking up fast food at a drive-through window. To address these differences, the 1982 **Tax Equity and Fiscal Responsibility Act (TEFRA)** instituted regulations guiding food and beverage operations on tip-reporting requirements. This 8 percent regulation means that if a tipped employee has gross sales of \$100, then it is expected that he or she will at least earn 8 percent of that, or \$8.00, in tips and thus will have to report at least \$8.00 as part of his or her wages.

This 8 percent rule applies to all foodservices except cafeteria and fast-food operations. It also has other provisions to make sure that certain items not usually tipped by guests do not count as gross sales, including takeout orders, complimentary snacks at the bar area, state and local taxes, and a few others. The complimentary items, however, do apply to casinos, because it is customary that guests in casinos will tip for such service. This rule is established so that the true wage earned by a tipped employee can be calculated and the appropriate taxes assessed to both the employee and the employer. Although it is customary for guests to tip about 15 percent of the bill, some will pay more, whereas others will pay less. As the TEFRA rule states, tipped employees need to report only 8 percent of the tips.

In 2002, the U.S. Supreme Court passed a ruling that holds businesses responsible for the shortfall of tip collection. The case resulted when an audit revealed employees at a Californian restaurant did not report at least 8 percent of the tips by customers left on credit cards receipts, let alone the 8 percent collected in the form of cash. If a food-and-beverage operation reports under the 8 percent regulation, it must file an 8027, the Employer's Annual Information Return of Tip Income and Allocated Tips (see Illustration 11-11). The employees may use IRS form 4070 to report tips to the employer (see Illustration 11-12). If you are an owner or a manager of a food-and-beverage establishment, consult the IRS. An agent will be pleased to visit your operation, at no cost to you, and educate your employees on the requirements and forms they need to file.

What happens if employees did not report at least 8 percent of the legitimate gross receipts during a particular period? Do you as an employer need to do anything? Absolutely! It is the employer's responsibility to determine the amount of the shortfall that was not reported and to allocate such amount to the directly tipped employees. The two methods to determine this are the gross receipts method and the hours worked method.

The **gross receipts method** adds all gross receipts of each employee and multiplies the total by 8 percent. This is the amount the employer should report. The difference between this amount and the amount reported by the employee is the shortfall. Each employee's gross receipts are then divided into the total gross receipts to

Form **8027**

Department of the Treasury
Internal Revenue Service

Employer's Annual Information Return of Tip Income and Allocated Tips

▶ See separate instructions.

OMB No. 1545-0714

2006

<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Name of establishment </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Number and street (see instructions) Employer identification number </div> <div style="border: 1px solid black; padding: 5px;"> City or town, state, and ZIP code </div>	Type of establishment (check only one box) <input type="checkbox"/> 1 Evening meals only <input type="checkbox"/> 2 Evening and other meals <input type="checkbox"/> 3 Meals other than evening meals <input type="checkbox"/> 4 Alcoholic beverages
Employer's name (same name as on Form 941)	Establishment number (see instructions)
Number and street (P.O. box, if applicable)	Apt. or suite no.
City, state, and ZIP code (if a foreign address, see instructions)	

Does this establishment accept credit cards, debit cards, or other charges? <input type="checkbox"/> Yes (lines 1 and 2 must be completed) <input type="checkbox"/> No	Check if: Amended Return <input type="checkbox"/> Final Return <input type="checkbox"/>
--	--

Attributed Tip Income Program (ATIP). See Revenue Procedure 2006-30 ▶

1 Total charged tips for calendar year 2006	1	
2 Total charge receipts showing charged tips (see instructions)	2	
3 Total amount of service charges of less than 10% paid as wages to employees	3	
4a Total tips reported by indirectly tipped employees	4a	
b Total tips reported by directly tipped employees	4b	
Note. Complete the Employer's Optional Worksheet for Tipped Employees on page 6 of the instructions to determine potential unreported tips of your employees.		
c Total tips reported (add lines 4a and 4b)	4c	
5 Gross receipts from food or beverage operations (not less than line 2—see instructions)	5	
6 Multiply line 5 by 8% (.08) or the lower rate shown here ▶ _____ granted by the IRS. (Attach a copy of the IRS determination letter to this return.)	6	
Note. If you have allocated tips using other than the calendar year (semimonthly, biweekly, quarterly, etc.), mark an "X" on line 6 and enter the amount of allocated tips from your records on line 7.		
7 Allocation of tips. If line 6 is more than line 4c, enter the excess here	7	
▶ This amount must be allocated as tips to tipped employees working in this establishment. Check the box below that shows the method used for the allocation. (Show the portion, if any, attributable to each employee in box 8 of the employee's Form W-2.)		
a Allocation based on hours-worked method (see instructions for restriction) <input type="checkbox"/>		
Note. If you marked the checkbox in line 7a, enter the average number of employee hours worked per business day during the payroll period. (see instructions) _____		
b Allocation based on gross receipts method <input type="checkbox"/>		
c Allocation based on good-faith agreement (Attach a copy of the agreement.) <input type="checkbox"/>		

8 Enter the total number of directly tipped employees at this establishment during 2006 ▶ _____

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete.

Signature ▶ _____ Title ▶ _____ Date ▶ _____

Form **4070**
(Rev. August 2005)
Department of the Treasury
Internal Revenue Service

Employee's Report of Tips to Employer

OMB No. 1545-0074

Illustration 11-12
IRS Form 4070

Employee's name and address	Social security number : : :
Employer's name and address (include establishment name, if different)	1 Cash tips received
	2 Credit and debit card tips received
	3 Tips paid out
Month or shorter period in which tips were received from _____, _____, to _____,	4 Net tips (lines 1 + 2 - 3)
Signature _____	Date _____

For Paperwork Reduction Act Notice, see the instructions on the back of this form. Cat. No. 41320P Form **4070** (Rev. 8-2005)

Date tips rec'd	Date of entry	a. Tips received directly from customers and other employees	b. Credit and debit card tips received	c. Tips paid out to other employees	d. Names of employees to whom you paid tips
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
Subtotals					

Date tips rec'd	Date of entry	a. Tips received directly from customers and other employees	b. Credit and debit card tips received	c. Tips paid out to other employees	d. Names of employees to whom you paid tips
26					
27					
28					
29					
30					
31					
Subtotals from pages 1, 2, and 3					
Totals					

1. Report total cash tips (col. a) on Form 4070, line 1.
2. Report total credit and debit card tips (col. b) on Form 4070, line 2.
3. Report total tips paid out (col. c) on Form 4070, line 3.

obtain a weighted ratio. The ratio is multiplied by the employee's 8 percent amount to determine the part of the 8 percent amount that should be reported by each employee. This is then compared to the amounts actually reported by each employee. For those employees who report at least their fair share of 8 percent, there is no allocation. For those who report less than their fair share of 8 percent, an allocation will be made to their paycheck, and taxes will be assessed accordingly.

The **hours worked method** is essentially the same in terms of mathematic procedures. The difference is the use of total hours worked, rather than the gross receipts, as the benchmark for calculation. Illustrations 11-13 and 11-14 are examples of the gross receipts method and the hours worked method, respectively.

Illustration 11-13

The Gross Receipts Method

Step 1. Determining the amount of shortfall to be allocated

Employees	Gross Receipts	Tips Reported	
A	\$ 31,500	\$ 2,125	
B	33,450	2,000	
C	30,050	2,260	
D	24,500	1,400	
E	30,500	2,105	
	<u>\$150,000</u>	<u>\$ 9,890</u>	
Indirectly Tipped Employees		<u>\$ 750</u>	
Total actual tips reported		<u>\$10,640</u>	
Total tips according to 8% rule ($\$150,000 \times 8\%$)			\$12,000.00
Total actual tips reported			10,640.00
Shortfall to be allocated			<u>1,360.00</u>
Total tips according to 8% rule			\$12,000.00
Tips reported by indirectly tipped employees			<u>750.00</u>
Tips that should have been reported by tipped employees			<u>\$11,250.00</u>

Step 2. Determining individual shortfall amounts

Employee	Tips That Should Have Been Reported	Gross Receipts Ratios	=	Employee's Share of the 8%	-	Actual Reported	=	Shortfall Portion
A	$\$11,250.00 \times$	$31,500/150,000$	=	\$ 2,362.50	-	\$2,125	=	\$ 237.50
B	$\$11,250.00 \times$	$33,450/150,000$	=	2,508.75	-	2,000	=	508.75
C	$\$11,250.00 \times$	$30,050/150,000$	=	2,253.75	-	2,260	=	—
D	$\$11,250.00 \times$	$24,500/150,000$	=	1,837.50	-	1,400	=	437.50
E	$\$11,250.00 \times$	$30,500/150,000$	=	2,287.50	-	2,105	=	182.50
	Totals			<u>\$11,250.00</u>		<u>\$9,890</u>		<u>\$1,366.25</u>
								Total shortfall

Step 3. Allocation of shortfall

Employee	Shortfall Ratio	Shortfall to Be Allocated	=	Tip Allocation
A	$237.5/1,366.25$	$\times 1,360$	=	\$ 236.41
B	$508.75/1,366.25$	$\times 1,360$	=	506.42
C	0	$\times 1,360$	=	—
D	$437.5/1,366.25$	$\times 1,360$	=	435.50
E	$182.5/1,366.25$	$\times 1,360$	=	181.67
				<u>\$1,360.00</u>

Illustration 11-14

The Hours Worked Method

Step 1. Determining the amount of shortfall to be allocated

Employees	Hours Worked	Tips Reported	
A	40	\$ 2,125	
B	45	2,000	
C	40	2,260	
D	30	1,400	
E	30	2,105	
	<u>185</u>	<u>\$ 9,890</u>	
Indirectly Tipped Employees		<u>750</u>	
Total actual tips reported		\$10,640	
Total tips according to 8% rule (\$150,000 × 8%)			\$12,000.00
Total actual tips reported			<u>10,640.00</u>
Shortfall to be allocated			<u>\$ 1,360.00</u>
Total tips according to 8% rule			\$12,000.00
Tips reported by indirectly tipped employees			<u>750.00</u>
Tips that should have been reported by tipped employees			<u>\$11,250.00</u>

Step 2. Determining individual shortfall amounts

Employee	Tips That Should Have Been Reported		Hours Worked Ratios	=	Employee's Share of the 8%		Actual Reported	=	Shortfall Portion
A	\$11,250.00	×	40/185	=	\$ 2,432.43	–	\$2,125	=	\$ 307.43
B	11,250.00	×	45/185	=	2,736.49	–	2,000	=	736.49
C	11,250.00	×	40/185	=	2,432.43	–	2,260	=	172.43
D	11,250.00	×	30/185	=	1,824.32	–	1,400	=	424.32
E	11,250.00	×	30/185	=	1,824.32	–	2,105	=	—
			Total		<u>\$11,250.00</u>		<u>\$9,890</u>		<u>\$1,640.67</u>
									Total shortfall

Step 3. Allocation of shortfall

Employee	Shortfall Ratio		Shortfall to Be Allocated	=	Tip Allocation
A	307.43/1640.68	×	1,360	=	\$ 254.83
B	736.49/1640.68	×	1,360	=	\$ 610.51
C	172.43/1640.68	×	1,360	=	\$ 142.93
D	424.32/1640.68	×	1,360	=	\$ 351.73
E	0	×	1,360	=	\$ —
					<u>\$1,360.00</u>

BEFORE YOU GO ON...

▶ REVIEW IT

1. Identify two internal control procedures that apply to each payroll function.
2. What are the primary sources of gross earnings?
3. What payroll deductions are (a) mandatory and (b) voluntary?
4. What account titles are used in recording a payroll, assuming only mandatory payroll deductions are involved?

▶ DO IT

Your cousin Stan is establishing a small catering business and will have a number of employees working for him. He is aware that documentation procedures are an important part of internal control. But he is confused about the difference between an employee earnings record and a payroll register. He asks you to explain the principal differences because he wants to be sure that he sets up the proper payroll procedures.

ACTION PLAN

- Determine the earnings and deductions data that must be recorded and reported for each employee.
- Design a record that will accumulate earnings and deductions data and will serve as a basis for journal entries to be prepared and posted to the general ledger accounts.
- Explain the difference between the employee earnings record and the payroll register.

SOLUTION

An employee earnings record is kept for *each* employee. It shows gross earnings, payroll deductions, and net pay for each pay period. It provides cumulative payroll data for that employee. In contrast, a payroll register is a listing of *all* employees' gross earnings, payroll deductions, and net pay for each pay period. It is the documentation for preparing paychecks and for recording the payroll. Of course, Stan will need to keep both documents.



EMPLOYER PAYROLL TAXES

STUDY OBJECTIVE 3

Describe and record employer payroll taxes.

Payroll tax expense for businesses results from three taxes *levied on employers* by governmental agencies. These taxes are (1) FICA, (2) federal unemployment tax, and (3) state unemployment tax. These taxes plus such items as paid vacations and pensions are collectively referred to as **fringe benefits**. As indicated earlier, the cost of fringe benefits in many companies is substantial.

FICA TAXES

We have seen that each employee must pay FICA taxes. An employer must match each employee's FICA contribution. The matching contribution results in **payroll tax expense** to the employer. The employer's tax is subject to the same rate and maximum earnings applicable to the employee. The account, FICA Taxes Payable, is used for both the employee's and the employer's FICA contributions. For the January 14 payroll, Academy Waterparks' FICA tax contribution is \$1,376.80 ($\$17,210.00 \times 8\%$).

HELPFUL HINT

FICA taxes are paid by both the employer and the employee. Federal unemployment taxes and (in most states) state unemployment taxes are borne entirely by the employer.

FEDERAL UNEMPLOYMENT TAXES

The Federal Unemployment Tax Act (FUTA) is another feature of the federal Social Security program. **Federal unemployment taxes** provide benefits for a limited period of time to employees who lose their jobs through no fault of their

own. Under provisions of the act, the employer is required to pay a tax of 6.2 percent on the first \$9,000 of gross wages paid to each employee during a calendar year. The law allows the employer a maximum credit of 5.4 percent on the federal rate for contributions to state unemployment taxes. Because of this provision, state unemployment tax laws generally provide for a 5.4 percent rate. The effective federal unemployment tax rate thus becomes 0.8 percent (6.2% – 5.4%). **This tax is borne entirely by the employer.** There is no deduction or withholding from employees.

The account Federal Unemployment Taxes Payable is used to recognize this liability. The federal unemployment tax for Academy Waterparks for the January 14 payroll is \$137.68 ($\$17,210.00 \times 0.8\%$).

STATE UNEMPLOYMENT TAXES

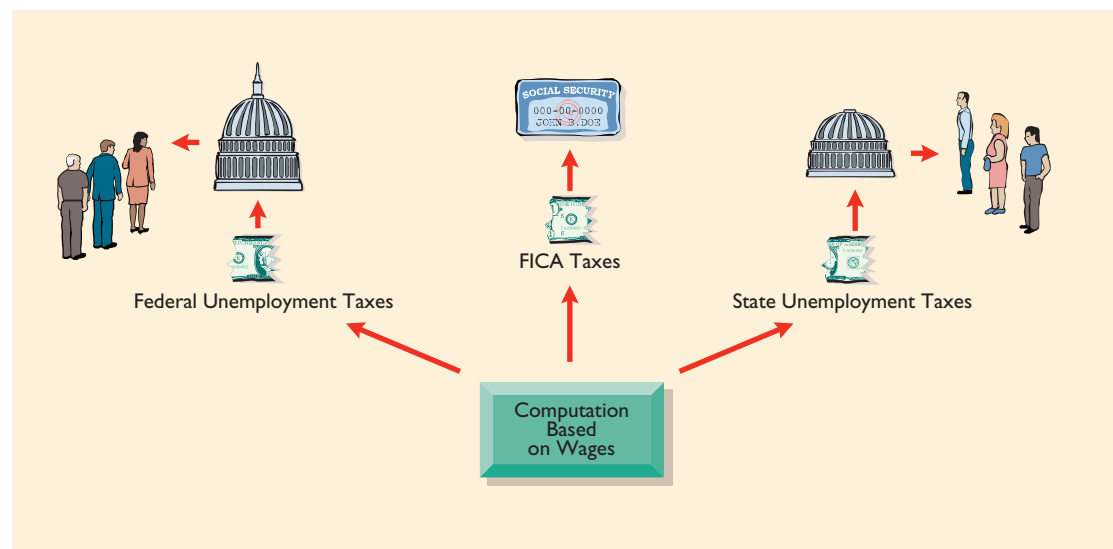
All states have unemployment compensation programs under state unemployment tax acts (SUTAs). Like federal unemployment taxes, **state unemployment taxes** provide benefits to employees who lose their jobs. These taxes are levied on employers.² The basic rate is usually 5.4 percent on the first \$9,000 of wages paid to an employee during the year. The basic rate is adjusted according to the employer's experience rating: Companies with a history of unstable employment may pay more than the basic rate. Companies with a history of stable employment may pay less than 5.4 percent. Regardless of the rate paid, the credit on the federal unemployment tax is still 5.4 percent.

The account State Unemployment Taxes Payable is used for this liability. The state unemployment tax for Academy Waterparks for the January 14 payroll is \$929.34 ($\$17,210.00 \times 5.4\%$).

Illustration 11-15 summarizes the types of employer payroll taxes.

Illustration 11-15

Employer payroll taxes



RECORDING EMPLOYER PAYROLL TAXES

Employer payroll taxes are usually recorded at the same time the payroll is journalized. The entire amount of gross pay (\$17,210.00) shown in the payroll register in Illustration 11-9 is subject to each of the three taxes previously mentioned.

²In a few states, the employee is also required to make a contribution. In this textbook, including the homework, we will assume that the tax is only on the employer.

Accordingly, the entry to record the payroll tax expense associated with the January 14 payroll is

A	=	L	+	SE
		+1,376.80		-2,443.82
		+137.68		
		+929.34		

Jan. 14	Payroll Tax Expense	2,443.82	
	FICA Taxes Payable		1,376.80
	Federal Unemployment Taxes Payable		137.68
	State Unemployment Taxes Payable		929.34
	(To record employer's payroll taxes on January 14 payroll)		

Separate liability accounts are used instead of a single credit to Payroll Taxes Payable. Why? Because these liabilities are payable to different taxing authorities at different dates. The liability accounts are classified in the balance sheet as current liabilities because they will be paid within the next year. Payroll Tax Expense is classified on the income statement as an operating expense.

FILING AND REMITTING PAYROLL TAXES

Preparation of payroll tax returns is the responsibility of the payroll department. Payment of the taxes is made by the treasurer's department. Much of the information for the returns is obtained from employee earnings records.

For purposes of reporting and remitting to the IRS, FICA taxes and federal income taxes that were withheld are combined. **The taxes must be reported quarterly, no later than one month following the close of each quarter.** The remitting requirements depend on the amount of taxes withheld and the length of the pay period. Remittances are made through deposits in either a Federal Reserve bank or an authorized commercial bank.

Federal unemployment taxes generally are filed and remitted *annually* on or before January 31 of the subsequent year. Earlier payments are required when the tax exceeds a specified amount. State unemployment taxes usually *must be filed and paid by the end of the month following each quarter.* When payroll taxes are paid, payroll liability accounts are debited, and Cash is credited.

The employer is also required to provide each employee with a **Wage and Tax Statement (Form W-2)** by January 31 following the end of a calendar year. This statement shows gross earnings, FICA taxes withheld, and income taxes withheld for the year. The required W-2 form for Mark Jordan, using assumed annual data, is shown in Illustration 11-16.

The employer must send a copy of each employee's Form W-2 to the Social Security Administration. This agency subsequently furnishes the Internal Revenue Service with the income data required.

Illustration 11-16

W-2 Form

a Control number		OMB No. 1545-0008			
b Employer's identification number 36-2167852		1 Wages, tips, other compensation \$26,300.00	2 Federal income tax withheld \$2,248.00		
c Employer's name, address and ZIP code Academy Waterparks 19 Center St. Hampton, MI 48291		3 Social security wages \$26,300.00	4 Social security tax withheld \$2,104.00		
d Employee's social security number 329-36-9547		5 Medicare wages and tips	6 Medicare tax withheld		
e Employee's first name and initial Last name Mark Jordan 2345 Mifflin Ave. Hampton, MI 48292		7 Social security tips	8 Allocated tips		
f Employee's address, and ZIP code		9 Advance EIC payment	10 Dependent care benefits		
15 State Employer's state ID number		16 State wages, tips, etc.	17 State income tax	18 Local wages, tips, etc.	19 Local income tax
			\$526.00		
					Michigan
Form W-2 Wage and Tax Statement		2008		Department of the Treasury—Internal Revenue Service	

BEFORE YOU GO ON...

▶ **REVIEW IT**

1. What payroll taxes are levied on employers?
2. What accounts are involved in accruing employer payroll taxes?

▶ **DO IT**

In January, the payroll supervisor determines that gross earnings in Halo Company for the month are \$70,000. All earnings are subject to 8 percent FICA taxes, 5.4 percent state unemployment taxes, and 0.8 percent federal unemployment taxes. You are asked to record the employer's payroll taxes.

ACTION PLAN

- Compute the employer's payroll taxes on the period's gross earnings.
- Identify the expense account(s) to be debited.
- Identify the liability account(s) to be credited.

SOLUTION

The entry to record the employer's payroll taxes is:

Payroll Tax Expense	9,940	
FICA Taxes Payable (\$70,000 × 8%)		5,600
Federal Unemployment Taxes Payable (\$70,000 × 0.8%)		560
State Unemployment Taxes Payable (\$70,000 × 5.4%)		3,780
(To record employer's payroll taxes on January payroll)		



D **EMONSTRATION PROBLEM**

Indiana Jones Company had the following payroll transactions:

- Feb. 28 The payroll for the month consists of Sales Salaries \$32,000 and Office Salaries \$18,000. All wages are subject to 8 percent FICA taxes. A total of \$8,900 federal income taxes are withheld. The salaries are paid on March 1.
- 28 Employer payroll taxes include 8 percent FICA taxes, 5.4 percent state unemployment tax, and 0.8 percent federal unemployment tax.

Instructions

- (a) Journalize the February payroll transaction.
- (b) Journalize the payroll adjusting entry at February 28.

SOLUTION TO DEMONSTRATION PROBLEM

(a) Feb. 28	Sales Salaries Expense	32,000	
	Office Salaries Expense	18,000	
	FICA Taxes Payable (\$50,000 × 8%)		4,000
	Federal Income Taxes Payable		8,900
	Salaries Payable		37,100
	(To record February salaries)		
(b) Feb. 28	Payroll Tax Expense	7,100	
	FICA Taxes Payable		4,000
	Federal Unemployment Taxes Payable (\$50,000 × 0.8%)		400
	State Unemployment Taxes Payable (\$50,000 × 5.4%)		2,700
	(To record employer's payroll taxes on February payroll)		

ACTION PLAN

- Base employees' payroll taxes on gross earnings.
- Base employer's payroll taxes on gross earnings.

SUMMARY OF STUDY OBJECTIVES

- 1. Discuss the objectives of internal control for payroll.** The objectives of internal control for payroll are (1) to safeguard company assets against unauthorized payments of payrolls and (2) to ensure the accuracy of the accounting records pertaining to payrolls.
- 2. Compute and record the payroll for a pay period.** The computation of the payroll involves gross earnings, payroll deductions, and net pay. In recording the payroll, Salaries (or Wages) Expense is debited for gross earnings, individual tax and other liability accounts are credited for payroll deductions, and Salaries (Wages) Payable is credited for net pay. When the payroll is paid, Salaries and Wages Payable is debited, and Cash is credited.
- 3. Compute and record tips under the 8 percent tip regulation.** The computation and recording of the 8 percent tip

regulation is based on 8 percent of the gross receipts. The Tax Equity and Fiscal Responsibility Act (TEFRA) details the calculation of gross receipts and the types of establishments that are included in this reporting. If all the employees' tips reportings do not meet at least 8 percent of the gross receipts of the business, the employer needs to perform an allocation by either the gross receipts method or the hours worked method to allocate such shortfall to the appropriate employee.

- 4. Describe and record employer payroll taxes.** Employer payroll taxes consist of FICA, federal unemployment taxes, and state unemployment taxes. The taxes are usually accrued at the time the payroll is recorded by debiting Payroll Tax Expense and crediting separate liability accounts for each type of tax.



GLOSSARY

- Bonus** Compensation to management personnel and other employees, based on factors such as increased sales or the amount of net income (p. 324).
- Employee earnings record** A cumulative record of each employee's gross earnings, deductions, and net pay during the year (p. 327).
- Employee's Withholding Allowance Certificate (Form W-4)** An Internal Revenue Service form on which the employee indicates the number of allowances claimed for withholding federal income taxes (p. 326).
- Fair Labor Standards Act (FLSA)** 1938 law, amended with additional provisions in 1977, commonly known as FLSA. It provides minimum standards for both wages and overtime entitlement, equal pay, and child labor and spells out administrative procedures by which covered work time must be compensated (p. 323).
- Federal Insurance Contribution Act (FICA) taxes** Taxes designed to provide workers with supplemental retirement, employment disability, and medical benefits (p. 325).
- Federal unemployment taxes** Taxes imposed on the employer that provide benefits for a limited time period to employees who lose their jobs through no fault of their own (p. 336).
- Fringe benefits** Any form of employee compensation except salary and wages. This may include life or medical insurance, retirement, bonus plans, or leaves (p. 336).
- Gross earnings** Total compensation earned by an employee (p. 324).
- Gross receipts method** A method of tip reporting under which all gross receipts of employees are totaled and then

multiplied by 8 percent to determine the amount of tips an employee should report (p. 331).

Hours worked method A method of tip reporting under which the total hours worked by all employees are used as the benchmark for tip calculation (p. 333).

Net pay Gross earnings less payroll deductions (p. 327).

Payroll deductions Deductions from gross earnings to determine the amount of a paycheck (p. 325).

Payroll register A payroll record that accumulates the gross earnings, deductions, and net pay by employee for each pay period (p. 328).

Salaries Specified amount per month or per year paid to executive and administrative personnel (p. 320).

Statement of earnings A document attached to a paycheck that indicates the employee's gross earnings, payroll deductions, and net pay to date (p. 329).

State unemployment taxes Taxes imposed on the employer that provide benefits to employees who lose their jobs (p. 337).

Tax Equity and Fiscal Responsibility Act (TEFRA) 1982 law that institutes regulations guiding food and beverage operations on tip reporting (p. 331).

Wage and Tax Statement (Form W-2) A form showing gross earnings, FICA taxes withheld, and income taxes withheld that is prepared annually by an employer for each employee (p. 338).

Wages Amounts paid to employees based on a rate per hour or per piece (p. 320).

EXERCISES

Compute gross earnings and net pay.

(SO 2)

- 11-1** Sandy Teter's regular hourly wage rate is \$16, and she receives an hourly rate of \$24 for work in excess of 40 hours. During a January pay period, Sandy works 45 hours. Sandy's federal income tax withholding is \$95, and she has no voluntary deductions. Compute Sandy Teter's gross earnings and net pay for the pay period.

11-2 Data for Sandy Teter are presented in 11-1. Prepare the journal entries to record (a) Sandy’s pay for the period and (b) the payment of Sandy’s wages. Use January 15 for the end of the pay period and the payment date.

Record a payroll and the payment of wages.
(SO 2)

11-3 In January, gross earnings in Yoon Company totaled \$90,000. All earnings are subject to 8% FICA taxes, 5.4% state unemployment taxes, and 0.8% federal unemployment taxes. Prepare the entry to record January payroll tax expense.

Record employer payroll taxes.
(SO 3)

11-4 Employee earnings records for Brantley Restaurants reveal the following gross earnings for four employees through the pay period of December 15:

Compute maximum FICA deductions.
(SO 2)

C. Mays	\$83,500	D. Delgado	\$86,100
L. Jeter	\$85,600	T. Rolan	\$87,000

For the pay period ending December 31, each employee’s gross earnings is \$3,000. The FICA tax rate is 8 percent on gross earnings of \$87,900.

Instructions

Compute the FICA withholdings that should be made for each employee for the December 31 pay period. (Show computations.)

11-5 Marissa’s Sushi has the following data for the weekly payroll ending January 31:

Prepare payroll register, and record payroll and payroll tax expense.
(SO 2, 3)

Employee	Hours						Hourly Rate	Federal Income Tax Withholding	Health Insurance
	M	T	W	T	F	S			
M. Hindi	8	8	9	8	10	3	\$11	\$34	\$10
E. Benson	8	8	8	8	8	2	13	37	15
K. Estes	9	10	8	8	9	0	14	58	15

Employees are paid 1½ times the regular hourly rate for all hours worked in excess of 40 hours per week. FICA taxes are 8 percent on the first \$87,900 of gross earnings. Marissa’s Sushi is subject to 5.4 percent state unemployment taxes on the first \$9,800 and 0.8 percent federal unemployment taxes on the first \$7,000 of gross earnings.

Instructions

- (a) Prepare the payroll register for the weekly payroll.
- (b) Prepare the journal entries to record the payroll and Marissa’s payroll tax expense.

11-6 The payroll procedures used by three different companies are:

Identify internal control weaknesses and make recommendations for improvement.
(SO 1)

1. In Brewer Cafe, each employee is required to mark on a clock card the hours worked. At the end of each pay period, the employee must have this clock card approved by the department manager. The approved card is then given to the payroll department by the employee. Subsequently, the treasurer’s department pays the employee by check.
2. In Evan’s Steak House, clock cards and time clocks are used. At the end of each pay period, the department manager initials the cards, indicates the rates of pay, and sends them to payroll. A payroll register is prepared from the cards by the payroll department. Cash equal to the total net pay in each department is given to the department manager, who pays the employees in cash.
3. In Elien’s Noodles, employees are required to record hours worked by “punching” clock cards in a time clock. At the end of each pay period, the clock cards are collected by the department manager. The manager prepares a payroll register in duplicate and forwards the original to payroll. In payroll, the summaries are checked for mathematical accuracy, and a payroll supervisor pays each employee by check.

Instructions

- (a) Indicate the weakness(es) in internal control in each company.
- (b) For each weakness, describe the control procedure(s) that will provide effective internal control. Use the following format for your answer:

<u>(a) Weaknesses</u>	<u>(b) Recommended Procedures</u>
-----------------------	-----------------------------------

Prepare payroll register and payroll entries.
(SO 2, 3)

11-7 Joe's Sandwich Shop has four employees who are paid on an hourly basis plus time-and-a-half for all hours worked in excess of 40 a week. Payroll data for the week ended February 15, 2010, are presented below:

<u>Employees</u>	<u>Hours Worked</u>	<u>Hourly Rate</u>	<u>Federal Income Tax Withholdings</u>	<u>United Fund</u>
L. Leiss	39	\$14.00	\$?	\$ —
S. Bjork	42	\$12.00	?	5.00
M. Cape	44	\$12.00	61	7.50
L. Wild	48	\$12.00	52	5.00

Leiss and Bjork are married. They claim two and four withholding allowances, respectively. The following tax rates are applicable: FICA 8 percent, state income taxes 3 percent, state unemployment taxes 5.4 percent, and federal unemployment taxes 0.8 percent. The first three employees are sales clerks (store wage expense). The fourth employee performs administrative duties (office wages expense).

Instructions

- Prepare a payroll register for the weekly payroll. (Use the wage-bracket withholding table in the text for federal income tax withholdings.)
- Journalize the payroll on February 15, 2010, and the accrual of employer payroll taxes.
- Journalize the payment of the payroll on February 16, 2010.
- Journalize the deposit in a Federal Reserve bank on February 28, 2010, of the FICA and federal income taxes payable to the government.

Journalize payroll transactions and adjusting entries.
(SO 2, 3)

11-8 The following payroll liability accounts are included in the ledger of Milton's Brewery and Grille on January 1, 2010:

FICA Taxes Payable	\$ 662.20
Federal Income Taxes Payable	1,254.60
State Income Taxes Payable	102.15
Federal Unemployment Taxes Payable	312.00
State Unemployment Taxes Payable	1,954.40
Union Dues Payable	250.00
U.S. Savings Bonds Payable	350.00

In January, the following transactions occurred:

- Jan. 10 Sent check for \$250.00 to union treasurer for union dues.
- 12 Deposited check for \$1,916.80 in Federal Reserve bank for FICA taxes and federal income taxes withheld.
- 15 Purchased U.S. Savings Bonds for employees by writing check for \$350.00.
- 17 Paid state income taxes withheld from employees.
- 20 Paid federal and state unemployment taxes.
- 31 Completed monthly payroll register, which shows office salaries \$17,600; store wages \$27,400; FICA taxes withheld \$3,600; federal income taxes payable \$1,770; state income taxes payable \$360; union dues payable \$400; United Fund contributions payable \$1,800; and net pay \$37,070.
- 31 Prepared payroll checks for the net pay, and distributed checks to employees.

On January 31, the company also makes the following accrual for employer payroll taxes: FICA taxes 8 percent, state unemployment taxes 5.4 percent, and federal unemployment taxes 0.8 percent.

Instructions

- Journalize the January transactions.
- Journalize the adjustments pertaining to employee compensation at January 31.

11-9 For the year ended December 31, 2010, R. Visnak Company reports the following summary payroll data:

Prepare entries for payroll and payroll taxes; prepare W-2 data.
(SO 2, 3)

Gross earnings	
Administrative salaries	\$180,000
Electricians' wages	320,000
Total	<u>\$500,000</u>
Deductions	
FICA taxes	\$35,200
Federal income taxes withheld	153,000
State income taxes withheld (2.6%)	13,000
United Fund contributions payable	25,000
*Hospital insurance premiums	15,800
Total	<u>\$242,000</u>

R. Visnak Company's payroll taxes are FICA 8 percent, state unemployment 2.5 percent (due to a stable employment record), and federal unemployment 0.8 percent. Gross earnings subject to FICA taxes total \$440,000, and unemployment taxes total \$110,000.

Instructions

- (a) Prepare a summary journal entry at December 31 for the full year's payroll.
- (b) Journalize the adjusting entry at December 31 to record the employer's payroll taxes.
- (c) The W-2 Wage and Tax Statement requires the following dollar data:

<u>Wages, Tips, Other Compensation</u>	<u>Federal Income Tax Withheld</u>	<u>State Income Tax Withheld</u>	<u>FICA Wages</u>	<u>FICA Tax Withheld</u>
--	--	--------------------------------------	-----------------------	------------------------------

Complete the required data for the following employees:

<u>Employee</u>	<u>Gross Earnings</u>	<u>Federal Income Tax Withheld</u>
R. Lopez	\$60,000	\$27,500
K. Kirk	27,000	11,000

11-10 Nguyen's Vietnamese Sandwiches employs seven waitpersons with one busperson, with whom the waitpersons will share their tips. The information regarding their gross receipts, number of hours worked, and tips reported are detailed in the table below. The owner, Mrs. Trang Nguyen, is not sure that all the waitpersons report the required 8 percent of gross receipts. Using both the gross receipts and the hours worked methods, please help Mrs. Nguyen identify the tip amounts that need to be allocated to each employee, if any.

Prepare entries for payroll and payroll taxes; prepare W-2 data.
(SO 3)

<u>Employee</u>	<u>Gross Receipts</u>	<u>Hours Worked</u>	<u>Tips Reported</u>
1	\$28,000	30	\$1,600
2	35,000	40	2,670
3	17,500	20	1,250
4	31,230	40	3,150
5	40,100	40	3,870
6	42,290	38	3,775
7	34,300	40	2,200

EXPLORING THE WEB

11-11 The Internal Revenue Service provides considerable information over the Internet. The following demonstrates how useful one of its sites is in answering payroll tax questions faced by employers.

Address: www.irs.ustreas.gov/formspubs/index.html, or go to www.wiley.com/college/weygandt

Steps

1. Go to the sites shown on the previous page.
2. Choose **Publications Online**.
3. Choose **Publication 15, Circular E, Employer's Tax Guide**.

Instructions

Answer each of the following questions:

- (a) How does the government define “employees”?
- (b) What are the special rules for Social Security and Medicare regarding children who are employed by their parents?
- (c) How can an employee obtain a Social Security card if he or she doesn't have one?
- (d) Must employees report to their employer tips received from customers? If so, what is the process?
- (e) Where should the employer deposit Social Security taxes withheld or contributed?

GROUP DECISION CASE

11-12 Kishwaukee Catering Company provides catering services for banquets, events, and other catering functions within a university community. The work is fairly steady throughout the year but peaks significantly in December and May as a result of holiday parties and graduation events.

Two years ago, the company attempted to meet the peak demand by hiring part-time help. However, this led to numerous errors and considerable customer dissatisfaction. A year ago, the company hired four experienced employees on a permanent basis instead of using part-time help. This proved to be much better in terms of productivity and customer satisfaction. But it has caused an increase in annual payroll costs and a significant decline in annual net income.

Recently, Valarie Flynn, a sales representative of Harrington Services, Inc., has made a proposal to the company. Under her plan, Harrington Services will provide up to four experienced workers at a daily rate of \$110 per person for an eight-hour workday. Harrington workers are not available on an hourly basis. Kishwaukee Catering would have to pay only the daily rate for the workers used.

The owner of Kishwaukee, Martha Bell, asks you, as the company's accountant, to prepare a report on the expenses that are pertinent to the decision. If the Harrington plan is adopted, Martha will terminate the employment of two permanent employees and will keep two permanent employees. At the moment, each employee earns an annual income of \$30,000. Kishwaukee pays 8 percent FICA taxes, 0.8 percent federal unemployment taxes, and 5.4 percent state unemployment taxes. The unemployment taxes apply to only the first \$7,000 of gross earnings. In addition, Kishwaukee Catering pays \$40 per month for each employee for medical and dental insurance.

Martha indicates that if the Harrington Services plan is accepted, Kishwaukee's needs for Harrington's workers will be as follows.

<u>Months</u>	<u>Number</u>	<u>Working Days per Month</u>
January–March	2	20
April–May	3	25
June–October	2	18
November–December	3	23

Instructions

With the class divided into groups, answer the following:

- (a) Prepare a report showing the comparative payroll expense of continuing to employ permanent workers compared to adopting the Harrington Services, Inc., plan.
- (b) What other factors should Martha consider before finalizing her decision?

ETHICS CASE

11-13 Harry Smith owns and manages Harry's Restaurant, a twenty-four-hour restaurant near the city's medical complex. Harry employs nine full-time employees and sixteen part-time

employees. He pays all the full-time employees by check, the amounts of which are determined by Harry's public accountant, Pam Web. Harry pays all his part-time employees in cash. He computes their wages and withdraws the cash directly from his cash register.

Pam has repeatedly urged Harry to pay all employees by check. But, as Harry has told his competitor and friend, Steve Hill, who owns the Greasy Diner, "First of all, my part-time employees prefer the cash over a check; and second, I don't withhold or pay any taxes or workmen's compensation insurance on those wages because they go totally unrecorded and unnoticed."

Instructions

- (a) Who are the stakeholders in this situation?
- (b) What are the legal and ethical considerations regarding Harry's handling of his payroll?
- (c) Pam Web is aware of Harry's payment of the part-time payroll in cash. What are her ethical responsibilities in this case?
- (d) What internal control principle is violated in this payroll process?



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

ACCOUNTING FOR RECEIVABLES AND PAYABLES



THE NAVIGATOR ✓

- Understand *Concepts for Review*
- Read *Feature Story*
- Scan *Study Objectives*
- Read *Preview*
- Read text and answer *Before You Go On*
p. 356–357 p. 359–360 p. 366
- Work *Demonstration Problem*
- Review *Summary of Study Objectives*
- Complete *Assignments*

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. How to record sales transactions. (Ch. 8, pp. 243–245)
- b. Why adjusting entries are made. (Ch. 4, pp. 107–108)
- c. How to compute interest. (Ch. 4, p. 117)

F E A T U R E S T O R Y

Financing His Dreams

What would you do if you had a great idea for a new product but couldn't come up with the cash to get the business off the ground? Small businesses often can't attract investors, nor can they obtain traditional debt financing through bank loans or bond issuances. Instead, they often resort to unusual, and costly, forms of nontraditional financing.

Such was the case for Wilbert Murdock. Murdock grew up in a New York housing project and always had great ambitions. This ambitious spirit led him into some business ventures that failed: a medical diagnostic tool, a device to eliminate carpal tunnel syndrome, custom sneakers, and a device to keep people from falling asleep while driving.

His latest idea was computerized golf clubs that analyze a golfer's swing and provide immediate feedback. Murdock saw great potential in the idea: Many golfers are willing to shell out considerable sums of money for devices that might improve their game. But Murdock had

no cash to develop his product, and banks and other lenders had shied away. Rather than give up, Murdock resorted to credit cards—in a big way. He quickly owed \$25,000 to credit-card companies.

While funding a business with credit cards might sound unusual, it isn't. A recent study found that one-third of businesses with fewer than 20 employees financed at least part of their operations with credit cards. As Murdock explained, credit cards are an appealing way to finance a start-up because "credit-card companies don't care how the money is spent." But they do care how they are paid. And so Murdock faced high interest charges and a barrage of credit-card collection letters.

Murdock's debt forced him to sacrifice nearly everything in order to keep his business afloat. His car



stopped running, he barely had enough money to buy food, and he lived and worked out of a dimly lit apartment in his mother's basement. Through it all he tried to maintain a positive spirit, joking that if he becomes successful, he might some day get to appear in an American Express commercial.

SOURCE: Rodney Ho, "Banking on Plastic: To Finance a Dream, Many Entrepreneurs Binge on Credit Cards," *Wall Street Journal*, March 9, 1998, p. A1.



S T U D Y O B J E C T I V E S

After studying this chapter, you should be able to

1. Identify the different types of receivables.
2. Explain how accounts receivable are recognized in the accounts.
3. Distinguish between the methods and the bases used to value accounts receivable.
4. Describe the entries to record the disposition of accounts receivable.
5. Explain why credit policies are needed in the hospitality industry.
6. Compute the maturity date of and interest on notes receivable.
7. Explain how notes receivable are recognized in the accounts.
8. Describe how notes receivable are valued.
9. Describe the entries to record the disposition of notes receivable.

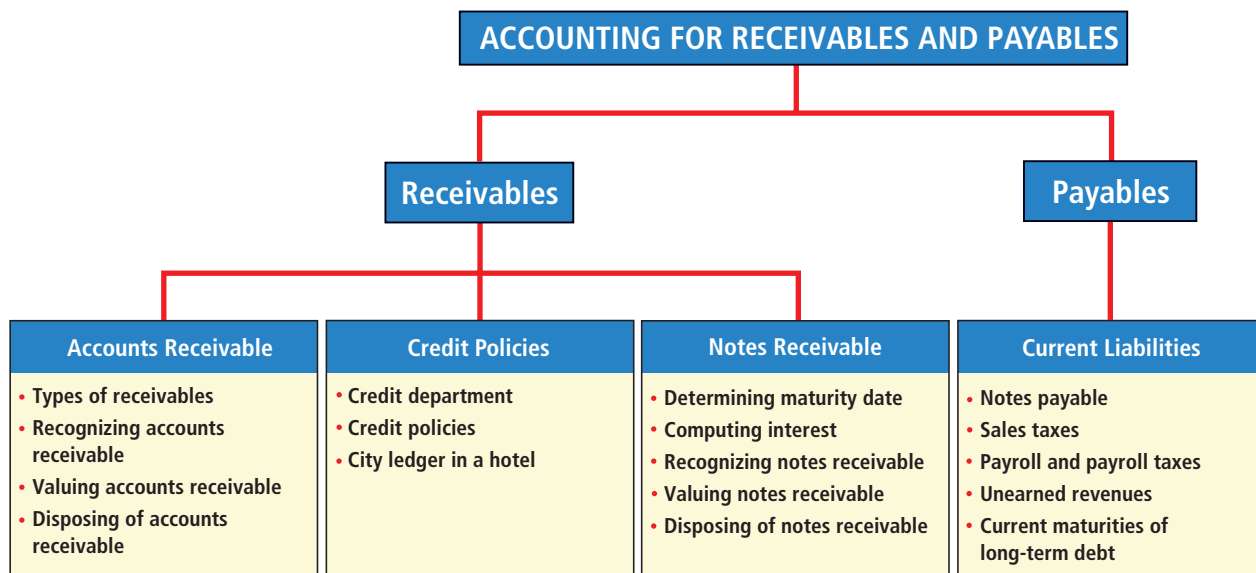


Continued

PREVIEW OF CHAPTER 12

As indicated in the Feature Story, inventor-entrepreneur Wilbert Murdock has had to use multiple credit cards to finance his business venture. Murdock's credit-card debt would be classified current liabilities because they are due every month. Yet, by making minimal payments and paying high interest each month, Murdock uses this credit source long-term. Some credit-card balances remain outstanding for years as they accumulate interest. All liabilities, whether they are claims, debts, or obligations, must be settled or paid at some time in the future by the transfer of assets or services. The future date on which they are due or payable (maturity date) is a significant feature of liabilities and thus has to be managed appropriately. Failure to pay your bills on time, including sales taxes you collect on behalf of the government, can result in severe penalties. On the other hand, receivables are a significant asset on the books of many hospitality companies. These accounts represent cash flows of corporations. As a consequence, companies must pay close attention to their receivables and carefully manage them. In this chapter you will learn what journal entries hospitality companies make when products are sold, when cash is collected from those sales, when accounts that cannot be collected are written off, when debts are incurred, and when they are paid.

Thus the content and organization of Chapter 12 are as follows:



STUDY OBJECTIVES (CONTINUED)

10. Explain a current liability, and identify the major types of current liabilities.
11. Describe the accounting of notes payable.
12. Explain the accounting of other current liabilities.

ACCOUNTS RECEIVABLE

TYPES OF RECEIVABLES

The term *receivables* refers to amounts due from individuals and other companies. They are claims that are expected to be collected in cash. Receivables are frequently classified as accounts, notes, and other.

- **Accounts receivable** are amounts owed by customers on account. They result from the sale of goods and services. These receivables generally are expected

STUDY OBJECTIVE 1

Identify the different types of receivables.

to be collected within 30 to 60 days. They are the most significant type of claim held by a company.

- **Notes receivable** are claims for which formal instruments of credit are issued as proof of the debt. A note receivable normally extends for time periods of 60 to 90 days or longer and requires the debtor to pay interest. Notes and accounts receivable that result from sales transactions are often called **trade receivables**.
- **Other receivables** include nontrade receivables. Examples are interest receivable, loans to company officers, advances to employees, and income taxes refundable. These are unusual. Therefore, they are generally classified and reported as separate items in the balance sheet.

Three primary accounting issues are associated with accounts receivable:

1. **Recognizing** accounts receivable
2. **Valuing** accounts receivable
3. **Disposing of** accounts receivable

RECOGNIZING ACCOUNTS RECEIVABLE

Recognizing accounts receivable is relatively straightforward. In Chapter 6 we saw how accounts receivable are affected by the sale of merchandise. To illustrate, assume that Jordache Co., on July 1, 2008, sells merchandise on account to Polo Theme Park for \$1,000 terms 2/10, n/30. On July 5, Polo returns merchandise worth \$100 to Jordache Co. On July 11, Jordache receives payment from Polo for the balance due. The journal entries to record these transactions on the books of Jordache Co. are as follows:

July 1	Accounts Receivable—Polo Theme Park Sales (To record sales on account)	1,000	1,000
July 5	Sales Returns and Allowances Accounts Receivable—Polo Theme Park (To record merchandise returned)	100	100
July 11	Cash (\$900 – \$18) Sales Discounts (\$900 × 0.02) Accounts Receivable—Polo Theme Park (To record collection of accounts receivable)	882 18 900	900

A 2 percent discount is given in these situations either to encourage prompt payment or for competitive reasons.

Sometimes a hospitality business also may need to pay interest. Take the example of Gary’s Soup and Salad. Gary’s buys produce from Fresh Produce for all its salad bar items. To illustrate, assume Gary’s buy on credit. Fresh Produce will make the following entry at the date of sale:

Accounts Receivable Sales (To record sale of merchandise)	300	300
---	-----	-----

Fresh Produce will send Gary’s a monthly statement of this transaction and any others that have occurred during the month. If Gary’s does not pay in full within 30 days, Fresh Produce adds an interest (financing) charge to the balance due. Although the interest rates vary by region and over time, a common rate of interest is 18 percent per year (1.5 percent per month).

ETHICS NOTE

Receivables from employees and officers of a company are reported separately in the financial statements. The reason: Sometimes those assets are valued inappropriately or are not based on an “arm’s length” transaction.

STUDY OBJECTIVE 2

Explain how accounts receivable are recognized in the accounts.

A	=	L	+	SE
+1,000				+1,000

A	=	L	+	SE
-100				-100

A	=	L	+	SE
+882				-18
-900				

HELPFUL HINT

The preceding entries are the same as those described in Chapter 8. For simplicity, inventory and cost of goods sold are omitted from this set of journal entries and from end-of-chapter material.

A	=	L	+	SE
+300				+300

When financing charges are added, the seller recognizes interest revenue. Assuming that you owe \$300 at the end of the month and that Fresh Produce charges 1.5 percent per month on the balance due, the adjusting entry to record interest revenue of \$4.50 ($\$300 \times 1.5\%$) is as follows:

$\begin{array}{r} \text{A} \\ +4.50 \end{array} = \begin{array}{r} \text{L} \\ \text{Interest Revenue} \end{array} + \begin{array}{r} \text{SE} \\ +4.50 \end{array}$	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; border-right: 1px solid black; padding: 5px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">Accounts Receivable</td> <td style="width: 10%; text-align: center; padding: 5px;">4.50</td> <td style="width: 40%;"></td> </tr> <tr> <td style="padding: 5px;">Interest Revenue</td> <td></td> <td style="text-align: right; padding: 5px;">4.50</td> </tr> <tr> <td style="padding: 5px;">(To record interest on amount due)</td> <td></td> <td></td> </tr> </table> </td> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> </table>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">Accounts Receivable</td> <td style="width: 10%; text-align: center; padding: 5px;">4.50</td> <td style="width: 40%;"></td> </tr> <tr> <td style="padding: 5px;">Interest Revenue</td> <td></td> <td style="text-align: right; padding: 5px;">4.50</td> </tr> <tr> <td style="padding: 5px;">(To record interest on amount due)</td> <td></td> <td></td> </tr> </table>	Accounts Receivable	4.50		Interest Revenue		4.50	(To record interest on amount due)				
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">Accounts Receivable</td> <td style="width: 10%; text-align: center; padding: 5px;">4.50</td> <td style="width: 40%;"></td> </tr> <tr> <td style="padding: 5px;">Interest Revenue</td> <td></td> <td style="text-align: right; padding: 5px;">4.50</td> </tr> <tr> <td style="padding: 5px;">(To record interest on amount due)</td> <td></td> <td></td> </tr> </table>	Accounts Receivable	4.50		Interest Revenue		4.50	(To record interest on amount due)						
Accounts Receivable	4.50												
Interest Revenue		4.50											
(To record interest on amount due)													

Interest revenue is often substantial for many retailers.

ACCOUNTING IN ACTION *Business Insight*



Interest rates on most credit cards are quite high, averaging 18.8 percent. As a result, consumers often look for companies that charge lower rates. Be careful—some companies offer lower interest rates but have eliminated the standard 25-day grace period before finance charges are incurred. Other companies encourage consumers to get more in debt by advertising that only a \$1 minimum payment is due on a \$1,000 account balance. The less you pay off, the more interest they earn! One bank markets a credit card that allows cardholders to skip a payment twice a year. However, the outstanding balance continues to incur interest. Other credit-card companies calculate finance charges initially on two-month averages, a practice that often translates into higher interest charges. In short, read the fine print.

STUDY OBJECTIVE 3

Distinguish between the methods and the bases used to value accounts receivable.

VALUING ACCOUNTS RECEIVABLE

Once receivables are recorded in the accounts, the question is: How should receivables be reported in the financial statements? They are reported on the balance sheet as an asset. But determining the *amount* to report is sometimes difficult because some receivables will become uncollectible.

Each customer must satisfy the credit requirements of the seller before the credit sale is approved. Inevitably, though, some accounts receivable become uncollectible. For example, one of your customers may not be able to pay because of a decline in sales owing to a downturn in the economy. Similarly, individuals may be laid off from their jobs or faced with unexpected hospital bills. Credit losses are recorded as debits to **Bad Debts Expense** (or Uncollectible Accounts Expense). Such losses are considered a normal and necessary risk of doing business on a credit basis.

Two methods are used in accounting for uncollectible accounts: (1) the direct write-off method and (2) the allowance method. These methods are explained in the following sections.

Direct Write-Off Method for Uncollectible Accounts

Under the **direct write-off method**, when a particular account is determined to be uncollectible, the loss is charged to Bad Debts Expense. Assume, for example, that Executive Conference Center writes off M. E. Doran's \$200 balance as uncollectible on December 12. The entry looks like this:

$\begin{array}{r} \text{A} \\ -200 \end{array} = \begin{array}{r} \text{L} \\ \text{Bad Debts Expense} \end{array} + \begin{array}{r} \text{SE} \\ -200 \end{array}$	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; border-right: 1px solid black; padding: 5px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">Dec. 12 Bad Debts Expense</td> <td style="width: 10%; text-align: center; padding: 5px;">200</td> <td style="width: 40%;"></td> </tr> <tr> <td style="padding: 5px;">Accounts Receivable—M. E. Doran</td> <td></td> <td style="text-align: right; padding: 5px;">200</td> </tr> <tr> <td style="padding: 5px;">(To record write-off of M. E. Doran account)</td> <td></td> <td></td> </tr> </table> </td> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> </table>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">Dec. 12 Bad Debts Expense</td> <td style="width: 10%; text-align: center; padding: 5px;">200</td> <td style="width: 40%;"></td> </tr> <tr> <td style="padding: 5px;">Accounts Receivable—M. E. Doran</td> <td></td> <td style="text-align: right; padding: 5px;">200</td> </tr> <tr> <td style="padding: 5px;">(To record write-off of M. E. Doran account)</td> <td></td> <td></td> </tr> </table>	Dec. 12 Bad Debts Expense	200		Accounts Receivable—M. E. Doran		200	(To record write-off of M. E. Doran account)				
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Dec. 12 Bad Debts Expense	200												
Accounts Receivable—M. E. Doran		200											
(To record write-off of M. E. Doran account)													

When this method is used, bad debts expense will show only *actual losses* from uncollectibles. Accounts receivable will be reported at its gross amount.

Although this method is simple, its use can reduce the usefulness of both the income statement and the balance sheet. Consider the following example: Assume that in 2008, Quick Buck Cruise Company decided it could increase its revenues by offering holiday cruises to college students without requiring any money down and with no credit-approval process. On campuses across the country it distributed 1 million cruises with a selling price of \$800 each. This increased Quick Buck's revenues and receivables by \$800 million. The promotion was a huge success! The 2008 balance sheet and income statement looked great. Unfortunately, during 2009, nearly 40 percent of the college student customers defaulted on their loans. This made the 2009 income statement and balance sheet look terrible. Illustration 12-1 shows the effect of these events on the financial statements if the direct write-off method is used.

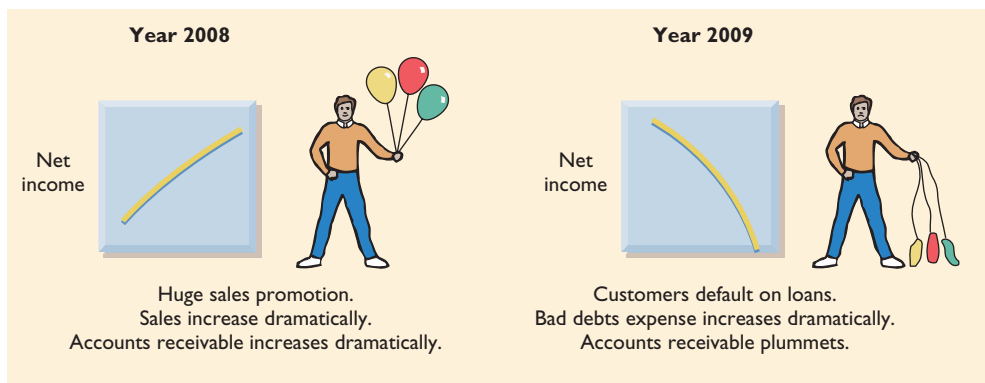


Illustration 12-1

Effects of direct write-off method

Under the direct write-off method, bad debts expense is often recorded in a period different from the period in which the revenue was recorded. No attempt is made to match bad debts expense to sales revenues in the income statement, and the direct write-off method does not show accounts receivable in the balance sheet at the amount actually expected to be received. **Consequently, unless bad debts losses are insignificant, the direct write-off method is not acceptable for financial reporting purposes.**

Allowance Method for Uncollectible Accounts

The **allowance method** of accounting for bad debts involves estimating uncollectible accounts at the end of each period. This provides better matching on the income statement and ensures that receivables are stated at their cash (net) realizable value on the balance sheet. **Cash (net) realizable value** is the net amount expected to be received in cash. It excludes amounts that the company estimates it will not collect. Receivables are therefore reduced by estimated uncollectible receivables in the balance sheet through use of this method.

The allowance method is required for financial reporting purposes when bad debts are material in amount. It has three essential features:

1. Uncollectible accounts receivable are *estimated*. This estimate is treated as an expense and is matched against sales in the same accounting period in which the sales occurred.
2. Estimated uncollectibles are debited to Bad Debts Expense and are credited to Allowance for Doubtful Accounts (a contra asset account) through an adjusting entry at the end of each period.
3. When a specific account is written off, actual uncollectibles are debited to Allowance for Doubtful Accounts and credited to Accounts Receivable.

RECORDING ESTIMATED UNCOLLECTIBLES. To illustrate the allowance method, assume that Hampson Hotels has credit sales to various restaurants of

HELPFUL HINT

In this context, *material* means "significant" or "important" to financial statement users.

\$1.2 million in 2008. Of this amount, \$200,000 remains uncollected at December 31. The credit manager estimates that \$12,000 of these sales will be uncollectible. The adjusting entry to record the estimated uncollectibles looks like this:

A	=	L	+	SE
-12,000				-12,000

Dec. 31	Bad Debts Expense	12,000	
	Allowance for Doubtful Accounts		12,000
	(To record estimate of uncollectible accounts)		

Bad Debts Expense is reported in the income statement as an operating expense (usually as a selling expense). Thus, the estimated uncollectibles are matched with sales in 2008. The expense is recorded in the same year the sales are made.

Allowance for Doubtful Accounts shows the estimated amount of claims on customers that are expected to become uncollectible in the future. This contra account is used instead of a direct credit to Accounts Receivable because we do not know which customers will not pay. The credit balance in the allowance account will absorb the specific write-offs when they occur. It is deducted from Accounts Receivable in the current assets section of the balance sheet as shown in Illustration 12-2.

Illustration 12-2

Presentation of allowance for doubtful accounts

HAMPSON HOTELS			
Balance Sheet (partial)			
Current assets			
Cash			\$ 14,800
Accounts receivable	\$200,000		
Less: Allowance for doubtful accounts	<u>12,000</u>	188,000	
Merchandise inventory			310,000
Prepaid expense			<u>25,000</u>
Total current assets			\$537,800

INTERNATIONAL NOTE
 The Finance Ministry in Japan noted that financial institutions should make better disclosure of bad loans. This disclosure would help depositors pick healthy banks.

The amount of \$188,000 in Illustration 12-2 represents the expected cash realizable value of the accounts receivable at the statement date. **Allowance for Doubtful Accounts is not closed at the end of the fiscal year.**

RECORDING THE WRITE-OFF OF AN UNCOLLECTIBLE ACCOUNT. Companies use various methods of collecting past-due accounts, such as letters, calls, and legal action. When all means of collecting a past-due account have been exhausted and collection appears impossible, the account should be written off. In the credit-card industry, for example, it is standard practice to write off accounts that are 210 days past due. To prevent premature or unauthorized write-offs, each write-off should be formally approved in writing by management. To maintain good internal control, authorization to write off accounts should not be given to someone who also has daily responsibilities related to cash or receivables.

To illustrate a receivables write-off, assume that the vice president of finance of Hampson Hotel authorizes a write-off of the \$500 balance owed by R. A. Cybercafe on March 1, 2009:

A	=	L	+	SE
+500				
-500				

Mar. 1	Allowance for Doubtful Accounts	500	
	Accounts Receivable—R. A. Cybercafe		500
	(Write-off of R. A. Cybercafe account)		

Bad Debts Expense is not increased when the write-off occurs. **Under the allowance method, every bad debt write-off is debited to the allowance account rather than to Bad Debts Expense.** A debit to Bad Debts Expense would be incorrect because the

expense has already been recognized when the adjusting entry was made for estimated bad debts. Instead, the entry to record the write-off of an uncollectible account reduces both Accounts Receivable and Allowance for Doubtful Accounts. After posting, the general ledger accounts will appear as in Illustration 12-3.

Accounts Receivable		Allowance for Doubtful Accounts	
Jan. 1 Bal.	200,000	Mar. 1	500
Mar. 1 Bal.	199,500	Mar. 1	500
		Jan. 1 Bal.	12,000
		Mar. 1 Bal.	11,500

Illustration 12-3

General ledger balances after write-off

A write-off affects only balance sheet accounts. The write-off of the account reduces both Accounts Receivable and Allowance for Doubtful Accounts. Cash realizable value in the balance sheet, therefore, remains the same, as shown in Illustration 12-4.

	Before Write-Off	After Write-Off
Accounts receivable	\$ 200,000	\$199,500
Allowance for doubtful accounts	12,000	11,500
Cash realizable value	\$188,000	\$188,000

Illustration 12-4

Cash realizable value comparison

RECOVERY OF AN UNCOLLECTIBLE ACCOUNT. Occasionally, a company collects from a customer after the account has been written off. Two entries are required to record the recovery of a bad debt: (1) The entry made in writing off the account is reversed to reinstate the customer’s account. (2) The collection is journalized in the usual manner.

To illustrate, assume that on July 1, R. A. Cybercafe pays the \$500 amount that had been written off on March 1. These are the entries:

July 1	(1)	Accounts Receivable—R. A. Cybercafe	500	
		Allowance for Doubtful Accounts		500
		(To reverse write-off of R. A. Cybercafe account)		
July 1	(2)	Cash	500	
		Accounts Receivable—R. A. Cybercafe		500
		(To record collection from R. A. Cybercafe)		

A	=	L	+	SE
+500				
-500				

A	=	L	+	SE
+500				
-500				

Note that the recovery of a bad debt, like the write-off of a bad debt, affects only balance sheet accounts. The net effect of the two entries above is a debit to Cash and a credit to Allowance for Doubtful Accounts for \$500. Accounts Receivable is debited and the Allowance for Doubtful Accounts is credited in entry (1) for two reasons: First, the company made an error in judgment when it wrote off the account receivable. Second, after R. A. Cybercafe did pay, Accounts Receivable in the general ledger and R. A. Cybercafe’s account in the subsidiary ledger should show the collection for possible future credit purposes.

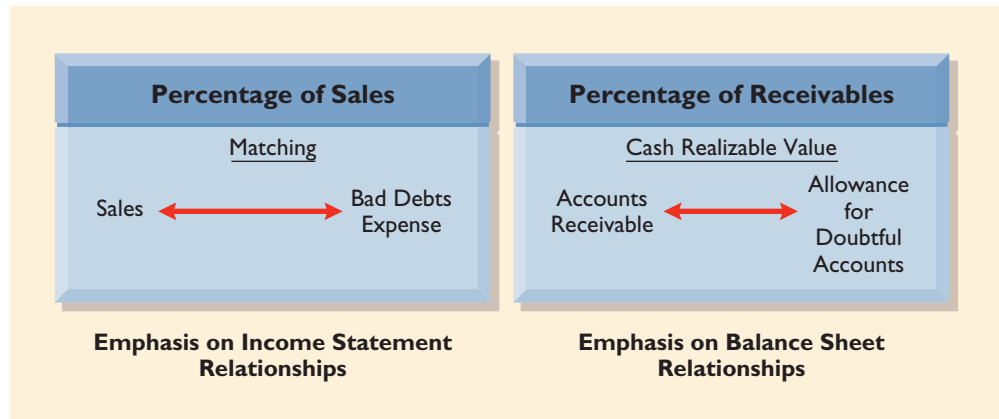
HELPFUL HINT
Like the write-off, a recovery does not involve the income statement.

BASES USED FOR ALLOWANCE METHOD. To simplify the preceding explanation, we assumed we knew the amount of the expected uncollectibles. In “real life,” companies must estimate that amount if they use the allowance method. Two bases are used to determine this amount: (1) percentage of sales and (2) percent-

age of receivables. Both bases are generally accepted. The choice is a management decision that depends on the relative emphasis that management wishes to give to expenses and revenues, on the one hand, or to cash realizable value of the accounts receivable, on the other. The choice is whether to emphasize income statement or balance sheet relationships. Illustration 12-5 compares the two bases.

Illustration 12-5

Comparison of bases for estimating uncollectibles



The **percentage of sales basis** results in a better matching of expenses with revenues—an income statement viewpoint. The **percentage of receivables basis** produces the better estimate of cash realizable value—a balance sheet viewpoint. Under both bases, it is necessary to determine the company’s past experience with bad debt losses.

In the percentage of sales basis, management estimates what percentage of credit sales will be uncollectible. This percentage is based on past experience and anticipated credit policy.

The percentage is applied to either total credit sales or net credit sales of the current year. To illustrate, assume that the Gonzalez Hotel elects to use the percentage of sales basis. It concludes that 1 percent of net credit sales will become uncollectible. If net credit sales for 2008 is \$800,000, the estimated bad debts expense is \$8,000 (1% × \$800,000). The adjusting entry is

A	=	L	+	SE
-8,000				-8,000

Dec. 31	Bad Debts Expense	8,000	
	Allowance for Doubtful Accounts		8,000
	(To record estimated bad debts for year)		

After the adjusting entry is posted, assuming the allowance account already has a credit balance of \$1,723, the accounts of Gonzalez Hotel will look like Illustration 12-6:

Illustration 12-6

Bad debts accounts after posting

Bad Debts Expense		Allowance for Doubtful Accounts	
Dec. 31	Adj. 8,000	Bal.	1,723
		Dec. 31	Adj. 8,000
		Bal.	9,723

This basis of estimating uncollectibles emphasizes the matching of expenses with revenues. As a result, Bad Debts Expense will show a direct percentage relationship to the sales base on which it is computed. **When the adjusting entry is made, the existing balance in Allowance for Doubtful Accounts is disregarded.** The adjusted balance in this account should be a reasonable approximation of the uncollectible receivables. If actual write-offs differ significantly from the amount estimated, the percentage for future years should be modified.

Under the *percentage of receivables basis*, management estimates the percentage of receivables that will result in losses from uncollectible accounts. An **aging schedule** is prepared, in which customer balances are classified by the length of time they have been unpaid. Because of its emphasis on time, the analysis is often called **aging the accounts receivable**.

ACCOUNTING IN ACTION Business Insight



In the hotel industry, we use two terms to describe trade receivables—*guest ledger* and *city ledger*. The guest ledger is a list of all outstanding amounts (receivables) owed to the hotel by the guest who did not depart yet, and the city ledger is a list of all outstanding amounts owed by the departed guest who has billing privileges.

Usually, the guest ledger is not a challenge for the simple reason that most outstanding amounts will be paid by credit card or cash once the guest checks out. A few accounts will be transferred to the city ledger. Accordingly, most of our efforts are used to control the outstanding receivables in the city ledger. For the same reason, in the hotel business, *city ledger* and *trade receivables* are used interchangeably; and the *perfect receivables* is one that is relatively low in dollars, reasonably current, without a doubt collectable, and ultimately produces no or little write-off.

SOURCE: E. Mohamad, MSA, “The Perfect Receivables: How to Keep Your Receivables Low, Current, and Collectible,” *Bottomline* 17(8), pp. 36–40.

After the accounts are aged, the expected bad debt losses are determined. This is done by applying percentages based on past experience to the totals in each category. The longer a receivable is past due, the less likely it is to be collected. So the estimated percentage of uncollectible debts increases as the number of days past due increases. An aging schedule for Dart Day Spa is shown in Illustration 12-7. Note the increasing percentages from 2 to 40 percent.

Customer	Total	Not Yet Due	Number of Days Past Due			
			1–30	31–60	61–90	Over 90
T. E. Adert	\$ 600		\$ 300		\$ 200	\$ 100
R. C. Bortz	300	\$ 300				
B. A. Carl	450		200	\$ 250		
O. L. Diker	700	500			200	
T. O. Ebbet	600			300		300
Others	36,950	26,200	5,200	2,450	1,600	1,500
	\$39,600	\$27,000	\$5,700	\$3,000	\$2,000	\$1,900
Estimated Percentage Uncollectible		2%	4%	10%	20%	40%
Total Estimated Bad Debts	\$ 2,228	\$ 540	\$ 228	\$ 300	\$ 400	\$ 760

Illustration 12-7

Aging schedule

HELPFUL HINT

The higher percentages are used for the older categories because the longer an account is past due, the less likely it is to be collected.

Total estimated bad debts for Dart Day Spa (\$2,228) represent the amount of existing customer claims expected to become uncollectible in the future. This amount represents the required balance in Allowance for Doubtful Accounts at the balance sheet date. **The amount of the bad debt adjusting entry is the difference between the required balance and the existing balance in the allowance account.** If the trial balance shows Allowance for Doubtful Accounts with a credit balance of \$528, an adjusting entry for \$1,700 (\$2,228 – \$528) is necessary, as shown on page 356:

A	=	L	+	SE
-1,700				-1,700

Dec. 31	Bad Debts Expense	1,700	
	Allowance for Doubtful Accounts		1,700
	(To adjust allowance account to total estimated uncollectibles)		

After the adjusting entry is posted, the accounts of the Dart Day Spa will look like Illustration 12-8.

Illustration 12-8

Bad debts accounts after posting

Bad Debts Expense		Allowance for Doubtful Accounts	
Dec. 31 Adj.	1,700	Bal.	528
		Dec. 31 Adj.	1,700
		Bal.	2,228

Occasionally the allowance account will have a *debit balance* prior to adjustment. This occurs when write-offs during the year have exceeded previous provisions for bad debts. In such a case *the debit balance is added to the required balance* when the adjusting entry is made. Thus, if there had been a \$500 debit balance in the allowance account before adjustment, the adjusting entry would have been for \$2,728 (\$2,228 + \$500) to arrive at a credit balance of \$2,228.

The percentage of receivables method normally will result in the better approximation of cash realizable value. But it will not result in the better matching of expenses with revenues if some customers' accounts are more than one year past due. In such a case, bad debts expense for the current period would include amounts related to the sales of a prior year.

ACCOUNTING IN ACTION *Business Insight*



Although many individuals pay for their hotel stay with a credit card, there are many others, especially business groups, that ask to be billed to a master account. These invoices are often thousands of dollars. An association holding an annual convention in a hotel might have twenty to thirty rooms blocked for its officers, meeting space rentals, breakfasts, luncheons, dinners, and breaks, all charged to a single master bill. It is therefore imperative that hotel controllers try to collect the funds as soon as possible. A number of hotel companies send bills to their customers via Federal Express or other courier services if such accounts are more than \$25,000. Why? The customer will have to sign for the delivery of the bill. This eliminates the excuse some customers use, saying they never "received" the bill so that they are not at fault for delinquent payment.

BEFORE YOU GO ON...

► **REVIEW IT**

1. What is the primary criticism of the direct write-off method?
2. Explain the difference between the percentage of sales and the percentage of receivables methods.

► **DO IT**

Brule Gourmet has been in business five years. The ledger at the end of the current year shows Accounts Receivable \$30,000; Sales \$180,000; and Allowance for Doubtful Accounts with a **debit** balance of \$2,000. Bad debts are estimated to be 10 percent of receivables. Prepare the entry to adjust Allowance for Doubtful Accounts.

ACTION PLAN

- Report receivables at their cash (net) realizable value.
- Estimate the amount the company does not expect to collect.
- Consider the existing balance in the allowance account when using the percentage of receivables basis.

SOLUTION

The following entry should be made to bring the balance in Allowance for Doubtful Accounts up to a balance of \$3,000 ($0.1 \times \$30,000$):

Bad Debts Expense	5,000	
Allowance for Doubtful Accounts		5,000
(To record estimate of uncollectible accounts)		



DISPOSING OF ACCOUNTS RECEIVABLE

In the normal course of events, accounts receivable are collected in cash and removed from the books. However, as credit sales and receivables have grown in significance, their “normal course of events” has changed. Companies now frequently sell their receivables to another company for cash, thereby shortening the cash-to-cash operating cycle.

Receivables are sold for two major reasons:

1. **Receivables may be sold because they may be the only reasonable source of cash.** When money is tight, companies may not be able to borrow money in the usual credit markets. Or if money is available, the cost of borrowing may be prohibitive.
2. **Billing and collection are often time-consuming and costly.** It is often easier for a retailer to sell the receivable to another party with expertise in billing and collection matters. Credit-card companies, such as **MasterCard**, **VISA**, **American Express**, and **Diners Club**, specialize in billing and collecting accounts receivable.

Sale of Receivables

A common sale of receivables is a sale to a factor. A **factor** is a finance company or bank that buys receivables from businesses and then collects the payments directly from the customers. Factoring is a multibillion-dollar business.

Factoring arrangements vary widely. Typically, the factor charges a commission to the company that is selling the receivables. This fee ranges from 1 to 3 percent of the amount of receivables purchased. To illustrate, assume that Hendredon Resort factors \$600,000 of receivables to Federal Factors. Federal Factors assesses a service charge of 2 percent of the amount of receivables sold. The journal entry to record the sale by Hendredon Resort is as follows:

Cash	588,000	
Service Charge Expense ($2\% \times \$600,000$)	12,000	
Accounts Receivable		600,000
(To record the sale of accounts receivable)		

STUDY OBJECTIVE 4

Describe the entries to record the disposition of accounts receivable.

HELPFUL HINT

Two common expressions apply here:

1. *Time is money.* That is, waiting for the normal collection process costs money.
2. *A bird in the hand is worth two in the bush.* That is, getting cash now is better than getting it later.

A	=	L	+	SE
+588,000				-12,000
-600,000				

If the company often sells its receivables, the service-charge expense (such as that incurred by Hendredon) is recorded as selling expense. If receivables are sold infrequently, this amount may be reported in the “other expenses and losses” section of the income statement.

Credit-Card Sales

HELPFUL HINT
 By accepting credit cards, such as VISA, a retailer can increase its sales while reducing its bad debts expense.

One billion credit cards were estimated to be in use recently—more than three credit cards for every man, woman, and child in the United States. Companies such as **VISA**, **MasterCard**, **Discover**, **American Express**, and **Diners Club** offer national credit cards. Three parties are involved when national credit cards are used in making retail sales: (1) the credit-card issuer, who is independent of the retailer; (2) the retailer; and (3) the customer. A retailer’s acceptance of a national credit card is another form of selling (factoring) the receivable.

The major advantages of these national credit cards to the retailer are shown in Illustration 12-9. In exchange for these advantages, the retailer pays the credit-card issuer a fee of 2 to 6 percent of the invoice price for its services.

Illustration 12-9

Advantages of credit cards to the retailer



CASH SALES: VISA AND MASTERCARD. Sales resulting from the use of **VISA** and **MasterCard** are considered cash sales by the retailer. These cards are issued by banks. On receipt of credit-card sales slips from a retailer, the bank immediately adds the amount to the seller’s bank balance, deducting a fee of 2 to 4 percent of the credit-card sales slips for this service. These credit-card sales slips are recorded in the same manner as checks deposited from a cash sale.

To illustrate, Lee Lenertz purchases \$1,000 of compact discs for her restaurant from Brieschke Music Co., using her VISA First Bank Card. The service fee that the bank charges is 3 percent. The entry to record this transaction by Brieschke Music is as follows:

A	=	L	+	SE
+970				-30
				+1,000

Cash	970	
Service Charge Expense	30	
Sales		1,000
(To record VISA credit-card sales)		

CREDIT SALES: AMERICAN EXPRESS AND DINERS CLUB. Sales using **American Express** and **Diners Club** cards are reported as credit sales, not cash sales. Conversion into cash does not occur until these companies remit the net amount to the seller. To illustrate, assume that Four Seasons restaurant accepts an American Express card for a \$300 bill. The entry for the sale by Four Seasons, assuming a 5 percent service fee, looks like this:

Accounts Receivable—American Express	285			
Service Charge Expense	15			
Sales			300	
(To record American Express credit-card sales)				

A	=	L	+	SE
+285				-15
				+300

American Express will subsequently pay the restaurant \$285. The restaurant will record this payment as follows.

Cash	285			
Accounts Receivable—American Express			285	
(To record redemption of credit-card billings)				

A	=	L	+	SE
+285				
-285				

Service Charge Expense is reported by the restaurant as a selling expense in the income statement.

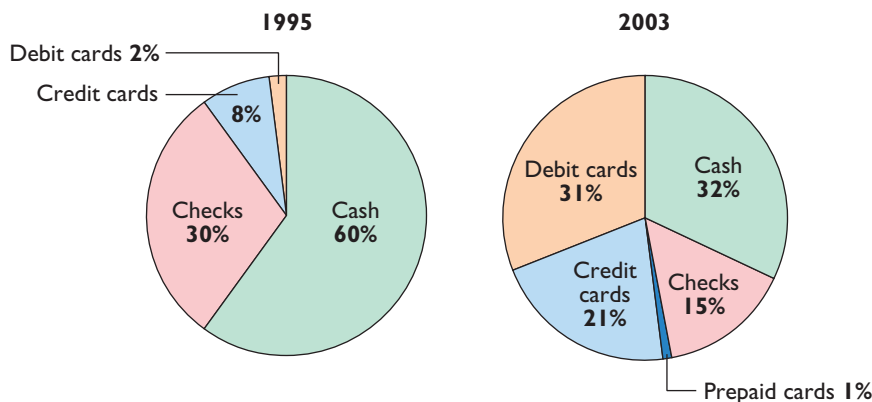
ACCOUNTING IN ACTION *Business Insight*



It used to be that cash was king. Over the past five decades, though, “plastic” has taken over the top spot. Since 1995, the amount that American consumers buy in stores using credit cards has increased 430 percent, according to a Dove Consulting study on consumer preferences. In 2003, for the first time, Americans bought more using cards than they did using cash.

How will this trend affect the amount and the mix of retail businesses’ expenses?

Total in-store purchases by type



SOURCE: *Fortune*, February 23, 2004, p. 132.

BEFORE YOU GO ON...

► **REVIEW IT**

1. Why do companies sell their receivables?
2. What is the journal entry when a company sells its receivables to a factor?
3. How are sales using a VISA or MasterCard reported? Is a sale using an American Express card recorded differently? Explain.

▶ DO IT

Peter M. Dell Food Wholesalers Co. has been expanding faster than it can raise capital. According to its local banker, the company has reached its debt ceiling. Dell's customers are slow in paying (sixty to ninety days), but its suppliers (creditors) are demanding thirty-day payment. Dell has a cash-flow problem.

Dell needs \$120,000 in cash to safely cover next Friday's employee payroll. Its balance of outstanding receivables totals \$750,000. What might Dell do to alleviate this cash crunch? Record the entry that Dell would make when it raises the needed cash.

ACTION PLAN

- To speed up the collection of cash, sell receivables to a factor.
- Calculate service charge expense as a percentage of the factored receivables.

SOLUTION

Assuming that Dell Food Wholesalers factors \$125,000 of its accounts receivable at a 1 percent service charge, the following entry would be made:

Cash	123,750	
Service Charge Expense	1,250	
Accounts Receivable		125,000
(To record sale of receivables to factor)		



CREDIT POLICIES

STUDY OBJECTIVE 5

Explain why credit policies are needed in the hospitality industry.

Credit policies are crucial in the hospitality industry, especially in the hotel industry, where functions and parties are held. Good credit policies will ensure guest satisfaction, lessen misunderstanding, and ensure that the hospitality business will be able to collect its revenues in a timely manner.

THE CREDIT DEPARTMENT

The credit department of a hotel is normally part of the accounting department. Its function is to set policies and also to work with the sales staff to check the credit of potential guests. For example, a student organization approaches a hotel for its year-end banquet. This hotel does not know the organization or any of its personnel. The credit department will ask the hotel sales representatives to have the student organization liaison complete a credit application form. The form asks for information such as bank accounts, businesses the student organization has dealt with before, address, phone number, and the like. The credit department then will do its due diligence to hopefully award credit to this organization while the sales personnel discusses the banquet and the needs of this new potential client. Once credit is approved, it is also customary for a hotel to ask for a deposit and to have a contract signed. One might think that all these may be a bit too much work. However, consider a function that is \$50 per person. If 100 people attend, it is \$5,000. All you need is one bad incident, and the hotel's profit for the event is gone.

THE CREDIT POLICY BEFORE, DURING, AND AFTER THE EVENT

Policies always should be followed; but in the hospitality business, you might be dealing with people who are not good event planners. This means that unexpected questions will arise. Imagine a wedding where the bride's parents have everything set with the hotel staff for a reception of 200 people. Despite the advice of the sales staff that the party might need more food because it is held during dinner-time, the family goes with its own estimate. The credit approval is only for a certain

amount. The hotel approves the credit to a certain amount and requests and requires a deposit from the wedding party.

On the day of the wedding, forty unexpected guests arrive. Within half an hour into the reception, the food is gone. The groom's family is telling the banquet captain to bring out more food. Some guests ask the waitstaff for additional canapés. Who actually has the authority to order more food on the spot? The bride wants to add more champagne for the guests. If champagne is \$50 a bottle and the bride wants another ten bottles, that is \$500. Should the hotel staff take her order? What if later on, the parents do not agree with this and do not want to pay? Should they write a check of \$500 right there? Can they be billed later? When it comes to money, all these polices should be set ahead of time so that embarrassing moments like these will not occur.

CITY LEDGER OF A HOTEL

As mentioned earlier, a hotel keeps two ledgers: the guest ledger and the city ledger. The guest ledger is associated with guests staying at the hotel, whereas the city ledger contains all other billings. As you can well imagine, it is easier to collect from people who are staying in your hotel because they are physically there. However, for city ledger accounts, collection can be challenging at times.

The city ledger can include individual billings, corporate accounts, group and travel agents, and banquet accounts. An individual might want to rent a function room for a meeting. Corporations might have training sessions for all their first-level managers. They might bring anywhere from 50 to 100 people to a hotel for a few days. The guest rooms, function rooms, and food and beverage bills can add up to thousands of dollars.

Besides training, corporations also hold incentive trips to reward their sales staff. These trips can be big affairs and are wonderful business for hotels. Associations hold annual membership conferences, trade shows, and conventions. Travel agencies book tour groups into hotels. Weddings, birthdays, and anniversaries are all common functions. Did we mention how much these functions can cost? A wealthy businessman once held a dinner for about eighty of his friends and spent more than \$75,000, close to \$1,000 per person. Of course, this wealthy person paid his bill.

What if, *just what if*, the hotel does not have a good credit policy or no good accounting personnel to work its city ledger for collection? Well, for one thing, the hotel would not be in business for long. Therefore, having a good credit department within the accounting office, good credit policies, and good management of the city ledger is crucial to a successful operation.

In a restaurant, club, theme park, and other hospitality businesses, it is also important to have such practices. However, these businesses are less susceptible to losses in accounts receivables. Most customers pay by cash or credit cards in restaurants. Even if a restaurant caters functions, it normally will ask for a good amount of deposit up front. Clubs, owing to their tax status, cannot take more than 15 percent of their business from nonmembers. In addition, such business normally is referred or sponsored by the members, so there is always a lead to collect if needed.

NOTES RECEIVABLE

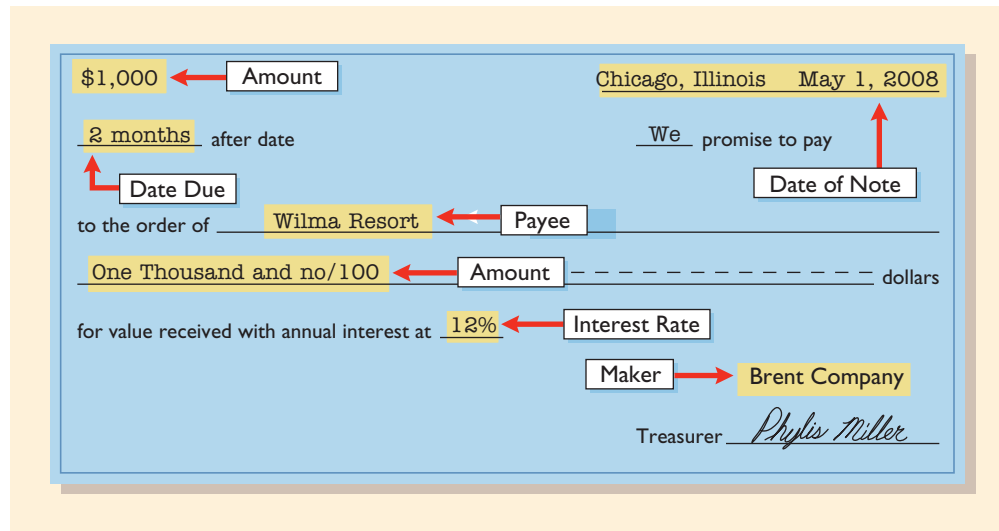
Credit may be granted in exchange for a promissory note. A **promissory note** is a written promise to pay a specified amount of money on demand or at a definite time. Promissory notes may be used (1) when individuals and companies lend or borrow money, (2) when the amount of the transaction and the credit period exceed normal limits, or (3) in settlement of accounts receivable.

In a promissory note, the party making the promise to pay is called the **maker**. The party to whom payment is to be made is called the **payee**. The payee may be specifically identified by name or may be designated simply as the bearer of the

note. In the note shown in Illustration 12-10, Brent Company is the maker, and Wilma Resort is the payee. To Wilma Resort, the promissory note is a note receivable; to Brent Company, it is a note payable.

Illustration 12-10

Promissory note



HELPFUL HINT

Who are the two key parties to a note, and what entry does each party make when the note is issued?

Answer:

1. The maker, Brent Company, credits Notes Payable.
2. The payee, Wilma Resort, debits Notes Receivable.

Notes receivable give the payee a stronger legal claim to assets than accounts receivable. Like accounts receivable, notes receivable can be readily sold to another party. Promissory notes are negotiable instruments (as are checks), which means that they can be transferred to another party by endorsement.

Notes receivable are frequently accepted from customers who need to extend the payment of an account receivable. They are often required from high-risk customers. In some industries (such as the pleasure boat industry), all credit sales are supported by notes. The majority of notes originate from loans. The basic issues in accounting for notes receivable are the same as those for accounts receivable:

1. **Recognizing** notes receivable
2. **Valuing** notes receivable
3. **Disposing of** notes receivable

On the following pages we will look at these issues. Before we do, we need to consider two issues that did not apply to accounts receivable: (1) maturity date and (2) computing interest.

DETERMINING THE MATURITY DATE

When the life of a note is expressed in terms of months, the due date (when it matures) is found by counting the months from the date of issue. For example, the maturity date of a three-month note dated May 1 is August 1. A note drawn on the last day of a month matures on the last day of a subsequent month. That is, a July 31 note due in two months matures on September 30.

When the due date is stated in terms of days, you need to count the exact number of days to determine the maturity date. **In counting, the date the note is issued is omitted, but the due date is included.** For example, the maturity date of a sixty-day note dated July 17 is September 15, computed in Illustration 12-11.

STUDY OBJECTIVE 6

Compute the maturity date of and interest on notes receivable.

Illustration 12-11

Computation of maturity date

Term of note		60 days
July (31 - 17)	14	
August	<u>31</u>	<u>45</u>
Maturity date: September		<u>15</u>

The due date (maturity date) of a promissory note may be stated in one of three ways, as shown in Illustration 12-12.

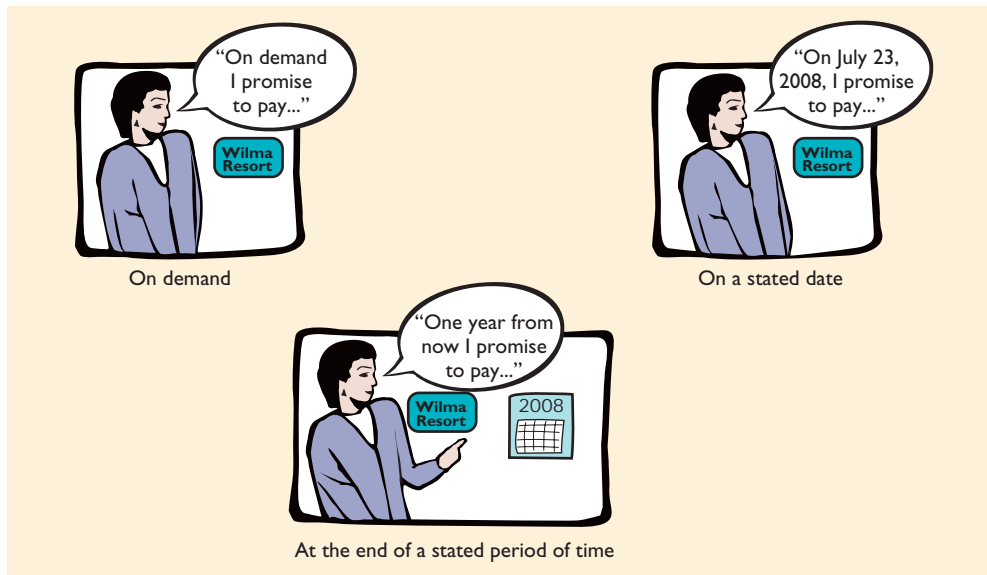


Illustration 12-12

Maturity date of different notes

COMPUTING INTEREST

As indicated in Chapter 4, Illustration 12-13 shows the basic formula for computing interest on an interest-bearing note.

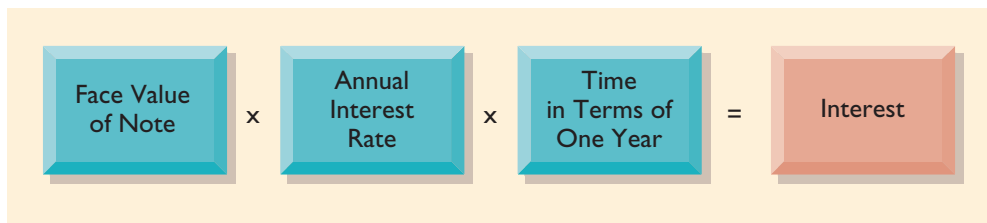


Illustration 12-13

Formula for computing interest

The interest rate specified in a note is an *annual* rate of interest. The time factor in the formula in Illustration 12-13 expresses the fraction of a year that the note is outstanding. When the maturity date is stated in days, the time factor is often the number of days divided by 360. When the due date is stated in months, the time factor is the number of months divided by 12. Computation of interest for various time periods is shown in Illustration 12-14.

HELPFUL HINT

The interest rate specified is the *annual* rate.

Terms of Note	Interest Computation
\$ 730, 18%, 120 days	$\$ 730 \times 18\% \times 120/360 = \$ 43.80$
\$1,000, 15%, 6 months	$\$1,000 \times 15\% \times 6/12 = \$ 75.00$
\$2,000, 12%, 1 year	$\$2,000 \times 12\% \times 1/1 = \240.00

Illustration 12-14

Computation of interest

There are many different ways to calculate interest. The preceding computation assumed 360 days for the length of the year. Many financial institutions use 365 days. It is more profitable to use 360 days; the holder of the note receives more interest than if 365 days are used. For homework problems, assume 360 days.

STUDY OBJECTIVE 7

Explain how notes receivable are recognized in the accounts.

A	=	L	+	SE
+1,000				
-1,000				

RECOGNIZING NOTES RECEIVABLE

To illustrate the basic entry for notes receivable, we will use the \$1,000, two-month, 12 percent promissory note on page 362. Assuming that the note was written to settle an open account, the entry for the receipt of the note by Wilma Resort is

May 1	Notes Receivable	1,000	
	Accounts Receivable—Brent Company		1,000
	(To record acceptance of Brent Company note)		

Observe that the note receivable is recorded at its **face value**, the value shown on the face of the note. No interest revenue is reported when the note is accepted because the revenue recognition principle does not recognize revenue until earned. Interest is earned (accrued) as time passes.

If a note is exchanged for cash, the entry is a debit to Notes Receivable and a credit to Cash in the amount of the loan.

VALUING NOTES RECEIVABLE

Valuing short-term notes receivable is the same as valuing accounts receivable. Like accounts receivable, short-term notes receivable are reported at their **cash (net) realizable value**. The notes receivable allowance account is Allowance for Doubtful Accounts. The estimations involved in determining cash realizable value and in recording bad debts expense and related allowance are similar.

STUDY OBJECTIVE 8

Describe how notes receivable are valued.

ACCOUNTING IN ACTION *International Insight*

One important component of a note is its interest rate. If you are issuing a note receivable, you sure would like to have it at a higher rate, thereby earning more interest payment. On the contrary, if you are writing a note payable, you would want to negotiate the note at the lowest rate possible so that you will not need to pay that much interest. Interest rates go through cycles, with the highest prime rate recorded at 20.50 percent in August 1981 in the United States. In the early 2000s, interest rates still were relatively low, dropping from 9.0 percent to as low as 4.0 percent. However, around 2005, interest rates in the United States began inching higher and higher. The lowest prime rate was recorded at 4.0 percent in 2003 and 2004. In June 2006, the prime rate broke 8.0 percent, went up to 8.25 percent in July and stayed at the same rate and dropped back to 7.50 percent effective October 31, 2007. So shop before you sign any note or borrow any funds for your operations.

STUDY OBJECTIVE 9

Describe the entries to record the disposition of notes receivable.

DISPOSING OF NOTES RECEIVABLE

Notes may be held to their maturity date, at which time the face value plus accrued interest is due. Sometimes the maker of the note defaults, and an adjustment to the accounts must be made. At other times, the holder of the note speeds up the conversion to cash by selling the note. The entries for honoring and dishonoring notes are illustrated in this section.

Honor of Notes Receivable

A note is **honored** when it is paid in full at its maturity date. For an interest-bearing note, the amount due at maturity is the face value of the note plus interest for the length of time specified on the note.

To illustrate, assume that Betty Hospitality, Inc., lends Wayne Higley, Inc., \$10,000 on June 1, accepting a four-month, 9 percent interest note. Interest will be \$300 ($\$10,000 \times 9\% \times 4/12$). The amount due, the maturity value, will be \$10,300. To obtain

payment, Betty Hospitality, Inc. (the payee), must present the note either to Wayne Higley, Inc. (the maker), or to the maker's duly appointed agent, such as a bank. Assuming that Betty Hospitality, Inc., presents the note to Wayne Higley, Inc., on the maturity date, the entry by Betty Hospitality, Inc., to record the collection is

Oct. 1	Cash	10,300	
	Notes Receivable		10,000
	Interest Revenue		300
	(To record collection of Higley, Inc., note)		

A	=	L	+	SE
+10,300				+300
-10,000				

If Betty Hospitality, Inc., prepares financial statements as of September 30, it would be necessary to accrue interest. In this case, the adjusting entry by Betty Hospitality, Inc., would be to record four months' interest (\$300), as shown:

Sept. 30	Interest Receivable	300	
	Interest Revenue		300
	(To accrue 4 months' interest)		

A	=	L	+	SE
+300				+300

When interest has been accrued, at maturity it is necessary to credit Interest Receivable. The entry by Betty Hospitality, Inc., to record the honoring of the Wayne Higley, Inc., note on October 1 is

Oct. 1	Cash	10,300	
	Notes Receivable		10,000
	Interest Receivable		300
	(To record collection of note at maturity)		

A	=	L	+	SE
+10,300				
-10,000				
-300				

In this case, Interest Receivable is credited because the receivable was established in the adjusting entry.

Dishonor of Notes Receivable

A **dishonored note** is a note that is not paid in full at maturity. A dishonored note receivable is no longer negotiable. However, the payee still has a claim against the maker of the note. Therefore, the Notes Receivable account is usually transferred to an Account Receivable.

To illustrate, assume that Wayne Higley, Inc., on October 1 indicates that it cannot pay at the present time. The entry to record the dishonor of the note depends on whether eventual collection is expected. If Betty Hospitality, Inc., expects eventual collection, the amount due (face value and interest) on the note is debited to Accounts Receivable. Betty Hospitality, Inc., would make the following entry at the time the note is dishonored (assuming no previous accrual of interest):

Oct. 1	Accounts Receivable—Wayne Higley, Inc.	10,300	
	Notes Receivable		10,000
	Interest Revenue		300
	(To record the dishonor of Higley, Inc., note)		

A	=	L	+	SE
+10,300				+300
-10,000				

If there is no hope of collection, the face value of the note would be written off by debiting Allowance for Doubtful Accounts. No interest revenue would be recorded because collection will not occur.

Sale of Notes Receivable

The accounting for the sale of notes receivable is recorded similarly to the sale of accounts receivable. The accounting entries for the sale of notes receivable are left for a more advanced course.

BEFORE YOU GO ON...**REVIEW IT**

1. What is the basic formula for computing interest?
2. At what value are notes receivable reported on the balance sheet?
3. Explain the difference between honoring and dishonoring a note receivable.

DO IT

Gambit Logo Shirts accepts from Leonard Golf Proshop a \$3,400, ninety-day, 12 percent note dated May 10 in settlement of Leonard's overdue account. What is the maturity date of the note? What is the entry made by Gambit at the maturity date, assuming Leonard pays the note and interest in full at that time?

ACTION PLAN

- Count the exact number of days to determine the maturity date. Omit the date the note is issued, but include the due date.
- Determine whether interest was accrued. The entry here assumes that no interest has been previously accrued on this note.

SOLUTION

The maturity date is August 8, computed as follows:

Term of note:		90 days
May (31 - 10)	21	
June	30	
July	<u>31</u>	<u>82</u>
Maturity date: August		<u><u>8</u></u>

The interest payable at maturity date is \$102, computed as follows:

$$\begin{aligned} \text{Face} \times \text{Rate} \times \text{Time} &= \text{Interest} \\ \$3,400 \times 12\% \times 90/360 &= \$102 \end{aligned}$$

The entry recorded by Gambit Logo Shirts at the maturity date is

Cash	3,502	
Notes Receivable		3,400
Interest Revenue		102
(To record collection of Leonard note)		



ACCOUNTING IN ACTION *Business Insight*



Can a hotel company make money selling notes receivable? Absolutely. In 2005, Dallas-based Silverleaf Resorts, Inc., reported a net income of \$12.9 million in its third quarterly report. Included in that figure is a gain of sale in its notes receivable of \$5.8 million. Together with other adjustments, its third-quarter adjusted net income was \$5.0 million. This also holds true for Hilton Grand Vacations in June 2002, when Hilton's timeshare segment sold approximately \$52 million of its timeshare notes receivable to a subsidiary of GE Capital, resulting in a gain of approximately \$2 million in the second quarter. Starwood Hotel and Resorts also reported gains from the sales of notes receivable of \$25 million and \$14 million in 2005 and 2004, respectively, primarily owing to the sale of approximately \$221 million and \$113 million of vacation ownership receivables during the years ended December 31, 2005 and 2004.

WHAT IS A CURRENT LIABILITY?

As explained in Chapter 5, a **current liability** is a debt with two key features: (1) It can reasonably be expected to be paid from existing current assets or through the creation of other current liabilities. (2) It will be paid within one year or the operating cycle, whichever is longer. Debts that do not meet *both criteria* are classified as long-term liabilities. Most companies pay current liabilities within one year out of current assets rather than by creating other liabilities.

Companies must carefully monitor the relationship of current liabilities to current assets. This relationship is critical in evaluating a company's short-term debt-paying ability. A company that has more current liabilities than current assets is usually the subject of some concern because the company may not be able to meet its current obligations when they become due.

Current liabilities include notes payable, accounts payable, and unearned revenues. They also include accrued liabilities such as taxes, salaries and wages, and interest payable. The entries for accounts payable and the adjusting entries for some current liabilities were explained in previous chapters. Other types of current liabilities that are often encountered are discussed in the following sections.

NOTES PAYABLE

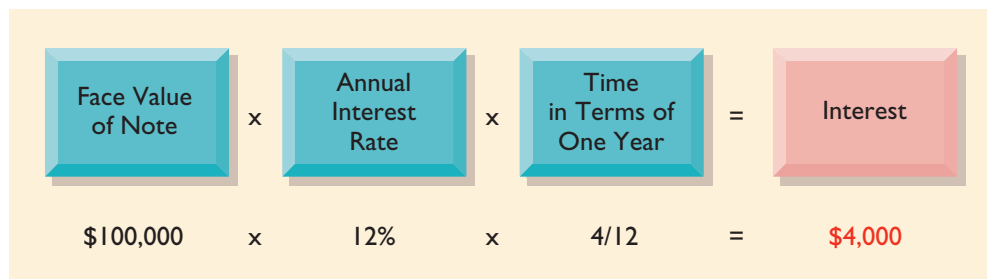
Obligations in the form of written promissory notes are recorded as **notes payable**. Notes payable are often used instead of accounts payable. Doing so gives the lender formal proof of the obligation in case legal remedies are needed to collect the debt. Notes payable usually require the borrower to pay interest and frequently are issued to meet short-term financing needs.

Notes are issued for varying periods. **Those due for payment within one year of the balance sheet date are usually classified as current liabilities.** Most notes are interest bearing.

To illustrate the accounting for notes payable, assume that First National Bank agrees to lend \$100,000 on March 1, 2008, if Williams Restaurant signs a \$100,000, 12 percent, four-month note. With an interest-bearing promissory note, the amount of assets received on issuance of the note generally equals the note's face value. Williams Restaurant therefore will receive \$100,000 cash and will make the following journal entry:

Mar. 1	Cash	100,000	
	Notes Payable		100,000
	(To record issuance of 12%, 4-month note to First National Bank)		

Interest accrues over the life of the note and must be recorded periodically. If Williams Restaurant prepares financial statements semiannually, an adjusting entry is required at June 30 to recognize interest expense and interest payable of \$4,000 ($\$100,000 \times 12\% \times 4/12$). The formula for computing interest and its application to Williams Restaurant's note are shown in Illustration 12-15.



STUDY OBJECTIVE 10

Explain a current liability, and identify the major types of current liabilities.

HELPFUL HINT

The current liabilities section of the balance sheet gives creditors a good idea of what obligations are coming due.

STUDY OBJECTIVE 11

Describe the accounting for notes payable.

A	=	L	+	SE
+100,000		+100,000		

Illustration 12-15

Formula for computing interest

The adjusting entry looks like this:

$\begin{array}{r} \text{A} = \text{L} + \text{SE} \\ +4,000 \quad -4,000 \end{array}$	<table border="1"> <tr> <td style="border: none;">June 30</td> <td style="border: none;">Interest Expense</td> <td style="border: none;">4,000</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Interest Payable</td> <td style="border: none;"></td> <td style="border: none;">4,000</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">(To accrue interest for 4 months on First National Bank note)</td> <td style="border: none;"></td> <td style="border: none;"></td> </tr> </table>	June 30	Interest Expense	4,000			Interest Payable		4,000		(To accrue interest for 4 months on First National Bank note)		
June 30	Interest Expense	4,000											
	Interest Payable		4,000										
	(To accrue interest for 4 months on First National Bank note)												

In the June 30 financial statements, the current liabilities section of the balance sheet will show notes payable \$100,000 and interest payable \$4,000. In addition, interest expense of \$4,000 will be reported under “other expenses and losses” in the income statement. If Williams prepared financial statements monthly, the adjusting entry at the end of each month would have been \$1,000 ($\$100,000 \times 12\% \times 1/12$).

At maturity (July 1, 2008), Williams must pay the face value of the note (\$100,000) plus \$4,000 interest ($\$100,000 \times 12\% \times 4/12$). The entry to record payment of the note and accrued interest is as follows:

$\begin{array}{r} \text{A} = \text{L} + \text{SE} \\ -104,000 \quad -100,000 \\ \quad \quad -4,000 \end{array}$	<table border="1"> <tr> <td style="border: none;">July 1</td> <td style="border: none;">Notes Payable</td> <td style="border: none;">100,000</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Interest Payable</td> <td style="border: none;">4,000</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Cash</td> <td style="border: none;"></td> <td style="border: none;">104,000</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">(To record payment of First National Bank interest-bearing note and accrued interest at maturity)</td> <td style="border: none;"></td> <td style="border: none;"></td> </tr> </table>	July 1	Notes Payable	100,000			Interest Payable	4,000			Cash		104,000		(To record payment of First National Bank interest-bearing note and accrued interest at maturity)		
July 1	Notes Payable	100,000															
	Interest Payable	4,000															
	Cash		104,000														
	(To record payment of First National Bank interest-bearing note and accrued interest at maturity)																

SALES TAXES PAYABLE

STUDY OBJECTIVE 12

Explain the accounting for other current liabilities.

As a consumer, you know that when you eat at a restaurant, the food is subject to sales taxes. The tax is expressed as a stated percentage of the sales price. The retailer collects the tax from the customer when the sale occurs. Periodically (usually monthly), the restaurant remits the collections to the state’s department of revenue.

Under most state sales tax laws, the amount of the sale and the amount of the sales tax collected must be rung up separately on the cash register. The cash register readings are then used to credit Sales and Sales Taxes Payable. For example, if the March 25 cash register reading for Cooley Restaurant shows sales of \$10,000 and sales taxes of \$600 (sales tax rate of 6 percent), the entry looks like this:

$\begin{array}{r} \text{A} = \text{L} + \text{SE} \\ +10,600 \quad +600 \quad +10,000 \end{array}$	<table border="1"> <tr> <td style="border: none;">Mar. 25</td> <td style="border: none;">Cash</td> <td style="border: none;">10,600</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Sales</td> <td style="border: none;"></td> <td style="border: none;">10,000</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Sales Taxes Payable</td> <td style="border: none;"></td> <td style="border: none;">600</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">(To record daily sales and sales taxes)</td> <td style="border: none;"></td> <td style="border: none;"></td> </tr> </table>	Mar. 25	Cash	10,600			Sales		10,000		Sales Taxes Payable		600		(To record daily sales and sales taxes)		
Mar. 25	Cash	10,600															
	Sales		10,000														
	Sales Taxes Payable		600														
	(To record daily sales and sales taxes)																

When the taxes are remitted to the taxing agency, Sales Taxes Payable is debited and Cash is credited. The company does not report sales taxes as an expense. It simply forwards to the government the amount paid by the customers. Thus Cooley serves only as a **collection agent** for the taxing authority.

When sales taxes are not rung up separately on the cash register, they must be extracted from the total receipts. To determine the amount of sales in such cases, divide total receipts by 100 percent plus the sales tax percentage. To illustrate, assume that in the preceding example Cooley rings up total receipts, which are \$10,600. The receipts from the sales are equal to the sales price (100 percent) plus the tax percentage (6 percent of sales), or 1.06 times the sales total. We can compute the sales amount as follows:

$$\$10,600 \div 1.06 = \$10,000$$

HELPFUL HINT

Alternatively, Cooley could find the tax by multiplying sales by the sales tax rate ($\$10,000 \times 6$ percent).

Thus Cooley Restaurant could find the sales tax amount it must remit to the state by subtracting sales from total receipts (\$10,600 – \$10,000).

ACCOUNTING IN ACTION  *Business Insight*



If you buy a book at a bookstore, you pay sales tax. If you buy the same book over the Internet, you don't pay sales tax (in most cases). This is one reason why e-commerce, as it has come to be called, has been growing exponentially and why Web sites like **Amazon.com** have become so popular. A recent study suggested that Internet sales would fall by 30 percent if sales tax were applied. In December 2001, Congress passed and President Bush signed into law a two-year extension to the ban on sales taxes on Internet purchases. While Internet retailers were pleased, the American Booksellers Association protested the ban, saying it gives online booksellers such as Amazon.com an unfair advantage over bricks-and-mortar bookstores.



SOURCE: Edward Nawotka, "Bush Extends Internet Tax Ban," *Publishers Weekly*, December 3, 2001, p. 18.

PAYROLL AND PAYROLL TAXES PAYABLE

Every employer incurs liabilities relating to employees' salaries and wages. One liability is the amount of wages and salaries owed to employees—**wages and salaries payable**. Another is the amount required by law to be withheld from employees' gross pay. Until these **withholding taxes** (federal and state income taxes and Social Security taxes) are remitted to the governmental taxing authorities, they are credited to appropriate liability accounts. For example, if a corporation withholds taxes from its employees' wages and salaries, accrual and payment of a \$100,000 payroll would be recorded as follows:

March 7	Salaries and Wages Expense	100,000		<table border="1"> <tr> <td>A</td> <td>=</td> <td>L</td> <td>+</td> <td>SE</td> </tr> <tr> <td></td> <td></td> <td>+7,250</td> <td></td> <td>-100,000</td> </tr> <tr> <td></td> <td></td> <td>+21,864</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>+2,922</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>+67,964</td> <td></td> <td></td> </tr> </table>	A	=	L	+	SE			+7,250		-100,000			+21,864					+2,922					+67,964		
A	=	L	+		SE																								
		+7,250			-100,000																								
		+21,864																											
		+2,922																											
		+67,964																											
	FICA Taxes Payable ¹		7,250																										
	Federal Income Taxes Payable		21,864																										
	State Income Taxes Payable		2,922																										
	Salaries and Wages Payable		67,964																										
	(To record payroll and withholding taxes for the week ending March 7)																												
March 11	Salaries and Wages Payable	67,964		<table border="1"> <tr> <td>A</td> <td>=</td> <td>L</td> <td>+</td> <td>SE</td> </tr> <tr> <td>-67,964</td> <td></td> <td>-67,964</td> <td></td> <td></td> </tr> </table>	A	=	L	+	SE	-67,964		-67,964																	
A	=	L	+		SE																								
-67,964		-67,964																											
	Cash		67,964																										
	(To record payment of the March 7 payroll)																												

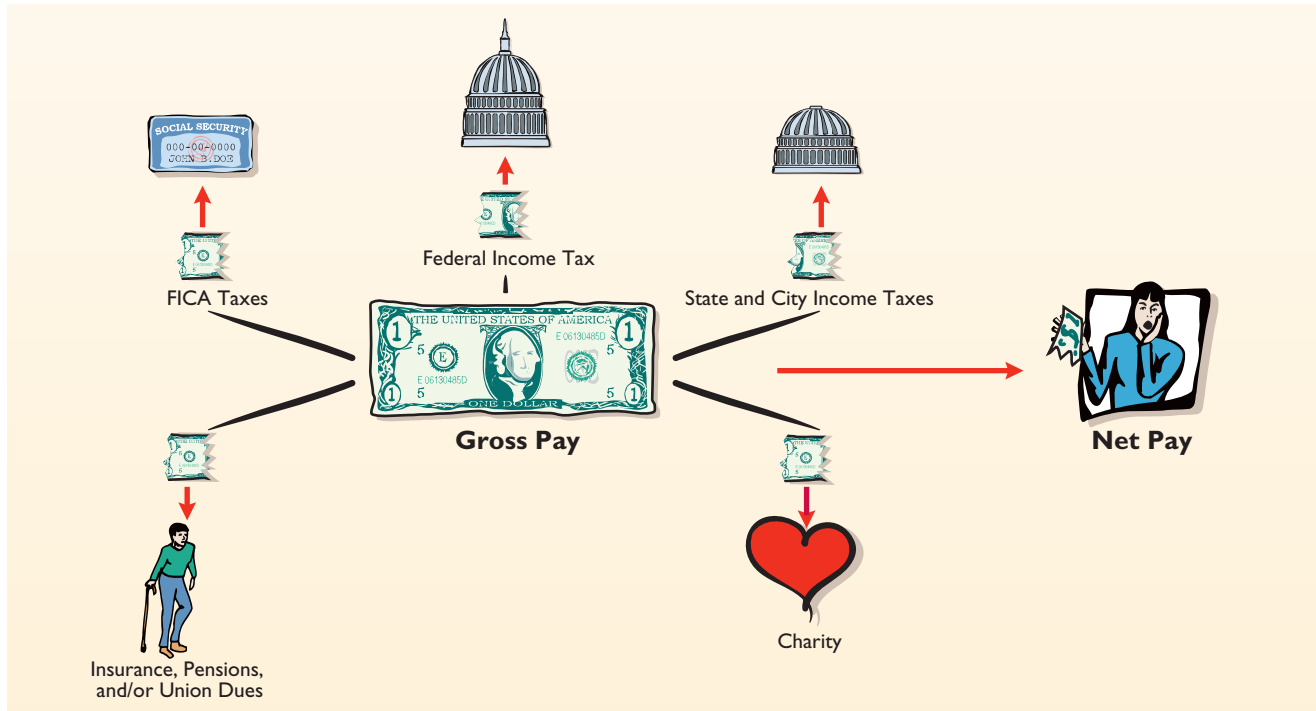
Illustration 12-16 on page 370 summarizes the types of payroll deductions.

Also, with every payroll, the employer incurs liabilities to pay various **payroll taxes** levied on the employer. These payroll taxes include the employer's share of Social Security taxes and the state and federal unemployment taxes. Based on the \$100,000 payroll in the preceding example, the

¹Social Security taxes are commonly referred to as FICA taxes. In 1937, Congress enacted the Federal Insurance Contribution Act (FICA). This act and other payroll issues are discussed in greater detail in Chapter 11.

Illustration 12-16

Payroll deductions



following entry would be made to record the employer's expense and liability for these payroll taxes:

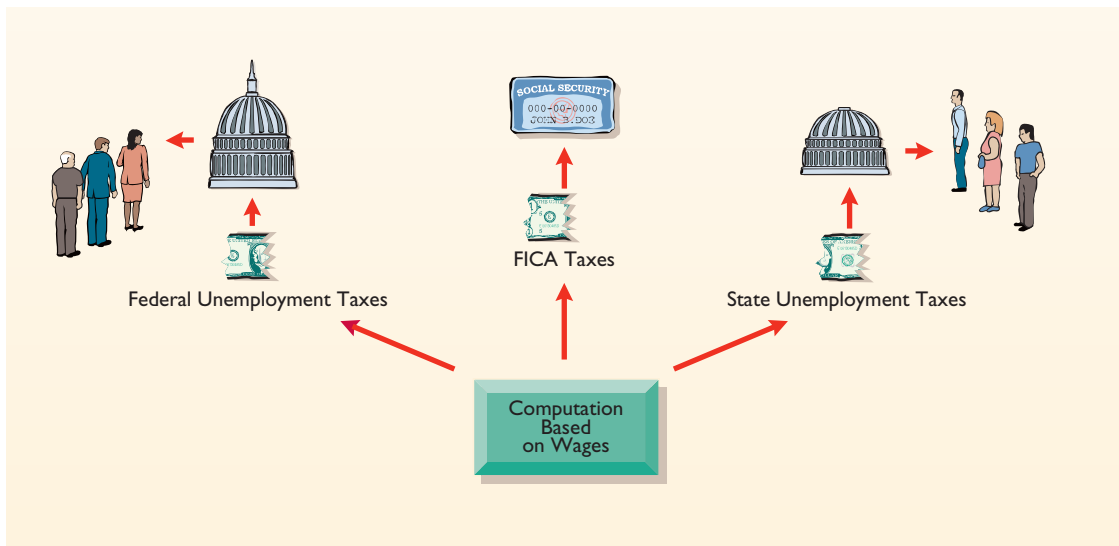
A	=	L	+	SE
		+7,250		-13,450
		+800		
		+5,400		

March 7	Payroll Tax Expense	13,450	
	FICA Taxes Payable		7,250
	Federal Unemployment Taxes Payable		800
	State Unemployment Taxes Payable		5,400
	(To record employer's payroll taxes on March 7 payroll)		

Illustration 12-17

Employer payroll taxes

Illustration 12-17 shows the types of taxes levied on employers.



The payroll and payroll tax liability accounts are classified as current liabilities because they must be paid to employees or remitted to taxing authorities in the near term. Taxing authorities impose substantial fines and penalties on employers if the withholding and payroll taxes are not computed correctly and paid on time.

UNEARNED REVENUES

A hotel, such as **Hilton**, receives a customer’s check when a banquet is ordered. An airline company, such as **American Airlines**, receives cash when it sells tickets for future flights. Through these transactions, both companies have incurred unearned revenues—revenues that are received before goods are delivered or services are rendered. How do companies account for unearned revenues?

1. When the advance payment is received, Cash is debited, and a current liability account identifying the source of the unearned revenue is credited.
2. When the revenue is earned, the Unearned Revenue account is debited, and an earned revenue account is credited.

To illustrate, assume that Superior Catering sells a party for 10,000 people at \$50 each for a Thanksgiving event. The entry for the sale looks like this:

Aug. 6	Cash		500,000	
	Unearned Catering Revenue			500,000

A	=	L	+	SE
+500,000		+500,000		

As the function is completed, the following entry is made:

Sept. 7	Unearned Revenue		500,000	
	Sales Revenue			500,000
	(To record revenues earned)			

A	=	L	+	SE
-500,000		+500,000		

Any balance in an unearned revenue account is reported as a current liability in the balance sheet. As revenue is earned, a transfer from unearned revenue to earned revenue occurs. Unearned revenue is material for some companies: In the airline industry, for example, tickets sold for future flights represent almost 50 percent of total current liabilities. At **United Air Lines**, unearned ticket revenue is the largest current liability, recently amounting to more than \$1 billion.

Illustration 12-18 shows specific unearned and earned revenue accounts used in selected types of businesses.

Type of Business	Account Title	
	Unearned Revenue	Earned Revenue
Airline	Unearned Passenger Ticket Revenue	Passenger Revenue
Magazine publisher	Unearned Subscription Revenue	Subscription Revenue
Hotel	Unearned Rental Revenue	Rental Revenue
Insurance company	Unearned Premium Revenue	Premium Revenue

Illustration 12-18
Unearned and earned revenue accounts

CURRENT MATURITIES OF LONG-TERM DEBT

Companies often have a portion of long-term debt that comes due in the current year. That amount would be considered a current liability. For example, assume that Wendy Construction issues a five-year, interest-bearing, \$25,000 note on January 1, 2008. Each January 1, starting January 1, 2009, \$5,000 of the note is due to be paid. When financial statements are prepared on December 31, 2008, \$5,000

should be reported as a current liability. The remaining \$20,000 on the note would be reported as a long-term liability. Current maturities of long-term debt are often termed **long-term debt due within one year**.

It is not necessary to prepare an adjusting entry to recognize the current maturity of long-term debt. The proper statement classification of each balance sheet account is recognized when the balance sheet is prepared.

DEMONSTRATION PROBLEM

The following selected transactions relate to Falcetto Souvenirs Company:

- Mar. 1 Sold \$20,000 of merchandise to Potter Hotels, terms 2/10, n/30.
 11 Received payment in full from Potter Hotels for balance due.
 12 Accepted Juno Resorts \$20,000, 6-month, 12% note for balance due.
 15 Made American Express credit sales totaling \$6,700. A 5% service fee is charged by American Express.
 30 Received payment in full from American Express Company.
 Apr. 11 Sold accounts receivable of \$8,000 to Harcot Factor. Harcot Factor assesses a service charge of 2% of the amount of receivables sold.
 May 10 Wrote off as uncollectible \$16,000 of accounts receivable. Falcetto uses the percentage of sales basis to estimate bad debts.
 June 30 Credit sales for the first 6 months total \$2,000,000. The bad debt percentage is 1% of credit sales. At June 30, the balance in the allowance account is \$3,500.
 July 16 One of the accounts receivable written off in May was from J. Simon, who pays the amount due, \$4,000, in full.

Instructions

Prepare the journal entries for the transactions.

SOLUTION TO DEMONSTRATION PROBLEM

ACTION PLAN

- Generally, record accounts receivable at invoice price.
- Recognize that sales returns and allowances and cash discounts reduce the amount received on accounts receivable.
- Record a service charge expense on the seller's books when accounts receivable are sold.
- Prepare an adjusting entry for bad debts expense.
- Ignore any balance in the allowance account under the percentage of sales basis. Recognize the balance in the allowance account under the percentage of receivables basis.
- Record write-offs of accounts receivable only in balance sheet accounts.

Mar. 1	Accounts Receivable—Potter Sales (To record sales on account)	20,000	20,000
11	Cash Sales Discounts (2% × \$20,000) Accounts Receivable—Potter (To record collection of accounts receivable)	19,600 400	20,000
12	Notes Receivable Accounts Receivable—Juno (To record acceptance of Juno Company note)	20,000	20,000
15	Accounts Receivable—American Express Service Charge Expense (5% × \$6,700) Sales (To record credit-card sales)	6,365 335	6,700
Mar. 30	Cash Accounts Receivable—American Express (To record redemption of credit-card billings)	6,365	6,365
Apr. 11	Cash Service Charge Expense (2% × \$8,000) Accounts Receivable (To record sale of receivables to factor)	7,840 160	8,000

May 10	Allowance for Doubtful Accounts Accounts Receivable (To record write-off of accounts receivable)	16,000	16,000
June 30	Bad Debts Expense ($\$2,000,000 \times 1\%$) Allowance for Doubtful Accounts (To record estimate of uncollectible accounts)	20,000	20,000
July 16	Accounts Receivable—J. Simon Allowance for Doubtful Accounts (To reverse write-off of accounts receivable)	4,000	4,000
16	Cash Accounts Receivable—J. Simon (To record collection of accounts receivable)	4,000	4,000



SUMMARY OF STUDY OBJECTIVES

1. Identify the different types of receivables. Receivables are frequently classified as (1) accounts, (2) notes, and (3) other. Accounts receivable are amounts owed by customers on account. Notes receivable are claims for which formal instruments of credit are issued as proof of the debt. Other receivables include nontrade receivables, such as interest receivable, loans to company officers, advances to employees, and income taxes refundable.

2. Explain how accounts receivable are recognized in the accounts. Accounts receivable are recorded at invoice price. They are reduced by Sales Returns and Allowances. Cash discounts reduce the amount received on accounts receivable. When interest is charged on a past due receivable, this interest is added to the accounts receivable balance and is recognized as interest revenue.

3. Distinguish between the methods and the bases used to value accounts receivable. There are two methods of accounting for uncollectible accounts: (1) the allowance method and (2) the direct write-off method. Either the percentage of sales or the percentage of receivables basis may be used to estimate uncollectible accounts using the allowance method. The percentage of sales basis emphasizes the matching principle. The percentage of receivables basis emphasizes the cash realizable value of the accounts receivable. An aging schedule is often used with this basis.

4. Describe the entries to record the disposition of accounts receivable. When an account receivable is collected, Accounts Receivable is credited. When an account receivable is sold, a service charge expense is charged, which reduces the amount collected.

5. Explain why credit policies are needed in the hospitality industry. Credit policies are needed in the hospitality industry, especially in the hotel industry, where functions and parties are held. Good credit policies will ensure guest satisfaction, lessen misunderstanding, and ensure that the hospitality business will be able to collect its revenues in a timely manner.

6. Compute the maturity date of and interest on notes receivable. The maturity date of a note must be computed unless the due date is specified or the note is payable on demand. For a note stated in months, the maturity date is found by counting the months from the date of issue. For a note stated in days, the number of days is counted, omitting the issue date and counting the due date. The formula for computing interest is $\text{Face Value} \times \text{Interest Rate} \times \text{Time}$.

7. Explain how notes receivable are recognized in the accounts. Notes receivable are recorded at face value. In some cases, it is necessary to accrue interest prior to maturity. In this case, Interest Receivable is debited and Interest Revenue is credited.

8. Describe how notes receivable are valued. Like accounts receivable, notes receivable are reported at their cash (net) realizable value. The notes receivable allowance account is Allowance for Doubtful Accounts. The computation and estimations involved in valuing notes receivable at cash realizable value and in recording the proper amount of bad debts expense and related allowance are similar to those for accounts receivable.

9. Describe the entries to record the disposition of notes receivable. Notes can be held to maturity. At that time the face value plus accrued interest is due, and the note is removed from the accounts. In many cases, the holder of the note speeds up the conversion by selling the receivable to another party. In some situations, the maker of the note dishonors the note (defaults), and the note is written off.

10. Explain a current liability, and identify the major types of current liabilities. A current liability is a debt that can be reasonably expected to be paid (1) from existing current assets or through the creation of other current liabilities and (2) within one year or the operating cycle, whichever is longer. The major types of current liabilities are notes payable, accounts payable, sales taxes payable, unearned revenues, and accrued liabilities, such as taxes, salaries and wages, and interest payable.

11. Describe the accounting of notes payable. When a promissory note is interest bearing, the amount of assets received upon the issuance of the note is generally equal to the face value of the note. Interest expense is accrued over the life of the note. At maturity, the amount paid is equal to the face value of the note plus accrued interest.

12. Explain the accounting for other current liabilities. Sales taxes payable are recorded at the time the related sales occur. The company serves as a collection agent for the taxing au-

thority. Sales taxes are not an expense to the company. Until employee withholding taxes are remitted to governmental taxing authorities, they are credited to appropriate liability accounts. Unearned revenues are initially recorded in an unearned revenue account. As the revenue is earned, a transfer from unearned revenue to earned revenue occurs. The current maturities of long-term debt should be reported as a current liability in the balance sheet.



GLOSSARY

Accounts receivable Amounts owed by customers on account as a result from the sale of goods and services (p. 348).

Agging of accounts receivable The analysis of customer balances by the length of time they have been unpaid (p. 355).

Allowance method A method of accounting for bad debts that involves estimating uncollectible accounts at the end of each period (p. 351).

Bad Debts Expense An expense account to record uncollectible receivables (p. 350).

Cash (net) realizable value The net amount expected to be received in cash (p. 351).

Direct write-off method A method of accounting for bad debts that involves expensing accounts at the time they are determined to be uncollectible (p. 350).

Dishonored note A note that is not paid in full at maturity (p. 365).

Factor A finance company or bank that buys receivables from businesses and then collects the payments directly from the customers (p. 357).

Maker The party in a promissory note who is making the promise to pay (p. 361).

Notes payable Obligations in the form of written promissory notes (p. 367).

Notes receivable Claims for which formal instruments of credit are issued as evidence of the debt (p. 362).

Other receivables Nontrade receivables, such as interest receivable, loans to company officers, advances to employees, and income tax refundable (p. 349).

Payee The party to whom payment of a promissory note is to be made (p. 361).

Percentage of receivables basis Management establishes a percentage relationship between the amount of receivables and the expected losses from uncollectible accounts (p. 354).

Percentage of sales basis Management establishes a percentage relationship between the amount of credit sales and expected losses from uncollectible accounts (p. 354).

Promissory note A written promise to pay a specified amount of money on demand or at a definite time (p. 361).

Trade receivables Notes and accounts receivable that result from sales transactions (p. 349).

EXERCISES

Prepare entries for interest-bearing notes.

(SO 2)

12-1 On June 1, Padillio Pasta borrows \$80,000 from First Bank on a six-month, \$80,000, 12 percent note.

Instructions

- Prepare the entry on June 1.
- Prepare the adjusting entry on June 30.
- Prepare the entry at maturity (December 1), assuming monthly adjusting entries have been made through November 30.
- What was the total financing cost (interest expense)?

12-2 In providing accounting services to small businesses, you encounter the following situations pertaining to cash sales:

- Sue Jackson Company rings up sales and sales taxes separately on its cash register. On April 10, the register totals are sales \$30,000 and sales taxes \$2,000.
- Person Company does not segregate sales and sales taxes. Its register total for April 15 is \$28,800, which includes an 8 percent sales tax.

Instructions

Prepare the entry to record the sales transactions and related taxes for each client.

Journalize sales and related taxes.

(SO 3)

12-3 Presented here are two independent situations.

- On January 6, Bennett Catering sells food and services on account to Jackie, Inc., for \$7,000, terms 2/10, n/30. On January 16, Jackie, Inc., pays the amount due. Prepare the entries on Bennett's books to record the sale and related collection.
- On January 10, Erin Bybee uses her Sheridan Co. credit card to purchase kitchen supplies from Sheridan Co. for \$9,000. On February 10, Bybee is billed for the amount due of \$9,000. On February 12, Bybee pays \$6,000 on the balance due. On March 10, Bybee is billed for the amount due, including interest at 2 percent per month on the unpaid balance as of February 12. Prepare the entries on Sheridan Co.'s books related to the transactions that occurred on January 10, February 12, and March 10.

12-4 The ledger of Elburn Grill at the end of the current years shows Accounts Receivable \$110,000; Sales \$840,000; and Sales Returns and Allowances \$28,000.

Instructions

- If Elburn uses the direct write-off method to account for uncollectible accounts, journalize the adjusting entry at December 31, assuming Elburn determines that Copp's \$1,400 balance is uncollectible.
- If Allowance for Doubtful Accounts has a credit balance of \$2,100 in the trial balance, journalize the adjusting entry at December 31, assuming bad debts are expected to be (1) 1 percent of net sales and (2) 10 percent of accounts receivable.
- If Allowance for Doubtful Accounts has a debit balance of \$200 in the trail balance, journalize the adjusting entry at December 31, assuming bad debts are expected to be (1) 0.75 percent of net sales and (2) 6 percent of accounts receivable.

12-5 Leland Hotels has accounts receivable of \$98,100 at March 31. An analysis of the accounts shows the following:

<u>Month of Sale</u>	<u>Balance, March 31</u>
March	\$65,000
February	17,600
January	8,500
Prior to January	7,000
	<u>\$98,100</u>

Credit terms are 2/10, n/30. On March 31, Allowance for Doubtful Accounts has a credit balance of \$1,200 prior to adjustment. The company uses the percentage of receivables basis for estimating uncollectible accounts. The company's estimate of bad debts is as follows:

<u>Age of Accounts</u>	<u>Estimated Percentage Uncollectible</u>
1–30 days	2.0%
30–60 days	5.0%
60–90 days	30.0%
Over 90 days	50.0%

Instructions

- Determine the total estimated uncollectibles.
- Prepare the adjusting entry at March 31 to record bad debts expense.

12-6 On December 31, 2008, Crawford Resorts estimated that 1.5 percent of its net sales of \$400,000 would become uncollectible. The company recorded this amount as an addition to Allowance for Doubtful Accounts. On May 11, 2009, Crawford Co. determined that Kevin Hayes's account was uncollectible and wrote off \$1,100. On June 12, 2009, Hayes paid the amount previously written off.

Instructions

- Prepare the journal entries on December 31, 2008; May 11, 2009; and June 12, 2009.

12-7 Presented here are two independent situations.

- On March 3, Hinckley Appliances sells \$580,000 of its receivables to Marsh Factors, Inc. Marsh Factors assesses a finance charge of 3 percent of the amount of receivables sold. Prepare the entry on Hinckley Appliances' books to record the sale of the receivables.

Journalize entries for recognizing accounts receivable.

(SO 2)

Journalize entries to record allowance for doubtful accounts using two different bases.

(SO 3)

Determine bad debts expense; prepare the adjusting entry for bad debts expense.

(SO 3)

Journalize percentage of sales basis, write-off, recovery.

(SO 3)

Journalize entries for the sale of accounts receivable.

(SO 4)

- (b) On May 10, Cody Company sold merchandise for \$3,800 and accepted the customer's Allstar Bank MasterCard. At the end of the day, the Allstar Bank MasterCard receipts were deposited in the company's bank account. Allstar Bank charges a 4 percent service charge for credit-card sales. Prepare the entry on Cody Company's books to record the sale of merchandise.

Journalize entries for credit-card sales.
(SO 4)

12-8 Presented here are two independent situations.

- (a) On April 2, Julie Keiser uses her KitchenMart Company credit card to purchase kitchen supply from a KitchenMart store for \$1,800. On May 1, Keiser is billed for the \$1,800 amount due. Keiser pays \$700 on the balance due on May 3. On June 1, Keiser receives a bill for the amount due, including interest at 1 percent per month on the unpaid balance as of May 3. Prepare the entries on KitchenMart books related to the transactions that occurred on April 2, May 3, and June 1.
- (b) On July 4, Newark's Restaurant accepts an American Express card for a \$350 dinner bill. American Express charges a 4 percent service fee. On July 10, American Express pays Newark \$336. Prepare the entries on Newark's books related to the transactions.

Journalize entries for notes receivable transactions.
(SO 5, 6)

12-9 Mexico Timeshare, Inc., has the following transactions related to notes receivable during the last two months of 2008:

- Nov. 1 Loaned \$18,000 cash to Norma Hanson on a one-year, 10 percent note.
- Dec. 11 Sold goods to John Countryman, Inc., receiving a \$6,750, ninety-day, 8 percent note.
- 16 Received a \$4,000, six-month, 9 percent note in exchange for Bob Shabo's outstanding accounts receivable.
- 31 Accrued interest revenue on all notes receivable.

Instructions

- (a) Journalize the transactions for Mexico Timeshare, Inc.
- (b) Record the collection of the Hanson note at its maturity in 2009.

Journalize entries for notes receivable.
(SO 5, 6)

12-10 Record the following transactions for Sandwich, Co., in the general journal:

2006

- May 1 Received an \$8,700, one-year, 10 percent note in exchange for Linda Anderson's outstanding accounts receivable.
- Dec. 31 Accrued interest on the Anderson note.
- Dec. 31 Closed the interest revenue account.

2007

- May 1 Received principal plus interest on the Anderson note. (No interest has been accrued in 2009.)

Prepare journal entries related to bad debts expense.
(SO 2, 3, 9)

12-11 At December 31, 2008, Sycamore International Foods reported the following information on its balance sheet:

Accounts receivable	\$1,020,000
Less: Allowance for doubtful accounts	60,000

During 2009, the company had the following transactions related to receivables:

- 1. Sales on account \$2,670,000
- 2. Sales returns and allowances 40,000
- 3. Collections of accounts receivable 2,300,000
- 4. Write-offs of accounts receivable deemed uncollectible 65,000
- 5. Recovery of bad debts previously written off as uncollectible. 20,000

Instructions

- (a) Prepare the journal entries to record each of these five transactions. Assume that no cash discounts were taken on the collections of accounts receivable.
- (b) Enter the January 1, 2009, balances in Accounts Receivable and Allowance for Doubtful Accounts. Post the entries to the two accounts (use T accounts), and determine the balances.
- (c) Prepare the journal entry to record bad debts expense for 2009, assuming that an aging of accounts receivable indicates that estimated bad debts are \$95,000.
- (d) Compute the accounts receivable turnover ratio for the year 2009.

12-12 Brantley Food Supply Co. has the following transactions related to notes receivable during the last two months of the year:

- Nov. 1 Loaned \$15,000 cash to Bayou Bend Restaurant on a one-year, 12 percent note.
 Dec. 11 Sold goods to Walker BBQ receiving a \$8,000, ninety-day, 12 percent note.
 16 Received a \$5,000, 180-day, 10 percent note on account from Jane's Bakery.
 31 Accrued interest revenue on all notes receivable.

Journalize entries for notes receivable transactions.
 (SO 6, 7)

Instructions

Journalize the transactions for Brantley Food Supply Co.

12-13 Record the following transactions for Amy Ice Co. in the general journal:

2008

- May 1 Received a \$12,000, one-year, 10 percent note on account from Rosa's Hamburger.
 Dec. 31 Accrued interest on the note.
 Dec. 31 Closed the interest revenue account.

Journalize entries for notes receivable.
 (SO 7, 8)

2009

- May 1 Received principal plus interest on the note. (No interest has been accrued in 2009.)

12-14 The following is an aging schedule for Griffin Hotel:

Journalize entries to record transactions related to bad debts.
 (SO 2, 3)

Customer	Total	Not Yet Due	Number of Days Past Due			
			1-30	31-60	61-90	Over 90
Hovey	\$ 19,800		\$ 9,800		\$10,000	
Mark	30,000	\$30,000				
Osborne	54,000		12,000	\$ 5,000		\$37,000
Peluso	21,579	17,000			4,579	
Others	124,259	24,000	23,678	46,688	25,333	4,560
	\$249,638	\$71,000	\$45,478	\$51,688	\$39,912	\$41,560
Estimated Percentage Uncollectible		3%	8%	15%	30%	65%
Total Estimated Bad Debts	\$52,509.04	\$2,130.00	\$3,638.24	\$7,753.20	\$11,973.60	\$27,014.00

On December 31, 2008, the unadjusted balance in Allowance for Doubtful Accounts is a credit of \$12,000.

Instructions

- (a) Journalize and post the adjusting entry for bad debts at December 31, 2008.
 (b) Journalize and post to the allowance account the following events and transactions in the year 2009.
 (1) On March 31, a \$1,000 customer balance originating in 2004 is judged uncollectible.
 (2) On May 31, a check for \$1,000 is received from the customer whose account was written off as uncollectible on March 31.
 (c) Journalize the adjusting entry for bad debts on December 31, 2009, assuming that the unadjusted balance in Allowance for Doubtful Accounts is a debit of \$800 and that the aging schedule indicates that total estimated bad debts will be \$30,300.

EXPLORING THE WEB

12-15 The Securities Exchange Act of 1934 requires any firm that is listed on one of the national exchanges to file annual reports (Form 10-K), financial statements, and quarterly reports (Form 10-Q) with the Securities and Exchange Commission (SEC). This exercise demonstrates how to search and access available SEC filings through the Internet.

Address: <http://biz.yahoo.com/i>

Steps

1. Type in a company's name, or use index to find a company name.
2. Choose **Profile**.
3. Choose **Raw SEC Filings**.

Instructions

Answer the following questions:

- (a) Which SEC filings were available for the company you selected?
- (b) In the company's quarterly report (SEC Form 10-Q), what was one key point discussed in the "Management's Discussion and Analysis of Results of Operations and Financial Condition"?
- (c) What was the net income for the period selected?

ETHICS CASE

12-16 The controller of Shirt Co. believes that the yearly allowance for doubtful accounts for Shirt Co. should be 2 percent of net credit sales. The president of Shirt Co., nervous that the stockholders might expect the company to sustain its 10 percent growth rate, suggests that the controller increase the allowance for doubtful accounts to 4 percent. The president thinks that the lower net income, which reflects a 6 percent growth rate, will be a more sustainable rate for Shirt Co.

Instructions

- (a) Who are the stakeholders in this case?
- (b) Does the president's request pose an ethical dilemma for the controller?
- (c) Should the controller be concerned with Shirt Co.'s growth rate in estimating the allowance? Explain your answer.

FINANCIAL REPORTING PROBLEM: PepsiCo



12-17 PepsiCo's financial information is presented in Appendix A. Based on such information, compute the account receivables turnover and average collection period for receivables of PepsiCo in 2006. What conclusions concerning the management of account receivables can be drawn from these data?



12-18 The financial statements of PepsiCo and the Notes to Consolidated Financial statements appear in Appendix A.

Instructions

Refer to PepsiCo's financial statements, and answer the following questions about current and long-term liabilities:

- (a) What were PepsiCo's total current liabilities at December 30, 2006? What was the increase/decrease in PepsiCo's total current liabilities from the prior year?
- (b) In PepsiCo's Note 2 ("Our Significant Accounting Policies"), the company explains the nature of its contingencies. Under what conditions does PepsiCo recognize (record and report) liabilities for contingencies?
- (c) What were the components of total current liabilities on December 30, 2006?
- (d) What was PepsiCo's total long-term debt (excluding deferred income taxes) at December 30, 2006? What was the increase/decrease in total long-term debt (excluding deferred income taxes) from the prior year? What does Note 9 to the financial statements indicate about the composition of PepsiCo's long-term debt obligation?
- (e) What are the total long-term contractual commitments that PepsiCo reports as of December 30, 2006? (See Note 9.)



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

LONG-TERM AND INTANGIBLE ASSETS



THE NAVIGATOR ✓

- Understand *Concepts for Review*
- Read *Feature Story*
- Scan *Study Objectives*
- Read *Preview*
- Read text and answer *Before You Go On*
p. 386 p. 395 p. 400
- Work *Demonstration Problems*
- Review *Summary of Study Objectives*
- Complete *Assignments*

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. The time period assumption. (Ch. 4, p. 105)
- b. The cost principle (Ch. 1, p. 9) and the matching principle. (Ch. 4, p. 106)
- c. Depreciation. (Ch. 4, p. 111)
- d. How to make adjustments for depreciation. (Ch. 4, pp. 111–112)

F FEATURE STORY

Time to Relax

Trellis is a spectacular spa within the tranquil setting of the eighteen-acre property of The Houstonian Hotel, Club & Spa in Houston, Texas. A Mediterranean-style, two-story, residential-style building surrounds a courtyard that offers a beautiful natural garden environment that can be seen through large windows located throughout the spa. Outside the second story of Trellis, there is a balcony overlooking the Houstonian's lush landscape.

This 17,000-square-foot spa houses nineteen treatment rooms, including ten rooms for body treatments, six facial rooms, two couples' rooms (each including two treatment tables and couples' showers and tubs), and a hydrotherapy room. In addition, there are hair-styling stations, manicure and pedicure stations, luxurious locker rooms with Jacuzzi and steam room, an indoor float pool, a comfortable upstairs lounge with a fireplace, and a quiet room for before and after treatments.

How much does it cost to build such a luxurious sanctuary just next to the Galleria and business center in Houston? \$5.6 million. This includes \$4.26 million in construction; \$450,000 in furniture, fixtures, and equipment; \$124,000 in computing; \$380,000 in architecture and consultant fees; and other costs of \$392,000. Why did the Houstonian decide to go with this investment? Al Gallo, the chief financial officer of Redstone Hospitality, which owns and operates the Houstonian Hotel, Club & Spa, offers the following:

First, the existing spa of 5,000 square feet that serves the members

of the fitness club and the hotel and catering patrons is too small. It had long appointment waiting lists; and the facility itself, although somewhat historic, had outlived its usefulness. In addition, though it was owned by Redstone, it was managed by an outside spa company. Mr. Gallo notes that Redstone feels that it can manage and own the spa and can do a better job of controlling member and guest expectations. Finally, demolition of the old spa building made room for the latest addition, the new family-resort-style swimming pool. The new spa was relocated across the street, a few yards away, on a vacant parcel of land previously used as green space and some parking. The name Trellis was chosen in order to incorporate the luscious outdoor landscaping element of the property, and some elements of water were added for a feel of tranquility and relaxation.

The entire project from ground breaking to grand opening took sixteen months, from September 2002 through December 2003. The hiring and training were done two months in advance of opening, and Redstone offered complimentary spa treatments to staff and members for the month prior to opening. Given the clientele, Redstone is quite selective in its hiring of licensed massage therapists. All the new hires go through "Seven Habits" training, a Franklin Covey-style leadership training program. The guests have given it rave reviews, as have the members.



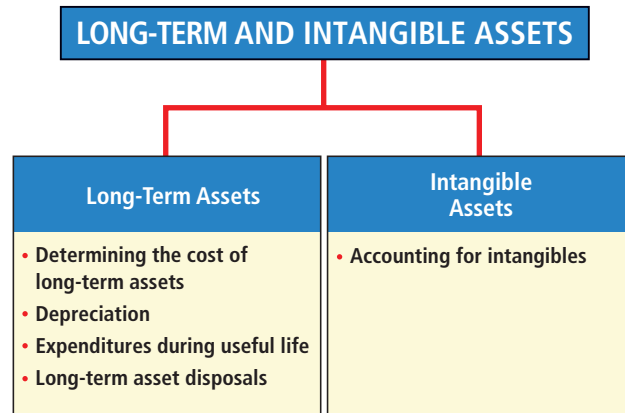
Trellis is the only Mobil four-star spa in the city of Houston. Although 50 percent of the guests are active fitness club members and about 10 percent are hotel guests, 40 percent of the clients are from the local Houston area. Determining the correct balance of treatment rooms to locker rooms and leisure space is a challenge. To accomplish this, Redstone enlisted outside spa consultants. With the current demand, Trellis can use an additional two to three rooms beyond what it has today and therefore has plans already to expand in the near future.

Is it different to be the CFO of a hotel than to be one of a hotel, a club, and a spa all at the same time? Mr. Gallo says that the key is to understand the accounting for the hotel. He has found if one can understand the nuances of hotel accounting, the club and/or spa accounting is much easier to digest because they are large businesses but viewed as additional outlets to the hotel. He did have to learn much more about the spa business with regard to payroll, such as hourly payments versus flat fees for each serv-

PREVIEW OF CHAPTER 13

The accounting for long-term assets has important implications for a company's reported results. In this chapter we explain the application of the cost principle of accounting to property, plant, and equipment, such as the building of the Trellis Spa at the **Houstonian Hotel, Club & Spa**. We also describe the methods that may be used to allocate an asset's cost over its useful life. In addition, the accounting for expenditures incurred during the useful life of assets, such as the cost of replacing kitchen equipment and a catering delivery truck, is discussed.

The content and organization of Chapter 13 are as follows:



FEATURE STORY (CONTINUED)

ice performed.

The volume of work increases significantly within the accounting department itself because the spa is a large generator of invoices to pay,

employees on staff, gift certificates to track, and software to keep up-to-date and interfaced with the other hotel and club systems. By setting the club and spa up similar to, say, an

outlet of the hotel, staff can process the payables, payroll, and receivables in a similar fashion without adding a whole



STUDY OBJECTIVES

After studying this chapter, you should be able to

1. Describe the application of the cost principle to long-term assets.
2. Explain the concept of depreciation.
3. Compute periodic depreciation using different methods.
4. Describe the procedure for revising periodic depreciation.
5. Distinguish between revenue and capital expenditures, and explain the entries for these expenditures.
6. Explain how to account for the disposal of a long-term asset through retirement, sale, or exchange.
7. Contrast the accounting for intangible assets with the accounting for long-term assets.



LONG-TERM ASSETS

Long-term assets are tangible resources that are used in the operations of a business and are not intended for sale to customers. They are also called **property, plant, and equipment; furniture, fixtures, and equipment; or fixed assets**. These assets are generally long-lived. They are expected to provide services to the company for a number of years. Except for land, long-term assets decline in service potential over their useful lives. Many companies have substantial investments in long-term assets. Illustration 13-1 shows the percentages of long-term assets in relation to total assets of companies in several industries.

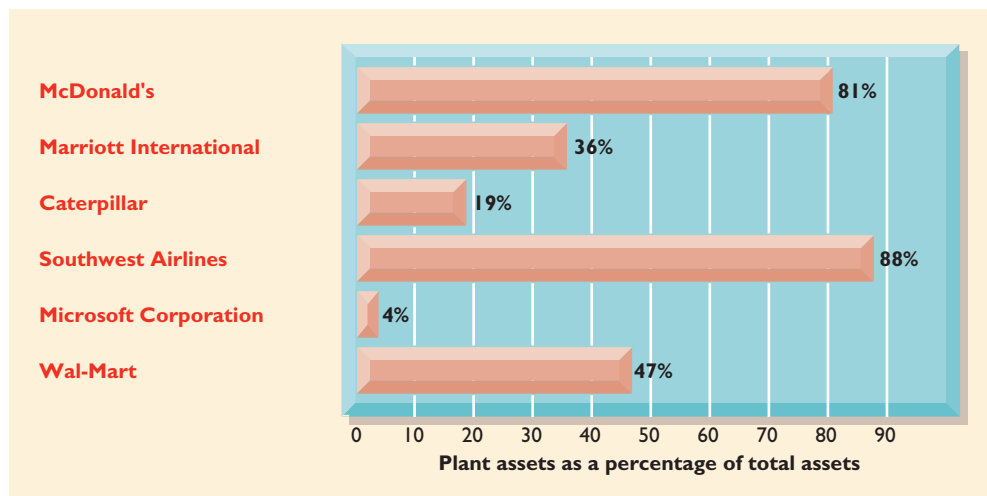


Illustration 13-1

Percentages of long-term assets in relation to total assets

Long-term assets are often subdivided into four classes:

1. **Land**, such as a building site
2. **Land improvements**, such as driveways, parking lots, fences, and underground sprinkler systems
3. **Buildings**, such as stores, offices, hotels, restaurants, retail shops, and warehouses
4. **Equipment**, such as store checkout counters, cash registers, coolers, office furniture, and delivery equipment

Like the purchase of a home by an individual, the acquisition of long-term assets is an important decision for a business. It is also important for a business to (1) keep assets in good operating condition, (2) replace worn-out or outdated assets, and (3) expand its productive resources as needed. The decline of rail travel in the United States can be traced in part to the failure of railroad companies to meet the first two conditions. The growth of U.S. air travel is due in part to airlines having generally met these conditions.

DETERMINING THE COST OF LONG-TERM ASSETS

Long-term assets are recorded *at cost* in accordance with the **cost principle** of accounting. Thus the delivery vehicles at a catering company are recorded at cost. **Cost consists of all expenditures necessary to acquire the asset and to make it ready for its intended use.** For example, the cost of factory machinery includes the purchase price, freight costs paid by the purchaser, and installation costs. Once cost is

STUDY OBJECTIVE 1

Describe the application of the cost principle to long-term assets.

established, it becomes the basis of accounting for the long-term asset over its useful life. Current market or replacement values are not used after acquisition.

The application of the cost principle to each of the major classes of long-term assets is explained in the following sections.

LAND

The cost of land includes the cash purchase price plus other related costs. These costs might include closing costs, such as title and attorney's fees, real estate broker's commissions, and accrued property taxes and other liens on the land assumed by the purchaser. For example, if the cash price is \$50,000 and the purchaser agrees to pay accrued taxes of \$5,000, the cost of the land is \$55,000.

All necessary costs incurred to make land *ready for its intended use* are debited to the Land account. For vacant land, these costs include expenditures for clearing, draining, filling, and grading. Sometimes the land has a building on it that must be removed before construction of a new building. In this case, all demolition and removal costs, less any proceeds from salvaged materials, are debited to the Land account. To illustrate, assume that Hayes Hotel Company acquires land for \$100,000. An old warehouse on the property is razed at a net cost of \$6,000 (\$7,500 in costs less \$1,500 proceeds from salvaged materials). Other expenditures are the attorney's fee, \$1,000, and the real estate broker's commission, \$8,000. The cost of the land is \$115,000, computed in Illustration 13-2.

INTERNATIONAL NOTE

The United Kingdom is more flexible than the United States about asset valuation. Most companies in the United Kingdom make revaluations to fair value when they believe fair value is more relevant. Other countries that permit revaluations are Switzerland and the Netherlands.

Illustration 13-2

Computation of cost of land

<u>Land</u>	
Cash price of property	\$100,000
Net removal cost of warehouse	6,000
Attorney's fee	1,000
Real estate broker's commission	8,000
Cost of land	<u>\$115,000</u>

In recording the acquisition, Land is debited for \$115,000 and Cash is credited for \$115,000.

LAND IMPROVEMENTS

The cost of land improvements includes all expenditures needed to make the improvements ready for their intended use. For example, the cost of a new hotel parking lot will include the amount paid for paving, fencing, and lighting. Thus these costs are debited to Land Improvements. Because these improvements have limited useful lives and their maintenance and replacement are the responsibility of the company, *they are depreciated over their useful lives*.

BUILDINGS

All necessary costs related to the purchase or the construction of a building are debited to the Buildings account. When a building is purchased, such costs include the purchase price, closing costs (attorney's fees, title insurance, etc.), and broker's commission. Costs to make the building ready for its intended use include expenditures for remodeling and replacing or repairing the roof, floors, electrical wiring, and plumbing.

When a new building is constructed, cost consists of the contract price plus payments for architects' fees, building permits, and excavation costs. Also, interest costs incurred to finance the project are included when a significant period of time is required to get the building ready for use. These interest costs are considered as necessary as materials and labor. The inclusion of interest costs is

limited to the *construction period*, however. When construction has been completed, subsequent interest payments on funds borrowed to finance the construction are debited to Interest Expense.

EQUIPMENT

The cost of equipment, such as vehicles, consists of the cash purchase price plus certain related costs. These costs include **sales taxes, freight charges, and insurance during transit paid by the purchaser**. They also include **expenditures required in assembling, installing, and testing the unit**. However, motor vehicle licenses and accident insurance on company trucks and cars are not included in the cost of equipment. They are treated as expenses as they are incurred. They represent annual recurring expenditures and do not benefit future periods.

To illustrate, assume that Merten Hotels purchases kitchen equipment at a cash price of \$50,000. Related expenditures consist of sales taxes \$3,000; insurance during shipping \$500; and installation and testing \$1,000. The cost of the kitchen equipment is \$54,500, computed in Illustration 13-3.

<u>Kitchen Equipment</u>	
Cash price	\$50,000
Sales taxes	3,000
Insurance during shipping	500
Installation and testing	1,000
Cost of kitchen equipment	<u>\$54,500</u>

HELPFUL HINT

Two criteria apply in determining cost here: (1) the frequency of the cost—one-time or recurring and (2) the benefit period—life of asset or one year.

Illustration 13-3

Computation of cost of kitchen equipment

A summary entry is made to record the purchase and related expenditures:

Kitchen Equipment	54,500	
Cash		54,500
(To record purchase of kitchen equipment)		

A	=	L	+	SE
+54,500				
-54,500				

For another example, assume that Lenard Catering purchases a delivery truck at a cash price of \$22,000. Related expenditures consist of sales taxes \$1,320; painting and lettering \$500; motor vehicle license \$80; and a three-year accident insurance policy \$1,600. The cost of the delivery truck is \$23,820, computed in Illustration 13-4.

<u>Delivery Truck</u>	
Cash price	\$22,000
Sales taxes	1,320
Painting and lettering	500
Cost of delivery truck	<u>\$23,820</u>

Illustration 13-4

Computation of cost of delivery truck

The motor vehicle license is expensed when incurred; the insurance policy is a prepaid asset. The summary entry to record the purchase of the truck and related expenditures looks like this:

Delivery Truck	23,820	
License Expense	80	
Prepaid Insurance	1,600	
Cash		25,500
(To record purchase of delivery truck and related expenditures)		

A	=	L	+	SE
+23,820				-80
+1,600				
-25,500				



BEFORE YOU GO ON...

▶ REVIEW IT

1. What are long-term assets? What are the major classes of long-term assets? How is the cost principle applied to accounting for long-term assets?
2. What classifications and amounts does **PepsiCo** report on its balance sheet under the heading “Property and equipment, net”?

▶ DO IT

Assume that a restaurant delivery truck is purchased for \$15,000 cash, plus sales taxes of \$900 and delivery costs to the dealer of \$500. The restaurant also pays \$200 for painting and lettering, \$600 for an annual insurance policy, and \$80 for a motor vehicle license. Explain how each of these costs would be accounted for.

ACTION PLAN

- Identify expenditures made in order to get delivery equipment ready for its intended use.
- Expense operating costs incurred during the useful life of the equipment.

SOLUTION

The first four payments (\$15,000, \$900, \$500, and \$200) are considered to be expenditures necessary to make the truck ready for its intended use. Thus, the cost of the truck is \$16,600. The payments for insurance and the license are considered to be operating expenses incurred during the useful life of the asset.



STUDY OBJECTIVE 2

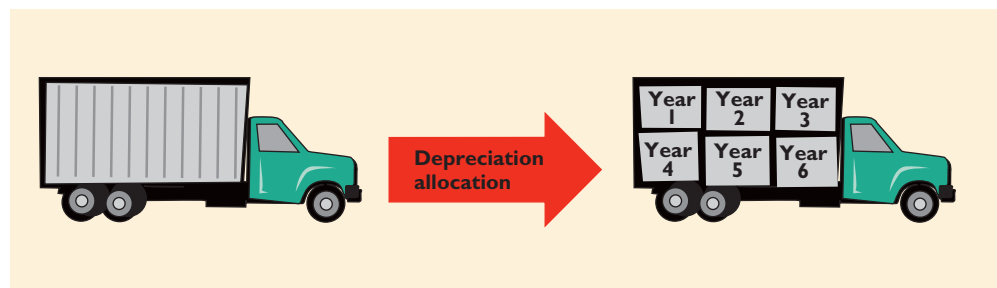
Explain the concept of depreciation.

DEPRECIATION

As explained in Chapter 3, **depreciation is the allocation of the cost of a plant asset to expense over its useful (service) life in a rational and systematic manner.** Cost allocation provides for the proper matching of expenses with revenues in accordance with the matching principle (see Illustration 13-5).

Illustration 13-5

Depreciation as an allocation concept



HELPFUL HINT

Remember that depreciation is the allocation of cost over the useful life of an asset. It is not a measure of value.

Depreciation is a process of cost allocation, not a process of asset valuation. The change in an asset’s market value is not measured during ownership because plant assets are not held for resale. So the **book value** (cost less accumulated depreciation) of a plant asset may be quite different from its market value.

Depreciation applies to three classes of plant assets: (1) land improvements (2) buildings, and (3) equipment. Each asset in these classes is considered to be a **depreciable asset**. Why? Because the usefulness to the company and the revenue-producing ability of each asset will decline over the asset’s useful life. Depreciation does not apply to land because its usefulness and revenue-producing ability generally remain intact over time. In fact, in many cases, the usefulness of land is greater over time because of the scarcity of good land sites. Thus land is *not* a depreciable asset.

During a depreciable asset's useful life, its revenue-producing ability will decline because of wear and tear. A delivery truck that has been driven 100,000 miles will be less useful to a company than one driven only 800 miles. Trucks and planes exposed to snow and salt will deteriorate faster than equipment that is not exposed to these elements.

Revenue-producing ability also may decline because of *obsolescence*. Obsolescence is the process of becoming out of date before the asset physically wears out. Major airlines were rerouted from Chicago's Midway Airport to Chicago-O'Hare International Airport because Midway's runways were too short for jumbo jets, for example.

It is important to understand that **recognizing depreciation on an asset does not result in an accumulation of cash for replacement of the asset**. The balance in Accumulated Depreciation represents the total cost that has been charged to expense. It is not a cash fund. However, not recognizing depreciation will lead to overvaluing the asset and thus misrepresenting the financial picture of the hospitality company. Therefore, it is important that depreciation is recognized properly.

Factors in Computing Depreciation

Three factors affect the computation of depreciation:

1. **Cost.** Issues affecting the cost of a depreciable asset were explained earlier in this chapter. Recall that plant assets are recorded at cost, in accordance with the cost principle.
2. **Useful life.** **Useful life** is an estimate of the expected productive life, also called *service life*, of the asset. Useful life may be expressed in terms of units of time, units of activity (such as machine hours), or units of output. Useful life is an estimate. In making the estimate, management considers such factors as the intended use of the asset, its expected repair and maintenance, and its vulnerability to obsolescence. Past experience with similar assets is often helpful in deciding on expected useful life. We might reasonably expect the estimated useful life used by **Rent-a-Wreck** to differ from that used by **Avis**.
3. **Salvage value.** **Salvage value** is an estimate of the asset's value at the end of its useful life. This value may be based on the asset's worth as scrap or on its expected trade-in value. Like useful life, salvage value is an estimate. In making the estimate, management considers how it plans to dispose of the asset and its experience with similar assets.

ALTERNATIVE TERMINOLOGY
Another term sometimes used for salvage value is *residual value*.

Illustration 13-6 summarizes the three factors used in computing depreciation.

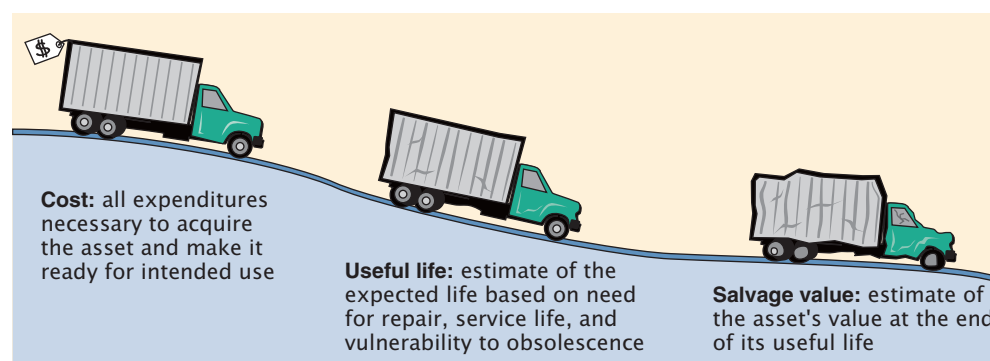


Illustration 13-6

Three factors in computing depreciation

HELPFUL HINT

Depreciation expense is reported on the income statement, and accumulated depreciation is reported as a deduction from plant assets on the balance sheet.

ACCOUNTING IN ACTION *Business Insight*



The **Houstonian Hotel, Club & Spa** welcomes 86,000 guests per year and has a member list of about 10,000. It also hosts meetings and interviews for President George W. Bush. Therefore, anything that is done at the Houstonian is always first class. However, with buildings that depreciate, renovations and upkeeps, and building a new spa, how does the Houstonian deal with the issue of depreciation?

Mr. Al Gallo explains: “We capitalize our assets and break them out in terms of hard construction costs, soft costs—or those costs associated with architectural fees, project managers and consultants, also furniture fixtures and equipment—and finally we categorize separately our computer equipment and security and surveillance equipment. Each category listed above has a unique life established. We would employ MACRS [Modified Accelerated Cost Recovery System] for tax and simple depreciation for book as well. After the project is finished, we would move the ‘work in progress’ amounts into the ‘fixed assets’ and depreciate them monthly in order to properly match revenues and expenses.”

STUDY OBJECTIVE 3

Compute periodic depreciation using different methods.

Depreciation Methods

Depreciation is generally computed using one of four methods:

1. Straight-line
2. Units-of-activity
3. Declining-balance
4. Sum-of-years'-digits

Each method is acceptable under generally accepted accounting principles. Management selects the method(s) it believes to be appropriate. The objective is to select the method that best measures an asset's contribution to revenue over its useful life. Once a method is chosen, it should be applied consistently over the useful life of the asset. Consistency enhances the comparability of financial statements.

We will compare the three depreciation methods using the data in Illustration 13-7 for a small delivery truck purchased by Barb's Florists on January 1, 2008. Barb's supplies many arrangement to hotels for weddings and special events.

Illustration 13-7

Delivery truck data

Cost	\$13,000
Expected salvage value	\$ 1,000
Estimated useful life in years	5
Estimated useful life in miles	100,000

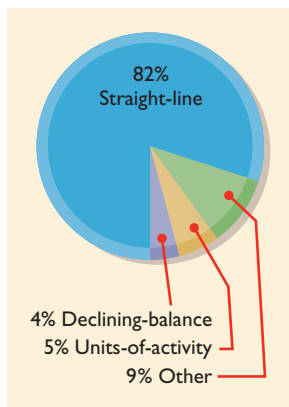


Illustration 13-8

Use of depreciation methods in 600 large U.S. companies

Depreciation affects the balance sheet through accumulated depreciation and the income statement through depreciation expense. Illustration 13-8 (in the margin) shows the use of the different depreciation methods in 600 of the largest companies in the United States.

STRAIGHT-LINE Under the **straight-line method**, depreciation is the same for each year of the asset's useful life. It is measured solely by the passage of time.

In order to compute depreciation expense under the straight-line method, it is necessary to determine **depreciable cost**—the cost of the asset less its salvage value. It represents the total amount subject to depreciation. Under the straight-line method, depreciable cost is divided by the asset's useful life to determine annual depreciation expense. The computation of depreciation expense in the first year for Barb's Florists' delivery truck is shown in Illustration 13-9.

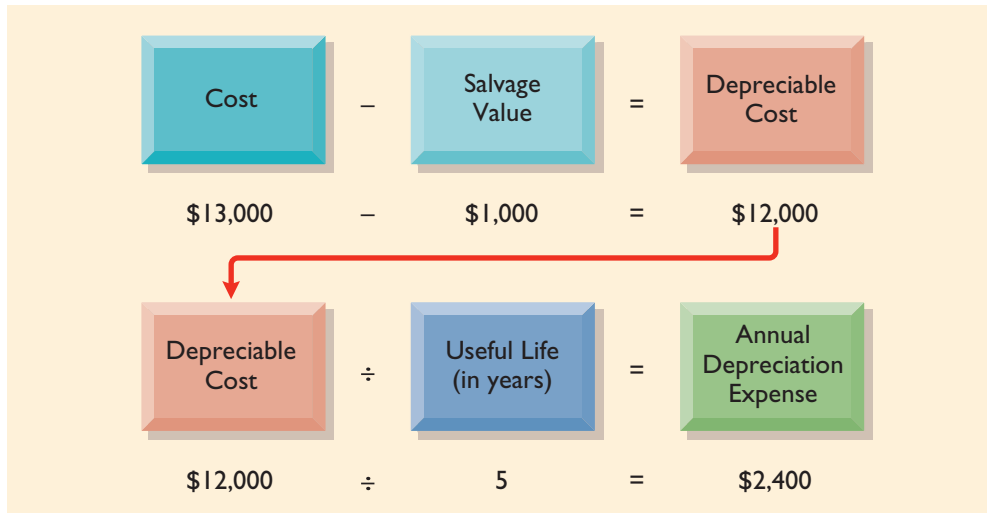


Illustration 13-9

Formula for straight-line method

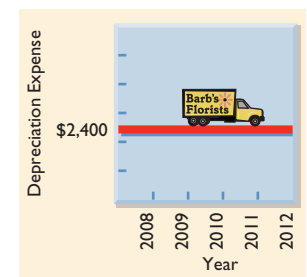
Alternatively, we also can compute an **annual rate of depreciation**. In this case, the rate is 20 percent ($100\% \div 5$ years). When an annual straight-line rate is used, the percentage rate is applied to the depreciable cost of the asset. The use of an annual rate is shown in the **depreciation schedule** in Illustration 13-10.

BARB'S FLORISTS						
Year	Computation		Annual Depreciation Expense	End of Year		
	Depreciable Cost	× Depreciation Rate		Accumulated Depreciation	Book Value	
2008	\$12,000	20%	\$2,400	\$ 2,400	\$10,600*	
2009	12,000	20	2,400	4,800	8,200	
2010	12,000	20	2,400	7,200	5,800	
2011	12,000	20	2,400	9,600	3,400	
2012	12,000	20	2,400	12,000	1,000	

*($\$13,000 - \$2,400$)

Illustration 13-10

Straight-line depreciation schedule



Note that the depreciation expense of \$2,400 is the same each year. The book value at the end of the useful life is equal to the estimated \$1,000 salvage value.

What happens when an asset is purchased *during* the year, rather than on January 1, as in our example? In that case, it is necessary to *prorate the annual depreciation* on a time basis. If Barb's Florists had purchased the delivery truck on April 1, 2008, the depreciation for 2008 would be \$1,800 ($\$12,000 \times 20\% \times 9/12$ of a year).

The straight-line method predominates in practice. Such large companies as **Campbell Soup**, **Marriott Corporation**, and **General Mills** use the straight-line method. It is simple to apply, and it matches expenses with revenues when the use of the asset is reasonably uniform throughout the service life.

UNITS-OF-ACTIVITY Under the **units-of-activity method**, useful life is expressed in terms of the total units of production or use expected from the asset rather than as a time period. The units-of-activity method is ideally suited to factory

ALTERNATIVE TERMINOLOGY

Another term often used is the *units-of-production method*.

machinery. Production can be measured in units of output (machine hours). This method also can be used for such assets as delivery equipment (miles driven) and airplanes (hours in use). The units-of-activity method is generally not suitable for buildings or furniture because depreciation for these assets is more a function of time than of use.

To use this method, the total units of activity for the entire useful life are estimated, and these units are divided into depreciable cost. The resulting number represents the depreciation cost per unit. The depreciation cost per unit is then applied to the units of activity during the year to determine the annual depreciation expense.

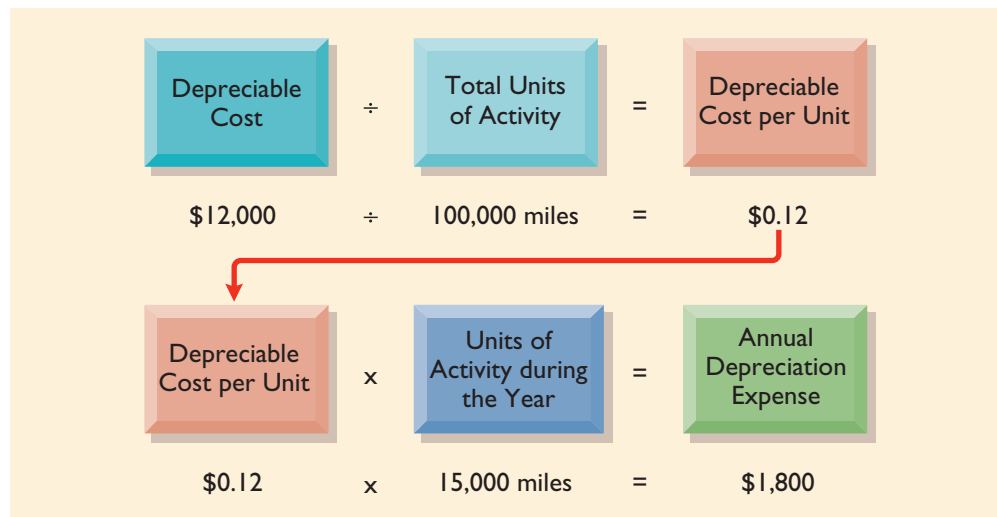
To illustrate, assume that Barb’s Florists’ delivery truck is driven 15,000 miles in the first year. The computation of depreciation expense in the first year is shown in Illustration 13-11.

HELPFUL HINT

Under any method, depreciation stops when the asset’s book value equals expected salvage value.

Illustration 13-11

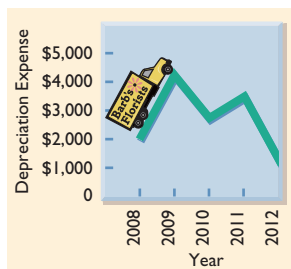
Formula for units-of-activity method



The units-of-activity depreciation schedule, using assumed mileage, is shown in Illustration 13-12.

Illustration 13-12

Units-of-activity depreciation schedule



BARB'S FLORISTS						
Year	Computation		Annual Depreciation Expense	End of Year		
	Units of Activity	× Depreciation Cost/Unit		Accumulated Depreciation	Book Value	
2008	15,000	× \$0.12	\$1,800	\$ 1,800	\$11,200*	
2009	30,000	× 0.12	3,600	5,400	7,600	
2010	20,000	× 0.12	2,400	7,800	5,200	
2011	25,000	× 0.12	3,000	10,800	2,200	
2012	10,000	× 0.12	1,200	12,000	1,000	

*(\$13,000 – \$1,800)

This method is easy to apply when assets are purchased during the year. In such a case, the productivity of the asset for the partial year is used in computing the depreciation.

The units-of-activity method is not nearly as popular as the straight-line method (see Illustration 13-8) primarily because it is often difficult to make a

reasonable estimate of total activity. It is also not widely used in hospitality businesses. However, this method is used by some very large companies, such as **ChevronTexaco Corp.** and **Boise Cascade Corporation** (a forestry company). When the productivity of an asset varies significantly from one period to another, the units-of-activity method results in the best matching of expenses with revenues.

DECLINING-BALANCE The **declining-balance method** produces a decreasing annual depreciation expense over the asset’s useful life. The method is so named because the periodic depreciation is based on a *declining book value* (cost less accumulated depreciation) of the asset. Annual depreciation expense is computed by multiplying the book value at the beginning of the year by the declining-balance depreciation rate. **The depreciation rate remains constant from year to year, but the book value to which the rate is applied declines each year.**

Book value at the beginning of the first year is the cost of the asset. This is so because the balance in accumulated depreciation at the beginning of the asset’s useful life is zero. In subsequent years, book value is the difference between cost and accumulated depreciation to date. Unlike the other depreciation methods, the declining-balance method does not use depreciable cost. That is, **salvage value is ignored in determining the amount to which the declining-balance rate is applied.** Salvage value, however, does limit the total depreciation that can be taken. Depreciation stops when the asset’s book value equals expected salvage value.

A common declining-balance rate is double the straight-line rate. As a result, the method is often referred to as the **double-declining-balance method**. If Barb’s Florists uses the double-declining-balance method, the depreciation rate is 40 percent (2 × the straight-line rate of 20%). The computation of depreciation for the first year on the delivery truck is shown in Illustration 13-13.

HELPFUL HINT
Book value is variable, and the depreciation rate is constant for this method.

Book Value at Beginning of Year	×	Declining- Balance Rate	=	Annual Depreciation Expense
\$13,000	×	40%	=	\$5,200

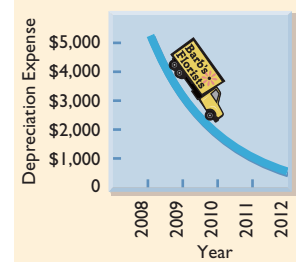
Illustration 13-13
Formula for declining-balance method

Illustration 13-14 shows the depreciation schedule under this method.

BARB’S FLORISTS						
Year	Computation		=	Annual Depreciation Expense	End of Year	
	Book Value Beginning of Year	Depreciation Rate			Accumulated Depreciation	Book Value
2008	\$13,000	40%		\$5,200	\$ 5,200	\$7,800
2009	7,800	40		3,120	8,320	4,680
2010	4,680	40		1,872	10,192	2,808
2011	2,808	40		1,123	11,315	1,685
2012	1,685	40		685*	12,000	1,000

*Computation of \$674 (\$1,685 × 40%) is adjusted to \$685 in order for book value to equal salvage value.

Illustration 13-14
Double-declining-balance depreciation schedule



HELPFUL HINT

The method to be used for an asset that is expected to be more productive in the first half of its useful life is the declining-balance method.

You can see that the delivery equipment is 69 percent depreciated ($\$8,320 \div \$12,000$) at the end of the second year. Under the straight-line method it would be depreciated 40 percent ($\$4,800 \div \$12,000$) at that time. Because the declining-balance method produces higher depreciation expense in the early years than in the later years, it is considered an **accelerated-depreciation method**. The declining-balance method is compatible with the matching principle. The higher depreciation expense in early years is matched with the higher benefits received in these years. On the other hand, lower depreciation expense is recognized in later years when the asset's contribution to revenue is less. Also, some assets lose usefulness rapidly because of obsolescence. In these cases, the declining-balance method provides a more appropriate depreciation amount.

When an asset is purchased during the year, the first year's declining-balance depreciation must be prorated on a time basis. For example, if Barb's Florists had purchased the truck on April 1, 2008, depreciation for 2008 would become \$3,900 ($\$13,000 \times 40\% \times 9/12$). The book value at the beginning of 2009 is then \$9,100 ($\$13,000 - \$3,900$), and the 2009 depreciation is \$3,640 ($\$9,100 \times 40\%$). Subsequent computations would follow from those amounts.

SUM-OF-YEARS'-DIGITS Similar to the straight-line method, in the **sum-of-years'-digits method**, it is necessary to determine the salvage value and the depreciable cost. Once these are determined, the digits of the years of the asset's expected useful life will be added to be used as the denominator of the calculation, while the years' digits are used in reverse order as the numerator for depreciation. Using this method, depreciation expense will be highest during the first year of usage and will decline as time passes, giving the business the most depreciation write-off at the beginning of the asset's useful life. The computation of depreciation expense for Barb's Florists' truck follows:

With a five-year useful life, the denominator for the calculation will be, as the name of this method suggests, the sum of the digits: $1 + 2 + 3 + 4 + 5 = 15$. In case the life of an asset runs up to some higher figures, this formula may come in handy:

$$\text{Sum of years' digits} = n(n + 1) / 2$$

Since 5 is the number of years of useful life, then the sum of years' digits will be

$$(5 \times 6) \div 2 = 15$$

Illustration 13-15 shows the depreciation schedule for the sum-of-years'-digits method for Barb's Florists.

Illustration 13-15

Sum-of-years'-digits depreciation schedule

BARB'S FLORISTS							
Year	Rate	Computation			End of Year		
		×	Depreciable Cost	=	Annual Depreciation	Accumulated Depreciation	Book Value
2008	5/15	×	\$12,000	=	\$4,000	\$ 4,000	\$9,000*
2009	4/15	×	12,000	=	3,200	7,200	5,800
2010	3/15	×	12,000	=	2,400	9,600	3,400
2011	2/15	×	12,000	=	1,600	11,200	1,800
2012	1/15	×	12,000	=	800	12,000	1,000

*($\$13,000 - \$4,000$)

Comparison of Methods

A comparison of annual and total depreciation expense under each of the four methods is shown for Barb’s Florists in Illustration 13-16.

Year	Straight-Line	Units-of-Activity	Declining-Balance	Sum-of-Years'-Digits
2008	\$ 2,400	\$ 1,800	\$ 5,200	\$ 4,000
2009	2,400	3,600	3,120	3,200
2010	2,400	2,400	1,872	2,400
2011	2,400	3,000	1,123	1,600
2012	2,400	1,200	685	800
	\$12,000	\$12,000	\$12,000	\$12,000

Illustration 13-16

Comparison of depreciation methods

Observe that annual depreciation varies considerably among the methods. But total depreciation is the same for the five-year period under all four methods. Each method is acceptable in accounting because each recognizes the decline in service potential of the asset in a rational and systematic manner. The depreciation expense pattern under each method is presented graphically in Illustration 13-17.

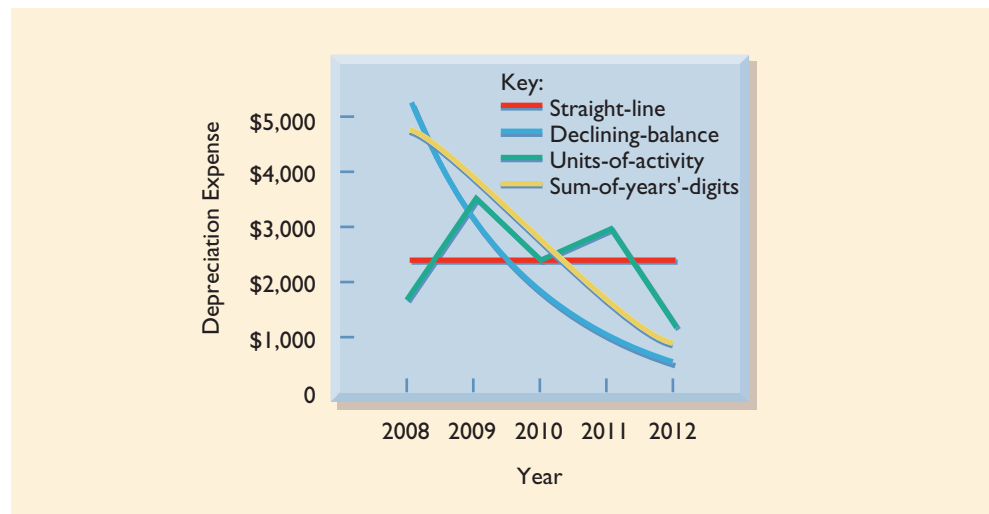


Illustration 13-17

Patterns of depreciation

Depreciation and Income Taxes

The Internal Revenue Service (IRS) allows corporate taxpayers to deduct depreciation expense when they compute taxable income. However, the IRS does not require the taxpayer to use the same depreciation method on the tax return that is used in preparing financial statements. Many corporations use straight-line in their financial statements to maximize net income. At the same time, they use a special **accelerated-depreciation method** on their tax returns to minimize their income taxes. Taxpayers must use on their tax returns either the straight-line method or a special accelerated-depreciation method called the **Modified Accelerated Cost Recovery System (MACRS)**.

MACRS

MACRS has been in place since 1986. As its name implies, and similar to the double-declining-balance and sum-of-years'-digits methods, it allows taxpayers to

depreciate their assets at an accelerated rate, faster than the straight-line method. MACRS classifies property into six recovery classes of three-, five-, seven-, ten-, fifteen-, and twenty-year. For example, computers are classified as a five-year life property, whereas office desks are a ten-year property. A table is normally used to assist taxpayers in determining the percentage that can be written off as depreciation for the asset depending on its class life and when in the year the asset is purchased. You will learn more about MACRS in a finance class regarding taxation implications.

TECHNOLOGY IN ACTION



Software packages to account for long-term assets exist for both large and small computer systems. Even the least sophisticated packages can maintain a control and subsidiary ledger for long-term assets and make the necessary depreciation computations and adjusting entries. Many packages also maintain separate depreciation schedules for both financial statement and income tax purposes, with reconciliations made for any differences.

STUDY OBJECTIVE 4

Describe the procedure for revising periodic depreciation.

REVISING PERIODIC DEPRECIATION

Depreciation is one example of the use of estimation in the accounting process. Annual depreciation expense should be reviewed periodically by management. If wear and tear or obsolescence indicate that annual depreciation estimates are inadequate or excessive, a change should be made.

When a change in an estimate is required, the change is made in *current and future years*. It is not made retroactively to *prior periods*. Thus there is no correction of previously recorded depreciation expense. Instead, depreciation expense for current and future years is revised. The rationale is that continual restatement of prior periods would adversely affect confidence in financial statements.

To determine the new annual depreciation expense, we first compute the asset's depreciable cost at the time of the revision. We then allocate the revised depreciable cost to the remaining useful life. To illustrate, assume that Barb's Florists decides on January 1, 2009, to extend the useful life of the truck one year because of its excellent condition. The company has used the straight-line method to depreciate the asset to date, and book value is \$5,800 (\$13,000 - \$7,200). The new annual depreciation is \$1,600, computed in Illustration 13-18.

Barb's Florists makes no entry for the change in estimate. On December 31,

Illustration 13-18

Revised depreciation computation

Book value, 1/1/09	\$ 5,800
Less: Salvage value	1,000
Depreciable cost	<u>\$ 4,800</u>
Remaining useful life	<u>3 years</u> (2009–2012)
Revised annual depreciation (\$4,800 ÷ 3)	<u>\$ 1,600</u>

HELPFUL HINT

Use a step-by-step approach: (1) Determine new depreciable cost; (2) divide by remaining useful life.

2009, during the preparation of adjusting entries, it would record depreciation expense of \$1,600. Significant changes in estimates must be described in the financial statements.

BEFORE YOU GO ON...

► REVIEW IT

1. What is the relationship, if any, of depreciation to (a) cost allocation, (b) asset valuation, and (c) cash accumulation?
2. Explain the factors that affect the computation of depreciation.
3. What are the formulas for computing annual depreciation under each of the depreciation methods?
4. How do the methods differ in terms of their effects on annual depreciation over the useful life of the asset?
5. Are revisions of periodic depreciation made to prior periods? Explain.

► DO IT

On January 1, 2008, Iron Mountain Ski Corporation purchased a new snow-grooming machine for \$50,000. The machine is estimated to have a ten-year life with a \$2,000 salvage value. What journal entry would Iron Mountain Ski Corporation make at December 31, 2008, if it uses the straight-line method of depreciation?

ACTION PLAN

- Calculate depreciable cost (Cost – Salvage value).
- Divide the depreciable cost by the estimated useful life.

SOLUTION

$$\text{Depreciation expense} = \frac{\text{Cost} - \text{Salvage value}}{\text{Useful life}} = \frac{\$50,000 - \$2,000}{10} = \$4,800$$

The entry to record the first year's depreciation would be

Dec. 31	Depreciation Expense Accumulated Depreciation (To record annual depreciation on snow-grooming machine)	4,800	4,800
---------	--	-------	-------



EXPENDITURES DURING USEFUL LIFE

During the useful life of a plant asset, a company may incur costs for ordinary repairs, additions, or improvements. **Ordinary repairs** are expenditures to maintain the operating efficiency and the productive life of the unit. They usually are fairly small amounts that occur frequently. Motor tune-ups and oil changes, the painting of buildings, and the replacing of worn-out gears on machinery are examples. Such repairs are debited to Repair (or Maintenance) Expense as they are incurred. Because they are immediately charged as an expense against revenues, these costs are often referred to as **revenue expenditures**.

Additions and improvements are costs incurred to increase the operating efficiency, productive capacity, or useful life of a long-term asset. They are usually material in amount and occur infrequently. Additions and improvements increase the company's investment in productive facilities and are generally debited to the long-term asset affected. They are often referred to as **capital expenditures**. Most major U.S. corporations disclose annual capital expenditures. The **Venetian** in Las Vegas spent over \$275 million in an expansion project in 2003, while **Coca-Cola** reported capital expenditures of \$851 million in 2002.

STUDY OBJECTIVE 5

Distinguish between revenue and capital expenditures, and explain the entries for these expenditures.

ACCOUNTING IN ACTION Ethics Insight

In what could become one of the largest accounting frauds in history, **WorldCom** announced the discovery of \$7 billion in expenses improperly booked as capital expenditures, a gimmick that boosted profit over a recent five-quarter period. If these expenses had been recorded properly, WorldCom, one of the biggest stock market stars of the 1990s, would have reported a net loss for 2001, as well as for the first quarter of 2002. Instead, WorldCom reported a profit of \$1.4 billion for 2001 and \$130 million for the first quarter of 2002. As a result of these problems, WorldCom declared bankruptcy, to the dismay of its investors and creditors.

What erroneous accounting entries (accounts debited and credited) were made by WorldCom? What is the correcting entry that should be recorded, and what is its effect on WorldCom's financial statements?

STUDY OBJECTIVE 6

Explain how to account for the disposal of a long-term asset through retirement, sale, or exchange.

LONG-TERM ASSET DISPOSALS

Long-term assets may be disposed of in three ways—(1) retirement, (2) sale, or (3) exchange—as shown in Illustration 13-19. Whatever the method, at the time of disposal, it is necessary to determine the book value of the long-term asset. As noted earlier, *book value* is the difference between the cost of a long-term asset and the accumulated depreciation to date.

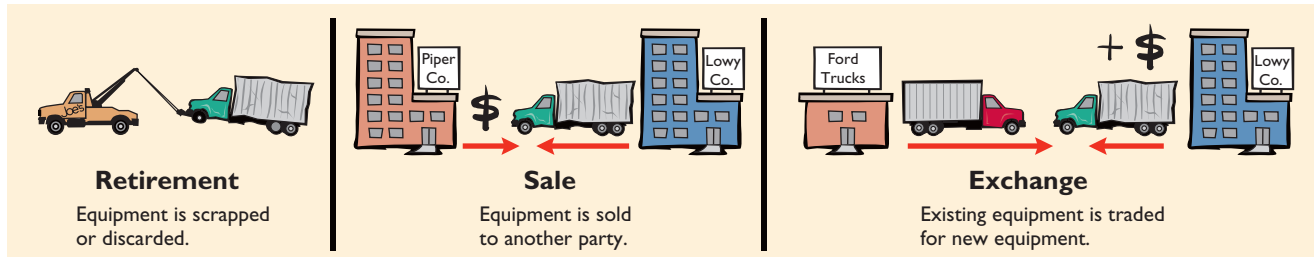


Illustration 13-19

Methods of long-term asset disposal

At the time of disposal, depreciation for the fraction of the year to the date of disposal must be recorded. The book value is then eliminated by debiting (decreasing) Accumulated Depreciation for the total depreciation to date and crediting (decreasing) the asset account for the cost of the asset. In this section we will examine the accounting for each of the three methods of long-term asset disposal.

Retirement of Long-Term Assets

To illustrate the retirement of long-term assets, assume that Hobart Country Club retires its computer printers, which cost \$32,000. The accumulated depreciation on these printers is \$32,000. The equipment, therefore, is fully depreciated (zero book value). The entry to record this retirement is as follows:

A = L + SE
+32,000
-32,000

Accumulated Depreciation—Printing Equipment	32,000	
Printing Equipment		32,000
(To record retirement of fully depreciated equipment)		

What happens if a fully depreciated long-term asset is still useful to the company? In this case, the asset and its accumulated depreciation continue to be reported on the balance sheet without further depreciation adjustment until the asset

is retired. Reporting the asset and related accumulated depreciation on the balance sheet informs the financial statement reader that the asset is still in use. However, once an asset is fully depreciated, even if it is still being used, no additional depreciation should be taken. In no situation can the accumulated depreciation on a long-term asset exceed its cost.

If a long-term asset is retired before it is fully depreciated and no scrap or salvage value is received, a loss on disposal occurs. For example, assume that Sunset Catering discards delivery equipment that cost \$18,000 and has accumulated depreciation of \$14,000. The entry is as follows:

Accumulated Depreciation—Delivery Equipment	14,000			
Loss on Disposal	4,000			18,000
Delivery Equipment (To record retirement of delivery equipment at a loss)				

HELPFUL HINT

When a long-term asset is disposed of, all amounts related to the asset must be removed from the accounts. This includes the original cost in the asset account and the total depreciation to date in the accumulated depreciation account.

	A	=	L	+	SE
	+14,000				-4,000
	-18,000				

The loss on disposal is reported in the “other expenses and losses” section of the income statement.

Sale of Long-Term Assets

In a disposal by sale, the book value of the asset is compared with the proceeds received from the sale. **If the proceeds of the sale exceed the book value of the long-term asset, a gain on disposal occurs. If the proceeds of the sale are less than the book value of the long-term asset sold, a loss on disposal occurs.**

Only by coincidence will the book value and the fair market value of the asset be the same when the asset is sold. Gains and losses on sales of plant assets are therefore quite common. For example, **Delta Airlines** reported a \$94,343,000 gain on the sale of five **Boeing** B-727-200 aircraft and five **Lockheed** L-1011-1 aircraft.

GAIN ON DISPOSAL. To illustrate a gain, assume that on July 1, 2008, Wright Hotels sells some of its hotel furniture for \$16,000 cash. The furniture originally cost \$60,000. As of January 1, 2008, it had accumulated depreciation of \$41,000. Depreciation for the first six months of 2008 is \$8,000. The entry to record depreciation expense and update accumulated depreciation to July 1 is as follows:

July 1	Depreciation Expense Accumulated Depreciation—Furniture (To record depreciation expense for the first 6 months of 2008)	8,000		
				8,000

	A	=	L	+	SE
	-8,000				-8,000

After the accumulated depreciation balance is updated, a gain on disposal of \$5,000 is computed, as shown in Illustration 13-20.

Cost of furniture	\$60,000
Less: Accumulated depreciation (\$41,000 + \$8,000)	49,000
Book value at date of disposal	11,000
Proceeds from sale	16,000
Gain on disposal	\$ 5,000

Illustration 13-20

Computation of gain on disposal

The entry to record the sale and the gain on disposal is as follows:

<table border="1"> <tr><td>A</td><td>=</td><td>L</td><td>+</td><td>SE</td></tr> <tr><td>+16,000</td><td></td><td></td><td></td><td>+5,000</td></tr> <tr><td>+49,000</td><td></td><td></td><td></td><td></td></tr> <tr><td>-60,000</td><td></td><td></td><td></td><td></td></tr> </table>	A	=	L	+	SE	+16,000				+5,000	+49,000					-60,000					<table border="0"> <tr> <td style="padding-right: 10px;">July 1</td> <td style="padding-right: 10px;">Cash</td> <td style="border-left: 1px solid black; padding-left: 10px;">16,000</td> <td style="border-left: 1px solid black; padding-left: 10px;"></td> </tr> <tr> <td></td> <td>Accumulated Depreciation—Furniture</td> <td style="border-left: 1px solid black; padding-left: 10px;">49,000</td> <td style="border-left: 1px solid black; padding-left: 10px;"></td> </tr> <tr> <td></td> <td>Furniture</td> <td style="border-left: 1px solid black; padding-left: 10px;"></td> <td style="border-left: 1px solid black; padding-left: 10px;">60,000</td> </tr> <tr> <td></td> <td>Gain on Disposal</td> <td style="border-left: 1px solid black; padding-left: 10px;"></td> <td style="border-left: 1px solid black; padding-left: 10px;">5,000</td> </tr> <tr> <td></td> <td>(To record sale of furniture at a gain)</td> <td style="border-left: 1px solid black; padding-left: 10px;"></td> <td style="border-left: 1px solid black; padding-left: 10px;"></td> </tr> </table>	July 1	Cash	16,000			Accumulated Depreciation—Furniture	49,000			Furniture		60,000		Gain on Disposal		5,000		(To record sale of furniture at a gain)		
A	=	L	+	SE																																					
+16,000				+5,000																																					
+49,000																																									
-60,000																																									
July 1	Cash	16,000																																							
	Accumulated Depreciation—Furniture	49,000																																							
	Furniture		60,000																																						
	Gain on Disposal		5,000																																						
	(To record sale of furniture at a gain)																																								

The gain on disposal is reported in the “other revenues and gains” section of the income statement.

LOSS ON DISPOSAL. Assume that instead of selling the furniture for \$16,000, Wright sells it for \$9,000. In this case, a loss of \$2,000 is computed, as shown in Illustration 13-21.

Illustration 13-21

Computation of loss on disposal

Cost of furniture	\$60,000
Less: Accumulated depreciation	49,000
Book value at date of disposal	11,000
Proceeds from sale	9,000
Loss on disposal	\$2,000

The entry to record the sale and the loss on disposal is as follows:

<table border="1"> <tr><td>A</td><td>=</td><td>L</td><td>+</td><td>SE</td></tr> <tr><td>+9,000</td><td></td><td></td><td></td><td>-2,000</td></tr> <tr><td>+49,000</td><td></td><td></td><td></td><td></td></tr> <tr><td>-60,000</td><td></td><td></td><td></td><td></td></tr> </table>	A	=	L	+	SE	+9,000				-2,000	+49,000					-60,000					<table border="0"> <tr> <td style="padding-right: 10px;">July 1</td> <td style="padding-right: 10px;">Cash</td> <td style="border-left: 1px solid black; padding-left: 10px;">9,000</td> <td style="border-left: 1px solid black; padding-left: 10px;"></td> </tr> <tr> <td></td> <td>Accumulated Depreciation—Furniture</td> <td style="border-left: 1px solid black; padding-left: 10px;">49,000</td> <td style="border-left: 1px solid black; padding-left: 10px;"></td> </tr> <tr> <td></td> <td>Loss on Disposal</td> <td style="border-left: 1px solid black; padding-left: 10px;">2,000</td> <td style="border-left: 1px solid black; padding-left: 10px;"></td> </tr> <tr> <td></td> <td>Furniture</td> <td style="border-left: 1px solid black; padding-left: 10px;"></td> <td style="border-left: 1px solid black; padding-left: 10px;">60,000</td> </tr> <tr> <td></td> <td>(To record sale of furniture at a loss)</td> <td style="border-left: 1px solid black; padding-left: 10px;"></td> <td style="border-left: 1px solid black; padding-left: 10px;"></td> </tr> </table>	July 1	Cash	9,000			Accumulated Depreciation—Furniture	49,000			Loss on Disposal	2,000			Furniture		60,000		(To record sale of furniture at a loss)		
A	=	L	+	SE																																					
+9,000				-2,000																																					
+49,000																																									
-60,000																																									
July 1	Cash	9,000																																							
	Accumulated Depreciation—Furniture	49,000																																							
	Loss on Disposal	2,000																																							
	Furniture		60,000																																						
	(To record sale of furniture at a loss)																																								

The loss on disposal is reported in the “other expenses and losses” section of the income statement.

Exchange of Long-Term Assets

Long-term assets also may be disposed of through exchange. Exchanges can be for either similar or dissimilar assets. Because exchanges of similar assets are more common, they are discussed here. An exchange of similar assets occurs, for example, when old office furniture is exchanged for new office furniture. In an exchange of similar assets, the new asset performs the *same function* as the old asset.

In exchanges of similar long-term assets, it is necessary to determine two things: (1) the cost of the asset acquired and (2) the gain or loss on the asset given up. Because a noncash asset is given up in the exchange, cost is the **cash equivalent price paid**. That is, cost is the fair market value of the asset given up plus the cash paid. **The gain or loss on disposal is the difference between the fair market value and the book value of the asset given up.** These determinations are explained and illustrated below.

LOSS TREATMENT. A loss on the exchange of similar assets is recognized immediately. To illustrate, assume that Roland Foods exchanged old kitchen equipment for new kitchen equipment. The book value of the old equipment is \$26,000 (cost \$70,000 less accumulated depreciation \$44,000). Its fair market value is

HELPFUL HINT

A building costing \$200,000 was destroyed by fire. At the date of the fire, accumulated depreciation was \$150,000. Insurance proceeds were \$325,000. Prepare the entry to record the insurance proceeds and the disposition of building. Answer: Debit Cash \$325,000, debit Accumulated Depreciation \$150,000, credit Building \$200,000, and credit Gain on Disposal \$275,000.

\$10,000, and cash of \$81,000 is paid. Illustration 13-22 shows the cost of the new equipment, \$91,000.

Fair market value of old kitchen equipment	\$10,000
Cash	81,000
Cost of new kitchen equipment	<u>\$91,000</u>

Illustration 13-22

Computation of cost of new office equipment

A loss on disposal of \$16,000 on this exchange is incurred. The reason is that the book value is greater than the fair market value of the asset given up. The computation is shown in Illustration 13-23.

Book value of old kitchen equipment (\$70,000 – \$44,000)	\$26,000
Fair market value of old kitchen equipment	10,000
Loss on disposal	<u>\$16,000</u>

Illustration 13-23

Computation of loss on disposal

In recording an exchange at a loss, three steps are required: (1) Eliminate the book value of the asset given up, (2) record the cost of the asset acquired, and (3) recognize the loss on disposal. The entry for Roland Foods is as follows:

Kitchen Equipment (new)	91,000	
Accumulated Depreciation—Kitchen Equipment (old)	44,000	
Loss on Disposal	16,000	
Kitchen Equipment (old)		70,000
Cash		81,000
(To record exchange of old kitchen equipment for similar new equipment)		

A	=	L	+	SE
+91,000				-16,000
+44,000				
-70,000				
-81,000				

GAIN TREATMENT. A gain on the exchange of similar assets is not recognized immediately but instead is deferred. This is done by reducing the cost basis of the new asset. In determining the cost of the new asset, compute the *cost before deferral of the gain* and then the *cost after deferral of the gain*.

To illustrate, assume that Mark’s Express Catering decides to exchange its old delivery equipment plus cash of \$3,000 for new delivery equipment. The book value of the old delivery equipment is \$12,000 (cost \$40,000 less accumulated depreciation \$28,000). The fair market value of the old delivery equipment is \$19,000.

The cost of the new asset (before deferral of the gain) is the fair market value of the old asset exchanged plus any cash (or other consideration given up). The cost of the new delivery equipment (before deferral of the gain) is \$22,000, computed in Illustration 13-24.

HELPFUL HINT

Why aren’t gains on the exchange of similar assets recognized? Because the earnings process is not considered completed. To be conservative, however, losses are recognized.

Fair market value of old delivery equipment	\$19,000
Cash	3,000
Cost of new delivery equipment (before deferral of gain)	<u>\$22,000</u>

Illustration 13-24

Cost of new equipment (before deferral of gain)

A gain results when the fair market value is greater than the book value of the asset given up. Illustration 13-25 shows that for Mark’s Express, there is a gain of \$7,000 on the disposal.

Fair market value of old delivery equipment	\$19,000
Book value of old delivery equipment (\$40,000 – \$28,000)	12,000
Gain on disposal	<u>\$ 7,000</u>

Illustration 13-25

Computation of gain on disposal

The \$7,000 gain on disposal is then offset against the \$22,000 cost of the new delivery equipment. The result is a \$15,000 cost of the new delivery equipment, after deferral of the gain, as shown in Illustration 13-26.

Illustration 13-26

Cost of new equipment
(after deferral of gain)

Cost of new delivery equipment (before deferral of gain)	\$22,000	
Less: Gain on disposal	<u>7,000</u>	
Cost of new delivery equipment (after deferral of gain)	<u>\$15,000</u>	

The entry to record the exchange is as follows:

A	=	L	+	SE
+15,000				
+28,000				
-40,000				
-3,000				

Delivery Equipment (new)	15,000	
Accumulated Depreciation—Delivery Equipment (old)	28,000	
Delivery Equipment (old)		40,000
Cash		3,000
(To record exchange of old delivery equipment for similar new delivery equipment)		

This entry does not eliminate the gain; it just postpones or defers it to future periods. The deferred gain of \$7,000 reduces the \$22,000 cost to \$15,000. As a result, net income in future periods increases because depreciation expense on the newly acquired delivery equipment is less by \$7,000.

Illustration 13-27 summarizes the rules for accounting for exchanges of similar assets:

Illustration 13-27

Accounting rules for plant asset exchanges

Type of Event	Recognition
Loss	Recognize immediately by debiting Loss on Disposal
Gain	Defer and reduce cost of new asset

BEFORE YOU GO ON...

► **REVIEW IT**

1. How does a capital expenditure differ from a revenue expenditure?
2. What is the proper accounting for the retirement and sale of plant assets?
3. What is the proper accounting for the exchange of similar plant assets?

► **DO IT**

Overland Catering has an old truck that cost \$30,000. The truck has accumulated depreciation of \$16,000 and a fair value of \$17,000. Overland has a choice of either selling the truck for \$17,000 cash or exchanging the old truck and \$3,000 cash for a new truck. What is the entry that Overland Trucking would record under each option?

ACTION PLAN

- Compare the asset’s book value and fair value to determine whether a gain or a loss has occurred.
- Defer gains on the exchange of similar assets by reducing the recorded value of the new asset.

SOLUTION

Sale of truck for cash:

Cash	17,000	
Accumulated Depreciation—Truck (old)	16,000	
Truck (old)		30,000
Gain on Disposal [$\$17,000 - (\$30,000 - \$16,000)$]		3,000
(To record sale of truck at a gain)		

Exchange of old truck and cash for new truck:		
Truck (new)	17,000*	
Accumulated Depreciation—Truck (old)	16,000	
Truck (old)		30,000
Cash		3,000
(To record exchange of old truck for similar new truck)		
*(\$20,000 – \$3,000)		

If the old truck is exchanged for the new truck, the \$3,000 gain is deferred, and the recorded cost of the new truck is reduced by \$3,000.



INTANGIBLE ASSETS

Intangible assets are rights, privileges, and competitive advantages that result from the ownership of assets that do not possess physical substance. Evidence of intangibles may exist in the form of contracts or licenses. Intangibles may arise from any of the following:

- Government grants, such as patents, copyrights, and trademarks
- Acquisition of another business, in which the purchase price includes a payment for the company's favorable attributes (called *goodwill*)
- Private monopolistic arrangements arising from contractual agreements, such as franchises and leases

Some widely known intangibles are the franchises of **McDonald's** and the trade name of Col. Sanders's **Kentucky Fried Chicken**.

Intangible assets are recorded at cost. The cost of an intangible asset should be allocated over its useful life, assuming the useful life is limited. If the life of the intangible is indefinite, the cost of the intangible should not be allocated. *Indefinite* means that no legal, regulatory, contractual, competitive, economic, or other factors limit the intangible's useful life. At disposal, the book value of the intangible asset is eliminated; and a gain or a loss, if any, is recorded.

There are several differences between accounting for intangible assets and accounting for long-term assets. First, assuming that an intangible asset has a limited life, the term used to describe the allocation of the cost of an intangible asset to expense is **amortization**, rather than depreciation. Also, to record amortization of an intangible, an amortization expense is debited, and the specific intangible asset is credited (rather than crediting a contra account). An alternative is to credit an accumulated amortization account, similar to accumulated depreciation.

There is also a difference in determining cost. For long-term assets, cost includes both the purchase price of the asset and the costs incurred in designing and constructing the asset. In contrast, cost for an intangible asset includes only the purchase price. Any costs incurred in developing an intangible asset are expensed as incurred.

The method of amortizing an intangible asset with a limited life should reflect the pattern in which the asset's economic benefits are used. If such a pattern cannot be reliably determined, a straight-line method of amortization should be used. For homework purposes, use the straight-line method unless otherwise indicated.

An indefinite-life intangible asset should not be amortized until its life is determined to be limited. At that time, the intangible asset should be amortized.

STUDY OBJECTIVE 7

Contrast the accounting for intangible assets with the accounting for long-term assets.

PATENTS

A **patent** is an exclusive right issued by the U.S. Patent Office that enables the recipient to manufacture, sell, or otherwise control an invention for a period of twenty years from the date of the grant. A patent is nonrenewable. But the legal life of a patent may be extended by obtaining new patents for improvements or other changes in the basic design.

The initial cost of a patent is the cash or cash equivalent price paid to acquire the patent. The saying “A patent is only as good as the money you’re prepared to spend defending it” is very true. Many patents are subject to some type of litigation. Legal costs an owner incurs in successfully defending a patent in an infringement suit are considered necessary to establish the validity of the patent. They are added to the Patent account and amortized over the remaining life of the patent.

The cost of a patent should be amortized over its twenty-year legal life or its useful life, whichever is shorter. Obsolescence and inadequacy should be considered in determining useful life. These factors may cause a patent to become economically ineffective before the end of its legal life.

To illustrate the computation of patent expense, assume that National Labs purchases a patent at a cost of \$60,000. If the useful life of the patent is eight years, the annual amortization expense is \$7,500 ($\$60,000 \div 8$). The entry to record the annual amortization looks like this:

<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">=</td> <td style="text-align: center;">L</td> <td style="text-align: center;">+</td> <td style="text-align: center;">SE</td> </tr> <tr> <td style="text-align: center;">-7,500</td> <td></td> <td></td> <td></td> <td style="text-align: center;">-7,500</td> </tr> </table>	A	=	L	+	SE	-7,500				-7,500	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; padding-right: 10px;">Dec. 31</td> <td style="width: 60%; padding-right: 10px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px solid black; padding-right: 5px;">Amortization Expense—Patents</td> <td style="width: 50%; padding-left: 5px; text-align: right;">7,500</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px;"> Patents</td> <td style="padding-left: 5px; text-align: right;">7,500</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px;"> (To record patent amortization)</td> <td></td> </tr> </table> </td> </tr> </table>	Dec. 31	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px solid black; padding-right: 5px;">Amortization Expense—Patents</td> <td style="width: 50%; padding-left: 5px; text-align: right;">7,500</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px;"> Patents</td> <td style="padding-left: 5px; text-align: right;">7,500</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px;"> (To record patent amortization)</td> <td></td> </tr> </table>	Amortization Expense—Patents	7,500	Patents	7,500	(To record patent amortization)		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 60%;"></td> <td style="width: 30%; text-align: right; padding-right: 10px;">7,500</td> </tr> </table>			7,500
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		7,500																					

Amortization Expense—Patents is classified as an **operating expense** in the income statement.

COPYRIGHTS

Copyrights are grants from the federal government giving the owner the exclusive right to reproduce and sell an artistic or published work. Copyrights extend for the life of the creator plus seventy years. The cost of a copyright is the **cost of acquiring and defending it**. The cost may be only the \$10 fee paid to the U.S. Copyright Office. Or it may amount to a great deal more if a copyright infringement suit is involved. Because copyrights have an indefinite life, their cost is not amortized.

TRADEMARKS AND TRADE NAMES

A **trademark** or **trade name** is a word, phrase, jingle, or symbol that identifies a particular enterprise or product. Trade names like Wheaties, Hilton, Sunkist, Marriott, Coca-Cola, Big Mac, and Jeep create immediate product identification. They also generally enhance the sale of the product. The creator or original user may obtain exclusive legal right to the trademark or trade name by registering it with the U.S. Patent Office. Such registration provides twenty years’ protection. The registration may be renewed indefinitely as long as the trademark or trade name is in use.

If the trademark or trade name is *purchased* by the company that will sell the product, its cost is the purchase price. If the trademark or trade name is *developed* by the company itself, the cost includes attorney’s fees, registration fees, design costs, successful legal defense costs, and other expenditures directly related to securing it.

Because trademarks and trade names have indefinite lives, they are not amortized.

FRANCHISES AND LICENSES

When you drive down the street in your RAV4 purchased from a **Toyota** dealer, fill up your tank at the corner **Shell** station, or eat lunch at **Taco Bell**, you are dealing with franchises. A **franchise** is a contractual arrangement under which the franchisor grants the franchisee the right to sell certain products, render specific services, or use certain trademarks or trade names. The franchise is usually restricted to a designated geographic area.

Another type of franchise is that entered into between a governmental body (commonly municipalities) and a business enterprise. This franchise permits the enterprise to use public property in performing its services. Examples are the use of city streets for a bus line or taxi service, the use of public land for telephone and electric lines, and the use of airwaves for radio or TV broadcasting. Such operating rights are referred to as **licenses**.

When costs can be identified with the acquisition of a franchise or license, an intangible asset should be recognized. Franchises and licenses may be granted for a period of time, limited or indefinite. The cost of a limited-life franchise (or license) should be amortized over the useful life. If the life is indefinite, its cost is not amortized. Annual payments made under a franchise agreement are recorded as operating expenses in the period in which they are incurred.

ETHICS NOTE

A pharmaceutical company was growing rapidly by buying unwanted drug licensing rights. These licensing rights, reported as intangible assets, represented over 70 percent of the company's total assets. The company experienced a 50 percent drop in value when the market realized the rights were being amortized over forty years. If a more reasonable life had been used to amortize the rights, the company's reported profits would, instead, have been huge losses.

ACCOUNTING IN ACTION *Business Insight*



Best Western International is “THE WORLD’S LARGEST HOTEL CHAIN®” with over 4,200 hotels, 315,000 guest rooms, in 80 countries. Best Western does not own any of them but is in fact a membership organization of hotel owners and operators of Best Western properties. As for using technology, Best Western started utilizing Internet booking in 1995. Since January 2005, bestwestern.com has been booking over \$1 million per day in revenue for its members.

GOODWILL

Usually, the largest intangible asset that appears on a company's balance sheet is goodwill. **Goodwill** is the value of all favorable attributes that relate to a business enterprise. These include exceptional management, skilled employees, high-quality products, and harmonious relations with labor unions. Goodwill is unusual: Unlike other assets, such as investments, long-term assets, or patents, which can be sold individually in the marketplace, goodwill can be identified only with the business as a whole.

If goodwill can be identified only with the business as a whole, how can it be determined? One could try to put a dollar value on the factors previously listed (exceptional management, high-quality products, and so on), but the results would be very subjective. Such subjective valuations would not contribute to the reliability of financial statements. **Therefore, goodwill is recorded only when there is a transaction that involves the purchase of an entire business. In that case, goodwill is the excess of cost over the fair market value of the net assets (assets less liabilities) acquired.**

In recording the purchase of a business, the net assets are debited at their fair market values, cash is credited for the purchase price, and goodwill is debited for the difference. Goodwill is not amortized because it is considered to have an indefinite life, but it must be written down if its value is determined to have declined (been permanently impaired). Goodwill is reported in the balance sheet under intangible assets.

HELPFUL HINT

Goodwill is recorded only when it has been purchased along with tangible and identifiable intangible assets of a business.

ACCOUNTING IN ACTION *International Insight*



Internet use is very important to a number of segments of the hospitality industry, especially for lodging and travel booking. Increasingly, more and more restaurants also employ the Internet for reservations. Some fast-food places even offer “ordering” for pick-up or delivery through the Internet. It’s no wonder that the proper Internet domain name can make or break a company and that buying a domain name makes a hot market. While the cost of registration is negligible, if a company has to purchase its name from a cybersquatter—people who register names in the hopes of selling them for a profit—the cost can rise quickly.

When **eBay, Inc.**, the world’s largest online auction house, recently tried to register www.ebay.ca in Canada, it discovered that the name had been registered previously by an entrepreneur. eBay then had two options to consider. Since eBay is a registered trademark around the world, (1) the company could take legal action; or (2) it could negotiate the domain name www.ebaycanada.ca, which also had been registered previously by a self-described “Internet entrepreneur.” This entrepreneur said that he hoped to make some quick money when he registered www.ebaycanada.ca. He eventually gave up the name without a fight rather than go to court and face high legal bills.

DEMONSTRATION PROBLEM 1

DuPage Restaurant purchases an ice machine at a cost of \$18,000 on January 1, 2008. The machine is expected to have a salvage value of \$2,000 at the end of its four-year useful life.

During its useful life, the machine is expected to be used 160,000 hours. Actual annual hourly use was: 2008, 40,000; 2009, 60,000; 2010, 35,000; and 2011, 25,000.

Instructions

Prepare depreciation schedules for the following methods:

(a) straight-line, (b) units-of-activity, (c) declining-balance using double the straight-line rate, and (d) sum-of-years'-digits.

SOLUTION TO DEMONSTRATION PROBLEM 1

(a)

Straight-Line Method

Year	Computation		Annual Depreciation Expense	End of Year	
	Depreciable Cost	Depreciation Rate		Accumulated Depreciation	Book Value
2008	\$16,000	25%	\$4,000	\$ 4,000	\$14,000*
2009	16,000	25%	4,000	8,000	10,000
2010	16,000	25%	4,000	12,000	6,000
2011	16,000	25%	4,000	16,000	2,000

*\$18,000 – \$4,000

(b)

Units-of-Activity Method

Year	Computation		Annual Depreciation Expense	End of Year	
	Units of Activity	Depreciation Cost/Unit		Accumulated Depreciation	Book Value
2008	40,000	\$0.10	\$4,000	\$ 4,000	\$14,000
2009	60,000	0.10	6,000	10,000	8,000
2010	35,000	0.10	3,500	13,500	4,500
2011	25,000	0.10	2,500	16,000	2,000

ACTION PLAN

- Under the straight-line method, apply the depreciation rate to depreciable cost.
- Under the units-of-activity method, compute the depreciation cost per unit by dividing depreciable cost by total units of activity.
- Under the declining-balance method, apply the depreciation rate to **book value** at the beginning of the year.
- Under the sum-of-years'-digits method, apply the depreciation rate to depreciable cost.

(c)

Declining-Balance Method

Year	Computation			End of Year	
	Book Value Beginning of Year	× Depreciation Rate	= Annual Depreciation Expense	Accumulated Depreciation	Book Value
2008	\$18,000	50%	\$9,000	\$ 9,000	\$9,000
2009	9,000	50%	4,500	13,500	4,500
2010	4,500	50%	2,250	15,750	2,250
2011	2,250	50%	250*	16,000	2,000

*Adjusted to \$250 because ending book value should not be less than expected salvage value.

(d)

Sum-of-Years'-Digits Method

Year	Computation			End of Year	
	Depreciation Cost	× Depreciation Rate	= Annual Depreciation	Accumulated Depreciation	Book Value
2008	4/10	\$16,000	\$6,400	\$ 6,400	\$11,600*
2009	3/10	16,000	4,800	11,200	6,800
2010	2/10	16,000	3,200	14,400	3,600
2011	1/10	16,000	1,600	16,000	2,000

*\$18,000 – \$6,400



DEMONSTRATION PROBLEM 2

On January 1, 2008, Skyline Hotel Co. purchased a passenger van for transporting guests to and from airports and nearby shopping areas at an acquisition cost of \$28,000. The vehicle has been depreciated by the straight-line method using a four-year service life and a \$4,000 salvage value. The company's fiscal year ends on December 31.

Instructions

Prepare the journal entry or entries to record the disposal of the van assuming that it was

- Retired and scrapped with no salvage value on January 1, 2012.
- Sold for \$5,000 on July 1, 2011.
- Traded in on a new van on January 1, 2011. The fair market value of the old vehicle was \$9,000, and \$22,000 was paid in cash.
- Traded in on a new van on January 1, 2011. The fair market value of the old vehicle was \$11,000, and \$22,000 was paid in cash.

SOLUTION TO DEMONSTRATION PROBLEM 2

(a)	1/1/11	Accumulated Depreciation—Van	24,000	28,000
		Loss on Disposal	4,000	
		Van		
		(To record retirement of van)		
(b)	7/1/10	Depreciation Expense	3,000	3,000
		Accumulated Depreciation—Van		
		(To record depreciation to date of disposal)		
		Cash	5,000	28,000
		Accumulated Depreciation—Van	21,000	
		Loss on Disposal	2,000	
		Van		
		(To record sale of van)		

ACTION PLAN

- At the time of disposal, determine the book value of the asset.
- Recognize any gain or loss from disposal of the asset.
- Remove the book value of the asset from the records by debiting Accumulated Depreciation for the total depreciation to date of disposal and crediting the asset account for the cost of the asset.

(c)	1/1/10	Van (new)	31,000	
		Accumulated Depreciation—Van (old)	18,000	
		Loss on Disposal	1,000	
		Van (old)		28,000
		Cash		22,000
(To record exchange of vans)				
(d)	1/1/10	Van (new) (\$11,000 + \$22,000 – \$1,000)	32,000	
		Accumulated Depreciation—Van (old)	18,000	
		Van (old)		28,000
		Cash		22,000
		(To record exchange of vans)		



SUMMARY OF STUDY OBJECTIVES

1. Describe the application of the cost principle to long-term assets. The cost of long-term assets includes all expenditures necessary to acquire the asset and make it ready for its intended use. Cost is measured by the cash or cash equivalent price paid.

2. Explain the concept of depreciation. Depreciation is the allocation of the cost of a long-term asset to expense over its useful (service) life in a rational and systematic manner. Depreciation is neither a process of valuation nor a process that results in an accumulation of cash. Depreciation is caused by wear and tear or by obsolescence.

3. Compute periodic depreciation using different methods. There are four depreciation methods:

Method	Effect on Annual Depreciation	Formula
Straight-line	Constant amount	Depreciable cost ÷ Useful life (in years)
Units-of-activity	Varying amount	Depreciation cost per unit × Units of activity during the year
Declining-balance	Decreasing amount	Book value at beginning of year × Declining-balance rate
Sum-of-years'-digits	Decreasing amount	Depreciable cost × Rate*

$$*Rate = \frac{\text{Depreciable year}}{\text{Sum of digits of asset's useful life}}$$

4. Describe the procedure for revising periodic depreciation. Revisions of periodic depreciation are made in present and future periods, not retroactively. The new annual depreciation is found by dividing the depreciable cost at the time of the revision by the remaining useful life.

5. Distinguish between revenue and capital expenditures, and explain the entries for these expenditures. Revenue expenditures are incurred to maintain the operating efficiency and expected productive life of the asset. These expenditures are debited to Repair Expense as incurred. Capital expenditures increase the operating efficiency, productive capacity, or expected useful life of the asset. These expenditures are generally debited to the long-term asset affected.

6. Explain how to account for the disposal of a long-term asset through retirement, sale, or exchange. The accounting for disposal of a long-term asset through retirement or sale is as follows:

- Eliminate the book value of the long-term asset at the date of disposal.
- Record cash proceeds, if any.
- Account for the difference between the book value and the cash proceeds as a gain or a loss on disposal.

In accounting for exchanges of similar assets:

- Eliminate the book value of the old asset at the date of the exchange.
- Record the acquisition cost of the new asset.
- Account for the loss or gain, if any, on the old asset:
 - If a loss, recognize it immediately.
 - If a gain, defer and reduce the cost of the new asset.

7. Contrast the accounting for intangible assets with the accounting for long-term assets. The accounting for intangible assets and long-term assets is much the same. One difference is that the term used to describe the write-off of an intangible asset is amortization, rather than depreciation.

The straight-line method is normally used for amortizing intangible assets.



GLOSSARY

Accelerated-depreciation method Depreciation method that produces higher depreciation expense in the early years than in the later years (p. 392).

Additions and improvements Costs incurred to increase the operating efficiency, productive capacity, or useful life of a long-term asset (p. 395).

Amortization The allocation of the cost of a limited-life intangible asset to expense over its useful life in a systematic and rational manner (p. 401).

Capital expenditures Expenditures that increase the company's investment in productive facilities (p. 395).

Copyright Exclusive grant from the federal government that allows the owner to reproduce and sell an artistic or published work (p. 402).

Declining-balance method Depreciation method that applies a constant rate to the declining book value of the asset and produces a decreasing annual depreciation expense over the useful life of the asset (p. 391).

Depreciable cost The cost of a long-term asset less its salvage value (p. 388).

Franchise A contractual arrangement under which the franchisor grants the franchisee the right to sell certain products, render specific services, or use certain trademarks or trade names, usually within a designated geographical area (p. 403).

Goodwill The value of all favorable attributes that relate to a business enterprise (p. 403).

Intangible assets Rights, privileges, and competitive advantages that result from the ownership of long-lived assets that do not possess physical substance (p. 401).

Licenses Operating rights to use public property, granted to a business enterprise by a governmental agency (p. 403).

Long-term assets Tangible resources that are used in the operations of the business and are not intended for sale to customers (p. 383).

Modified Accelerated Cost Recovery System (MACRS) Depreciation method whereby assets are classified into recovery classes and are depreciated at an accelerated rate (p. 393).

Ordinary repairs Expenditures to maintain the operating efficiency and productive life of the unit (p. 395).

Patent An exclusive right issued by the U.S. Patent Office that enables the recipient to manufacture, sell, or otherwise control an invention for a period of twenty years from the date of the grant (p. 402).

Revenue expenditures Expenditures that are immediately charged against revenues as an expense (p. 395).

Salvage value An estimate of an asset's value at the end of its useful life (p. 387).

Straight-line method Depreciation method in which periodic depreciation is the same for each year of the asset's useful life (p. 388).

Sum-of-years'-digits method Depreciation method in which the digits of the years of the asset's expected useful life are totaled as the denominator of the calculation and the years' digits are used in reverse order as the numerator for depreciation (p. 392).

Trademark (trade name) A word, phrase, jingle, or symbol that identifies a particular enterprise or product (p. 402).

Units-of-activity method Depreciation method in which useful life is expressed in terms of the total units of production or use expected from an asset (p. 389).

Useful life An estimate of the expected productive life, also called service life, of an asset (p. 387).

EXERCISES

13-1 Ellen catering acquires a delivery truck at a cost of \$36,000. The truck is expected to have a salvage value of \$2,000 at the end of its four-year useful life. Compute annual depreciation for the first and second years using the straight-line method.

Compute straight-line depreciation.

(SO 3)

13-2 On January 1, 2008, the Villareal Mexican Bakery ledger shows Equipment \$40,000 and Accumulated Depreciation \$9,000. The depreciation resulted from using the straight-line method with a useful life of ten years and salvage value of \$4,000. On this date, the company concludes that the equipment has a remaining useful life of only five years with the same salvage value. Compute the revised annual depreciation.

Compute revised depreciation.

(SO 4)

13-3 Prepare journal entries to record the following:

- Mayorga Fine Foods retires its delivery equipment, which cost \$45,000. Accumulated depreciation is also \$45,000 on this delivery equipment. No salvage value is received.
- Assume the same information as (a), except that accumulated depreciation for Mayorga Fine Foods is \$41,000, instead of \$45,000.

Prepare entries for disposal by retirement.

(SO 6)

13-4 Tuscany Tours uses the units-of-activity method in depreciating its buses. One bus was purchased on January 1, 2008, at a cost of \$115,000. Over its five-year useful life, the bus is expected to be driven 100,000 miles. Salvage value is expected to be \$9,000.

Compute depreciation under units-of-activity method.

(SO 3)

Instructions

- Compute the depreciation cost per unit.
- Prepare a depreciation schedule assuming actual mileage was: 2008, 24,000; 2009, 36,000; 2010, 20,000; and 2011, 20,000.

13-5 On March 1, 2006, Tanger Resorts acquired real estate on which it planned to construct a small bed-and-breakfast. The company paid \$90,000 in cash. An old warehouse on the property was razed at a cost of \$6,600; the salvaged materials were sold for \$1,700. Additional expenditures before construction began included \$1,100 attorney's fee for work concerning the land purchase, \$5,000 real estate broker's fee, \$7,800 architect's fee, and \$14,000 to put in driveway and a parking lot.

Determine acquisition costs on land.

(SO 1)

Instructions

- (a) Determine the amount to be reported as the cost of the land.
- (b) For each cost not used in part (a), indicate the account to be debited.

Compute depreciation under units-of-activity method. (SO 3)

13-6 Waterways Tours uses the units-of-activity method in depreciating its tour boats. One boat was purchased on January 1, 2006, at a cost of \$148,000. Over its four-year useful life, the boat is expected to be driven 100,000 miles. Salvage value is expected to be \$8,000.

Instructions

- (a) Compute the depreciation cost per unit.
- (b) Prepare a depreciation schedule assuming actual mileage was: 2008, 26,000; 2009, 32,000; 2010, 25,00; and 2011, 17,000.

Determine depreciation for partial periods. (SO 3)

13-7 Solo Country Club purchased a new computer system on October 1, 2008, at a cost of \$96,000. The company estimated that the machine would have a salvage value of \$12,000. The system is expected to be used for 10,000 working hours during its five-year life.

Instructions

Compute the depreciation expense under the following methods for the year indicated:

- (a) Straight-line for 2008.
- (b) Units-of activity for 2008, assuming system usage was 1,700 hours.
- (c) Declining-balance using double the straight-line rate for 2008 and 2009.

Determine acquisition costs of land and building. (SO 1)

13-8 Mia Fitness Club was organized on January 1. During the first year of operations, the following plant asset expenditures and receipts were recorded in random order.

Debits

1. Accrued real estate taxes paid at time of purchase of real estate	\$ 2,000
2. Real estate taxes on land paid for the current year	3,000
3. Full payment to building contractor	600,000
4. Excavation costs for new building	25,000
5. Cost of real estate purchased as a plant site (land \$100,000 and building \$25,000)	125,000
6. Cost of parking lots and driveways	15,000
7. Architect's fees on building plans	10,000
8. Installation cost of fences around property	4,000
9. Cost of demolishing building to make land suitable for construction of new building	21,000
	\$805,000

Credit

10. Proceeds from salvage of demolished building	\$ 2,500
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Instructions

Analyze the foregoing transactions using the following column headings. Insert the number of each transaction in the item space, and insert the amounts in the appropriate columns. For amounts in the Other Accounts column, also indicate the account title.

Item	Land	Building	Other Accounts
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Calculate revisions to depreciation expense. (SO 3, 4)

13-9 At the beginning of 2008, Bellamy Seafood acquired equipment costing \$60,000. It was estimated that this equipment would have a useful life of six years and a residual value of \$6,000 at that time. The straight-line method of depreciation was considered the most appropriate to use with this type of equipment. Depreciation is to be recorded at the end of each year.

During 2010 (the third year of the equipments's life), the company's engineers reconsidered their expectations and estimated that the equipment's useful life would probably be seven years (in total) instead of six years. The estimated residual value was not changed at that time. However, during 2013 the estimated residual value was reduced to \$3,000.

Instructions

Indicate how much depreciation expense should be recorded for this equipment each year by completing the following table.

<u>Year</u>	<u>Depreciation Expense</u>	<u>Accumulated Depreciation</u>
2008		
2009		
2010		
2011		
2012		
2013		
2014		

13-10 Foxx Saber Resorts was organized on January 1. During the first year of operations, the following plant asset expenditures and receipts were recorded in random order.

Determine acquisition costs of land and building.

(SO 1)

<u>Debits</u>		
1. Cost of filling and grading the land		\$ 4,000
2. Full payment to building contractor		700,000
3. Real estate taxes on land paid for the current year		5,000
4. Cost of real estate purchased as a plant site (land \$100,000 and building \$45,000)		145,000
5. Excavation costs for new building		30,000
6. Architect's fees on building plans		10,000
7. Accrued real estate taxes paid at time of purchase of real estate		2,000
8. Cost of parking lots and driveways		14,000
9. Cost of demolishing building to make land suitable for construction of new building		20,000
		<u>\$930,000</u>
<u>Credit</u>		
10. Proceeds from salvage of demolished building		<u>\$ 3,500</u>

Instructions

Analyze the foregoing transactions using the following column headings. Insert the number of each transaction in the Item space, and insert the amounts in the appropriate columns. For amounts entered in the Other Accounts column, also indicate the account titles.

<u>Item</u>	<u>Land</u>	<u>Building</u>	<u>Other Accounts</u>
-------------	-------------	-----------------	-----------------------

EXPLORING THE WEB

13-11 A company's annual report identifies the amount of its plant assets and the depreciation method used.

Address: www.reportgallery.com

Steps

1. From Report Gallery homepage, highlight the dialog box of "Search by Industry."
2. Select "Lodging" under the the "Leisure" category.
3. Select a particular company.
4. Follow instructions below.

Instructions

Answer the following questions.

- (a) What is the name of the company?
- (b) At fiscal year-end, what is the net amount of its long-term assets?
- (c) What is the accumulated depreciation?
- (d) Which method of depreciation does the company use?



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

SOLE PROPRIETORSHIPS, PARTNERSHIPS, AND CORPORATIONS



THE NAVIGATOR ✓

- Understand *Concepts for Review*

- Read *Feature Story*

- Scan *Study Objectives*

- Read *Preview*

- Read text and answer *Before You Go On*
p. 426 p. 429 p. 432 p. 436
p. 444–445 p. 448

- Work *Demonstration Problem*

- Review *Summary of Study Objectives*

- Complete *Assignments*

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

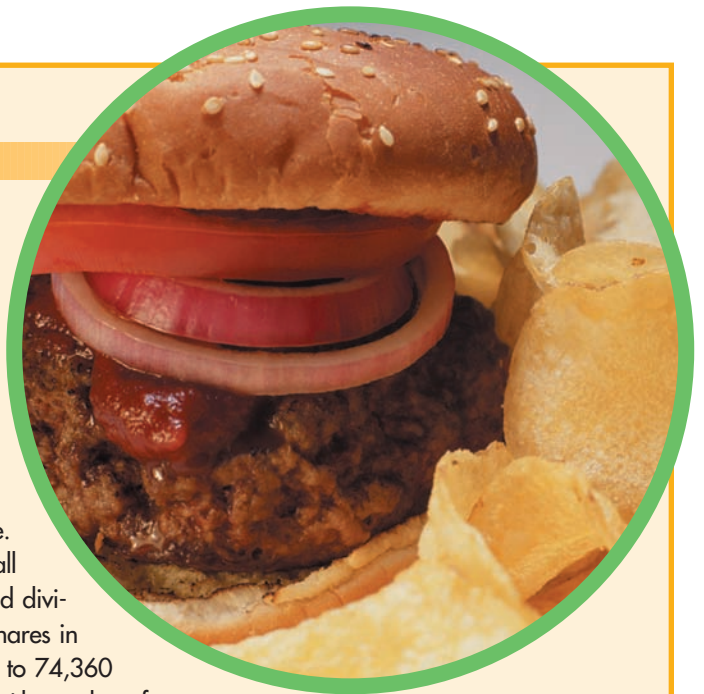
- a. The content of the stockholders' equity section of a balance sheet. (Ch. 5, pp. 157–158)
- b. How to prepare closing entries for a corporation. (Ch. 5, pp. 144–148)
- c. The difference between paid-in capital and retained earnings. (Ch. 1, p. 12)

F E A T U R E S T O R Y

“Two All Beef Patties, Special Sauce, Lettuce, Cheese, Pickles, Onions on a Sesame Seed Bun”

Many people know this saying too well and can even say it with a rhythm. It all started with a true salesman, Raymond Albert Kroc. Ray Kroc’s entrepreneurial zeal, combined with an almost evangelical ability to motivate nearly everyone he touched, enabled him to build the largest and most successful restaurant franchise company in the world. Ray didn’t promise franchisees success. Instead, he offered the opportunity to achieve it. Ray’s fair and balanced franchise partnership is said to be his greatest legacy. To underscore his own commitment to “taking the hamburger business more seriously than anyone else,” he established Hamburger University. By so doing, he confirmed his willingness to invest in the training and education of McDonald’s people and thereby accentuated his franchising commitment.

As a corporation, **McDonald’s** went to Wall Street in 1965, selling stocks in round lots of 100 shares at \$2,250, or \$22.50 per share. If one calculates all the stock splits and dividends, the 100 shares in 1965 had grown to 74,360 shares in 1998, with a value of over \$2.8 million. In 1985, McDonald’s was added to one of the 30 companies whose share prices make up the formula to derive the Dow Jones Industrial Average. Ray’s operating credo of “Quality, Service, Cleanliness and Value” became the mantra for all McDonald’s owners and established a permanent benchmark for the entire foodservice and food processing industries and, by extension, all service industry components. His exacting mandates for uniformity and product consistency made it possible for a customer to get a Big Mac and french fries in Houston, Texas, or Moscow, Russia. In fact, the Golden Arches are said to be the second



most widely recognized trademark in the world. Ray’s company changed the dining lifestyle of an entire society in less than one generation. Consequently, 96 percent of all Americans have eaten at a McDonald’s restaurant on at least one occasion, and an average McDonald’s restaurant brings in \$1.6 million in sales per year in the United States. To improve sales in the international units, McDonald’s has ongoing initiatives to include more local flavor in its menu options.

SOURCES: www.mcdonalds.com/corporate/info/history and www.hrm.uh.edu/?PageID=191

THE NAVIGATOR

STUDY OBJECTIVES

After studying this chapter, you should be able to

1. Identify the major characteristics of a sole proprietorship.
2. Identify the major characteristics of a partnership.
3. Explain the accounting entries for the formation of a partnership.
4. Identify the bases for dividing net income or net loss.
5. Identify the major characteristics of a corporation.
6. Record the issuance of common stock.
7. Explain the accounting for treasury stock.

Continued

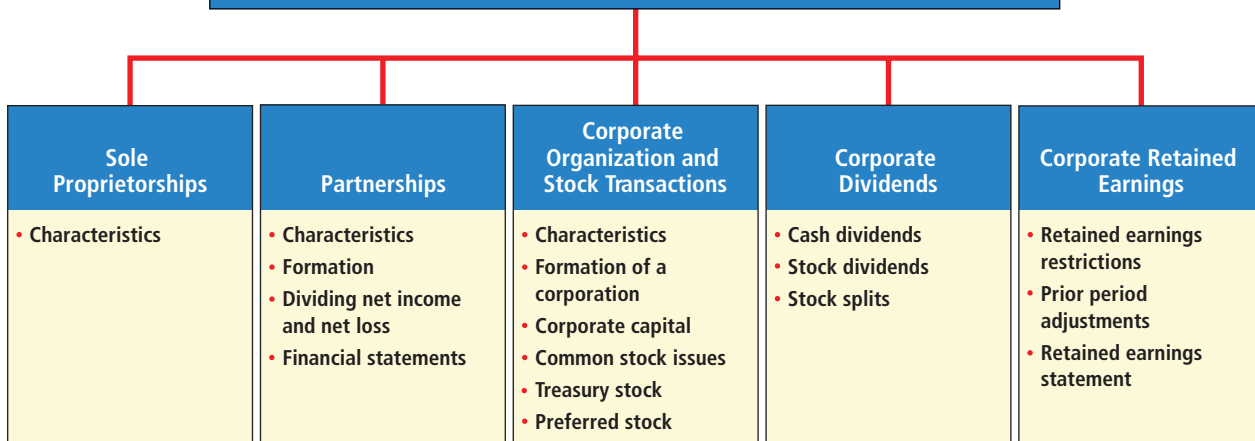
THE NAVIGATOR

PREVIEW OF CHAPTER 14

At some time in your hospitality career, you might want to open your own restaurant, build your own bed-and-breakfast, or purchase a franchise hotel. How should you structure or organize your business? Small businesses mostly start as sole proprietorships. Some business people get together with friends or business partners and pull resources together to form a partnership. In contrast, corporations like **Hilton**, **Disney**, and **Marriott** have substantial resources. In fact, the corporation is the dominant form of business organization in the United States in terms of dollar volume of sales and earnings and number of employees. All of the 500 largest companies in the United States are corporations. In this chapter we will explain the essential features of a proprietorship, a partnership, and a corporation and will look at the accounting for both forms of business organizations.

The content and organization of Chapter 14 are as follows:

SOLE PROPRIETORSHIPS, PARTNERSHIPS, AND CORPORATIONS



STUDY OBJECTIVES (CONTINUED)

- Differentiate preferred stock from common stock.
- Prepare the entries for cash dividends and stock dividends.
- Identify the items that are reported in a retained earnings statement.

SOLE PROPRIETORSHIPS

STUDY OBJECTIVE 1

Identify the major characteristics of a sole proprietorship.

The simplest form of business organization is **sole proprietorship**. For entrepreneurs in the hospitality business who want to own their own business, this is the easiest way to begin. A sole proprietorship is formed by a single individual and owned by this same person. This individual will register as “doing business as” with the proper authority and can begin. Thus one of characteristics of a sole proprietorship is the *ease of formation*. In addition, since it is owned by one person, the decision-making process is less complex, affording the business with *flexibility*. Moreover, when profits are reaped, the single owner will *retain all the money*.

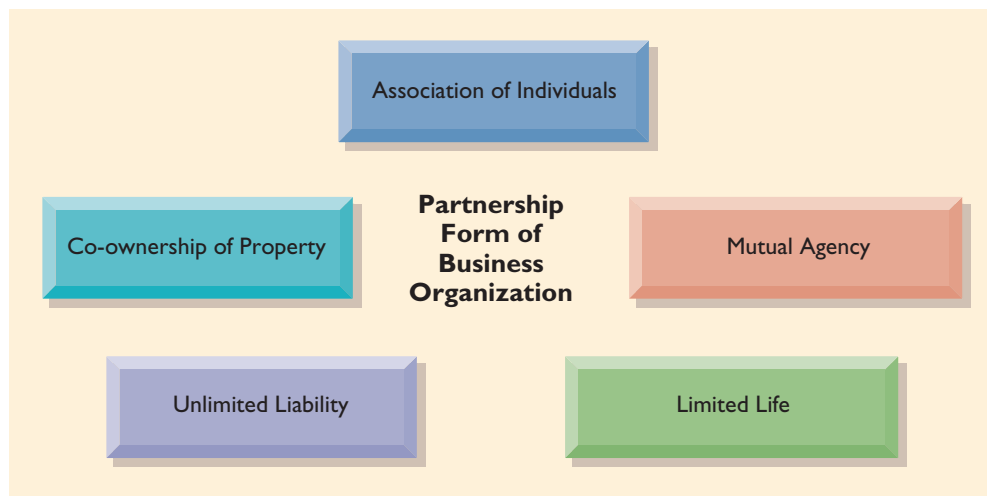
However, a sole proprietorship also has some risky characteristics. Since it is owned by one person, should there be a loss in the business, this one person will have to ab-

sorb all the loss. Legally, there is also *unlimited liability*. Thus the creditors can seize the owner's personal belongings to pay the bills. Another negative characteristic is that it is often *difficult to raise funds* through one person's collateral. Therefore, many hospitality businesses are formed as partnerships or, more often, corporations.

PARTNERSHIPS

The Uniform Partnership Act provides the basic rules for the formation and operation of partnerships in more than 90 percent of the states. This act defines a **partnership** as “an association of two or more persons to carry on as co-owners of a business for profit.” The partnership form of business organization is not restricted to any particular type of business, but it is most often used in relatively small companies and in professional fields, as mentioned earlier.

Illustration 14-1 shows principal characteristics of the partnership form of business organization.



STUDY OBJECTIVE 2

Identify the major characteristics of a partnership.

Illustration 14-1

Partnership characteristics

ASSOCIATION OF INDIVIDUALS

A partnership is a voluntary association of two or more individuals based on a legally binding contract, which may be written, oral, or implied. Under the Uniform Partnership Act, a partnership is considered a legal entity for certain purposes. For instance, property (land, buildings, equipment) can be owned in the name of the partnership, and the firm can sue or be sued. **A partnership also represents an accounting entity for financial reporting purposes.** Thus the purely personal assets, liabilities, and personal transactions of the partners are excluded from the accounting records of the partnership, just as they are in a proprietorship. In addition, the net income of a partnership is not taxed as a separate entity. However, a partnership is required to file an information tax return showing partnership net income and each partner's share of the net income. Each partner's share is taxable, regardless of the amount of net income withdrawn from the business during the year.

MUTUAL AGENCY

Each partner acts on behalf of the partnership when engaging in partnership business. The act of any partner is binding on all other partners, even when partners act beyond the scope of their authority, as long as the act appears to be appropriate for the partnership. For example, a partner of a catering company who purchases a delivery truck creates a binding contract in the name of the partnership, even if the

partnership agreement denies this authority. In contrast, if a partner in a catering company purchased a snowmobile for the partnership, such an act would not be binding on the partnership because it is clearly outside the scope of partnership business.

LIMITED LIFE

A partnership does not have unlimited life. Its continuance as a going concern rests in the partnership contract. As long as existing partners are willing to be bound by the contract, the maximum life of a partnership is equal to the life of any one of its partners. A partnership may be ended voluntarily at any time through the acceptance of a new partner into the firm or the withdrawal of a partner. A partnership may be ended involuntarily by the death or incapacity of a partner. In short, any change in the number of partners, regardless of the cause, effects the **dissolution** of the partnership. Thus the life of a partnership is unpredictable.

UNLIMITED LIABILITY

Each partner is personally and individually liable for all partnership liabilities. Creditors' claims attach first to partnership assets and then to the personal resources of any partner, irrespective of that partner's capital equity in the company. To illustrate, assume that (1) the Rowe-Sanchez partnership is terminated when the claims of company creditors exceed partnership assets by \$30,000 and (2) L. Rowe's personal assets total \$40,000 but B. Sanchez has no personal assets. Creditors can collect their total claims from Rowe regardless of Rowe's capital balance in the firm, even though Sanchez and Rowe may be equal partners. Rowe, in turn, has a legal claim on Sanchez, but this would be worthless under the conditions described. Some states allow **limited partnerships**, in which the liability of a partner is limited to the partner's capital equity. However, there must always be at least one partner with unlimited liability, often referred to as the **general partner**.

CO-OWNERSHIP OF PROPERTY

Partnership assets are co-owned by the partners. Once assets have been invested in the partnership, they are owned jointly by all the partners. Moreover, if the partnership is terminated, the assets do not legally revert to the original contributor. Each partner has a claim on total assets equal to the balance in his or her respective capital account, but this claim does not attach to specific assets that an individual partner may have contributed to the firm.

Similarly, if a partner invests a \$100,000 building in the partnership, and the building is sold later at a gain of \$20,000, that partner does not personally receive the entire gain. Partnership net income (or net loss) is also co-owned; if the partnership agreement does not specify to the contrary, all net income or net loss is shared equally by the partners. As you will see later, however, the partnership agreement may provide for unequal sharing of net income or net loss.

ADVANTAGES AND DISADVANTAGES OF A PARTNERSHIP

What are the major advantages and disadvantages of a partnership? One major advantage is that the **skills and resources of two or more individuals** can be combined. For example, a large public accounting firm such as **PricewaterhouseCoopers** must have combined expertise in auditing, taxation, and management consulting, not to mention specialists within each of these areas. In addition, a partnership does not have to contend with the "red tape" that a corporation must face; that is, a partnership is easily formed and is relatively free from governmental regulations and restrictions. Decisions can be made quickly on substantive matters affecting the firm, whereas in a corporation, formal meetings with the board of directors are often needed.

On the other hand, the major disadvantages of a partnership are mutual agency, limited life, and unlimited liability. Unlimited liability is particularly troublesome to many individuals, because they may lose not only their initial investment but

also their personal assets, if they are needed to pay partnership creditors. As a result, it is often difficult to obtain large amounts of investment capital in a partnership. That is one reason why the largest business enterprises in the United States are corporations, not partnerships.

The advantages and disadvantages of the partnership form of business organization are summarized in Illustration 14-2.

Advantages	Disadvantages
Combining skills and resources of two or more individuals	Mutual agency
Ease of formation	Limited life
Freedom from government regulations and restrictions	Unlimited liability
Ease of decision making	

Illustration 14-2

Advantages and disadvantages of a partnership

THE PARTNERSHIP AGREEMENT

A partnership is created by a contract expressing the voluntary agreement of two or more individuals. The written partnership agreement, often referred to as the partnership agreement or **articles of co-partnership**, contains such basic information as the name and principal location of the firm, the purpose of the business, and date of inception. In addition, different relationships that will exist among the partners, such as the following, should be specified:

- Names and capital contributions of partners
- Rights and duties of partners
- Basis for sharing net income or net loss
- Provision for withdrawals of income
- Procedures for submitting disputes to arbitration
- Procedures for the withdrawal or addition of a partner
- Rights and duties of surviving partners in the event of a partner's death

The importance of a written contract cannot be overemphasized. The agreement should be drawn with care and should attempt to anticipate all possible situations, contingencies, and disagreements. The help of a lawyer is highly desirable in preparing the agreement. A poorly drawn contract may create friction among the partners and eventually cause the termination of the partnership.

FORMATION OF A PARTNERSHIP

Each partner's initial investment in a partnership should be recorded at the fair market value of the assets at the date of their transfer to the partnership. The values assigned must be agreed to by all of the partners.

To illustrate, assume that A. Rolfe and T. Shea combine their proprietorships to start a partnership named U.S. Pizza. Rolfe and Shea invest in the partnership as shown in Illustration 14-3.

	Book Value		Market Value	
	A. Rolfe	T. Shea	A. Rolfe	T. Shea
Cash	\$ 8,000	\$ 9,000	\$ 8,000	\$ 9,000
Equipment	5,000		4,000	
Accumulated depreciation	(2,000)			
Accounts receivable		4,000		4,000
Allowance for doubtful accounts		(700)		(1,000)
	\$11,000	\$12,300	\$12,000	\$12,000

STUDY OBJECTIVE 3

Explain the accounting entries for the formation of a partnership.

Illustration 14-3

Book and market value of assets invested

The entries to record the investments are

<u>Investment of A. Rolfe</u>		
Cash	8,000	
Equipment	4,000	
A. Rolfe, Capital		12,000
(To record investment of Rolfe)		
<u>Investment of T. Shea</u>		
Cash	9,000	
Accounts Receivable	4,000	
Allowance for Doubtful Accounts		1,000
T. Shea, Capital		12,000
(To record investment of Shea)		

Note that neither the original cost of the equipment (\$5,000) nor its book value (\$5,000 – \$2,000) is recorded by the partnership. The equipment has not been used by the partnership, so there can be no accumulated depreciation. In contrast, the gross claims on customers (\$4,000) are carried forward to the partnership, and the allowance for doubtful accounts is adjusted to \$1,000 to arrive at a cash (net) realizable value of \$3,000. A partnership may start with an Allowance for Doubtful Accounts account because this balance pertains to existing accounts receivable that are expected to be uncollectible in the future. In addition, this procedure maintains the control and the subsidiary relationship between accounts receivable and the customers' ledger.

After the partnership has been formed, the accounting for its transactions is similar to accounting for transactions of any other type of business organization. For example, all transactions with outside parties, such as the purchase or sale of merchandise inventory and the payment or receipt of cash, should be recorded in the same manner for a partnership as for a proprietorship.

DIVISION OF NET INCOME OR NET LOSS

Partnership net income or net loss is shared equally unless the partnership contract specifically indicates the manner in which net income and net loss are to be divided. The same basis of division usually applies to both net income and net loss. As a result, it is customary to refer to the basis as the **income ratio**, the **income and loss ratio**, or the **profit and loss ratio**. Because of its wide acceptance, we will use the term income ratio to identify the basis for dividing both net income and net loss. A partner's share of net income or net loss is recognized in the accounts through closing entries.

Closing Entries

You may recall from Chapter 5 that four closing entries are needed during the closing process. The first two entries close revenues and expenses to Income Summary; the latter two entries transfer the balance in Income Summary to the partners' capital accounts and close their drawing accounts to their capital accounts.

To refresh your memory concerning the closing entries for a partnership, assume that L. Arbor and D. Barnett share net income and net loss equally. After closing all revenue and expense accounts, there is a credit balance in Income Summary of \$32,000, which is the net income for the period. The entry to close this balance to the respective capital accounts is as follows:

Income Summary	32,000	
L. Arbor, Capital		16,000
D. Barnett, Capital		16,000
(To close net income to partners' capitals)		

STUDY OBJECTIVE 4

Identify the bases for dividing net income or net loss.

If Arbor and Barnett have balances in their drawing accounts of \$8,000 and \$6,000, respectively, the entry to close these accounts looks like this:

L. Arbor, Capital	8,000	
D. Barnett, Capital	6,000	
L. Arbor, Drawing		8,000
D. Barnett, Drawing		6,000
(To close partners' drawings)		

Assuming the beginning capital balance is \$47,000 for Arbor and \$36,000 for Barnett, the following capital and drawing accounts (Illustration 14-4) will appear in the general ledger.

L. Arbor, Capital				D. Barnett, Capital			
Drawing	8,000	Beg. Bal.	47,000	Drawing	6,000	Beg. Bal.	36,000
		Net income	16,000			Net income	16,000
		End Bal.	55,000			End Bal.	46,000
L. Arbor, Drawing				D. Barnett, Drawing			
End Bal.	<u>8,000</u>	To Capital	<u>8,000</u>	End Bal.	<u>6,000</u>	To Capital	<u>6,000</u>

Illustration 14-4

Ledger balances after closing

The capital accounts indicate each partner's "permanent" investment, whereas the partners' drawing accounts are temporary owners' equity accounts. Normally, the capital accounts will have credit balances, whereas the drawing accounts will have debit balances. The drawing account is commonly debited in situations where cash or other assets are withdrawn by the partner for personal use. For example, the partnership contract may permit each partner to withdraw cash monthly for personal living expenses.

Income Ratios

As indicated earlier, the partnership agreement should specify the basis for sharing net income or net loss. The following are typical of the ratios that may be used:

- A fixed ratio, expressed as a proportion (6:4), a percentage (70 percent and 30 percent), or a fraction ($2/3$ and $1/3$)
- A ratio based either on capital balances at the beginning of the year or on average capital balances during the year
- Salaries to partners and the remainder on a fixed ratio
- Interest on partners' capitals and the remainder on a fixed ratio
- Salaries to partners, interest on partners' capitals, and the remainder on a fixed ratio

The objective is to reach agreement on a basis that will equitably reflect the differences among partners in terms of their capital investment and service to the partnership.

A fixed ratio is easy to apply, and it may be an equitable basis in some circumstances. Assume, for example, that Hughes and Lane are partners. Each contributes the same amount of capital; but Hughes expects to work full-time in the partnership, and Lane expects to work only half-time. Accordingly, the partners agree to a fixed ratio of $2/3$ to Hughes and $1/3$ to Lane.

A ratio based on capital balances may be appropriate when the funds invested in the partnership are considered the critical factor. This might be true when the

partners expect to give equal service to the partnership. Capital balances may also be equitable when a manager is hired to run the business and the partners do not plan to take an active role in daily operations.

The three remaining ratios give specific recognition to differences that may exist among partners by providing salary allowances for time worked and interest allowances for capital invested. Then, any remaining net income or net loss is allocated on a fixed ratio. Some caution needs to be exercised in working with these types of income ratios. These ratios pertain exclusively to the computations that are required in dividing net income or net loss. **Salaries to partners and interest on partners' capitals are not expenses of the partnership.** Therefore, these items do not enter into the matching of expenses with revenues and the determination of net income or net loss. For a partnership, as well as for other entities, salaries expense pertains to the cost of services performed by employees, and interest expense relates to the cost of borrowing money from creditors. Partners in their ownership capacity are not considered either employees or creditors. When the income ratio includes a salary allowance for partners, some partnership agreements permit the partner to make monthly withdrawals of cash based on their "salary." In such cases, the withdrawals are debited to the partner's drawing account.

Salaries, Interest, and Remainder on a Fixed Ratio

Under this income ratio the provisions for salaries and interest must be applied before the remainder is allocated on the specified fixed ratio. This is true even if the provisions exceed net income or if the partnership has suffered a net loss for the year. Detailed information concerning the division of net income or net loss should be shown at the bottom of the income statement.

To illustrate this income ratio, we will assume that Sara King and Ray Lee are co-partners in Kingslee Pizza. The partnership agreement provides for (1) salary allowances of \$8,400 to King and \$6,000 to Lee, (2) interest allowances of 10 percent on capital balances at the beginning of the year, and (3) the remainder equally. Capital balances on January 1 were King, \$28,000, and Lee, \$24,000. In 2008, partnership net income was \$22,000. The division of net income is as shown in Illustration 14-5.

Illustration 14-5

Income statement with
division of net income

KINGSLEE PIZZA			
Income Statement			
For the Year Ended December 31, 2008			
Sales			\$200,000
Net income			<u>\$ 22,000</u>
	<u>Division of Net Income</u>		
	Sara King	Ray Lee	Total
Salary allowance	\$ 8,400	\$6,000	\$14,400
Interest allowance			
Sara King ($\$28,000 \times 10\%$)	2,800		
Ray Lee ($\$24,000 \times 10\%$)		2,400	
Total interest			<u>5,200</u>
Total salaries and interest	11,200	8,400	19,600
Remaining income, \$2,400			
Sara King ($\$2,400 \times 50\%$)	1,200		
Ray Lee ($\$2,400 \times 50\%$)		1,200	
Total remainder			<u>2,400</u>
Total division	<u>\$12,400</u>	<u>\$9,600</u>	<u>\$22,000</u>

The entry to record the division of net income looks like this:

Dec. 31	Income Summary	22,000	
	Sara King, Capital		12,400
	Ray Lee, Capital		9,600
	(To close net income to partners' capitals)		

To illustrate a situation in which the salary and interest allowances exceed net income, we will assume that net income in Kingslee Pizza was only \$18,000. In this case, the allowances will create a deficiency of \$1,600 (\$19,600 – \$18,000). Since the computations of the salary and interest allowances are the same as those shown in Illustration 14-5, we will begin the division of net income with total salaries and interest as shown in Illustration 14-6.

	Sara King	Ray Lee	Total
Total salaries and interest	\$11,200	\$8,400	\$19,600
Remaining deficiency (\$1,600)			
Sara King (\$1,600 × 50%)	(800)		
Ray Lee (\$1,600 × 50%)		(800)	
Total remainder			(1,600)
Total division	<u>\$10,400</u>	<u>\$7,600</u>	<u>\$18,000</u>

Illustration 14-6

Division of net income—
income deficiency

PARTNERSHIP FINANCIAL STATEMENTS

The financial statements of a partnership are similar to those of a proprietorship. The differences are generally related to the fact that a number of owners are involved in a partnership. In a balance sheet, for instance, each partner's capital balance is reported. The income statement for a partnership is identical to the income statement for a proprietorship, except for the division of net income, as shown earlier.

The owner's equity statement for a partnership is called **partners' capital statement**. Its function is to explain the changes in each partner's capital account and in total partnership capital during the year. As in a proprietorship, changes in capital may result from three causes: (1) additional capital investment, (2) drawings, and (3) net income or net loss.

The partners' capital statement for Kingslee Pizza shown in Illustration 14-7 is based on the division of \$22,000 of net income. The statement includes assumed data for the additional investment and for drawings.

KINGSLEE PIZZA			
Partners' Capital Statement			
For the Year Ended December 31, 2008			
	Sara King	Ray Lee	Total
Capital, January 1	\$28,000	\$24,000	\$52,000
Add: Additional investment	2,000		2,000
Net income	<u>12,400</u>	<u>9,600</u>	<u>22,000</u>
	42,400	33,600	76,000
Less: Drawings	<u>7,000</u>	<u>5,000</u>	<u>12,000</u>
Capital, December 31	<u>\$35,400</u>	<u>\$28,600</u>	<u>\$64,000</u>

Illustration 14-7

Partners' capital statement

The capital statement is prepared from the income statement and the partners' capital and drawing accounts.

THE CORPORATE FORM OF ORGANIZATION AND STOCK TRANSACTIONS

In 1819, Chief Justice John Marshall defined a **corporation** as “an artificial being, invisible, intangible, and existing only in contemplation of law.” This definition is the foundation for the prevailing legal interpretation that a corporation is an entity separate and distinct from its owners.

A corporation is created by law, and its continued existence depends on the statutes of the state in which it is incorporated. As a legal entity, a corporation has most of the rights and privileges of a person. The major exceptions relate to privileges that only a living person can exercise, such as the right to vote or to hold public office. A corporation is subject to the same duties and responsibilities as a person. For example, it must abide by the laws, and it must pay taxes.

Corporations may be classified in a variety of ways. Two common bases are by purpose and by ownership. A corporation may be organized for the purpose of making a **profit**, or it may be **nonprofit**. Corporations for profit include such well-known companies as **McDonald’s**, **Darden**, **Landry’s**, **Hilton**, **Starwood**, and **Marriott**. Nonprofit corporations are organized for charitable, medical, or educational purposes. Examples are the **Salvation Army**, the **American Cancer Society**, the **Hilton Foundation**, and the **Forte Foundation**.

Classification by *ownership* distinguishes between publicly held and privately held corporations. A **publicly held corporation** may have thousands of stockholders. Its stock is regularly traded on a national securities exchange, such as the New York Stock Exchange. Most of the largest U.S. corporations are publicly held. Examples of publicly held hospitality corporations are **Starwood**, **Hilton**, **Marriott**, **Disney**, **Darden**, and **Landry’s**. In contrast, a **privately held corporation**, often referred to as a *closely held corporation*, usually has only a few stockholders and does not offer its stock for sale to the general public. Privately held companies are generally much smaller than publicly held companies, although some notable exceptions exist. **Hyatt Hotels** is one of the most well-known hotel companies in the United States that is privately held.

CHARACTERISTICS OF A CORPORATION

A number of characteristics distinguish a corporation from proprietorships and partnerships. The most important of these characteristics are explained here.

Separate Legal Existence

As an entity separate and distinct from its owners, the corporation acts under its own name rather than in the name of its stockholders. **Disney** may buy, own, and sell property. It may borrow money and may enter into legally binding contracts in its own name. It also may sue or be sued, and it pays its own taxes.

In contrast to a partnership, in which acts of the owners (partners) bind the partnership, the acts of its owners (stockholders) do not bind the corporation unless such owners are duly appointed agents of the corporation. For example, if you owned shares of Disney stock, you would not have the right to purchase a theme park for the company unless you were appointed as an agent of the corporation.

Limited Liability of Stockholders

Since a corporation is a separate legal entity, creditors have recourse only to corporate assets to satisfy their claims. The liability of stockholders is normally limited to their investment in the corporation. Creditors have no legal claim on the personal assets of the owners unless fraud has occurred. Even in the event of bankruptcy, stockholders’ losses are generally limited to their capital investment in the corporation.

STUDY OBJECTIVE 5

Identify the major characteristics of a corporation.



Transferable Ownership Rights

Ownership of a corporation is held in shares of capital stock. These are transferable units. Stockholders may dispose of part or all of their interest in a corporation simply by selling their stock. The transfer of an ownership interest in a partnership requires the consent of each owner. In contrast, the transfer of stock is entirely at the discretion of the stockholder. It does not require the approval of either the corporation or other stockholders.

The transfer of ownership rights between stockholders normally has no effect on the operating activities of the corporation. Nor does it affect the corporation's assets, liabilities, and total ownership equity. The transfer of these ownership rights is a transaction between individual owners. The enterprise does not participate in such transfers after it issues the capital stock.

Ability to Acquire Capital

It is relatively easy for a corporation to obtain capital through the issuance of stock. Buying stock in a corporation is often attractive to an investor because a stockholder has limited liability and shares of stock are readily transferable. Also, numerous individuals can become stockholders by investing small amounts of money. In sum, the ability of a successful corporation to obtain capital is virtually unlimited.

Continuous Life

The life of a corporation is stated in its charter. The life may be perpetual, or it may be limited to a specific number of years. If it is limited, the life can be extended through renewal of the charter. Since a corporation is a separate legal entity, its continuance as a going concern is not affected by the withdrawal, death, or incapacity of a stockholder, employee, or officer. As a result, a successful enterprise can have a continuous and perpetual life.

Corporation Management

As in **Marriott**, stockholders legally own the corporation. But they manage the corporation indirectly through a board of directors they elect. The board, in turn, formulates the operating policies for the company. The board also selects officers, such as a president and one or more vice presidents, to execute policy and to perform daily management functions.

A typical organization chart showing the delegation of responsibility is shown in Illustration 14-8 on page 422.

The **president** is the chief executive officer. This individual has direct responsibility for managing the business. As the organization chart shows, the president delegates responsibility to other officers. The chief accounting officer is the **controller**. The controller's responsibilities include (1) maintaining the accounting records; (2) maintaining an adequate system of internal control; and (3) preparing financial statements, tax returns, and internal reports. The **treasurer** has custody of the corporation's funds and is responsible for maintaining the company's cash position.

On one hand, the organizational structure of a corporation enables a company to hire professional managers to run the business. On the other hand, the separation of ownership and management prevents owners from having an active role in managing the company, which some owners like to have.

Government Regulations

A corporation is subject to numerous state and federal regulations. State laws usually prescribe the requirements for issuing stock, the distributions of earnings permitted to stockholders, and the effects of retiring stock. Federal securities laws govern the sale of capital stock to the general public. Also, most publicly held

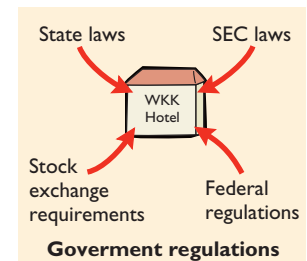
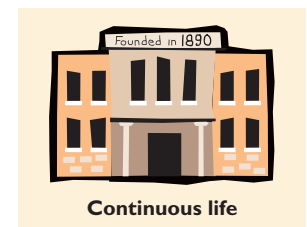
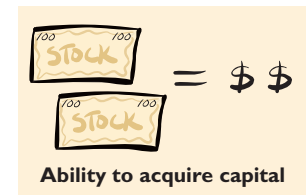
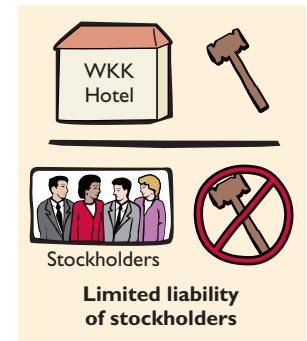
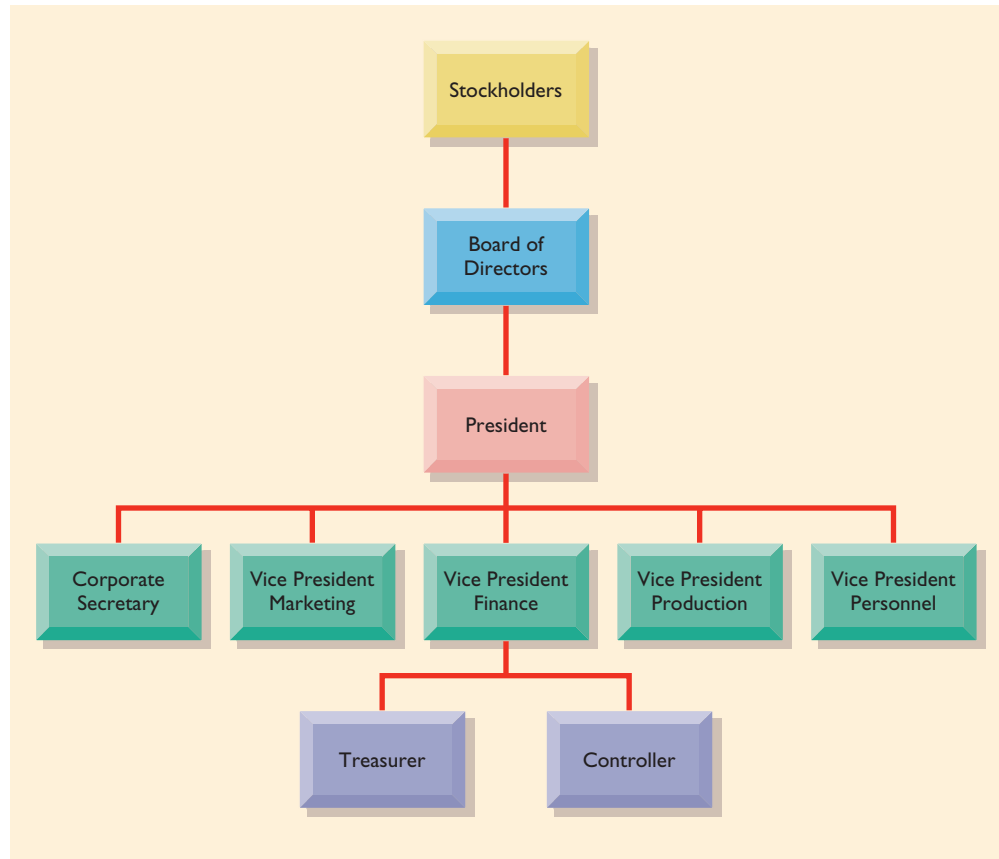


Illustration 14-8

Corporation organization chart

ETHICS NOTE

Managers who are not owners are often compensated based on the performance of the firm. They thus may be tempted to exaggerate firm performance by inflating income figures.



ACCOUNTING IN ACTION  *Business Insight*



When a group of investors in a company is unhappy with a company’s performance, it sometimes tries to elect new members to the board of directors at the company’s annual stockholder meeting. This is referred to as a proxy fight. Usually these efforts fail because it has been very expensive to get in contact with all of the company’s shareholders to try to convince them to vote for your group of nominees.

But the Internet has changed that, says James Heard, chief executive of **Proxy Monitor**, a New York firm that consults institutional shareholders on how to vote on corporate governance issues. “Increasingly the Internet is being used as a tool of communication among shareholders to pressure managements,” he said. One recent case involved an effort by a shareholder at **Luby’s** to get four new people elected to that company’s board of directors. That shareholder attracted considerable support from other Luby’s shareholders by posting messages on a **Yahoo!** message board.

SOURCE: Aaron Elstein, “Online Grousing Over Luby’s Escalates to Proxy Solicitation,” *Wall Street Journal*, October 25, 2000.

corporations are required to make extensive disclosure of their financial affairs to the Securities and Exchange Commission (SEC) through quarterly and annual reports. In addition, when a corporate stock is traded on organized securities exchanges, the corporation must comply with the reporting requirements of these exchanges. Government regulations are designed to protect the owners of the corporation. Such protection is needed because most stockholders do not participate in the day-to-day management of the company.

ACCOUNTING IN ACTION *Ethics Perspective*

In the wake of **Enron's** collapse, the members of Enron's board of directors have been questioned and scrutinized to determine what they knew and when they knew it. A *Wall Street Journal* story reported that Enron's board contends it was "kept in the dark" by management and by Arthur Andersen—Enron's longtime auditors—and didn't learn about the company's troublesome accounting until October 2001. But the *Wall Street Journal* reported that according to outside attorneys, "directors on at least two occasions waived Enron's ethical code of conduct to approve partnership between Enron and its chief financial officer. Those partnership kept significant debt off of Enron's books and masked actual company finances."

Was Enron's board of directors fulfilling its role in a corporate organization when it waived Enron's ethical code on two occasions?

SOURCE: Carol Hymowitz, "Serving on a Board Now Means Less Talk, More Accountability," *Wall Street Journal Online*, January 29, 2002.

Additional Taxes

Neither proprietorships nor partnerships pay income taxes. The owner's share of earnings from these organizations is reported on his or her personal income tax return. Taxes are then paid by the individual on this amount. Corporations, on the other hand, must pay federal and state income taxes as a separate legal entity. These taxes are substantial: They can amount to more than 40 percent of taxable income.

In addition, stockholders are required to pay taxes on cash dividends (pro rata distributions of net income). Thus, many argue that corporate income is **taxed twice (double taxation)**, once at the corporate level and again at the individual level.

From the foregoing, we can identify the following advantages and disadvantages of a corporation compared to proprietorship or partnership (Illustration 14-9).



<u>Advantages</u>	<u>Disadvantages</u>
Separate legal existence	Corporation management—separation of ownership and management
Limited liability of stockholders	Government regulations
Transferable ownership rights	Additional taxes
Ability to acquire capital	
Continuous life	
Corporation management—professional managers	

Illustration 14-9

Advantages and disadvantages of a corporation

S-Corporation

As you can see, while the characteristics of a regular corporation provide more liability protection for the investors, it is not practical for small, individual entrepreneurs to really take advantage of forming a corporation. In order to encourage business development, the government does allow a category of corporation known as the sub-chapter S corporation under the Internal Revenue Services Code, more widely known as S-corp, for smaller investors. The one characteristic of an S-corp that is similar to that of a regular corporation is limited liability. However, there is no double-taxation. The earnings or losses are passed directly to the owners and are taxed at the owners' individual tax rates.

If an S-corp has these good characteristics, why do all corporations not become S-corp? As I mentioned, the aim of the government is to encourage small businesses to still form as businesses but not to bear some of the disadvantages of a sole proprietorship. To become an S-corp, a corporation must have fewer than thirty-five shareholders, be a domestic corporation, and have only one class of stocks. These are all set up to provide protection and encouragement for domestic small businesses.

ALTERNATIVE TERMINOLOGY

The charter is often referred to as the *articles of incorporation*.

INTERNATIONAL NOTE

U.S. corporations are identified by *Inc.*, which stands for Incorporated. In Italy, the letters used are *SpA* (Società per Azioni); in Sweden, *AB* (Aktiebolag); in France, *SA* (Société Anonyme); and in the Netherlands, *NV* (Naamloze Vennootschap). In the United Kingdom, public limited corporations are identified by *PLC*, and private corporations are denoted by *Ltd.* (Limited). The parallel designations in Germany are *AG* for public corporations and *GmbH* for private corporations.

FORMING A CORPORATION

The initial step in forming a corporation is to file an application with the secretary of state in the state in which incorporation is desired. The application contains such information as (1) the name and purpose of the proposed corporation; (2) amounts, kinds, and number of shares of capital stock to be authorized; (3) the names of the incorporators; and (4) the shares of stock to which each has subscribed.

After the application is approved, a **charter** is granted. The charter may be an approved copy of the application form, or it may be a separate document containing the same basic data. The issuance of the charter creates the corporation. Upon receipt of the charter, the corporation develops its bylaws. The **bylaws** establish the internal rules and procedures for conducting the affairs of the corporation. They also indicate the powers of the stockholders, directors, and officers of the enterprise.¹

Regardless of the number of states in which a corporation has operating divisions, it is incorporated in only one state. It is to the company's advantage to incorporate in a state whose laws are favorable to the corporate form of business organization.

Corporations engaged in interstate commerce must also obtain a license from each state in which they do business. The license subjects the corporation's operating activities to the corporation laws of the state.

Costs incurred in the formation of a corporation are called **organization costs**. These costs include legal and state fees and promotional expenditures involved in the organization of the business. **Organization costs are expensed as incurred.** To determine the amount and the timing of future benefits is so difficult that a conservative approach of expensing these costs immediately is followed.

ACCOUNTING IN ACTION *Business Insight*

It is not necessary for a corporation to have an office in the state in which it incorporates. In fact, more than 50 percent of the Fortune 500 corporations are incorporated in Delaware. A primary reason is the Delaware courts' long-standing "business judgment rule." The rule provides that as long as directors exercise "due care" in the interests of stockholders, their actions will not be second-guessed by the courts. The rule has enabled directors to reject hostile takeover offers and to spurn takeovers simply because they did not want to sell the company. However, new interpretations are emerging. In a recent case, the state court ruled for a company that made a hostile takeover bid. On appeal, the Delaware Supreme Court ruled for the directors but gave the following guideline to the state courts: "Was the board's response reasonable in the light of the threat posed?"

CORPORATE CAPITAL

Owners' equity in a corporation is identified as **stockholders' equity, shareholders' equity, or corporate capital**. The stockholders' equity section of a corporation's balance sheet consists of (1) paid-in (contributed) capital and (2) retained earnings (earned capital). The distinction between paid-in capital and retained earnings is important from both a legal and a financial point of view. Legally, distributions of earnings (dividends) can be declared out of retained earnings in all states, but in many states dividends cannot be declared out of paid-in capital.

¹Following approval by two-thirds of the stockholders, the bylaws become binding on all stockholders, directors, and officers. Legally, a corporation is regulated first by the laws of the state, second by its charter, and third by its bylaws. Care must be exercised to ensure that the provisions of the bylaws are not in conflict with either state laws or the charter.

Financially, management, stockholders, and others look to earnings for the continued existence and growth of the corporation.

Ownership Rights of Stockholders

When chartered, the corporation may begin selling ownership rights in the form of shares of stock. When a corporation has only one class of stock, it is identified as **common stock**. Each share of common stock gives the stockholder the ownership rights pictured in Illustration 14-10. The ownership rights of a share of stock are stated in the articles of incorporation or in the bylaws.

Stockholders have the right to:




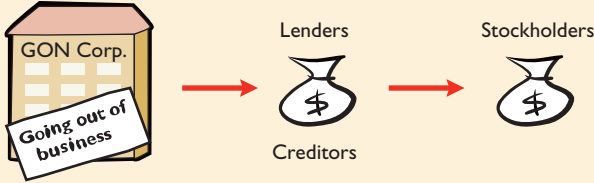
- Vote in the election of board of directors at the annual meeting and on actions that require stockholder approval. 
- Share the corporate earnings through receipt of dividends. 
- Keep same percentage ownership when new shares of stock are issued (**preemptive right**²). 
- Share in assets upon liquidation, in proportion to their holdings; called a **residual claim** because owners are paid with assets remaining after all claims have been paid. 

Illustration 14-10

Ownership rights of stockholders

ACCOUNTING IN ACTION *International Insight*



In Japan, stockholders are considered to be far less important to a corporation than employees, customers, and suppliers. There, stockholders are rarely asked to vote on an issue, and the notion of bending corporate policy to favor stockholders borders on the heretical. This attitude toward stockholders appears to be slowly changing, however, as influential Japanese are advocating listening to investors, raising the extremely low dividends paid by Japanese corporations, and improving disclosure of financial information.

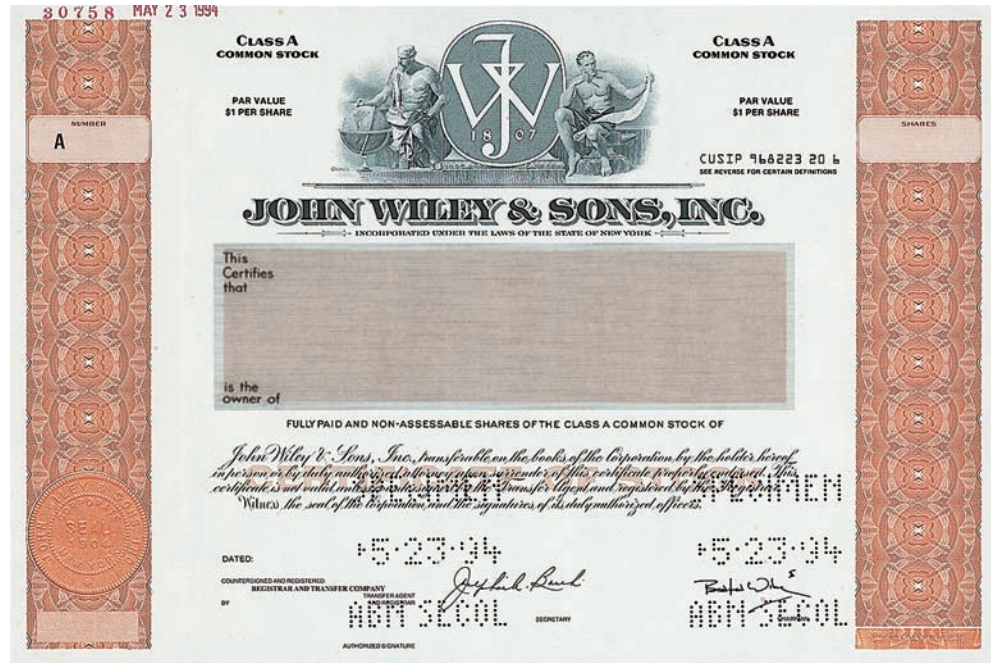


²Several companies have eliminated the preemptive right because they believe that it makes an unnecessary and cumbersome demand on management. For example, by stockholder approval, **IBM** has dropped its preemptive right for stockholders.

Proof of stock ownership is evidenced by a form known as a **stock certificate**. As shown in Illustration 14-11, the face of the certificate shows the name of the corporation, the stockholder's name, the class and special features of the stock, the number of shares owned, and the signatures of duly authorized corporate officials. Certificates are prenumbered to facilitate accountability. They may be issued for any quantity of shares.

Illustration 14-11

A stock certificate



BEFORE YOU GO ON...

REVIEW IT

1. What are the advantages and disadvantages of a corporation compared to a proprietorship and a partnership?
2. Identify the principal steps in forming a corporation.
3. What rights are inherent in owning a share of stock in a corporation?



INTERNATIONAL NOTE

U.S. and U.K. corporations raise most of their capital through millions of outside shareholders and bondholders. In contrast, companies in Germany, France, and Japan acquire financing from large banks or other institutions. In the latter environment, shareholders are less important, and external reporting and auditing receive less emphasis.

Stock Issue Considerations

In considering the issuance of stock, a corporation must resolve a number of basic questions: How many shares should be authorized for sale? How should the stock be issued? At what price should the shares be issued? What value should be assigned to the stock? These questions are answered in the following sections.

AUTHORIZED STOCK. The amount of stock that a corporation is *authorized* to sell is indicated in its charter. The total amount of **authorized stock** at the time of incorporation normally anticipates both initial and subsequent capital needs. As a result, the number of shares authorized generally exceeds the number initially sold. If all authorized stock is sold, a corporation must obtain consent of the state to amend its charter before it can issue additional shares.

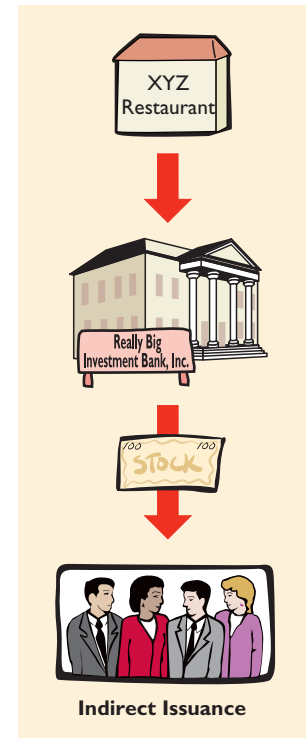
The authorization of capital stock does not result in a formal accounting entry. This event has no immediate effect on either corporate assets or stockholders' equity. But disclosure of the number of authorized shares is often reported in the stockholders' equity section. It is then simple to determine the number of unissued shares that can be issued without amending the charter: Subtract the total shares issued from the total authorized. For example, if Micro Hotel was authorized to sell 100,000 shares of common stock and issued 80,000 shares, 20,000 shares would remain unissued.

ISSUANCE OF STOCK. A corporation can issue common stock directly to investors. Or it can issue the stock indirectly through an investment banking firm (brokerage house) that specializes in bringing securities to the attention of prospective investors. Direct issue is typical in closely held companies. Indirect issue is customary for a publicly held corporation.

In an indirect issue, the investment banking firm may agree to **underwrite** the entire stock issue. In this arrangement, the investment banker buys the stock from the corporation at a stipulated price and resells the shares to investors. The corporation thus avoids any risk of being unable to sell the shares. Also, it obtains immediate use of the cash received from the underwriter. The investment banking firm, in turn, assumes the risk of reselling the shares in return for an underwriting fee.³ For example, **Bahama Resorts** used an underwriter to help it issue common stock to the public. The underwriter charged a 6.6 percent underwriting fee on Bahama's approximately \$20 million public offering.

How does a corporation set the price for a new issue of stock? Among the factors to be considered are (1) the company's anticipated future earnings, (2) its expected dividend rate per share, (3) its current financial position, (4) the current state of the economy, and (5) the current state of the securities market. The calculation can be complex and is properly the subject of a finance course.

MARKET VALUE OF STOCK. The stock of publicly held companies is traded on organized exchanges. The dollar prices per share are established by the interaction between buyers and sellers. In general, the prices set by the marketplace tend to



ACCOUNTING IN ACTION *Business Insight*



The volume of trading on national and international exchanges is heavy. Shares in excess of a billion are often traded daily on the New York Stock Exchange (NYSE) alone. For each listed stock, the *Wall Street Journal Online* reports the total volume of stock traded for a given day, the high and the low prices for the day (now in decimals), the closing market price, and the net change for the day. A recent listing for **PepsiCo** is shown.

<u>Stock</u>	<u>Volume</u>	<u>High</u>	<u>Low</u>	<u>Close</u>	<u>Net Change</u>
PepsiCo	2,942,400	48.88	47.31	47.50	-0.10

These numbers indicate that PepsiCo's trading volume was 2,942,400 shares. The high, low, and closing prices for that date were \$48.88, \$47.31, and \$47.50, respectively. The net change for the day was a decrease of \$0.10 per share.

For stock traded on organized stock exchanges, how are the dollar prices per share established? What factors might influence the price of shares in the marketplace?



³Alternatively, the investment banking firm may agree only to enter into a **best efforts** contract with the corporation. In such a case, the banker agrees to sell as many shares as possible at a specified price. The corporation bears the risk of unsold stock. Under a best efforts arrangement, the banking firm is paid a fee or a commission for its services.

follow the trend of a company's earnings and dividends. But factors beyond a company's control, such as international turmoil, changes in interest rates, and the outcome of a presidential election, may cause day-to-day fluctuations in market prices.

The trading of capital stock on securities exchanges involves the transfer of **already issued shares** from an existing stockholder to another investor. These transactions have no impact on a corporation's stockholders' equity.

TECHNOLOGY IN ACTION



Giant, publicly held corporations could not exist without the organized stock markets, and the stock markets could not exist without massive computerization. Not too many years ago, the NYSE "ticker" would run behind, or trading would even be halted, when sales exceeded 30 million shares or so. Now, with sales sometimes in excess of 800 million shares, the NYSE and its companion exchanges throughout the country operate efficiently with computer technology. Technology has also made possible extended trading hours. An investor in New York can trade electronically at 3:30 A.M., which is the time in New York when the London Stock Exchange opens at 8:30 A.M. Some predict that twenty-four-hour trading is not far off.

PAR AND NO-PAR VALUE STOCKS. **Par value stock** is capital stock that has been assigned a value per share in the corporate charter. The par value may be any amount selected by the corporation. Generally, the par value is quite low because states often levy a tax on the corporation based on par value. For example, **Starwood** has a par of \$0.01. **Hilton's** common stock carries a par value of \$2.50 per share, whereas its preferred stock has a par value of \$1.00 per share.

Par value does not indicate the worth or the market value of the stock. **Disney**, like **Starwood**, also carries stocks with a par value \$0.01; but its recent market price was \$18.18 per share. **Par value** has legal significance. It represents the **legal capital** per share that must be retained in the business for the protection of corporate creditors. That amount is not available for withdrawal by stockholders. Thus most states require the corporation to sell its shares at par or above.

No-par value stock is capital stock that has not been assigned a value in the corporate charter. It is often issued because some confusion still exists concerning par value and fair market value. If shares are not assigned a par value, the questionable use of par value as a basis for fair market value never arises. The major disadvantage of no-par value stock is that some states levy a high tax on such shares.

No-par value stock is quite common today. For example, **Marriott's** preferred stock has no par value. In many states the board of directors is permitted to assign a **stated value** to the no-par shares. This value becomes the legal capital per share. The stated value of no-par stock may be changed at any time by action of the directors. Stated value, like par value, does not indicate the market value of the stock. When there is no assigned stated value, the entire proceeds received on issuance of the stock is considered to be legal capital.

The relationship of par and no-par value to legal capital is shown in Illustration 14-12.

Illustration 14-12

Relationship of par and no-par value stock to legal capital

<u>Stock</u>	<u>Legal Capital per Share</u>
Par value	→ Par value
No-par value with stated value	→ Stated value
No-par value without stated value	→ Entire proceeds

ALTERNATIVE TERMINOLOGY
 Paid-in Capital in Excess of Par is also called *Premium on Stock*.

If Hydro-Slide issues an additional 1,000 shares of the \$1 par value common stock for cash at \$5 per share, the entry is

A	=	L	+	SE
+5,000				+1,000 +4,000

Cash	5,000	
Common Stock		1,000
Paid-in Capital in Excess of Par Value		4,000
(To record issuance of 1,000 shares of common stock in excess of par)		

The total paid-in capital from these two transactions is \$6,000, and the legal capital is \$2,000. If Hydro-Slide has retained earnings of \$27,000, the stockholders' equity section is as shown in Illustration 14-13.

Illustration 14-13

Stockholders' equity—
 paid-in capital in excess of
 par value

HYDRO-SLIDE THEME PARK	
Balance Sheet (partial)	
Stockholders' equity	
Paid-in-capital	
Common stock	\$ 2,000
Paid-in capital in excess of par value	4,000
Total paid-in capital	<u>6,000</u>
Retained earnings	<u>27,000</u>
Total stockholders' equity	<u><u>\$33,000</u></u>

When stock is issued for less than par value, the account Paid-in Capital in Excess of Par Value is debited, if a credit balance exists in this account. If a credit balance does not exist, then the amount less than par is debited to Retained Earnings. This situation occurs only rarely: The sale of common stock below par value is not permitted in most states because stockholders may be held personally liable for the difference between the price paid upon original sale and par value.

Issuing No-Par Common Stock for Cash

When no-par common stock has a stated value, the entries are similar to those illustrated for par value stock. The stated value represents legal capital. Therefore, it is credited to Common Stock. Also, when the selling price of no-par stock exceeds stated value, the excess is credited to Paid-in Capital in Excess of Stated Value. For example, assume that instead of \$1 par value stock, Hydro-Slide Theme Park has \$5 stated value no-par stock and the company issues 5,000 shares at \$8 per share for cash. The entry looks like this:

A	=	L	+	SE
+40,000				+25,000 +15,000

Cash	40,000	
Common Stock		25,000
Paid-in Capital in Excess of Stated Value		15,000
(To record issue of 5,000 shares of \$5 stated value no-par stock)		

Paid-in Capital in Excess of Stated Value is reported as part of paid-in capital in the stockholders' equity section.

What happens when no-par stock does not have a stated value? In that case, the entire proceeds from the issue become legal capital and are credited to Common Stock. Thus, if Hydro-Slide does not assign a stated value to its no-par stock, the issuance of the 5,000 shares at \$8 per share for cash is recorded as follows:

Cash Common Stock (To record issue of 5,000 shares of no-par stock)	40,000	40,000	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">A</td> <td style="text-align: center;">=</td> <td style="text-align: left;">L</td> <td style="text-align: center;">+</td> <td style="text-align: left;">SE</td> </tr> <tr> <td style="text-align: right;">+40,000</td> <td></td> <td></td> <td></td> <td style="text-align: right;">+40,000</td> </tr> </table>	A	=	L	+	SE	+40,000				+40,000
A	=	L	+	SE									
+40,000				+40,000									

The amount of legal capital for Hydro-Slide stock with a \$5 stated value is \$25,000. Without a stated value, it is \$40,000.

Issuing Common Stock for Services or Noncash Assets

Stock also may be issued for services (compensation to attorneys or consultants) or for noncash assets (land, buildings, and equipment). In such cases, what cost should be recognized in the exchange transaction? To comply with the **cost principle**, in a noncash transaction, **cost is the cash equivalent price**. Thus **cost is either the fair market value of the consideration given up or the fair market value of the consideration received, whichever is more clearly determinable**.

To illustrate, assume that attorneys have helped Jordan Sports Spa incorporate. They have billed the company \$5,000 for their services. They agree to accept 4,000 shares of \$1 par value common stock in payment of their bill. At the time of the exchange, there is no established market price for the stock. In this case, the market value of the consideration received, \$5,000, is more clearly evident. Accordingly, the entry is

Organization Expense Common Stock Paid-in Capital in Excess of Par Value (To record issuance of 4,000 shares of \$1 par value stock to attorneys)	5,000	4,000 1,000	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">A</td> <td style="text-align: center;">=</td> <td style="text-align: left;">L</td> <td style="text-align: center;">+</td> <td style="text-align: left;">SE</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">-5,000</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">+4,000</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">+1,000</td> </tr> </table>	A	=	L	+	SE					-5,000					+4,000					+1,000
A	=	L	+	SE																			
				-5,000																			
				+4,000																			
				+1,000																			

As explained on page 424, organization costs are expensed as incurred.

In contrast, assume that Athletic Rock Climbing Camp is an existing publicly held corporation. Its \$5 par value stock is actively traded at \$8 per share. The company issues 10,000 shares of stock to acquire land recently advertised for sale at \$90,000. The most clearly evident value in this noncash transaction is the market price of the consideration given, \$80,000. The transaction is recorded as follows:

Land Common Stock Paid-in Capital in Excess of Par Value (To record issuance of 10,000 shares of \$5 par value stock for land)	80,000	50,000 30,000	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">A</td> <td style="text-align: center;">=</td> <td style="text-align: left;">L</td> <td style="text-align: center;">+</td> <td style="text-align: left;">SE</td> </tr> <tr> <td style="text-align: right;">+80,000</td> <td></td> <td></td> <td></td> <td style="text-align: right;">+50,000</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">+30,000</td> </tr> </table>	A	=	L	+	SE	+80,000				+50,000					+30,000
A	=	L	+	SE														
+80,000				+50,000														
				+30,000														

As illustrated in these examples, **the par value of the stock is never a factor in determining the cost of the assets received**. This is also true of the stated value of no-par stock.

BEFORE YOU GO ON...

▶ REVIEW IT

1. Explain the accounting for par and no-par common stock issued for cash.
2. Explain the accounting for the issuance of stock for services or noncash assets.

▶ DO IT

Cayman Resorts begins operations on March 1 by issuing 100,000 shares of \$10 par value common stock for cash at \$12 per share. On March 15, it issues 5,000 shares of common stock to attorneys in settlement of their bill of \$50,000 for organization costs. Journalize the issuance of the shares, assuming the stock is not publicly traded.

ACTION PLAN

- In issuing shares for cash, credit Common Stock for par value per share.
- Credit any additional proceeds in excess of par value to a separate paid-in capital account.
- When stock is issued for services, use the cash equivalent price.
- For the cash equivalent price, use either the fair market value of what is given up or the fair market value of what is received, whichever is more clearly determinable.

SOLUTION

Mar. 1	Cash	1,200,000	
	Common Stock		1,000,000
	Paid-in Capital in Excess of Par Value		200,000
	(To record issuance of 100,000 shares at \$12 per share)		
Mar. 15	Organization Expense	50,000	
	Common Stock		50,000
	(To record issuance of 5,000 shares for attorneys' fees)		



ACCOUNTING FOR TREASURY STOCK

STUDY OBJECTIVE 7

Explain the accounting for treasury stock.

HELPFUL HINT

Treasury stock is so named because the company often holds the shares in its treasury for safekeeping.

HELPFUL HINT

Treasury shares do not have dividend rights or voting rights.

Treasury stock is a corporation's own stock that has been issued, fully paid for, and reacquired by the corporation but not retired. A corporation may acquire treasury stock for various reasons:

1. To reissue the shares to officers and employees under bonus and stock compensation plans.
2. To increase trading of the company's stock in the securities market in the hopes of enhancing its market value.
3. To have additional shares available for use in the acquisition of other companies.
4. To reduce the number of shares outstanding and thereby increase earnings per share.
5. To rid the company of disgruntled investors, perhaps to avoid a takeover.

Many corporations have treasury stock. One survey of 600 companies in the United States found that 66 percent have treasury stock.⁴ Specifically, **The Coca-Cola Company** reported as of December 31, 2005, \$19,644 million; and **Marriott** reported \$2,667 million in treasury stock.

⁴*Accounting Trends & Techniques 2000* (New York: American Institute of Certified Public Accountants).

ACCOUNTING IN ACTION *Business Insight*



Why would a company use its own cash or, worse yet, borrow money to buy back its own shares? Wouldn't a company want the public to buy its shares so that it could raise funds for future projects? Stock repurchase is a really interesting phenomenon. In 2000, more than a dozen lodging companies initiated repurchase programs. These include **Cendant Corporation**, **Choice Hotels International**, **Marriott International**, **Park Place Entertainment**, and **Sun International**, among others. Some companies believe their stocks are undervalued, and therefore, a stock repurchase program can maximize their returns. Such is the case with **John Q. Hammons Hotels**; it realized a 63 percent gain on its repurchase move.

Restaurants also use this tactic. **Landry's** repurchased its own shares in 1999, 2000, and 2001, totaling more than \$89 million. In 2002, **Starbucks Corporation** also announced the repurchase of 3.5 million of its common stock at a value of more than \$50 million. Its board also has approved up to a 10-million-share repurchase. In 2005, **Royal Caribbean Cruises, Ltd.**, announced a \$250 million stock repurchase plan. **Morgans Hotel Group** is one of the latest hotel groups that made known its \$50 stock repurchase plan to the public in December 2006.

SOURCES: M. Whitford, "Stock Buybacks Spur Demand," *Hotel and Motel Management* 215(16) (2000): 44.

"Starbucks Perks Up Stock Buyback Plan," *Nation's Restaurant News* 36(26) (2002): 12.

"Morgans Hotel Group Announces \$50 Million Stock Repurchase Program," <http://biz.yahoo.com/bw/061207/20061207005841.html?.v=1>

"Royal Carribean in Stock Repurchase," www.bizjournals.com/pacific/stories/2005/09/26/daily1.html.

Purchase of Treasury Stock

Treasury stock is generally accounted for by the cost method. This method uses the cost of the shares purchased to value the treasury stock. **Under the cost method, Treasury Stock is debited for the price paid to reacquire the shares.**

The same amount is credited to Treasury Stock when the shares are disposed of. To illustrate, assume that on January 1, 2008, the stockholders' equity section of Mead Foods, Inc., has 100,000 shares of \$5 par value common stock outstanding (all issued at par value) and Retained Earnings of \$200,000. The stockholders' equity section before purchase of treasury stock is shown in Illustration 14-14.

MEAD FOODS, INC.	
Balance Sheet (partial)	
Stockholders' equity	
Paid-in capital	
Common stock, \$5 par value, 100,000 shares issued and outstanding	\$500,000
Retained earnings	<u>200,000</u>
Total stockholders' equity	<u>\$700,000</u>

Illustration 14-14

Stockholders' equity with no treasury stock

On February 1, 2008, Mead acquires 4,000 shares of its stock at \$8 per share:

Feb. 1	Treasury Stock	32,000		
	Cash		32,000	
	(To record purchase of 4,000 shares of treasury stock at \$8 per share)			

A	=	L	+	SE
-32,000				-32,000

Note that Treasury Stock is debited for the cost of the shares purchased. Is the original paid-in capital account, Common Stock, affected? No, because the number of issued shares does not change. In the stockholders' equity section of the balance sheet, treasury stock is deducted from total paid-in capital and retained earnings. Treasury Stock is a contra stockholders' equity account.

The stockholders' equity section of Mead Foods after purchase of treasury stock is shown in Illustration 14-15.

Illustration 14-15

Stockholders' equity with treasury stock

MEAD FOODS, INC.	
Balance Sheet (partial)	
Stockholders' equity	
Paid-in capital	
Common stock, \$5 par value, 100,000 shares issued and 96,000 shares outstanding	\$500,000
Retained earnings	<u>200,000</u>
Total paid-in capital and retained earnings	700,000
Less: Treasury stock (4,000 shares)	<u>32,000</u>
Total stockholders' equity	<u><u>\$668,000</u></u>

Thus the acquisition of treasury stock reduces stockholders' equity.

In the balance sheet, both the number of shares issued (100,000) and the number in the treasury (4,000) are disclosed. The difference between these two amounts is the number of shares of stock outstanding (96,000). The term **outstanding stock** means the number of shares of issued stock that are being held by stockholders.

Some maintain that treasury stock should be reported as an asset because it can be sold for cash. Under this reasoning, unissued stock also should be shown as an asset, clearly an erroneous conclusion. Rather than being an asset, treasury stock reduces stockholder claims on corporate assets. This effect is correctly shown by reporting treasury stock as a deduction from total paid-in capital and retained earnings.

Disposal of Treasury Stock

Treasury stock is usually sold or retired. The accounting for its sale is different when treasury stock is sold above cost than when it is sold below cost.

SALE OF TREASURY STOCK ABOVE COST. If the selling price of the treasury shares is equal to cost, the sale of the shares is recorded by a debit to Cash and a credit to Treasury Stock. When the selling price of the shares is greater than cost, the difference is credited to Paid-in Capital from Treasury Stock.

To illustrate, assume that 1,000 shares of treasury stock of Mead Foods, Inc., previously acquired at \$8 per share, are sold at \$10 per share on July 1. The entry is as follows:

HELPFUL HINT

Treasury stock transactions are classified as capital stock transactions. As in the case when stock is issued, the income statement is not involved.

A	=	L	+	SE
+10,000				+8,000
				+2,000

July 1	Cash	10,000	
	Treasury Stock		8,000
	Paid-in Capital from Treasury Stock		2,000
	(To record sale of 1,000 shares of treasury stock above cost)		

The \$2,000 credit in the entry would not be considered a gain on sale of treasury stock for two reasons: (1) Gains on sales occur when **assets** are sold, and treasury stock is not an asset. (2) A corporation does not realize a gain or suffer a loss from stock transactions with its own stockholders. Thus paid-in capital arising from the sale of treasury stock should not be included in the measurement of net income. Paid-in Capital from Treasury Stock is listed separately on the balance sheet as a part of paid-in capital.

SALE OF TREASURY STOCK BELOW COST. When treasury stock is sold below its cost, the excess of cost over selling price is usually debited to Paid-in Capital from Treasury Stock. Thus, if Mead Foods, Inc., sells an additional 800 shares of treasury stock on October 1 at \$7 per share, the entry is as follows:

Oct. 1	Cash	5,600	
	Paid-in Capital from Treasury Stock	800	
	Treasury Stock		6,400
	(To record sale of 800 shares of treasury stock below cost)		

A	=	L	+	SE
+5,600				-800
				+6,400

Observe the following from the two sales entries: (1) Treasury Stock is credited at cost in each entry. (2) Paid-in Capital from Treasury Stock is used for the difference between cost and the resale price of the shares. (3) The original paid-in capital account, Common Stock, is not affected. **The sale of treasury stock increases both total assets and total stockholders' equity.**

After posting the foregoing entries, the treasury stock accounts will show the following balances on October 1 (Illustration 14-16).

Treasury Stock				Paid-in Capital from Treasury Stock			
Feb. 1	32,000	July 1	8,000	Oct. 1	800	July 1	2,000
		Oct. 1	6,400			Oct. 1 Bal.	1,200
Oct. 1 Bal.	17,600						

Illustration 14-16
Treasury stock accounts

When the credit balance in Paid-in Capital from Treasury Stock is eliminated, any additional excess of cost over selling price is debited to Retained Earnings. To illustrate, assume that Mead Foods, Inc., sells its remaining 2,200 shares at \$7 per share on December 1. The excess of cost over selling price is \$2,200 [2,200 × (\$8 – \$7)]. In this case, \$1,200 of the excess is debited to Paid-in Capital from Treasury Stock. The remainder is debited to Retained Earnings. The entry follows:

Dec. 1	Cash	15,400	
	Paid-in Capital from Treasury Stock	1,200	
	Retained Earnings	1,000	
	Treasury Stock		17,600
	(To record sale of 2,200 shares of treasury stock at \$7 per share)		

A	=	L	+	SE
+15,400				-1,200
				-1,000
				+17,600

BEFORE YOU GO ON...

▶ REVIEW IT

1. What is treasury stock, and why do companies acquire it?
2. How is treasury stock recorded?
3. Where is treasury stock reported in the financial statements? Does a company record gains and losses on treasury stock transactions? Explain.

▶ DO IT

Santa Anita Resorts, Inc., purchases 3,000 shares of its \$60 par value common stock for \$180,000 cash on July 1. The shares are to be held in the treasury until resold. On November 1, the corporation sells 1,000 shares of treasury stock for cash at \$70 per share. Journalize the treasury stock transactions.

ACTION PLAN

- Record the purchase of treasury stock at cost.
- When treasury stock is sold above its cost, credit the excess of the selling price over cost to Paid-in Capital from Treasury Stock.
- When treasury stock is sold below its cost, debit the excess of cost over selling price to Paid-in Capital from Treasury Stock.

SOLUTION

July 1	Treasury Stock	180,000	
	Cash		180,000
	(To record the purchase of 3,000 shares at \$60 per share)		
Nov. 1	Cash	70,000	
	Treasury Stock		60,000
	Paid-in Capital from Treasury Stock		10,000
	(To record the sale of 1,000 shares at \$70 per share)		



STUDY OBJECTIVE 8

Differentiate preferred stock from common stock.

PREFERRED STOCK

To appeal to more potential investors, a corporation may issue an additional class of stock, called preferred stock. **Preferred stock** has contractual provisions that give it a preference or priority over common stock in certain areas. Typically, preferred stockholders have a priority as to (1) distributions of earnings (dividends) and (2) assets in the event of liquidation. However, they generally do not have voting rights.

Like common stock, preferred stock may be issued for cash or for noncash assets. The entries for these transactions are similar to the entries for common stock. When a corporation has more than one class of stock, each paid-in capital account title should identify the stock to which it relates. For example, a company might have the following accounts: Preferred Stock, Common Stock, Paid-in Capital in Excess of Par Value—Preferred Stock, and Paid-in Capital in Excess of Par Value—Common Stock. Assume that Stine Hotel Corporation issues 10,000 shares of \$10 par value preferred stock for \$12 cash per share. The entry to record the issuance follows:

A	=	L	+	SE
+120,000				+100,000
				+20,000

Cash	120,000	
Preferred Stock		100,000
Paid-in Capital in Excess of Par Value—Preferred Stock		20,000
(To record the issuance of 10,000 shares of \$10 par value preferred stock)		

Preferred stock may have either a par value or a no-par value. In the stockholders' equity section of the balance sheet, preferred stock is shown first because of its dividend and liquidation preferences over common stock.

Various features associated with the issuance of preferred stock, including dividend preferences, liquidation preferences, convertibility, and callability, are discussed on the following pages.

Dividend Preferences

As noted earlier, **preferred stockholders have the right to share in the distribution of corporate income before common stockholders.** For example, if the dividend rate on preferred stock is \$5 per share, common shareholders will not receive any dividends in the current year until preferred stockholders have received \$5 per share. The first claim to dividends does not, however, guarantee the payment of dividends. Dividends depend on many factors, such as adequate retained earnings and availability of cash.

The per share dividend amount is stated as a percentage of the preferred stock's par value or as a specified amount. For example, Crane Resorts specifies a $3\frac{3}{4}$ percent dividend on its \$100 par value preferred ($\$100 \times 3\frac{3}{4}\% = \3.75 per share).

Cumulative Dividend

Preferred stock often contains a **cumulative dividend** feature. This means that preferred stockholders must be paid both current-year dividends and any unpaid prior-year dividends before common stockholders receive dividends. When preferred stock is cumulative, preferred dividends not declared in a given period are called **dividends in arrears**.

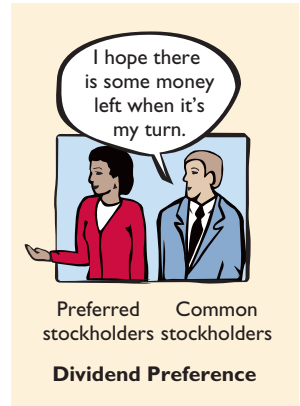
To illustrate, assume that Sun Resorts and Spas has 5,000 shares of 7 percent, \$100 par value, cumulative preferred stock outstanding. The annual dividend is \$35,000 ($5,000 \times \7 per share), but dividends are two years in arrears. In this case, preferred stockholders are entitled to receive the dividends shown in Illustration 14-17 in the current year.

Dividends in arrears ($\$35,000 \times 2$)	\$ 70,000
Current-year dividends	35,000
Total preferred dividends	<u>\$105,000</u>

No distribution can be made to common stockholders until this entire preferred dividend is paid. In other words, dividends cannot be paid to common stockholders while any preferred stock is in arrears.

Dividends in arrears are not considered a liability. No payment obligation exists until a dividend is declared by the board of directors. However, the amount of dividends in arrears should be disclosed in the notes to the financial statements. Doing so enables investors to assess the potential impact of this commitment on the corporation's financial position.

Companies that are unable to meet their dividend obligations are not looked upon favorably by the investment community. As a financial officer noted in discussing one company's failure to pay its cumulative preferred dividend for a period of time, "Not meeting your obligations on something like that is a major black mark on your record." The accounting entries for preferred stock dividends are explained in the following section.

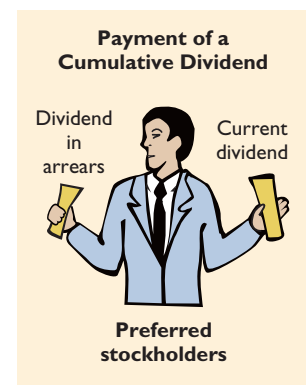


HELPFUL HINT

The cumulative dividend feature is often critical in investors' acceptance of a preferred stock issue. Investors are much less interested in a noncumulative preferred stock because a dividend passed in any year is lost forever.

Illustration 14-17

Computation of total dividends to preferred stock



DIVIDENDS

STUDY OBJECTIVE 9

Prepare the entries for cash dividends and stock dividends.

A **dividend** is a distribution by a corporation to its stockholders on a pro rata (proportional) basis. Potential buyers and sellers of stock are very interested in a company's dividend policies and practices. Dividends can take four forms: (1) cash, (2) property, (3) scrip (a promissory note to pay cash), or (4) stock. Cash dividends predominate in practice, and stock dividends are declared with some frequency. These two forms of dividends will be the focus of discussion in this chapter.

Dividends may be expressed in two ways: (1) as a percentage of the par or stated value of the stock or (2) as a dollar amount per share. In the financial press, dividends are generally reported **quarterly** as a **dollar amount per share**.

CASH DIVIDENDS

A **cash dividend** is a pro rata distribution of cash to stockholders. For a corporation to pay a cash dividend, it must have three things:

1. **Retained earnings.** The legality of a cash dividend depends on the laws of the state in which the company is incorporated. Payment of cash dividends from retained earnings is legal in all states. In general, cash dividend distributions based only on common stock (legal capital) are illegal. Statutes vary considerably with respect to cash dividends based on paid-in capital in excess of par or stated value. Many states permit such dividends. A dividend declared out of paid-in capital is termed a **liquidating dividend**. The amount originally paid in by stockholders is being reduced, or "liquidated," by such a dividend.
2. **Adequate cash.** The legality of a dividend and the ability to pay a dividend are two different things. For example, Best Hotels, with retained earnings of \$3 million, could legally declare a dividend of \$3 million. But Best's cash balance is only \$250,000. In order to pay a \$3 million dividend, Best would need to raise additional cash through the sale of other assets or through additional financing.

Before declaring a cash dividend, a company's board of directors must carefully consider both current and future demands on the company's cash resources. In some cases, current liabilities may make a cash dividend inappropriate. In other cases, a major plant expansion program may warrant only a relatively small dividend. **Sysco** declared an \$8.17 per share dividend per quarter in 2006. For the same period, **Hilton** declared a \$0.04 per share dividend, whereas **Marriott** paid \$0.05 to \$0.06 per share.

3. **A declaration of dividends.** A company does not pay dividends unless its board of directors decides to do so, at which point the board "declares" the dividend. The board of directors has full authority to determine the amount of income to be distributed in the form of a dividend and the amount to be retained in the business. Dividends do not accrue like interest on a note payable, and they are not a liability until declared.

The amount and the timing of a dividend are important issues. The payment of a large cash dividend could lead to liquidity problems for the enterprise. On the other hand, a small dividend or a missed dividend may cause unhappiness among stockholders. Many of them expect to receive a reasonable cash payment from the company on a periodic basis. Many companies declare and pay cash dividends quarterly.

Entries for Cash Dividends

Three dates are important in connection with dividends: (1) the declaration date, (2) the record date, and (3) the payment date. Normally, there are two to four

ACCOUNTING IN ACTION *Business Insight*



To pay, or not to pay, that seems to be the question. As stock prices fall and the market becomes more volatile, investors become more interested in dividends. And what they found was not too pleasing. One article noted, “According to Standard and Poor’s, only 72 percent of companies in its S&P 500 index paid a dividend last year [2001], down from 94 percent in 1980.” However, as a result of new tax regulations reducing the tax on dividends to only 15 percent, many corporate boards increased their dividend in 2003.

What factors must a board of directors consider before declaring a cash dividend?

SOURCE: “Dividends’ End: Should Technology Companies Pay Dividends?” *The Economist*, January 12, 2002, p. 68.

weeks between each date. Accounting entries are required on two of the dates—the declaration date and the payment date.

On the **declaration date**, the board of directors formally declares (authorizes) the cash dividend and announces it to stockholders. Declaration of a cash dividend **commits the corporation to a legal obligation**. The obligation is binding and cannot be rescinded. An entry is required to recognize the decrease in retained earnings and the increase in the liability Dividends Payable. To illustrate, assume that on December 1, 2008, the directors of Heavenly Resorts declare a 50 cents per share cash dividend on 100,000 shares of \$10 par value common stock. The dividend is \$50,000 (100,000 × 50 cents). The entry to record the declaration is

HELPFUL HINT

What is the effect of the declaration of a cash dividend on (1) total stockholders’ equity, (2) total liabilities, (3) total assets? Answer: (1) decrease, (2) increase, (3) no effect.

Declaration Date			
Dec. 1	Retained Earnings	50,000	
	Dividends Payable		50,000
	(To record declaration of cash dividend)		

A	=	L	+	SE
		+50,000		-50,000

Dividends Payable is a current liability: It will normally be paid within the next several weeks.

Instead of debiting Retained Earnings, the account Dividends may be debited. This account provides additional information in the ledger. Also, a company may have separate dividend accounts for each class of stock. When a dividend account is used, its balance is transferred to Retained Earnings at the end of the year by a closing entry. Whichever account is used for the dividend declaration, the effect is the same: Retained earnings is decreased and a current liability is increased. For homework problems, you should use the Retained Earnings account for recording dividend declarations.

At the **record date**, ownership of the outstanding shares is determined for dividend purposes. The records maintained by the corporation supply this information. In the interval between the declaration date and the record date, the corporation updates its stock ownership records. For Heavenly Resorts, the record date is December 22. No entry is required on this date because the corporation’s liability recognized on the declaration date is unchanged.

HELPFUL HINT

Between the declaration date and the record date, the number of shares outstanding should remain the same. The purpose of the record date is to identify the persons or entities that will receive the dividend, not to determine the amount of the dividend liability.

Record Date			
Dec. 22			
	No entry necessary		

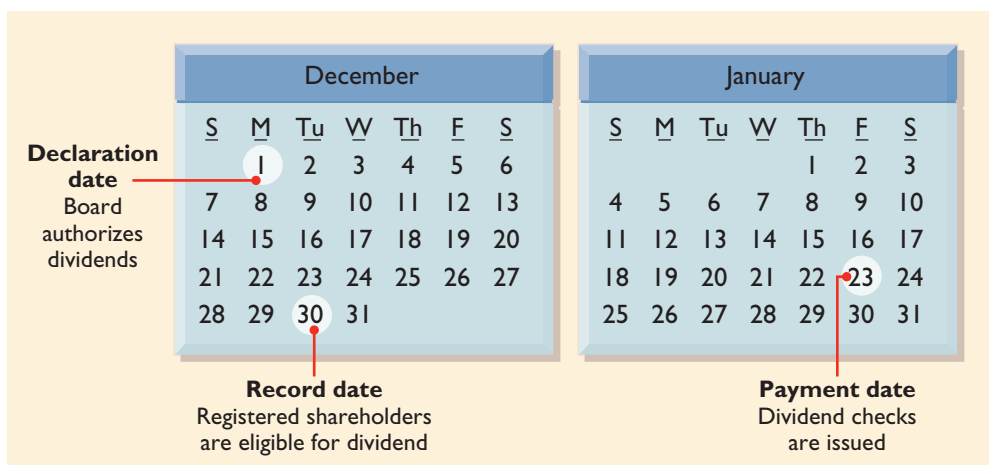
A	=	L	+	SE
-50,000		-50,000		

On the **payment date**, dividend checks are mailed to the stockholders, and the payment of the dividend is recorded. Assuming that the payment date is January 20 for Heavenly Resorts, the entry on that date would be:

		Payment Date		
Jan. 20	Dividends Payable Cash (To record payment of cash dividend)	50,000		50,000

Note that payment of the dividend reduces both current assets and current liabilities. It has no effect on stockholders' equity. The **cumulative effect** of the **declaration and payment** of a cash dividend is to **decrease both stockholders' equity and total assets**. Illustration 14-18 summarizes the three important dates associated with dividends.

Illustration 14-18
Key dividend dates



Allocating Cash Dividends between Preferred and Common Stock

As explained earlier in this chapter, preferred stock has priority over common stock in regard to dividends. Preferred stockholders must be paid any unpaid prior-year dividends before common stockholders receive dividends.

To illustrate, assume that at December 31, 2008, IBR Hotels Inc. has 1,000 shares of 8 percent, \$100 par value cumulative preferred stock. It also has 50,000 shares of \$10 par value common stock outstanding. The dividend per share for preferred stock is \$8 (\$100 par value × 8%). The required annual dividend for preferred stock is therefore \$8,000 (1,000 × \$8). At December 31, 2008, the directors declare a \$6,000 cash dividend. In this case, the entire dividend amount goes to preferred stockholders because of their dividend preference. The entry to record the declaration of the dividend looks like this:

A	=	L	+	SE
		+6,000		-6,000

Dec. 31	Retained Earnings Dividends Payable (To record \$6 per share cash dividend to preferred stockholders)	6,000		6,000
---------	---	-------	--	-------

Because of the cumulative feature, dividends of \$2 per share are in arrears on preferred stock for 2008. These dividends must be paid to preferred stockholders

before any future dividends can be paid to common stockholders. Dividends in arrears should be disclosed in the financial statements.

On December 31, 2008, IBR declares a \$50,000 cash dividend. Illustration 14-19 shows the allocation of the dividend to the two classes of stock.

Total dividend		\$50,000
Allocated to preferred stock		
Dividends in arrears, 2004 (1,000 × \$2)	\$2,000	
2005 dividend (1,000 × \$8)	8,000	10,000
Remainder allocated to common stock		<u>\$40,000</u>

Illustration 14-19

Allocating dividends to preferred and common stock

The entry to record the declaration of the dividend looks like this:

Dec. 31	Retained Earnings	50,000	
	Dividends Payable		50,000
	(To record declaration of cash dividends of \$10,000 to preferred stock and \$40,000 to common stock)		

A	=	L	+	SE
		+50,000		-50,000

What if IBR’s preferred stock were not cumulative? In that case, preferred stockholders would have received only \$8,000 in dividends in 2008. Common stockholders would have received \$42,000.

STOCK DIVIDENDS

A **stock dividend** is a pro rata distribution to stockholders of the corporation’s own stock. Whereas a cash dividend is paid in cash, a stock dividend is paid in stock. **A stock dividend results in a decrease in retained earnings and an increase in paid-in capital.** Unlike a cash dividend, a stock dividend does not decrease total stockholders’ equity or total assets.

To illustrate, assume that you have a 2 percent ownership interest in Cetus Restaurant, Inc.; you own twenty of its 1,000 shares of common stock. If Cetus declares a 10 percent stock dividend, it would issue 100 shares (1,000 × 10%) of stock. You would receive two shares (2% × 100). Would your ownership interest change? No, it would remain at 2 percent (22 ÷ 1,100). **You now own more shares of stock, but your ownership interest has not changed.** Illustration 14-20 shows the effect of a stock dividend for stockholders.

Before stock dividend

After stock dividend

“I owned 40 shares before and I own 120 shares now, but I still own only 1/4 of the company!”

Number of shares owned increases, but percentage of company owned remains the same.

Illustration 14-20

Effect of stock dividend for stockholders

From the company’s point of view, no cash has been disbursed, and no liabilities have been assumed by the corporation. What are the purposes and benefits of a stock dividend? Corporations issue stock dividends generally for one or more of the following reasons:

1. To satisfy stockholders’ dividend expectations without spending cash.
2. To increase the marketability of the corporation’s stock. When the number of shares outstanding increases, the market price per share decreases. Decreasing the market price of the stock makes it easier for smaller investors to purchase the shares.
3. To emphasize that a portion of stockholders’ equity has been permanently reinvested in the business (and is unavailable for cash dividends).

The size of the stock dividend and the value to be assigned to each dividend share are determined by the board of directors when the dividend is declared. The per share amount must be at least equal to the par or stated value in order to meet legal requirements.

The accounting profession distinguishes between a **small stock dividend** (less than 20 to 25 percent of the corporation’s issued stock) and a **large stock dividend** (greater than 20 to 25 percent). For small stock dividends, it recommends that the directors assign the **fair market value per share**. This treatment is based on the assumption that a small stock dividend will have little effect on the market price of the outstanding shares. Many stockholders consider small stock dividends to be distributions of earnings equal to the fair market value of the shares distributed. The amount to be assigned for a large stock dividend is not specified by the accounting profession. **Par or stated value per share** is normally assigned. Small stock dividends predominate in practice. Thus we will illustrate only the entries for small stock dividends.

ENTRIES FOR STOCK DIVIDENDS

To illustrate the accounting for small stock dividends, assume that Medland Restaurants Corporation has a balance of \$300,000 in retained earnings. It declares a 10 percent stock dividend on its 50,000 shares of \$10 par value common stock. The current fair market value of its stock is \$15 per share. The number of shares to be issued is 5,000 (10% × 50,000). Therefore, the total amount to be debited to Retained Earnings is \$75,000 (5,000 × \$15). The entry to record the declaration of the stock dividend is as follows:

A	=	L	+	SE			
				-75,000	Retained Earnings	75,000	
				+50,000	Common Stock Dividends Distributable		50,000
				+25,000	Paid-in Capital in Excess of Par Value		25,000
					(To record declaration of 10% stock dividend)		

Note that Retained Earnings is debited for the fair market value of the stock issued (\$15 × 5,000). Common Stock Dividends Distributable is credited for the par value of the dividend shares (\$10 × 5,000), and the excess over par (\$5 × 5,000) is credited to Paid-in Capital in Excess of Par Value.

Common Stock Dividends Distributable is a **stockholders’ equity account**. It is not a liability because assets will not be used to pay the dividend. If a balance sheet is prepared before the dividend shares are issued, the distributable account is reported under Paid-in capital, as an addition to common stock issued. This is shown in Illustration 14-21.

Paid-in capital		
Common stock	\$500,000	
Common stock dividends distributable	<u>50,000</u>	\$550,000

Illustration 14-21

Statement presentation of common stock dividends distributable

When the dividend shares are issued, Common Stock Dividends Distributable is debited, and Common Stock is credited as follows:

Common Stock Dividends Distributable	50,000	
Common Stock		50,000
(To record issuance of 5,000 shares in a stock dividend)		

A	=	L	+	SE
				-50,000
				+50,000

EFFECTS OF STOCK DIVIDENDS

How do stock dividends affect stockholders' equity? They change the composition of stockholders' equity because a portion of retained earnings is transferred to paid-in capital. However, **total stockholders' equity remains the same**. Stock dividends also have no effect on the par or stated value per share. But the number of shares outstanding increases. These effects are shown for Medland Corporation in Illustration 14-22.

	<u>Before Dividend</u>	<u>After Dividend</u>
Stockholders' equity		
Paid-in capital		
Common stock, \$10 par	\$ 500,000	\$ 550,000
Paid-in capital in excess of par value	<u>-0-</u>	<u>25,000</u>
Total paid-in capital	500,000	575,000
Retained earnings	<u>300,000</u>	<u>225,000</u>
Total stockholders' equity	<u>\$ 800,000</u>	<u>\$ 800,000</u>
Outstanding shares	<u>50,000</u>	<u>55,000</u>

Illustration 14-22

Stock dividend effects

In this example, total paid-in capital is increased by \$75,000, and retained earnings is decreased by the same amount. Note also that total stockholders' equity remains unchanged at \$800,000.

STOCK SPLITS

A **stock split**, like a stock dividend, involves the issuance of additional shares to stockholders according to their percentage ownership. **A stock split results in a reduction in the par or stated value per share.** The purpose of a stock split is to increase the marketability of the stock by lowering its market value per share. A lower market value also makes it easier for the corporation to issue additional stock.

The effect of a split on market value is generally inversely proportional to the size of the split. For example, after a two-for-one stock split, the market value of a stock will fall. The lower market value stimulates market activity.

In a stock split, the number of shares is increased in the same proportion that par or stated value per share is decreased. For example, in a two-for-one split, one

HELPFUL HINT

A stock split changes the par value per share but does not affect any balances in stockholders' equity.

share of \$10 par value stock is exchanged for two shares of \$5 par value stock. **A stock split does not have any effect on total paid-in capital, retained earnings, or total stockholders' equity.** But the number of shares outstanding increases. These effects are shown in Illustration 14-23 for Medland Restaurants, assuming that it splits its 50,000 shares of common stock on a two-for-one basis.

Illustration 14-23

Stock split effects

	<u>Before Stock Split</u>	<u>After Stock Split</u>
Stockholders' equity		
Paid-in capital		
Common stock	\$500,000	\$500,000
Paid-in capital in excess of par value	–0–	–0–
Total paid-in capital	500,000	500,000
Retained earnings	300,000	300,000
Total stockholders' equity	\$ 800,000	\$ 800,000
Outstanding shares	50,000	100,000

SYSCO Corporation is well known for splitting its stocks. In the past twenty-five years, it has had eight splits. The earlier splits were three-for-two and the latter were two-for-one. If you owned two shares of SYSCO in 1979, you will have 288 shares today! A stock split does not affect the balances in any stockholders' equity accounts. Therefore, **it is not necessary to journalize a stock split.** However, a memorandum entry explaining the effect of the split is typically made.

The significant differences between stock splits and stock dividends are shown in Illustration 14-24.

Illustration 14-24

Differences between the effects of stock splits and stock dividends

<u>Item</u>	<u>Stock Split</u>	<u>Stock Dividend</u>
Total paid-in capital	No change	Increase
Total retained earnings	No change	Decrease
Total par value (common stock)	No change	Increase
Par value per share	Decrease	No change

ACCOUNTING IN ACTION *Business Insight*



A handful of U.S. companies have no intention of keeping their stock trading in a range accessible to mere mortals. These companies never split their stock, no matter how high their stock price gets. The king is investment company **Berkshire Hathaway's** Class A stock, which sells for a pricey \$110,100—per share! The company's Class B stock is a relative bargain at roughly \$3,663 per share. Another “premium” stocks is **Mechanics Bank** of Richmond, California, at \$19,500.

BEFORE YOU GO ON...

▶ REVIEW IT

1. What entries are made for cash dividends on (a) the declaration date, (b) the record date, and (c) the payment date?

- Distinguish between a small and a large stock dividend, and indicate the basis for valuing each kind of dividend.
- Contrast the effects of a small stock dividend and a two-for-one stock split on (a) stockholders' equity and (b) outstanding shares.

► **DO IT**

Sing Resort Company has had five years of record earnings. Owing to this success, the market price of its 500,000 shares of \$2 par value common stock has tripled from \$15 per share to \$45. During this period, paid-in capital remained the same at \$2 million. Retained earnings increased from \$1.5 million to \$10 million. President Jan Ellis is considering either (1) a 10 percent stock dividend or (2) a two-for-one stock split. She asks you to show the before-and-after effects of each option on (a) retained earnings and (b) total stockholders' equity and the total shares outstanding.

ACTION PLAN

- Calculate the stock dividend's effect on retained earnings by multiplying the number of new shares times the market price of the stock (or par value for a large stock dividend).
- Recall that a stock dividend increases the number of shares without affecting total equity.
- Recall that a stock split only increases the number of shares outstanding and decreases the par value per share.

SOLUTION

- (a) (1) The stock dividend amount is \$2,250,000 $[(500,000 \times 10\%) \times \$45]$. The new balance in retained earnings is \$7,750,000 $(\$10,000,000 - \$2,250,000)$.
- (2) The retained earnings balance after the stock split would be the same as it was before the split: \$10 million.
- (b) The effects on total stockholders' equity and total shares outstanding are

	<u>Original Balances</u>	<u>After Dividend</u>	<u>After Split</u>
Paid-in capital	\$ 2,000,000	\$ 4,250,000	\$ 2,000,000
Retained earnings	<u>10,000,000</u>	<u>7,750,000</u>	<u>10,000,000</u>
Total stockholders' equity	<u>\$12,000,000</u>	<u>\$12,000,000</u>	<u>\$12,000,000</u>
Shares outstanding	<u>500,000</u>	<u>550,000</u>	<u>1,000,000</u>



RETAINED EARNINGS

Retained earnings is net income that is retained in the business. The balance in retained earnings is part of the stockholders' claim on the total assets of the corporation. It does not, though, represent a claim on any specific asset; nor can the amount of retained earnings be associated with the balance of any asset account. For example, a \$100,000 balance in retained earnings does not mean that there should be \$100,000 in cash. The reason is that the cash resulting from the excess of revenues over expenses may have been used to purchase buildings, equipment, and other assets. To illustrate that retained earnings and cash may be quite different, Illustration 14-25 shows recent amounts of retained earnings and cash in selected companies.

STUDY OBJECTIVE 10

Identify the items that are reported in a retained earnings statement.

Illustration 14-25

Retained earnings and cash balances

Company	(in millions)	
	Retained Earnings	Cash
Walt Disney Co.	\$17,990	\$1,819
Landry's	198	43
McDonald's	23,516	4,260
Hilton	1,125	1,336

HELPFUL HINT

Remember that Retained Earnings is a stockholders' equity account, whose normal balance is a credit.

Remember that when a company has net profit, the net income that is retained in the business is recorded in retained earnings by means of a closing entry. This entry debits Income Summary and credits Retained Earnings.

However, when expenses exceed revenues, a **net loss** results. A net loss is debited to Retained Earnings in a closing entry. This is done even if it results in a debit balance in Retained Earnings. **Net losses are not debited to paid-in capital accounts.** To do so would destroy the distinction between paid-in and earned capital. A debit balance in Retained Earnings is identified as a **deficit**. It is reported as a deduction in the stockholders' equity section, as shown in Illustration 14-26.

Illustration 14-26

Stockholders' equity with deficit

Balance Sheet (partial)	
Stockholders' equity	
Paid-in capital	
Common stock	\$800,000
Retained earnings (deficit)	(50,000)
Total stockholders' equity	<u>\$750,000</u>

RETAINED EARNINGS RESTRICTIONS

The balance in retained earnings is generally available for dividend declarations. Some companies state this fact.

In some cases, there may be **retained earnings restrictions**. These make a portion of the retained earnings balance currently unavailable for dividends. Restrictions result from one or more of the following causes: legal, contractual, or voluntary.

- 1. Legal restrictions.** Many states require a corporation to restrict retained earnings for the cost of treasury stock purchased. The restriction keeps intact the corporation's legal capital that is being temporarily held as treasury stock. When the treasury stock is sold, the restriction is lifted.
- 2. Contractual restrictions.** Long-term debt contracts may restrict retained earnings as a condition for the loan. The restriction limits the use of corporate assets for payment of dividends. Thus, it increases the likelihood that the corporation will be able to meet required loan payments.
- 3. Voluntary restrictions.** The board of directors may voluntarily create retained earnings restrictions for specific purposes. For example, the board may authorize a restriction for future plant expansion. By reducing the amount of retained earnings available for dividends, more cash may be available for the planned expansion.

Retained earnings restrictions are generally disclosed in the notes to the financial statements.

PRIOR PERIOD ADJUSTMENTS

Suppose that a corporation's books have been closed and the financial statements have been issued. The corporation then discovers that a material error has been made in reporting net income of a prior year. How should this situation be recorded in the accounts and reported in the financial statements?

The correction of an error in previously issued financial statements is known as a **prior period adjustment**. The correction is made directly to Retained Earnings because the effect of the error is now in this account: The net income for the prior period has been recorded in retained earnings through the journalizing and posting of closing entries.

To illustrate, assume that General Microtels discovers in 2008 that it understated depreciation expense in 2005 by \$300,000 due to computational errors. These errors overstated both net income for 2005 and the current balance in retained earnings. The entry for the prior period adjustment, assuming all tax effects are ignored, is as follows:

Retained Earnings Accumulated Depreciation (To adjust for understatement of depreciation in a prior period)	300,000	300,000	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">=</td> <td style="text-align: center;">L</td> <td style="text-align: center;">+</td> <td style="text-align: center;">SE</td> </tr> <tr> <td style="text-align: center;">-300,000</td> <td></td> <td></td> <td></td> <td style="text-align: center;">-300,000</td> </tr> </table>	A	=	L	+	SE	-300,000				-300,000
A	=	L	+	SE									
-300,000				-300,000									

A debit to an income statement account in 2008 would be incorrect because the error pertains to a prior year.

Prior period adjustments are reported in the retained earnings statement.⁵ They are added (or deducted, as the case may be) from the beginning retained earnings balance. This results in an adjusted beginning balance. Assuming General Microtels has a beginning balance of \$800,000 in retained earnings, the prior period adjustment is reported in Illustration 14-27.

GENERAL MICROTELS	
Retained Earnings Statement (partial)	
Balance, January 1, as reported	\$800,000
Correction for overstatement of net income in prior period (depreciation error)	<u>(300,000)</u>
Balance, January 1, as adjusted	\$500,000

Illustration 14-27

Statement presentation of
prior period adjustments

Again, reporting the correction in the current year's income statement would be incorrect because it applies to a prior year's income statement.

RETAINED EARNINGS STATEMENT

The **retained earnings statement** shows the changes in retained earnings during the year. The statement is prepared from the Retained Earnings account. Transactions and events that affect retained earnings are tabulated in account form as shown in Illustration 14-28 on page 448.

⁵A complete retained earnings statement is shown in Illustration 14-29 (p. 448).

Illustration 14-28

Debits and credits to retained earnings

Retained Earnings	
1. Net loss 2. Prior period adjustments for overstatement of net income 3. Cash dividends and stock dividends 4. Some disposals of treasury stock	1. Net income 2. Prior period adjustments for understatement of net income

As indicated, net income increases retained earnings, and a net loss decreases retained earnings. Prior period adjustments may either increase or decrease retained earnings. Both cash dividends and stock dividends decrease retained earnings. The circumstances under which treasury stock transactions decrease retained earnings were explained earlier, on pages 433-435.

Illustration 14-29 shows a complete retained earnings statement for Graber Hotels, Inc., based on assumed data.

Illustration 14-29

Retained earnings statement

GRABER HOTELS, INC. Retained Earnings Statement For the Year Ended December 31, 2008		
Balance, January 1, as reported		\$1,050,000
Correction for understatement of net income in prior period (inventory error)		<u>50,000</u>
Balance, January 1, as adjusted		1,100,000
Add: Net income		<u>360,000</u>
		1,460,000
Less: Cash dividends	\$100,000	
Stock dividends	<u>200,000</u>	<u>300,000</u>
Balance, December 31		<u><u>\$1,160,000</u></u>

BEFORE YOU GO ON...**▶ REVIEW IT**

1. How are retained earnings restrictions generally reported?
2. What is a prior period adjustment, and how is it reported?
3. What are the principal sources of debits and credits to Retained Earnings?

▶ DO IT

Vega Casino Corporation has retained earnings of \$5,130,000 on January 1, 2008. During the year, Vega earns \$2 million of net income. It declares and pays a \$250,000 cash dividend. In 2008, Vega records an adjustment of \$180,000 owing to the understatement of 2007 depreciation expense from a mathematical error. Prepare a retained earnings statement for 2008.

ACTION PLAN

- Recall that a retained earnings statement begins with retained earnings, as reported at the end of the previous year.
- Add or subtract any prior period adjustments to arrive at the adjusted beginning figure.
- Add net income and subtract dividends declared to arrive at the ending balance in retained earnings.

SOLUTION

VEGA CASINO CORPORATION	
Retained Earnings Statement	
For the Year Ended December 31, 2008	
Balance, January 1, as reported	\$5,130,000
Correction for overstatement of net income in prior period (depreciation error)	(180,000)
Balance, January 1, as adjusted	4,950,000
Add: Net income	2,000,000
	6,950,000
Less: Cash dividends	250,000
Balance, December 31	<u>\$6,700,000</u>



DEMONSTRATION PROBLEM

The Rolman Hotel Corporation is authorized to issue 1 million shares of \$5 par value common stock. In its first year, 2008, the company has the following stock transactions:

- Jan. 10 Issued 400,000 shares of stock at \$8 per share.
- July 1 Issued 100,000 shares of stock for land. The land had an asking price of \$900,000. The stock is currently selling on a national exchange at \$8.25 per share.
- Sept. 1 Purchased 10,000 shares of common stock for the treasury at \$9 per share.
- Dec. 1 Sold 4,000 shares of the treasury stock at \$10 per share.

Instructions

- (a) Journalize the transactions.
- (b) Prepare the stockholders' equity section assuming the company had retained earnings of \$200,000 at December 31, 2008.

SOLUTION TO DEMONSTRATION PROBLEM

(a) Jan. 10	Cash	3,200,000	
	Common Stock		2,000,000
	Paid-in Capital in Excess of Par Value (To record issuance of 400,000 shares of \$5 par value stock)		1,200,000
July 1	Land	825,000	
	Common Stock		500,000
	Paid-in Capital in Excess of Par Value (To record issuance of 100,000 shares of \$5 par value stock for land)		325,000
Sept. 1	Treasury Stock	90,000	
	Cash		90,000
	(To record purchase of 10,000 shares of treasury stock at cost)		

ACTION PLAN

- When common stock has a par value, credit Common Stock for par value.
- Use fair market value in a noncash transaction.
- Debit and credit the Treasury Stock account at cost.
- Record differences between the cost and the selling price of treasury stock in stockholders' equity accounts, not as gains or losses.

Dec. 1	Cash	40,000	
	Treasury Stock		36,000
	Paid-in Capital from Treasury Stock		4,000
	(To record sale of 4,000 shares of treasury stock above cost)		

(b) **ROLMAN HOTEL CORPORATION**
Balance Sheet (partial)
December 31, 2008

Stockholders' equity			
Paid-in capital			
Capital stock			
	Common stock, \$5 par value, 1,000,000 shares authorized, 500,000 shares issued, 494,000 shares outstanding		\$2,500,000
Additional paid-in capital			
	In excess of par value	\$1,525,000	
	From treasury stock	<u>4,000</u>	
	Total additional paid-in capital		<u>1,529,000</u>
	Total paid-in capital		<u>4,029,000</u>
Retained earnings			
	Total paid-in capital and retained earnings		<u>4,229,000</u>
	Less: Treasury stock (6,000 shares)		<u>(54,000)</u>
	Total stockholders' equity		<u><u>\$4,175,000</u></u>



SUMMARY OF STUDY OBJECTIVES

1. Identify the major characteristics of a sole proprietorship. The major characteristics of a sole proprietorship are easy formation, no dilution of profits, limited life, and unlimited liability.

2. Identify the major characteristics of a partnership. The major characteristics of a partnership are association of individuals, mutual agency, limited life, unlimited liability, and co-ownership of property.

3. Explain the accounting entries for the formation of a partnership. Each partner's initial investment in a partnership should be recorded at the fair market value of the assets at the date of their transfer to the partnership. The values assigned must be agreed to by all of the partners. Cash, Equipment, or other asset accounts are debited. The same amount is credited under the partner's name in the capital account.

4. Identify the bases for dividing net income or net loss. Partnership net income or loss is shared equally unless the partnership contract specifically indicates the manner in which net income and net loss are to be divided. The same basis of division usually applies to both net income and net loss.

5. Identify the major characteristics of a corporation. The major characteristics of a corporation are separate legal existence, limited liability of stockholders, transferable ownership rights, ability to acquire capital, continuous life, corporation management, government regulations, and additional taxes.

6. Record the issuance of common stock. When the issuance of common stock for cash is recorded, the par value of the shares is credited to Common Stock; the portion of the proceeds that is above or below par value is recorded in a separate paid-in capital account. When no-par common stock has a stated value, the entries are similar to those for par value stock. When no-par does not have a stated value, the entire proceeds from the issue become legal capital and are credited to Common Stock.

7. Explain the accounting for treasury stock. The cost method is generally used in accounting for treasury stock. Under this approach, Treasury Stock is debited at the price paid to reacquire the shares. The same amount is credited to Treasury Stock when the shares are sold. The difference between the sales price and the cost is recorded in stockholders' equity accounts, not in income statement accounts.

8. Differentiate preferred stock from common stock. Preferred stock has contractual provisions that give it priority over common stock in certain areas. Typically, preferred stockholders have a preference as to (1) dividends and (2) assets in the event of liquidation. They usually do not have voting rights.

9. Prepare the entries for cash dividends and stock dividends. Entries for both cash and stock dividends are required at the

declaration date and at the payment date. At the declaration date, the entries are: Cash dividend—debit Retained Earnings and credit Dividends Payable; small stock dividend—debit Retained Earnings, credit Paid-in Capital in Excess of Par (or Stated) Value, and credit Common Stock Dividends Distributable. At the payment date, the entries for cash and stock dividends, respectively, are: debit Dividends Payable and credit Cash; and debit Common Stock Dividends Distributable and credit Common Stock.

10. Identify the items that are reported in a retained earnings statement. Each of the individual debits and credits to retained earnings should be reported in the retained earnings statement. Additions consist of net income and prior period adjustments to correct understatements of prior years' net income. Deductions consist of net loss, adjustments to correct overstatements of prior years' net income, cash and stock dividends, and some disposals of treasury stock.



GLOSSARY

Articles of co-partnership A document detailing the organization of the partnership and including information such as name and principal location of the firm, the purpose of the business, and the date of inception (p. 415).

Authorized stock The amount of stock that a corporation is authorized to sell as indicated in its charter (p. 426).

Bylaws The internal rules and procedures for conducting the affairs of a corporation (p. 424).

Cash dividend A pro rata distribution of cash to stockholders (p. 438).

Charter A document that creates a corporation (p. 424).

Corporate capital The owners' equity in a corporation. Also called *stockholders' equity* or *shareholders' equity* (p. 424).

Corporation A business organized as a legal entity separate and distinct from its owners under state corporation law (p. 420).

Cumulative dividend A feature of preferred stock entitling the stockholder to receive current and unpaid prior year dividends before common stockholders receive any dividends (p. 437).

Declaration date The date the board of directors formally declares the dividend and announces it to stockholders (p. 439).

Deficit A debit balance in retained earnings (p. 446).

Dividend A distribution by a corporation to its stockholders on a pro rata (equal) basis (p. 438).

General partner This partner's liability is not limited to his or her capital equity in the business. There must always be at least one partner with unlimited liability in a partnership (p. 414).

Income ratio The basis for dividing both net income and net loss in a partnership (p. 416).

Legal capital The amount per share of stock that must be retained in the business for the protection of corporate creditors (p. 428).

Limited partnership This partner's liability is limited to his or her capital equity in the business (p. 414).

Liquidating dividend A dividend declared out of paid-in capital (p. 438).

No-par value stock Capital stock that has not been assigned a value in the corporate charter (p. 428).

Organization costs Costs incurred in the formation of a corporation (p. 424).

Outstanding stock Capital stock that has been issued and is being held by stockholders (p. 434).

Partnership An association of two or more persons to carry on as co-owners of a business for profit (p. 413).

Partners' capital statement The owners' equity statement for a partnership (p. 419).

Par value stock Capital stock that has been assigned a value per share in the corporate charter (p. 428).

Payment date The date dividend checks are mailed to stockholders (p. 440).

Preferred stock Capital stock that has contractual preferences over common stock in certain areas (p. 436).

Prior period adjustment The correction of an error in previously issued financial statements (p. 447).

Privately held corporation A corporation that has only a few stockholders and whose stock is not available for sale to the general public (p. 420).

Publicly held corporation A corporation that may have thousands of stockholders and whose stock is regularly traded on a national securities market (p. 420).

Record date The date when ownership of outstanding shares is determined for dividend purposes (p. 439).

Retained earnings Net income that is retained in the business (p. 445).

Retained earnings restrictions Circumstances that make a portion of retained earnings currently unavailable for dividends (p. 446).

Retained earnings statement A financial statement that shows the changes in retained earnings during the year (p. 447).

Sole proprietorship A business owned by one individual (p. 412).

Stated value The amount per share assigned by the board of directors to no-par stock that becomes legal capital per share (p. 428).

Stock dividend A pro rata distribution of the corporation's own stock to stockholders (p. 441).

Stock split The issuance of additional shares of stock to stockholders accompanied by a reduction in the par or stated value per share (p. 443).

Stockholders' equity account A statement that shows the changes in each stockholders' equity account and in total stockholders' equity during the year (p. 442).

Treasury stock A corporation's own stock that has been issued, fully paid for, and reacquired by the corporation but not retired (p. 432).

EXERCISES

Prepare entries for the formation of a partnership.
(SO 3)

Prepare entries for the formation of a partnership.
(SO 3)

Journalize the division of income of a partnership.
(SO 4)

Journalize the division of income of a partnership.
(SO 4)

Journalize issuance of common stock.
(SO 6)

Prepare entries for issuance of common stock and purchase of treasury stock.
(SO 6, 7, 8)

Journalize cash dividends; indicate statement presentation.
(SO 9)

14-1 Lori and Timothy combined their savings to open the Tres Leche Bakery. Lori invested \$10,000 in cash, whereas Timothy put in \$7,500 in cash and some kitchen equipment with a book value at \$8,000, accumulated depreciation at \$2,000, and a market value at \$5,000. Provide the journal entries to record these investments.

14-2 Chris and Carl have been partners for more than five years in their catering business, where Chris put in 40 percent of the equity and Carl put in the other 60 percent. With the growth of the business, Chris and Carl decide to part ways and each open up a new catering company. If the total amount in the Income Summary is \$80,000, prepare the entries needed for Chris and Carl to close the Income Summary amount and also their capital accounts.

14-3 After Carl starts his own catering company, he realizes that there is a lot of demand for desserts from his clients. Therefore, he negotiates with another friend, Mike, who is a pastry chef at a five-star hotel, to become a partner with him in this new venture. On January 1, 2008, 5-Star Gourmet Desserts started with \$30,000 from Carl and \$40,000 from Mike. The net income of the first year was \$12,000. If the income is divided according to their capital, how should the income be divided?

14-4 Referring back to 14-3, please prepare the partner's capital statement for the year ended December 31, 2008, for 5-Star Gourmet Desserts if Mike withdraws \$1,000 from the partnership.

14-5 During the first year of operations, Benji's Health Club had the following transactions pertaining to its common stock:

- Jan. 8 Issued 50,000 shares for cash at \$10 per share.
- Aug. 1 Issued 25,000 shares for cash at \$12 per share.

Instructions

- (a) Journalize the transactions, assuming that the common stock has a par value of \$1 per share.
- (b) Journalize the transactions, assuming that the common stock is no-par with a stated value of \$0.50 per share.

14-6 Cocoa Beach Hotels and Resorts had the following transactions during the current period:

- Feb. 22 Issued 10,000 shares of \$1 par value common stock to attorneys in payment of a bill for \$30,000 for services rendered in helping the company to incorporate.
- Mar. 23 Issued 80,000 shares of \$1 par value common stock for cash of \$400,000.
- July 15 Issued 2,000 shares of \$100 par value preferred stock for cash at \$125 per share.
- Dec. 1 Purchased 3,000 shares of treasury stock for \$90,000.

Instructions

Please prepare the necessary journal entries for these transactions.

14-7 On June 1, Meyers Hotel Corporation had 80,000 shares of no-par common stock issued and outstanding. The stock has a stated value of \$10 per share. During the year, the following occurred:

- Jul. 1 Issued 10,000 additional shares of common stock.
- Aug. 1 Declared a cash dividend of \$1.50 per share to stockholders of record on August 30.
- Oct. 1 Paid the \$1.50 per share cash dividend.
- Nov. 3 Issued 2,500 additional shares of common stock.
- Dec. 3 Declared a cash dividend on outstanding shares of \$1.60 per share to stockholders of record on December 31.

Instructions

- (a) Prepare the entries, if any, on each of the three dividend dates.
- (b) How are dividends and dividends payable reported in the financial statements prepared at December 31?

14-8 On March 1, 2008, Peluso Hotels had retained earnings of \$690,000. During the year, Peluso had the following selected transactions:

Prepare a retained earnings statement.
(SO 10)

1. Declared cash dividends \$155,000.
2. Corrected understatement of 2007 net income because of inventory valuation error of \$35,000.
3. Earned net income \$411,500.
4. Declared stock dividends \$50,000.

Instructions

Prepare a retained earnings statement for the year.

14-9 A June 1999 issue of *Money* magazine included an article by David Futrelle entitled “Stock Splits: How the Dumb Get Rich.”

Instructions

Read the article and answer the following questions:

- (a) What is a stock split?
- (b) How do anxious traders and investors obtain timely information about stock splits?
- (c) What are the statistics relative to market-price reactions for stocks of companies that have split their stocks?
- (d) Is there a downside to buying the stock of companies that announce stock splits?

EXPLORING THE WEB

14-11 SEC filings of publicly traded companies are available to view online.

Address: <http://biz.yahoo.com/i/>

Steps

1. Pick a company, and type in the company’s name.
2. Choose **Quote**.

Instructions

Answer the following questions.

- (a) What company did you select?
- (b) What is its stock symbol?
- (c) What was the stock’s trading range today?
- (d) What was the stock’s trading range for the year?



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

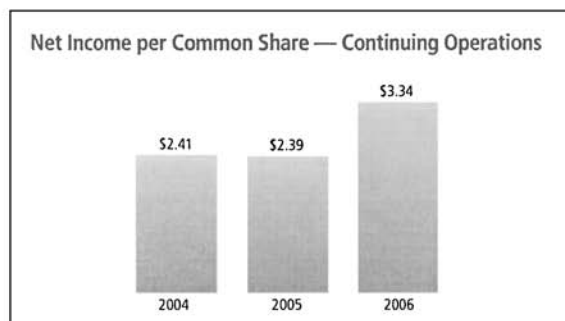
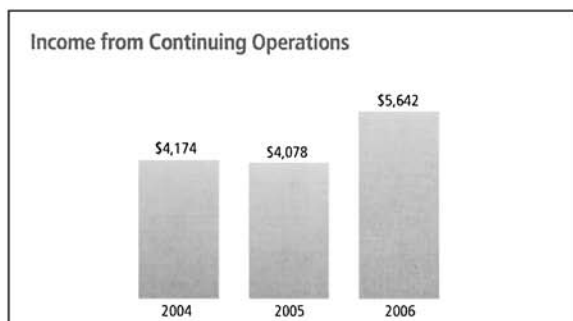
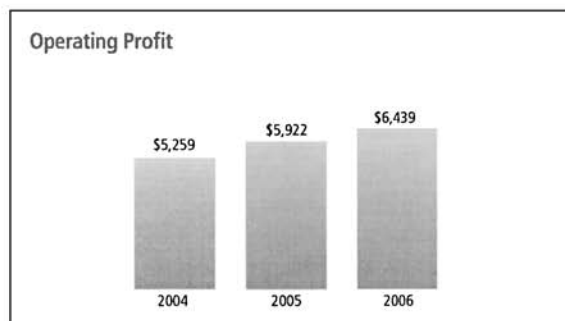
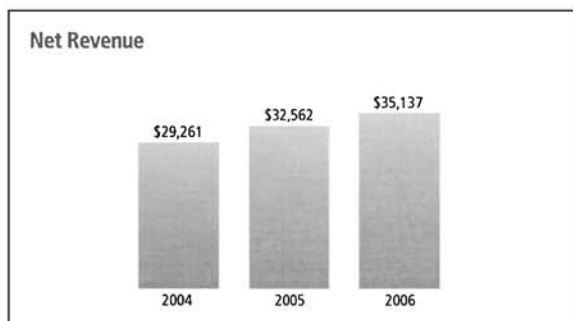
APPENDIX A
SPECIMEN FINANCIAL
STATEMENTS:
PepsiCo, Inc.

Consolidated Statement of Income

PepsiCo, Inc., and Subsidiaries
 Fiscal years ended December 30, 2006, December 31, 2005, and December 25, 2004

	2006	2005	2004
(in millions except per share amounts)			
Net Revenue	\$35,137	\$32,562	\$29,261
Cost of sales.....	15,762	14,176	12,674
Selling, general and administrative expenses.....	12,774	12,314	11,031
Amortization of intangible assets.....	162	150	147
Restructuring and impairment charges.....	—	—	150
Operating Profit	6,439	5,922	5,259
Bottling equity income.....	616	557	380
Interest expense.....	(239)	(256)	(167)
Interest income.....	173	159	74
Income from Continuing Operations before Income Taxes	6,989	6,382	5,546
Provision for Income Taxes	1,347	2,304	1,372
Income from Continuing Operations	5,642	4,078	4,174
Tax Benefit from Discontinued Operations	—	—	38
Net Income	\$ 5,642	\$ 4,078	\$ 4,212
Net Income per Common Share — Basic			
Continuing operations.....	\$3.42	\$2.43	\$2.45
Discontinued operations.....	—	—	0.02
Total.....	\$3.42	\$2.43	\$2.47
Net Income per Common Share — Diluted			
Continuing operations.....	\$3.34	\$2.39	\$2.41
Discontinued operations.....	—	—	0.02
Total.....	\$3.34	\$2.39	\$2.44*

* Based on unrounded amounts.
 See accompanying notes to consolidated financial statements.



Consolidated Statement of Cash Flows

PepsiCo, Inc., and Subsidiaries

Fiscal years ended December 30, 2006, December 31, 2005, and December 25, 2004

(in millions)

	2006	2005	2004
Operating Activities			
Net income	\$ 5,642	\$ 4,078	\$ 4,212
Depreciation and amortization.....	1,406	1,308	1,264
Stock-based compensation expense	270	311	368
Excess tax benefits from share-based payment arrangements.....	(134)	—	—
Restructuring and impairment charges.....	—	—	150
Cash payments for merger-related costs and restructuring charges.....	—	(22)	(92)
Tax benefit from discontinued operations.....	—	—	(38)
Pension and retiree medical plan contributions.....	(131)	(877)	(534)
Pension and retiree medical plan expenses	544	464	395
Bottling equity income, net of dividends.....	(479)	(411)	(297)
Deferred income taxes and other tax charges and credits.....	(510)	440	(203)
Other non-cash charges and credits, net.....	32	145	166
Change in accounts and notes receivable	(330)	(272)	(130)
Change in inventories.....	(186)	(132)	(100)
Change in prepaid expenses and other current assets.....	(37)	(56)	(31)
Change in accounts payable and other current liabilities.....	223	188	216
Change in income taxes payable	(295)	609	(268)
Other, net	69	79	(24)
Net Cash Provided by Operating Activities	6,084	5,852	5,054
Investing Activities			
Snack Ventures Europe (SVE) minority interest acquisition	—	(750)	—
Capital spending	(2,068)	(1,736)	(1,387)
Sales of property, plant and equipment.....	49	88	38
Investment in finance assets.....	(25)	—	—
Other acquisitions and investments in noncontrolled affiliates.....	(522)	(345)	(64)
Cash proceeds from sale of PBG stock.....	318	214	—
Divestitures.....	37	3	52
Short-term investments, by original maturity			
More than three months — purchases	(29)	(83)	(44)
More than three months — maturities.....	25	84	38
Three months or less, net.....	2,021	(992)	(963)
Net Cash Used for Investing Activities.....	(194)	(3,517)	(2,330)
Financing Activities			
Proceeds from issuances of long-term debt.....	51	25	504
Payments of long-term debt	(157)	(177)	(512)
Short-term borrowings, by original maturity			
More than three months — proceeds.....	185	332	153
More than three months — payments.....	(358)	(85)	(160)
Three months or less, net.....	(2,168)	1,601	1,119
Cash dividends paid	(1,854)	(1,642)	(1,329)
Share repurchases — common	(3,000)	(3,012)	(3,028)
Share repurchases — preferred.....	(10)	(19)	(27)
Proceeds from exercises of stock options.....	1,194	1,099	965
Excess tax benefits from share-based payment arrangements.....	134	—	—
Net Cash Used for Financing Activities	(5,983)	(1,878)	(2,315)
Effect of exchange rate changes on cash and cash equivalents	28	(21)	51
Net (Decrease)/Increase in Cash and Cash Equivalents.....	(65)	436	460
Cash and Cash Equivalents, Beginning of Year	1,716	1,280	820
Cash and Cash Equivalents, End of Year	\$ 1,651	\$ 1,716	\$ 1,280

See accompanying notes to consolidated financial statements.

Consolidated Balance Sheet

PepsiCo, Inc., and Subsidiaries
December 30, 2006, and December 31, 2005

(in millions except per share amounts)

	2006	2005
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 1,651	\$ 1,716
Short-term investments	1,171	3,166
Accounts and notes receivable, net.....	3,725	3,261
Inventories	1,926	1,693
Prepaid expenses and other current assets.....	657	618
Total Current Assets	9,130	10,454
Property, Plant and Equipment, net	9,687	8,681
Amortizable Intangible Assets, net	637	530
Goodwill.....	4,594	4,088
Other nonamortizable intangible assets.....	1,212	1,086
Nonamortizable Intangible Assets	5,806	5,174
Investments in Noncontrolled Affiliates.....	3,690	3,485
Other Assets	980	3,403
Total Assets	\$29,930	\$31,727
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities		
Short-term obligations	\$ 274	\$ 2,889
Accounts payable and other current liabilities.....	6,496	5,971
Income taxes payable	90	546
Total Current Liabilities	6,860	9,406
Long-Term Debt Obligations	2,550	2,313
Other Liabilities	4,624	4,323
Deferred Income Taxes	528	1,434
Total Liabilities	14,562	17,476
Commitments and Contingencies		
Preferred Stock, no par value	41	41
Repurchased Preferred Stock	(120)	(110)
Common Shareholders' Equity		
Common stock, par value 1 2/3¢ per share (issued 1,782 shares)	30	30
Capital in excess of par value.....	584	614
Retained earnings.....	24,837	21,116
Accumulated other comprehensive loss.....	(2,246)	(1,053)
	23,205	20,707
Less: repurchased common stock, at cost (144 and 126 shares, respectively)	(7,758)	(6,387)
Total Common Shareholders' Equity	15,447	14,320
Total Liabilities and Shareholders' Equity	\$29,930	\$31,727

See accompanying notes to consolidated financial statements.

Consolidated Statement of Common Shareholders' Equity

PepsiCo, Inc., and Subsidiaries
Fiscal years ended December 30, 2006, December 31, 2005, and December 25, 2004

(in millions)	2006		2005		2004	
	Shares	Amount	Shares	Amount	Shares	Amount
Common Stock	1,782	\$ 30	1,782	\$ 30	1,782	\$ 30
Capital in Excess of Par Value						
Balance, beginning of year		614		618		548
Stock-based compensation expense		270		311		368
Stock option exercises ^(a)		(300)		(315)		(298)
Balance, end of year		584		614		618
Retained Earnings						
Balance, beginning of year		21,116		18,730		15,961
Net income		5,642		4,078		4,212
Cash dividends declared — common		(1,912)		(1,684)		(1,438)
Cash dividends declared — preferred		(1)		(3)		(3)
Cash dividends declared — RSUs		(8)		(5)		(2)
Balance, end of year		24,837		21,116		18,730
Accumulated Other Comprehensive Loss						
Balance, beginning of year		(1,053)		(886)		(1,267)
Currency translation adjustment		465		(251)		401
Cash flow hedges, net of tax:						
Net derivative (losses)/gains		(18)		54		(16)
Reclassification of (gains)/losses to net income		(5)		(8)		9
Unamortized pension and retiree medical, net of tax		(1,782)		—		—
Minimum pension liability adjustment, net of tax		138		16		(19)
Unrealized gain on securities, net of tax		9		24		6
Other		—		(2)		—
Balance, end of year		(2,246)		(1,053)		(886)
Repurchased Common Stock						
Balance, beginning of year	(126)	(6,387)	(103)	(4,920)	(77)	(3,376)
Share repurchases	(49)	(3,000)	(54)	(2,995)	(58)	(2,994)
Stock option exercises	31	1,619	31	1,523	32	1,434
Other	—	10	—	5	—	16
Balance, end of year	(144)	(7,758)	(126)	(6,387)	(103)	(4,920)
Total Common Shareholders' Equity		\$15,447		\$14,320		\$13,572
		2006		2005		2004
Comprehensive Income						
Net income		\$5,642		\$4,078		\$4,212
Currency translation adjustment		465		(251)		401
Cash flow hedges, net of tax		(23)		46		(7)
Minimum pension liability adjustment, net of tax		5		16		(19)
Unrealized gain on securities, net of tax		9		24		6
Other		—		(2)		—
Total Comprehensive Income		\$6,098		\$3,911		\$4,593

(a) Includes total tax benefits of \$130 million in 2006, \$125 million in 2005, and \$183 million in 2004.
See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

Note 1 – Basis of Presentation and Our Divisions

Basis of Presentation

Our financial statements include the consolidated accounts of PepsiCo, Inc., and the affiliates that we control. In addition, we include our share of the results of certain other affiliates based on our economic ownership interest. We do not control these other affiliates, as our ownership in these other affiliates is generally less than 50%. Our share of the net income of noncontrolled bottling affiliates is reported in our income statement as bottling equity income. Bottling equity income also includes any changes in our ownership interests of these affiliates. Bottling equity income includes \$186 million and \$126 million of pre-tax gains on our sales of PBG stock in 2006 and 2005, respectively. See Note 8 for additional information on our significant noncontrolled bottling affiliates. Intercompany balances and transactions are eliminated. In 2005, we had an additional week of results (53rd week). Our fiscal year ends on the last Saturday of each December, resulting in an additional week of results every five or six years.

In connection with our ongoing BPT initiative, we aligned certain accounting policies across our divisions in 2005. We conformed our methodology for calculating our bad debt reserves and modified our policy for recognizing revenue for products shipped to customers by third-party carriers. Additionally, we conformed our method of accounting for certain costs, primarily warehouse and freight. These changes reduced our net revenue by \$36 million and our operating profit by \$60 million in 2005.

Raw materials, direct labor and plant overhead, as well as purchasing and receiving costs, costs directly related to production planning, inspection costs and raw material handling facilities, are included in cost of sales. The costs of moving, storing and delivering finished product are included in selling, general and administrative expenses.

The preparation of our consolidated financial statements in conformity with generally accepted accounting principles requires us to make estimates and assumptions that affect reported

amounts of assets, liabilities, revenues, expenses and disclosure of contingent assets and liabilities. Estimates are used in determining, among other items, sales incentives accruals, tax reserves, stock-based compensation, pension and retiree medical accruals, useful lives for intangible assets, and future cash flows associated with impairment testing for perpetual brands, goodwill and other long-lived assets. Actual results could differ from these estimates.

See "Our Divisions" below and for additional unaudited information on items affecting the comparability of our consolidated results, see "Items Affecting Comparability" in Management's Discussion and Analysis.

Tabular dollars are in millions, except per share amounts. All per share amounts reflect common per share amounts, assume dilution unless noted, and are based on unrounded amounts. Certain reclassifications were made to prior years' amounts to conform to the 2006 presentation.

Our Divisions

We manufacture or use contract manufacturers, market and sell a variety of salty, sweet and grain-based snacks, carbonated and non-carbonated beverages, and foods through our North American and international business divisions. Our North American divisions include the United States and Canada. The accounting policies for the divisions are the same as those described in Note 2, except for certain allocation methodologies for stock-based compensation expense and pension and retiree medical expenses, as described in the unaudited information in "Our Critical Accounting Policies." Additionally, beginning in the

fourth quarter of 2005, we began centrally managing commodity derivatives on behalf of our divisions. Certain of the commodity derivatives, primarily those related to the purchase of energy for use by our divisions, do not qualify for hedge accounting treatment. These derivatives hedge underlying commodity price risk and were not entered into for speculative purposes. Such derivatives are marked to market with the resulting gains and losses recognized in corporate unallocated expenses. These gains and losses are subsequently reflected in division results when the divisions take delivery of the underlying commodity. Therefore, division results

reflect the contract purchase price of the energy or other commodities.

Division results are based on how our President and Chief Executive Officer assess the performance of and reallocates resources to our divisions. Division results exclude certain Corporate-initiated restructuring and impairment charges. For additional unaudited information on our divisions, see "Our Operations" in Management's Discussion and Analysis.



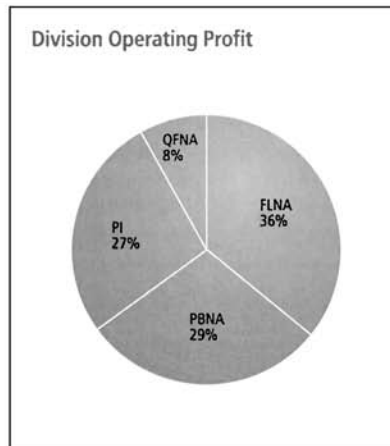
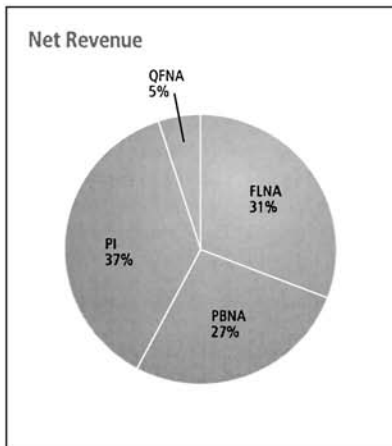
Frito-Lay
North America
(FLNA)

PepsiCo
Beverages
North America
(PBNA)

PepsiCo
International
(PI)

Quaker Foods
North America
(QFNA)

	Net Revenue			Operating Profit		
	2006	2005	2004	2006	2005	2004
FLNA	\$10,844	\$10,322	\$ 9,560	\$2,615	\$2,529	\$2,389
PBNA	9,565	9,146	8,313	2,055	2,037	1,911
PI	12,959	11,376	9,862	1,948	1,607	1,323
QFNA	1,769	1,718	1,526	554	537	475
Total division	35,137	32,562	29,261	7,172	6,710	6,098
Corporate	—	—	—	(733)	(788)	(689)
	35,137	32,562	29,261	6,439	5,922	5,409
Restructuring and impairment charges	—	—	—	—	—	(150)
Total	\$35,137	\$32,562	\$29,261	\$6,439	\$5,922	\$5,259



Corporate

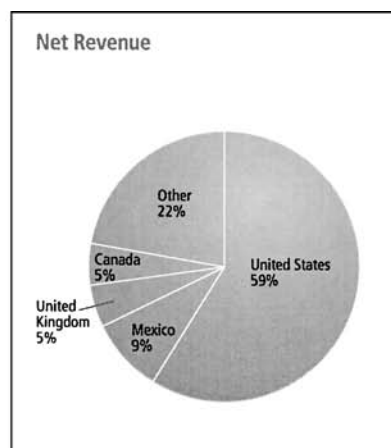
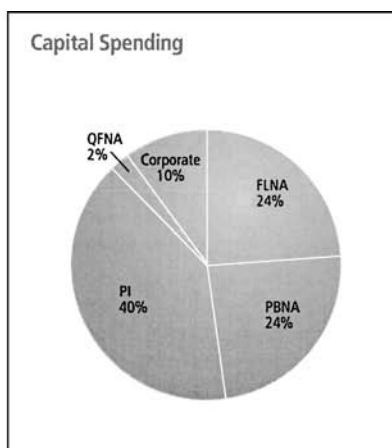
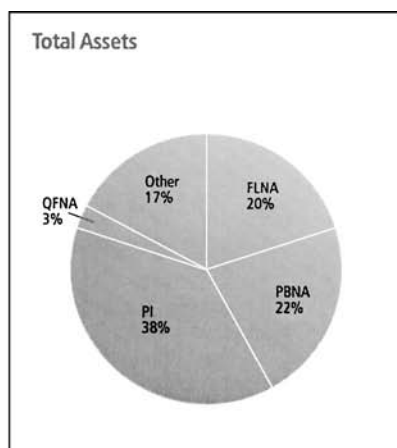
Corporate includes costs of our corporate headquarters, centrally-managed initiatives, such as our BPT initiative in North America, unallocated insurance and benefit programs, foreign exchange transaction gains and losses, and certain commodity derivative gains and losses, as well as profit-in-inventory elimination adjustments for our non-controlled bottling affiliates and certain other items.

Restructuring and Impairment Charges — See Note 3.

Other Division Information

	Total Assets			Capital Spending		
	2006	2005	2004	2006	2005	2004
FLNA	\$ 5,969	\$ 5,948	\$ 5,476	\$ 499	\$ 512	\$ 469
PBNA	6,567	6,316	6,048	492	320	265
PI	11,274	9,983	8,921	835	667	537
QFNA	1,003	989	978	31	31	33
Total division	24,813	23,236	21,423	1,857	1,530	1,304
Corporate (a)	1,739	5,331	3,569	211	206	83
Investments in bottling affiliates	3,378	3,160	2,995	—	—	—
	\$29,930	\$31,727	\$27,987	\$2,068	\$1,736	\$1,387

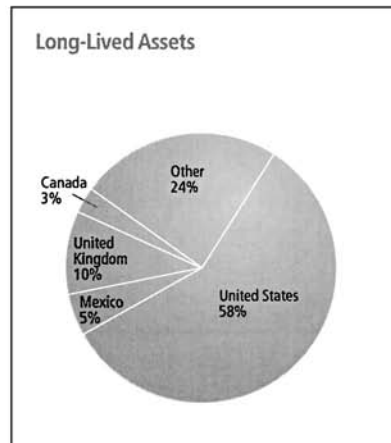
(a) Corporate assets consist principally of cash and cash equivalents, short-term investments, and property, plant and equipment.



	Amortization of Intangible Assets			Depreciation and Other Amortization		
	2006	2005	2004	2006	2005	2004
FLNA	\$ 9	\$ 3	\$ 3	\$ 432	\$ 419	\$ 420
PBNA	77	76	75	282	264	258
PI	76	71	68	478	420	382
QFNA	-	-	1	33	34	36
Total division	162	150	147	1,225	1,137	1,096
Corporate	-	-	-	19	21	21
	\$162	\$150	\$147	\$1,244	\$1,158	\$1,117

	Net Revenue ^(a)			Long-Lived Assets ^(b)		
	2006	2005	2004	2006	2005	2004
U.S.	\$20,788	\$19,937	\$18,329	\$11,515	\$10,723	\$10,212
Mexico	3,228	3,095	2,724	996	902	878
United Kingdom	1,839	1,821	1,692	1,995	1,715	1,896
Canada	1,702	1,509	1,309	589	582	548
All other countries	7,580	6,200	5,207	4,725	3,948	3,339
	\$35,137	\$32,562	\$29,261	\$19,820	\$17,870	\$16,873

(a) Represents net revenue from businesses operating in these countries.
 (b) Long-lived assets represent property, plant and equipment, nonamortizable intangible assets, amortizable intangible assets, and investments in noncontrolled affiliates. These assets are reported in the country where they are primarily used.



Note 2 – Our Significant Accounting Policies

Revenue Recognition

We recognize revenue upon shipment or delivery to our customers based on written sales terms that do not allow for a right of return. However, our policy for DSD and chilled products is to remove and replace damaged and out-of-date products from store shelves to ensure that our consumers receive the product quality and freshness that they expect. Similarly, our policy for ware-

house-distributed products is to replace damaged and out-of-date products. Based on our historical experience with this practice, we have reserved for anticipated damaged and out-of-date products. For additional unaudited information on our revenue recognition and related policies, including our policy on bad debts, see "Our Critical Accounting Policies" in Management's Discussion and Analysis. We are exposed

to concentration of credit risk by our customers, Wal-Mart and PBG. In 2006, Wal-Mart represented approximately 9% of our total net revenue, including concentrate sales to our bottlers which are used in finished goods sold by them to Wal-Mart; and PBG represented approximately 10%. We have not experienced credit issues with these customers.

Sales Incentives and Other Marketplace Spending

We offer sales incentives and discounts through various programs to our customers and consumers. Sales incentives and discounts are accounted for as a reduction of revenue and totaled \$10.1 billion in 2006, \$8.9 billion in 2005 and \$7.8 billion in 2004. While most of these incentive arrangements have terms of no more than one year, certain arrangements, such as fountain pouring rights, extend beyond one year. Costs incurred to obtain these arrangements are recognized over no longer than the contract period and the remaining balances of \$297 million at December 30, 2006, and \$321 million at December 31, 2005, are included in current assets and other assets on our balance sheet. For additional unaudited information on our sales incentives, see "Our Critical Accounting Policies" in Management's Discussion and Analysis.

Other marketplace spending includes the costs of advertising and other marketing activities and is reported as selling, general and administrative expenses. Advertising expenses were \$1.7 billion in 2006, \$1.8 billion in 2005 and \$1.7 billion in 2004. Deferred advertising costs are not expensed until the year first used and consist of:

- media and personal service prepayments,
- promotional materials in inventory, and
- production costs of future media advertising.

Deferred advertising costs of \$171 million and \$202 million at year-end 2006 and 2005, respectively, are classified as prepaid expenses on our balance sheet.

Distribution Costs

Distribution costs, including the costs of shipping and handling activities, are reported as selling, general and administrative expenses. Shipping and handling expenses were \$4.6 billion in 2006, \$4.1 billion in 2005 and \$3.9 billion in 2004.

Cash Equivalents

Cash equivalents are investments with original maturities of three months or less which we do not intend to rollover beyond three months.

Software Costs

We capitalize certain computer software and software development costs incurred in connection with developing or obtaining computer software for internal use. Capitalized software costs are included in property, plant and equipment on our balance sheet and amortized on a straight-line basis when placed into service over the estimated useful lives of the software, which approximate five to seven years. Net capitalized software and development costs were \$537 million at December 30, 2006, and \$327 million at December 31, 2005.

Commitments and Contingencies

We are subject to various claims and contingencies related to lawsuits, taxes and environmental matters, as well as commitments under contractual and other commercial obligations. We recognize liabilities for contingencies and commitments when a loss is probable and estimable. For additional information on our commitments, see Note 9.

Research and Development

We engage in a variety of research and development activities. These activities principally involve the development of new products, improvement in the quality of existing products, improvement and modernization of production processes, and the development and implementation of new technologies to enhance the quality and value of both current and proposed product lines. Research and development costs were \$344 million in 2006 and \$340 million in 2005 and are reported as selling, general and administrative expenses.

Other Significant Accounting Policies

Our other significant accounting policies are disclosed as follows:

- Property, Plant and Equipment and Intangible Assets — Note 4 and, for additional unaudited information on brands and goodwill, see "Our Critical Accounting Policies" in Management's Discussion and Analysis.
- Income Taxes — Note 5 and, for additional unaudited information, see "Our Critical Accounting Policies" in Management's Discussion and Analysis.

- Stock-Based Compensation Expense — Note 6 and, for additional unaudited information, see "Our Critical Accounting Policies" in Management's Discussion and Analysis.
- Pension, Retiree Medical and Savings Plans — Note 7 and, for additional unaudited information, see "Our Critical Accounting Policies" in Management's Discussion and Analysis.
- Risk Management — Note 10 and, for additional unaudited information, see "Our Business Risks" in Management's Discussion and Analysis.

Recent Accounting Pronouncements

As further discussed in Note 6, we adopted SFAS 123R on January 1, 2006.

As further discussed in Note 7, we adopted SFAS 158 on December 30, 2006.

In September 2006, the SEC issued SAB 108 to address diversity in practice in quantifying financial statement misstatements. SAB 108 requires that we quantify misstatements based on their impact on each of our financial statements and related disclosures. On December 30, 2006, we adopted SAB 108. Our adoption of SAB 108 did not impact our financial statements.

In July 2006, the FASB issued FIN 48 which clarifies the accounting for uncertainty in tax positions. FIN 48 requires that we recognize in our financial statements, the impact of a tax position, if that position is more likely than not of being sustained on audit, based on the technical merits of the position. The provisions of FIN 48 are effective as of the beginning of our 2007 fiscal year, with the cumulative effect of the change in accounting principle recorded as an adjustment to opening retained earnings. We do not expect our adoption of FIN 48 to materially impact our financial statements.

In September 2006, the FASB issued SFAS 157 which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. The provisions of SFAS 157 are effective as of the beginning of our 2008 fiscal year. We are currently evaluating the impact of adopting SFAS 157 on our financial statements.

Note 3 – Restructuring and Impairment Charges

2006 Restructuring and Impairment Charges

In 2006, we incurred a charge of \$67 million (\$43 million after-tax, or \$0.03 per share) in conjunction with consolidating the manufacturing network at FLNA by closing two plants in the U.S., and rationalizing other assets, to increase manufacturing productivity and supply chain efficiencies. The charge was comprised of \$43 million of asset impairments, \$14 million of severance and other employee costs, and \$10 million of other costs. Employee-related costs primarily reflect the termination costs for approximately 380 employees. We expect all of the cash payments related to this charge to be paid by the end of 2007.

2005 Restructuring Charges

In 2005, we incurred a charge of \$83 million (\$55 million after-tax, or \$0.03 per share) in conjunction with actions taken to reduce costs in our operations, principally through headcount reductions. Of this charge, \$34 million related to FLNA, \$21 million to PBNA, \$16 million to PI and \$12 million to Corporate. Most of this charge related to the termination of approximately 700 employees. As of December 30, 2006, all terminations had occurred and substantially no accrual remains.

2004 Restructuring and Impairment Charges

In 2004, we incurred a charge of \$150 million (\$96 million after-tax, or \$0.06 per

share) in conjunction with the consolidation of FLNA's manufacturing network as part of its ongoing productivity program. Of this charge, \$93 million related to asset impairments, primarily reflecting the closure of four U.S. plants. Production from these plants was redeployed to other FLNA facilities in the U.S. The remaining \$57 million included employee-related costs of \$29 million, contract termination costs of \$8 million, and other exit costs of \$20 million. Employee-related costs primarily reflect the termination costs for approximately 700 employees. As of December 30, 2006, all terminations had occurred and substantially no accrual remains.

Note 4 – Property, Plant and Equipment and Intangible Assets

	Average Useful Life	2006	2005	2004
Property, plant and equipment, net				
Land and improvements	10 – 30 yrs.	\$ 756	\$ 685	
Buildings and improvements	20 – 44	4,095	3,736	
Machinery and equipment, including fleet and software	5 – 15	12,768	11,658	
Construction in progress		1,439	1,066	
		19,058	17,145	
Accumulated depreciation		(9,371)	(8,464)	
		\$ 9,687	\$ 8,681	
Depreciation expense		\$1,182	\$1,103	\$1,062
Amortizable intangible assets, net				
Brands	5 – 40	\$1,288	\$1,054	
Other identifiable intangibles	3 – 15	290	257	
		1,578	1,311	
Accumulated amortization		(941)	(781)	
		\$ 637	\$ 530	
Amortization expense		\$162	\$150	\$147

Depreciation and amortization are recognized on a straight-line basis over an asset's estimated useful life. Land is not depreciated and construction in progress is not depreciated until ready for service. Amortization of intangible assets for each of the next five years, based on average 2006 foreign exchange rates, is expected to be \$49 million in 2007, \$49 million in 2008, \$47 million in 2009, \$46 million in 2010 and \$44 million in 2011.

Depreciable and amortizable assets are only evaluated for impairment upon a significant change in the operating or macroeconomic environment. In these circumstances, if an evaluation of the undiscounted cash flows indicates impairment, the asset is written down to its estimated fair value, which is based on discounted future cash flows.

Useful lives are periodically evaluated to determine whether events or circumstances have occurred which indicate the need for revision. For additional unaudited information on our amortizable brand policies, see "Our Critical Accounting Policies" in Management's Discussion and Analysis.

Nonamortizable Intangible Assets

Perpetual brands and goodwill are assessed for impairment at least annually. If the carrying amount of a perpetual brand exceeds its fair value, as determined by its discounted cash flows, an impairment loss is recognized in an amount equal to that excess. Goodwill is evaluated using a two-step impairment test at the reporting unit level. A reporting unit can be a division or business within a division. The first step compares the book value of a

reporting unit, including goodwill, with its fair value, as determined by its discounted cash flows. If the book value of a reporting unit exceeds its fair value, we complete the second step to determine the amount of goodwill impairment loss that we should record. In the second step, we determine an implied fair value of the reporting unit's goodwill by allocating the fair value of the reporting unit to all of the assets and liabilities other than goodwill (including any unrecognized intangible assets). The amount of impairment loss is equal to the excess of the book value of the goodwill over the implied fair value of that goodwill. No impairment charges resulted from the required impairment evaluations. The change in the book value of nonamortizable intangible assets is as follows:

	Balance, Beginning 2005	Acquisitions	Translation and Other	Balance, End of 2005	Acquisitions	Translation and Other	Balance, End of 2006
Frito-Lay North America							
Goodwill	\$ 138	\$ –	\$ 7	\$ 145	\$139	\$ –	\$ 284
PepsiCo Beverages North America							
Goodwill	2,161	–	3	2,164	39	–	2,203
Brands	59	–	–	59	–	–	59
	2,220	–	3	2,223	39	–	2,262
PepsiCo International							
Goodwill	1,435	278	(109)	1,604	183	145	1,932
Brands	869	263	(106)	1,026	–	127	1,153
	2,304	541	(215)	2,630	183	272	3,085
Quaker Foods North America							
Goodwill	175	–	–	175	–	–	175
Corporate							
Pension intangible	5	–	(4)	1	–	(1)	–
Total goodwill	3,909	278	(99)	4,088	361	145	4,594
Total brands	928	263	(106)	1,085	–	127	1,212
Total pension intangible	5	–	(4)	1	–	(1)	–
	\$4,842	\$541	\$(209)	\$5,174	\$361	\$271	\$5,806

Note 5 – Income Taxes

	2006	2005	2004
Income before income taxes — continuing operations			
U.S.	\$ 3,844	\$ 3,175	\$ 2,946
Foreign	3,145	3,207	2,600
	\$ 6,989	\$ 6,382	\$ 5,546
Provision for income taxes — continuing operations			
Current:			
U.S. Federal	\$ 776	\$ 1,638	\$ 1,030
Foreign	569	426	256
State	56	118	69
	1,401	2,182	1,355
Deferred:			
U.S. Federal	(31)	137	11
Foreign	(16)	(26)	5
State	(7)	11	1
	(54)	122	17
	\$ 1,347	\$ 2,304	\$ 1,372
Tax rate reconciliation — continuing operations			
U.S. Federal statutory tax rate	35.0%	35.0%	35.0%
State income tax, net of U.S. Federal tax benefit	0.5	1.4	0.8
Taxes on AJCA repatriation	—	7.0	—
Lower taxes on foreign results	(6.5)	(6.5)	(5.4)
Settlement of prior years' audit	—	—	(4.8)
2006 Tax Adjustments	(8.6)	—	—
Other, net	(1.1)	(0.8)	(0.9)
Annual tax rate	19.3%	36.1%	24.7%
Deferred tax liabilities			
Investments in noncontrolled affiliates	\$ 1,103	\$ 993	
Property, plant and equipment	784	772	
Pension benefits	—	863	
Intangible assets other than nondeductible goodwill	169	135	
Zero coupon notes	27	35	
Other	221	169	
Gross deferred tax liabilities	2,304	2,967	
Deferred tax assets			
Net carryforwards	667	608	
Stock-based compensation	443	426	
Retiree medical benefits	541	400	
Other employee-related benefits	342	342	
Pension benefits	38	—	
Other	592	520	
Gross deferred tax assets	2,623	2,296	
Valuation allowances	(624)	(532)	
Deferred tax assets, net	1,999	1,764	
Net deferred tax liabilities	\$ 305	\$ 1,203	
Deferred taxes included within:			
Assets:			
Prepaid expenses and other current assets	\$ 223	\$ 231	
Liabilities:			
Deferred income taxes	\$ 528	\$ 1,434	
Analysis of valuation allowances			
Balance, beginning of year	\$ 532	\$ 564	\$ 438
Provision/(benefit)	71	(28)	118
Other additions/(deductions)	21	(4)	8
Balance, end of year	\$ 624	\$ 532	\$ 564

For additional unaudited information on our income tax policies, including our reserves for income taxes, see "Our Critical Accounting Policies" in Management's Discussion and Analysis.

Carryforwards, Credits and Allowances

Operating loss carryforwards totaling \$6.1 billion at year-end 2006 are being carried forward in a number of foreign and state jurisdictions where we are permitted to use tax operating losses from prior periods to reduce future taxable income. These operating losses will expire as follows: \$0.2 billion in 2007, \$5.0 billion between 2008 and 2026, and \$0.9 billion may be carried forward indefinitely. In addition, certain tax credits generated in prior periods of approximately \$33.9 million are available to reduce certain foreign tax liabilities through 2011. We establish valuation allowances for our deferred tax assets when the amount of expected future taxable income is not likely to support the use of the deduction or credit.

Undistributed International Earnings

The AJCA created a one-time incentive for U.S. corporations to repatriate undistributed international earnings by providing an 85% dividends received deduction. In 2005, we repatriated approximately \$7.5 billion in earnings previously considered indefinitely rein-

vested outside the U.S. and recorded income tax expense of \$460 million related to this repatriation. Other than the earnings repatriated, we intend to continue to reinvest earnings outside the U.S. for the foreseeable future and, therefore, have not recognized any U.S. tax expense on these earnings. At December 30, 2006, we had approximately \$10.8 billion of undistributed international earnings.

Reserves

A number of years may elapse before a particular matter, for which we have established a reserve, is audited and finally resolved. The number of years with open tax audits varies depending on the tax jurisdiction. In 2006, we recognized non-cash tax benefits of \$602 million, substantially all of which related to the IRS's examination of our consolidated income tax returns for the years 1998 through 2002. The IRS issued a Revenue Agent's Report (RAR), and we are in agreement with their conclusion, except for one matter which we continue to dispute. The agreed adjustments relate to transfer pricing and various other transactions, including certain acquisitions, the public offering of PBG, as well as the restructuring of our international snack foods operations during that audit period. During 2004, we recognized \$266 million of tax benefits related to the

favorable resolution of certain previously open tax issues. In addition, in 2004, we recognized a tax benefit of \$38 million upon agreement with the IRS on a previously open issue related to our discontinued restaurant operations.

The IRS has initiated their audits of our tax returns for the years 2003 through 2005. While it is often difficult to predict the final outcome or the timing of resolution of any particular tax matter, we believe that our reserves reflect the probable outcome of known tax contingencies. We adjust these reserves, as well as the related interest, in light of changing facts and circumstances. Settlement of any particular issue would usually require the use of cash. Favorable resolution would be recognized as a reduction to our annual tax rate in the year of resolution. Our tax reserves, covering all federal, state and foreign jurisdictions, are presented on our balance sheet within other liabilities (see Note 14), except for any amounts relating to items we expect to pay in the coming year which are included in current income taxes payable. For further unaudited information on the impact of the resolution of open tax issues, see "Other Consolidated Results."

As further discussed in Note 2, we will adopt FIN 48 as of the beginning of our 2007 fiscal year.

Note 6 – Stock-Based Compensation

Our stock-based compensation program is a broad-based program designed to attract and retain employees while also aligning employees' interests with the interests of our shareholders. A majority of our employees participate in our stock-based compensation programs. In addition, members of our Board of Directors participate in our stock-based compensation program in connection with their service on our Board. Stock options and RSUs are granted to employees under the shareholder-approved 2003 Long-Term Incentive Plan (LTIP), our only active stock-based plan. Stock-based compensation

expense was \$270 million in 2006, \$311 million in 2005 and \$368 million in 2004. Related income tax benefits recognized in earnings were \$80 million in 2006, \$87 million in 2005 and \$103 million in 2004. Stock-based compensation cost capitalized in connection with our BPT initiative was \$3 million in 2006, \$4 million in 2005 and none in 2004. At year-end 2006, 36 million shares were available for future stock-based compensation grants. For additional unaudited information on our stock-based compensation program, see "Our Critical Accounting Policies" in Management's Discussion and Analysis.

Method of Accounting and Our Assumptions

We account for our employee stock options, which include grants under our executive program and broad-based SharePower program, under the fair value method of accounting using a Black-Scholes valuation model to measure stock option expense at the date of grant. All stock option grants have an exercise price equal to the fair market value of our common stock on the date of grant and generally have a 10-year term. The fair value of stock option grants is amortized to expense over the vesting period, generally three years.

Executives who are awarded long-term incentives based on their performance are offered the choice of stock options or RSUs. Executives who elect RSUs receive one RSU for every four stock options that would have otherwise been granted. Senior officers do not have a choice and are granted 50% stock options and 50% RSUs. RSU expense is based on the fair value of PepsiCo stock on the date of grant and is amortized over the vesting period, generally three years. Each RSU is

settled in a share of our stock after the vesting period. Vesting of RSU awards for senior officers is contingent upon the achievement of pre-established performance targets. There have been no reductions to the exercise price of previously issued awards, and any repricing of awards would require approval of our shareholders.

On January 1, 2006, we adopted SFAS 123R under the modified prospective method. Since we had previously

accounted for our stock-based compensation plans under the fair value provisions of SFAS 123, our adoption did not significantly impact our financial position or our results of operations. Under SFAS 123R, actual tax benefits recognized in excess of tax benefits previously established upon grant are reported as a financing cash inflow. Prior to adoption, such excess tax benefits were reported as an operating cash inflow.

Our weighted-average Black-Scholes fair value assumptions are as follows:

	2006	2005	2004
Expected life	6 yrs.	6 yrs.	6 yrs.
Risk free interest rate	4.5%	3.8%	3.3%
Expected volatility	18%	23%	26%
Expected dividend yield	1.9%	1.8%	1.8%

A summary of our stock-based compensation activity for the year ended December 30, 2006, is presented below:

Our Stock Option Activity	Options ^(a)	Average Price ^(b)	Average Life (years) ^(c)	Aggregate Intrinsic Value ^(d)
Outstanding at January 1, 2006	150,149	\$42.03		
Granted	12,519	57.72		
Exercised	(31,056)	38.61		
Forfeited/expired	(3,863)	49.06		
Outstanding at December 30, 2006	127,749	\$44.24	5.46	\$2,339,562
Exercisable at December 30, 2006	91,381	\$41.02	4.42	\$1,967,843

(a) Options are in thousands and include options previously granted under Quaker plans. No additional options or shares may be granted under the Quaker plans.

(b) Weighted-average exercise price.

(c) Weighted-average contractual life remaining.

(d) In thousands.

Our RSU Activity	RSUs ^(a)	Average Intrinsic Value ^(b)	Average Life (years) ^(c)	Aggregate Intrinsic Value ^(d)
Outstanding at January 1, 2006	5,669	\$50.70		
Granted	2,992	58.22		
Converted	(183)	50.00		
Forfeited/expired	(593)	53.17		
Outstanding at December 30, 2006	7,885	\$53.38	1.38	\$493,201

(a) RSUs are in thousands.

(b) Weighted-average intrinsic value at grant date.

(c) Weighted-average contractual life remaining.

(d) In thousands.

Other Stock-Based Compensation Data	2006	2005	2004
Stock Options			
Weighted-average fair value of options granted	\$12.81	\$13.45	\$12.04
Total intrinsic value of options exercised ^(a)	\$686,242	\$632,603	\$667,001
RSUs			
Total number of RSUs granted ^(a)	2,992	3,097	3,077
Weighted-average intrinsic value of RSUs granted	\$58.22	\$53.83	\$47.28
Total intrinsic value of RSUs converted ^(a)	\$10,934	\$4,974	\$914

(a) In thousands.

At December 30, 2006, there was \$301 million of total unrecognized compensation cost related to nonvested share-based compensation grants. This unrecognized compensation is expected to be recognized over a weighted-average period of 1.5 years.

Note 7 – Pension, Retiree Medical and Savings Plans

Our pension plans cover full-time employees in the U.S. and certain international employees. Benefits are determined based on either years of service or a combination of years of service and earnings. U.S. and Canada retirees are also eligible for medical and life insurance benefits (retiree medical) if they meet age and service requirements. Generally, our share of retiree medical costs is capped at specified dollar amounts, which vary based upon years of service, with retirees contributing the remainder of the costs. We use a September 30 measurement date and all plan assets and liabilities are generally reported as of that date.

Other gains and losses resulting from actual experience differing from our

assumptions and from changes in our assumptions are also determined at each measurement date. If this net accumulated gain or loss exceeds 10% of the greater of plan assets or liabilities, a portion of the net gain or loss is included in expense for the following year. The cost or benefit of plan changes that increase or decrease benefits for prior employee service (prior service cost/(credit)) is included in earnings on a straight-line basis over the average remaining service period of those expected to benefit, which is approximately 11 years for pension expense and approximately 13 years for retiree medical.

On December 30, 2006, we adopted SFAS 158 which requires that we recog-

nize the overfunded or underfunded status of our Plans as an asset or liability on our December 30, 2006, balance sheet. Subsequent changes in the funded status will be recognized through comprehensive income in the year in which they occur. SFAS 158 also requires that, beginning in 2008, our assumptions used to measure our annual pension and retiree medical expenses be determined as of the balance sheet date, and all plan assets and liabilities be reported as of that date. In accordance with SFAS 158, prior year amounts have not been adjusted.

The following illustrates the incremental effect of applying SFAS 158 on individual line items on our balance sheet as of December 30, 2006:

	Before Application of SFAS 158	Adjustments	After Application of SFAS 158
Other nonamortizable intangible assets	\$1,229	\$(17)	\$1,212
Other assets	\$2,979	\$(1,999)	\$980
Total assets	\$31,946	\$(2,016)	\$29,930
Accounts payable and other current liabilities	\$6,475	\$21	\$6,496
Other liabilities	\$4,127	\$497	\$4,624
Deferred income taxes	\$1,419	\$(891)	\$528
Total liabilities	\$14,935	\$(373)	\$14,562
Accumulated other comprehensive loss	\$603	\$1,643	\$2,246
Total common shareholders' equity	\$17,090	\$(1,643)	\$15,447

	Pension				Retiree Medical	
	2006	2005	2006	2005	2006	2005
	U.S.		International			
Change in projected benefit liability						
Liability at beginning of year	\$5,771	\$4,968	\$1,263	\$ 952	\$1,312	\$1,319
Service cost	245	213	52	32	46	40
Interest cost	319	296	68	55	72	78
Plan amendments	11	-	8	3	-	(8)
Participant contributions	-	-	12	10	-	-
Experience (gain)/loss	(163)	517	20	203	(34)	(45)
Benefit payments	(233)	(241)	(38)	(28)	(75)	(74)
Settlement/curtailment loss	(7)	-	(6)	-	-	-
Special termination benefits	4	21	-	-	1	2
Foreign currency adjustment	-	-	126	(68)	-	-
Other	-	(3)	6	104	48	-
Liability at end of year	\$5,947	\$5,771	\$1,511	\$1,263	\$1,370	\$1,312
Change in fair value of plan assets						
Fair value at beginning of year	\$5,086	\$4,152	\$1,099	\$ 838	\$ -	\$ -
Actual return on plan assets	513	477	112	142	-	-
Employer contributions/funding	19	699	30	104	75	74
Participant contributions	-	-	12	10	-	-
Benefit payments	(233)	(241)	(38)	(28)	(75)	(74)
Settlement/curtailment loss	(7)	-	-	-	-	-
Foreign currency adjustment	-	-	116	(61)	-	-
Other	-	(1)	(1)	94	-	-
Fair value at end of year	\$5,378	\$5,086	\$1,330	\$1,099	\$ -	\$ -
Reconciliation of funded status						
Funded status	\$ (569)	\$ (685)	\$ (181)	\$ (164)	\$ (1,370)	\$ (1,312)
Adjustment for fourth quarter contributions	6	5	13	4	16	19
Unrecognized prior service cost/(credit)	-	5	-	17	-	(113)
Unrecognized experience loss	-	2,288	-	474	-	402
Net amount recognized	\$ (563)	\$1,613	\$ (168)	\$ 331	\$ (1,354)	\$ (1,004)
Amounts recognized						
Other assets	\$ 185	\$2,068	\$ 6	\$367	\$ -	\$ -
Intangible assets	-	-	-	1	-	-
Other current liabilities	(19)	-	(2)	-	(84)	-
Other liabilities	(729)	(479)	(172)	(41)	(1,270)	(1,004)
Minimum pension liability	-	24	-	4	-	-
Net amount recognized	\$ (563)	\$1,613	\$ (168)	\$331	\$ (1,354)	\$ (1,004)
Amounts included in accumulated other comprehensive loss (pre-tax)						
Net loss	\$1,836	\$ -	\$475	\$ -	\$ 364	\$ -
Prior service cost/(credit)	13	-	24	-	(101)	-
Minimum pension liability	-	24	-	4	-	-
Total	\$1,849	\$24	\$499	\$ 4	\$ 263	\$ -
Components of the (decrease)/increase in net loss						
Change in discount rate	\$ (123)	\$ 365	\$ 2	\$194	\$ (30)	\$ 61
Employee-related assumption changes	(45)	57	6	2	-	-
Liability-related experience different from assumptions	5	95	6	7	(4)	(54)
Actual asset return different from expected return	(122)	(133)	(30)	(73)	-	-
Amortization of losses	(164)	(106)	(29)	(15)	(21)	(26)
Other, including foreign currency adjustments and 2003 Medicare Act	(3)	(3)	46	(22)	17	(52)
Total	\$ (452)	\$ (275)	\$ 1	\$ 93	\$ (38)	\$ (71)
Liability at end of year for service to date	\$4,998	\$4,783	\$1,239	\$1,047		

Components of benefit expense are as follows:

	Pension						Retiree Medical		
	2006	2005	2004	2006	2005	2004	2006	2005	2004
	U.S.			International					
Components of benefit expense									
Service cost	\$ 245	\$ 213	\$ 193	\$ 52	\$ 32	\$ 27	\$ 46	\$ 40	\$ 38
Interest cost	319	296	271	68	55	47	72	78	72
Expected return on plan assets	(391)	(344)	(325)	(81)	(69)	(65)	–	–	–
Amortization of prior service cost/(credit)	3	3	6	2	1	1	(13)	(11)	(8)
Amortization of net loss	164	106	81	29	15	9	21	26	19
	340	274	226	70	34	19	126	133	121
Settlement/curtailment loss	3	–	4	–	–	1	–	–	–
Special termination benefits	4	21	19	–	–	1	1	2	4
Total	\$ 347	\$ 295	\$ 249	\$ 70	\$ 34	\$ 21	\$127	\$135	\$125

The estimated amounts to be amortized from accumulated other comprehensive loss into benefit expense in 2007 for our pension and retiree medical plans are as follows:

	Pension		Retiree Medical
	U.S.	International	
Net loss	\$136	\$29	\$ 18
Prior service cost/(credit)	5	3	(13)
Total	\$141	\$32	\$ 5

The following table provides the weighted-average assumptions used to determine projected benefit liability and benefit expense for our pension and retiree medical plans:

	Pension						Retiree Medical		
	2006	2005	2004	2006	2005	2004	2006	2005	2004
	U.S.			International					
Weighted-average assumptions									
Liability discount rate	5.8%	5.7%	6.1%	5.2%	5.1%	6.1%	5.8%	5.7%	6.1%
Expense discount rate	5.7%	6.1%	6.1%	5.1%	6.1%	6.1%	5.7%	6.1%	6.1%
Expected return on plan assets	7.8%	7.8%	7.8%	7.3%	8.0%	8.0%	–	–	–
Rate of salary increases	4.5%	4.4%	4.5%	3.9%	4.1%	3.9%	–	–	–

The following table provides selected information about plans with liability for service to date and total benefit liability in excess of plan assets:

	Pension				Retiree Medical	
	2006	2005	2006	2005	2006	2005
	U.S.		International			
Selected information for plans with liability for service to date in excess of plan assets						
Liability for service to date	\$(387)	\$(374)	\$(286)	\$(65)		
Fair value of plan assets	\$1	\$8	\$237	\$33		
Selected information for plans with benefit liability in excess of plan assets						
Benefit liability	\$(754)	\$(2,690)	\$(1,387)	\$(1,158)	\$(1,370)	\$(1,312)
Fair value of plan assets	\$1	\$1,758	\$1,200	\$985	–	–

Of the total projected pension benefit liability at year-end 2006, \$701 million relates to plans that we do not fund because the funding of such plans does not receive favorable tax treatment.

Future Benefit Payments and Funding

Our estimated future benefit payments are as follows:

	2007	2008	2009	2010	2011	2012-16
Pension	\$265	\$285	\$310	\$345	\$375	\$2,490
Retiree medical*	\$90	\$95	\$100	\$100	\$105	\$595

*Expected future benefit payments for our retiree medical plans do not reflect any estimated subsidies expected to be received under the Medicare Act. Subsidies are expected to be approximately \$5 million for each of the years from 2007 through 2011 and approximately \$40 million for 2012 through 2016.

These future benefits to beneficiaries include payments from both funded and unfunded pension plans.

In 2007, we expect to make pension contributions of up to \$150 million with up to \$75 million expected to be discretionary. Our cash payments for retiree medical are estimated to be approximately \$85 million in 2007.

Pension Assets

The expected return on pension plan assets is based on our historical experience, our pension plan investment strategy and our expectations for long-term rates of return. We use a market-related value method that

recognizes each year's asset gain or loss over a five-year period. Therefore, it takes five years for the gain or loss from any one year to be fully included in the value of pension plan assets that is used to calculate the expected return. Our pension plan investment strategy is reviewed annually and is established based upon plan liabilities, an evaluation of market conditions, tolerance for risk, and cash requirements for benefit payments. Our investment objective is to ensure that funds are available to meet the plans' benefit obligations when they are due. Our investment strategy is to prudently invest plan assets in high-quality and diversified

equity and debt securities to achieve our long-term return expectation. Our investment policy also permits the use of derivative instruments to enhance the overall return of the portfolio. We use a third-party advisor to assist us in determining our investment allocation and modeling our long-term rate of return assumptions. Our expected long-term rate of return on U.S. plan assets is 7.8%, reflecting estimated long-term rates of return of 9.3% from equity securities and 5.8% from fixed income securities. Our target allocation and actual pension plan asset allocations for the plan years 2006 and 2005 are as follows:

Asset Category	Target Allocation	Actual Allocation	
		2006	2005
Equity securities	60%	61%	60%
Debt securities	40%	39%	39%
Other, primarily cash	—	—	1%
Total	100%	100%	100%

Pension assets include 5.5 million shares of PepsiCo common stock with a market value of \$358 million in 2006, and 5.5 million shares with a market value of \$311 million in 2005. Our investment policy limits the investment in PepsiCo stock at the time of investment to 10% of the fair value of plan assets.

Retiree Medical Cost Trend Rates

An average increase of 9% in the cost of covered retiree medical benefits is assumed for 2007. This average increase is then projected to decline gradually to 5% in 2011 and thereafter. These assumed health care cost trend rates have an impact on the retiree medical

plan expense and liability. However, the cap on our share of retiree medical costs limits the impact. A 1-percentage-point change in the assumed health care trend rate would have the following effects:

	1% Increase	1% Decrease
2006 service and interest cost components	\$4	\$(3)
2006 benefit liability	\$42	\$(36)

Savings Plan

Our U.S. employees are eligible to participate in 401(k) savings plans, which are voluntary defined contribution plans. The plans are designed to help employees accumulate additional savings for

retirement. We make matching contributions on a portion of eligible pay based on years of service. In 2006 and 2005, our matching contributions were \$56 million and \$52 million, respectively.

For additional unaudited information on our pension and retiree medical plans and related accounting policies and assumptions, see "Our Critical Accounting Policies" in Management's Discussion and Analysis.

Note 8 – Noncontrolled Bottling Affiliates

Our most significant noncontrolled bottling affiliates are PBG and PAS. Approximately 10% of our total net revenue in 2006, 2005, and 2004 reflects sales to PBG.

The Pepsi Bottling Group

In addition to approximately 38% and 41% of PBG's outstanding common

stock that we own at year-end 2006 and 2005, respectively, we own 100% of PBG's class B common stock and approximately 7% of the equity of Bottling Group, LLC, PBG's principal operating subsidiary. This gives us economic ownership of approximately 43% and 45% of PBG's combined operations at year-

end 2006 and 2005, respectively. Bottling equity income includes \$186 million and \$126 million of pre-tax gains on our sales of PBG stock in 2006 and 2005, respectively.

PBG's summarized financial information is as follows:

	2006	2005	2004
Current assets	\$ 2,749	\$ 2,412	
Noncurrent assets	9,178	9,112	
Total assets	\$11,927	\$11,524	
Current liabilities	\$2,051	\$2,598	
Noncurrent liabilities	7,252	6,387	
Minority interest	540	496	
Total liabilities	\$9,843	\$9,481	
Our investment	\$1,842	\$1,738	
Net revenue	\$12,730	\$11,885	\$10,906
Gross profit	\$5,920	\$5,632	\$5,250
Operating profit	\$1,017	\$1,023	\$976
Net income	\$522	\$466	\$457

Our investment in PBG, which includes the related goodwill, was \$500 million and \$400 million higher than our ownership interest in their net assets at year-end 2006 and 2005, respectively. Based upon the quoted closing price of PBG shares at year-end 2006 and 2005, the calculated market value of our shares in PBG, excluding our investment in Bottling Group, LLC, exceeded our investment balance by approximately \$1.4 billion and \$1.5 billion, respectively.

PepsiAmericas

At year-end 2006 and 2005, we owned approximately 44% and 43% of PepsiAmericas, respectively, and their summarized financial information is as follows:

	2006	2005	2004
Current assets	\$ 675	\$ 598	
Noncurrent assets	3,532	3,456	
Total assets	\$4,207	\$4,054	
Current liabilities	\$ 694	\$ 722	
Noncurrent liabilities	1,909	1,763	
Total liabilities	\$2,603	\$2,485	
Our investment	\$1,028	\$968	
Net revenue	\$3,972	\$3,726	\$3,345
Gross profit	\$1,608	\$1,562	\$1,423
Operating profit	\$356	\$393	\$340
Net income	\$158	\$195	\$182

Our investment in PAS, which includes the related goodwill, was \$316 million and \$292 million higher than our ownership interest in their net assets at year-end 2006 and 2005, respectively. Based upon the quoted closing price of PAS shares at year-end 2006 and 2005, the calculated market value of our shares in PepsiAmericas exceeded our investment balance by approximately \$173 million and \$364 million, respectively.

In January 2005, PAS acquired a regional bottler, Central Investment Corporation. The table includes the results of Central Investment Corporation from the transaction date forward.

Related Party Transactions

Our significant related party transactions involve our noncontrolled bottling affiliates. We sell concentrate to these affiliates, which they use in the produc-

tion of CSDs and non-carbonated beverages. We also sell certain finished goods to these affiliates and we receive royalties for the use of our trademarks for certain products. Sales of concentrate

and finished goods are reported net of bottler funding. For further unaudited information on these bottlers, see "Our Customers" in Management's Discussion and Analysis.

These transactions with our bottling affiliates are reflected in our consolidated financial statements as follows:

	2006	2005	2004
Net revenue	\$4,837	\$4,633	\$4,170
Selling, general and administrative expenses	\$87	\$143	\$114
Accounts and notes receivable	\$175	\$178	
Accounts payable and other current liabilities	\$62	\$117	

Such amounts are settled on terms consistent with other trade receivables and payables. See Note 9 regarding our guarantee of certain PBG debt.

In addition, we coordinate, on an aggregate basis, the negotiation and purchase of sweeteners and other raw materials requirements for certain of

our bottlers with suppliers. Once we have negotiated the contracts, the bottlers order and take delivery directly from the supplier and pay the suppliers directly. Consequently, these transactions are not reflected in our consolidated financial statements. As the contracting party, we could be liable to these suppliers in the event of any nonpayment by our bottlers, but we consider this exposure to be remote.

Note 9 – Debt Obligations and Commitments

	2006	2005
Short-term debt obligations		
Current maturities of long-term debt	\$ 605	\$ 143
Commercial paper (5.3% and 3.3%)	792	3,140
Other borrowings (7.3% and 7.4%)	377	356
Amounts reclassified to long-term debt	(1,500)	(750)
	\$ 274	\$2,889
Long-term debt obligations		
Short-term borrowings, reclassified	\$1,500	\$ 750
Notes due 2007-2026 (6.0% and 5.4%)	1,148	1,161
Zero coupon notes, \$425 million due 2007-2012 (13.4%)	299	312
Other, due 2007-2016 (6.1% and 6.3%)	208	233
	\$3,155	2,456
Less: current maturities of long-term debt obligations	(605)	(143)
	\$2,550	\$2,313

The interest rates in the above table reflect weighted-average rates at year-end.

In the second quarter of 2006, we entered into a new unsecured revolving credit agreement which enables us to borrow up to \$1.5 billion subject to customary terms and conditions. Funds borrowed under this agreement may be used for general corporate purposes, including supporting our outstanding commercial paper issuances. The agreement terminates in May 2011 and replaces our previous \$2.1 billion of credit facilities. As of December 30, 2006, we have reclassified \$1.5 billion of short-term debt to long-term based on our intent and ability to refinance on a long-term basis.

In addition, \$394 million of our debt related to borrowings from various lines of credit maintained for our international divisions. These lines of credit are subject to normal banking terms and conditions

and are fully committed to the extent of our borrowings.

In the third quarter of 2006, we entered into a U.S. \$2.5 billion euro medium term note program. Under the program, we may issue unsecured notes under mutually agreed upon terms with the purchasers of the notes. Proceeds from any issuance of notes may be used for general corporate purposes, except as otherwise specified in the related prospectus. As of December 30, 2006, we have no outstanding notes under the program.

Interest Rate Swaps

We entered into interest rate swaps in 2004 to effectively convert the interest rate of a specific debt issuance from a fixed rate of 3.2% to a variable rate. The variable weighted-average interest rate that we pay is linked to LIBOR and is subject to change. The notional

amount of the interest rate swaps outstanding at December 30, 2006, and December 31, 2005, was \$500 million. The terms of the interest rate swaps match the terms of the debt they modify. The swaps mature in May 2007.

At December 30, 2006, approximately 63% of total debt, after the impact of the related interest rate swaps, was exposed to variable interest rates, compared to 78% at December 31, 2005. In addition to variable rate long-term debt, all debt with maturities of less than one year is categorized as variable for purposes of this measure.

Cross Currency Interest Rate Swaps

In 2004, we entered into a cross currency interest rate swap to hedge the currency exposure on U.S. dollar denominated debt of \$50 million held by a foreign affiliate. The terms of this swap match the terms of the debt it modifies. The swap matures in 2008. The unrealized gain related to this swap was less than \$1 million at December 30, 2006, and December 31, 2005, resulting in a U.S. dollar liability of \$50 million. We have also entered into cross currency interest rate swaps to hedge the currency exposure on U.S. dollar denominated intercompany debt of \$95 million at December 30, 2006, and \$125 million at December 31, 2005. The terms of the swaps match the terms of the debt they modify. The swaps mature in 2007. The net unrealized loss related to these swaps was less than \$1 million at December 30, 2006, and the net unrealized gain related to these swaps was \$5 million at December 31, 2005.

Long-Term Contractual Commitments

Payments Due by Period	Total	2007	2008-2009	2010-2011	2012 and beyond
Long-term debt obligations ^(a)	\$ 1,050	\$ –	\$ 583	\$ 125	\$ 342
Interest on debt obligations ^(b)	295	50	57	43	145
Operating leases	922	231	302	176	213
Purchasing commitments	5,205	1,357	2,216	871	761
Marketing commitments	1,199	287	453	332	127
Other commitments	279	229	43	5	2
	\$8,950	\$2,154	\$3,654	\$1,552	\$1,590

(a) Excludes current maturities of long-term debt of \$605 million which are classified within current liabilities, as well as short-term borrowings reclassified as long-term debt of \$1,500 million.

(b) Interest payments on floating-rate debt are estimated using interest rates effective as of December 30, 2006.

The above table reflects non-cancelable commitments as of December 30, 2006, based on year-end foreign exchange rates.

Most long-term contractual commitments, except for our long-term debt obligations, are not recorded on our balance sheet. Non-cancelable operating leases primarily represent building leases. Non-cancelable purchasing commitments are primarily for oranges and orange juice, cooking oil and packaging materials. Non-cancelable marketing commitments primarily are for sports marketing. Bottler funding is not reflected in our long-term contractual commitments as it is negotiated on an annual basis. See Note 7 regarding our pension and retiree medical obligations and discussion below regarding our commitments to noncontrolled bottling affiliates and former restaurant operations.

Off-Balance-Sheet Arrangements

It is not our business practice to enter into off-balance-sheet arrangements, other than in the normal course of business, nor is it our policy to issue guarantees to our bottlers, non-controlled affiliates or third parties. However, certain guarantees were necessary to facilitate the separation of our bottling and restaurant operations from us. In connection with these transactions, we have guaranteed \$2.3 billion of Bottling Group, LLC's long-term debt through 2012 and \$23 million of YUM! Brands, Inc.'s (YUM) outstanding obligations, primarily property leases, through 2020. The terms of our Bottling Group, LLC debt guarantee are intended to preserve the

structure of PBG's separation from us and our payment obligation would be triggered if Bottling Group, LLC failed to perform under these debt obligations or the structure significantly changed. Our guarantees of certain obligations ensured YUM's continued use of certain properties. These guarantees would require our cash payment if YUM failed to perform under these lease obligations.

See "Our Liquidity and Capital Resources" in Management's Discussion and Analysis for further unaudited information on our borrowings.

Note 10 – Risk Management

We are exposed to the risk of loss arising from adverse changes in:

- commodity prices, affecting the cost of our raw materials and energy,
- foreign exchange risks,
- interest rates,
- stock prices, and
- discount rates affecting the measurement of our pension and retiree medical liabilities.

In the normal course of business, we manage these risks through a variety of strategies, including the use of derivatives. Certain derivatives are designated as either cash flow or fair value hedges and qualify for hedge accounting treatment, while others do not qualify and are marked to market through

earnings. See "Our Business Risks" in Management's Discussion and Analysis for further unaudited information on our business risks.

For cash flow hedges, changes in fair value are deferred in accumulated other comprehensive loss within shareholders' equity until the underlying hedged item is recognized in net income. For fair value hedges, changes in fair value are recognized immediately in earnings, consistent with the underlying hedged item. Hedging transactions are limited to an underlying exposure. As a result, any change in the value of our derivative instruments would be substantially offset by an opposite change in the value of the underlying hedged items. Hedging ineffectiveness and a net earnings

impact occur when the change in the value of the hedge does not offset the change in the value of the underlying hedged item. If the derivative instrument is terminated, we continue to defer the related gain or loss and include it as a component of the cost of the underlying hedged item. Upon determination that the underlying hedged item will not be part of an actual transaction, we recognize the related gain or loss in net income in that period.

We also use derivatives that do not qualify for hedge accounting treatment. We account for such derivatives at market value with the resulting gains and losses reflected in our income statement. We do not use derivative instruments for trading or speculative purposes, and we

limit our exposure to individual counterparties to manage credit risk.

Commodity Prices

We are subject to commodity price risk because our ability to recover increased costs through higher pricing may be limited in the competitive environment in which we operate. This risk is managed through the use of fixed-price purchase orders, pricing agreements, geographic diversity and derivatives. We use derivatives, with terms of no more than two years, to economically hedge price fluctuations related to a portion of our anticipated commodity purchases, primarily for natural gas and diesel fuel. For those derivatives that qualify for hedge accounting, any ineffectiveness is recorded immediately. However, such commodity cash flow hedges have not had any significant ineffectiveness for all periods presented. We classify both the earnings and cash flow impact from these derivatives consistent with the underlying hedged item. During the next 12 months, we expect to reclassify net gains of \$1 million related to cash flow hedges from accumulated other comprehensive loss into net income. Derivatives

used to hedge commodity price risks that do not qualify for hedge accounting are marked to market each period and reflected in our income statement.

Foreign Exchange

Our operations outside of the U.S. generate approximately 40% of our net revenue, with Mexico, the United Kingdom and Canada comprising approximately 20% of our net revenue. As a result, we are exposed to foreign currency risks from unforeseen economic changes and political unrest. On occasion, we enter into hedges, primarily forward contracts with terms of no more than two years, to reduce the effect of foreign exchange rates. Ineffectiveness of these hedges has not been material.

Interest Rates

We centrally manage our debt and investment portfolios considering investment opportunities and risks, tax consequences and overall financing strategies. We may use interest rate and cross currency interest rate swaps to manage our overall interest expense and foreign exchange risk. These instruments effectively change the interest rate and currency of specific debt issuances. These

swaps are entered into concurrently with the issuance of the debt that they are intended to modify. The notional amount, interest payment and maturity date of the swaps match the principal, interest payment and maturity date of the related debt. These swaps are entered into only with strong creditworthy counterparties, are settled on a net basis and are of relatively short duration.

Stock Prices

The portion of our deferred compensation liability that is based on certain market indices and on our stock price is subject to market risk. We hold mutual fund investments and prepaid forward contracts to manage this risk. Changes in the fair value of these investments and contracts are recognized immediately in earnings and are offset by changes in the related compensation liability.

Fair Value

All derivative instruments are recognized on our balance sheet at fair value. The fair value of our derivative instruments is generally based on quoted market prices. Book and fair values of our derivative and financial instruments are as follows:

	2006		2005	
	Book Value	Fair Value	Book Value	Fair Value
Assets				
Cash and cash equivalents ^(a)	\$1,651	\$1,651	\$1,716	\$1,716
Short-term investments ^(b)	\$1,171	\$1,171	\$3,166	\$3,166
Forward exchange contracts ^(c)	\$8	\$8	\$19	\$19
Commodity contracts ^(d)	\$2	\$2	\$41	\$41
Prepaid forward contracts ^(e)	\$73	\$73	\$107	\$107
Cross currency interest rate swaps ^(f)	\$1	\$1	\$6	\$6
Liabilities				
Forward exchange contracts ^(c)	\$24	\$24	\$15	\$15
Commodity contracts ^(d)	\$29	\$29	\$3	\$3
Debt obligations	\$2,824	\$2,955	\$5,202	\$5,378
Interest rate swaps ^(g)	\$4	\$4	\$9	\$9

The above items are included on our balance sheet under the captions noted or as indicated below. In addition, derivatives qualify for hedge accounting unless otherwise noted below.

(a) Book value approximates fair value due to the short maturity.

(b) Principally short-term time deposits and includes \$145 million at December 30, 2006, and \$124 million at December 31, 2005, of mutual fund investments used to manage a portion of market risk arising from our deferred compensation liability.

(c) The 2006 liability includes \$10 million related to derivatives that do not qualify for hedge accounting and the 2005 asset includes \$14 million related to derivatives that do not qualify for hedge accounting. Assets are reported within current assets and other assets, and liabilities are reported within current liabilities and other liabilities.

(d) The 2006 liability includes \$28 million related to derivatives that do not qualify for hedge accounting. The 2005 asset includes \$2 million related to derivatives that do not qualify for hedge accounting and the liability relates entirely to derivatives that do not qualify for hedge accounting. Assets are reported within current assets, and other assets and liabilities are reported within current liabilities and other liabilities.

(e) Included in current assets and other assets.

(f) Asset included within other assets.

(g) Reported in other liabilities.

This table excludes guarantees, including our guarantee of \$2.3 billion of Bottling Group, LLC's long-term debt. The guarantee had a fair value of \$35 million at December 30, 2006, and \$47 million at December 31, 2005, based on a third-party estimate of the cost to us of transferring the liability to an independent financial institution. See Note 9 for additional information on our guarantees.

Note II – Net Income per Common Share from Continuing Operations

Basic net income per common share is net income available to common shareholders divided by the weighted average of common shares outstanding during the period. Diluted net income per common share is calculated using the weighted average of common shares outstanding adjusted to include

the effect that would occur if in-the-money employee stock options were exercised and RSUs and preferred shares were converted into common shares. Options to purchase 0.1 million shares in 2006, 3.0 million shares in 2005, and 7.0 million shares in 2004 were not included in the calculation of

diluted earnings per common share because these options were out-of-the-money. Out-of-the-money options had average exercise prices of \$65.24 in 2006, \$53.77 in 2005, and \$52.88 in 2004.

The computations of basic and diluted net income per common share from continuing operations are as follows:

	2006		2005		2004	
	Income	Shares ^(a)	Income	Shares ^(a)	Income	Shares ^(a)
Net income	\$5,642		\$4,078		\$4,174	
Preferred shares:						
Dividends	(2)		(2)		(3)	
Redemption premium	(9)		(16)		(22)	
Net income available for common shareholders	\$5,631	1,649	\$4,060	1,669	\$4,149	1,696
Basic net income per common share	\$3.42		\$2.43		\$2.45	
Net income available for common shareholders	\$5,631	1,649	\$4,060	1,669	\$4,149	1,696
Dilutive securities:						
Stock options and RSUs	–	36	–	35	–	31
ESOP convertible preferred stock	11	2	18	2	24	2
Diluted	\$5,642	1,687	\$4,078	1,706	\$4,173	1,729
Diluted net income per common share	\$3.34		\$2.39		\$2.41	

(a) Weighted-average common shares outstanding.

Note 12 – Preferred and Common Stock

As of December 30, 2006, and December 31, 2005, there were 3.6 billion shares of common stock and 3 million shares of convertible preferred stock authorized. The preferred stock was issued only for an ESOP established by Quaker and these shares are redeemable for common stock by the ESOP participants. The preferred stock accrues dividends at an annual rate of \$5.46 per share. At year-end 2006 and 2005, there were

803,953 preferred shares issued and 320,853 and 354,853 shares outstanding, respectively. The outstanding preferred shares had a fair value of \$100 million as of December 30, 2006, and \$104 million as of December 31, 2005. Each share is convertible at the option of the holder into 4.9625 shares of common stock. The preferred shares may be called by us upon written notice at \$78 per share plus accrued and

unpaid dividends. There were 17 million shares of common stock held in the accounts of ESOP participants as of December 30, 2006, and December 31, 2005. Quaker made the final award to its ESOP plan in June 2001.

	2006		2005		2004	
	Shares	Amount	Shares	Amount	Shares	Amount
Preferred stock	0.8	\$41	0.8	\$41	0.8	\$41
Repurchased preferred stock						
Balance, beginning of year	0.5	\$110	0.4	\$ 90	0.3	\$63
Redemptions	–	10	0.1	19	0.1	27
Balance, end of year	0.5	\$120	0.5	\$110*	0.4	\$90

*Does not sum due to rounding.

Note 13 – Accumulated Other Comprehensive Loss

Comprehensive income is a measure of income which includes both net income and other comprehensive income or loss. Other comprehensive income or loss results from items deferred from

recognition into our income statement. Accumulated other comprehensive loss is separately presented on our balance sheet as part of common shareholders' equity. Other comprehensive

income/(loss) was \$456 million in 2006, \$(167) million in 2005, and \$381 million in 2004. The accumulated balances for each component of other comprehensive loss were as follows:

	2006	2005	2004
Currency translation adjustment	\$ (506)	\$ (971)	\$(720)
Cash flow hedges, net of tax ^(a)	4	27	(19)
Unamortized pension and retiree medical, net of tax ^(b)	(1,782)	–	–
Minimum pension liability adjustment ^(c)	–	(138)	(154)
Unrealized gain on securities, net of tax	40	31	7
Other	(2)	(2)	–
Accumulated other comprehensive loss	\$(2,246)	\$(1,053)	\$(886)

(a) Includes \$3 million gain in 2006, no impact in 2005, and \$6 million gain in 2004 for our share of our equity investees' accumulated derivative activity.

(b) Net of taxes of \$964 million in 2006.

(c) Net of taxes of \$72 million in 2005 and \$77 million in 2004. Also includes \$120 million in 2005 and \$121 million in 2004 for our share of our equity investees' minimum pension liability adjustments.

Note 14 – Supplemental Financial Information

	2006	2005	2004
Accounts receivable			
Trade receivables	\$3,147	\$2,718	
Other receivables	642	618	
	<u>3,789</u>	<u>3,336</u>	
Allowance, beginning of year	75	97	\$105
Net amounts charged/(credited) to expense	10	(1)	18
Deductions ^(a)	(27)	(22)	(25)
Other ^(b)	6	1	(1)
Allowance, end of year	<u>64</u>	<u>75</u>	<u>\$ 97</u>
Net receivables	<u>\$3,725</u>	<u>\$3,261</u>	
Inventories^(c)			
Raw materials	\$ 860	\$ 738	
Work-in-process	140	112	
Finished goods	926	843	
	<u>\$1,926</u>	<u>\$1,693</u>	

(a) Includes accounts written off.

(b) Includes currency translation effects and other adjustments.

(c) Inventories are valued at the lower of cost or market. Cost is determined using the average, first-in, first-out (FIFO) or last-in, first-out (LIFO) methods. Approximately 19% in 2006 and 17% in 2005 of the inventory cost was computed using the LIFO method. The differences between LIFO and FIFO methods of valuing these inventories were not material.

	2006	2005	2004
Other assets			
Non-current notes and accounts receivable	\$149	\$ 186	
Deferred marketplace spending	232	281	
Unallocated purchase price for recent acquisitions	196	256	
Pension plans	197	2,440	
Other	206	240	
	<u>\$980</u>	<u>\$3,403</u>	
Accounts payable and other current liabilities			
Accounts payable	\$2,102	\$1,799	
Accrued marketplace spending	1,444	1,383	
Accrued compensation and benefits	1,143	1,062	
Dividends payable	492	431	
Other current liabilities	1,315	1,296	
	<u>\$6,496</u>	<u>\$5,971</u>	
Other liabilities			
Reserves for income taxes	\$1,435	\$1,884	
Other	3,189	2,439	
	<u>\$4,624</u>	<u>\$4,323</u>	
Other supplemental information			
Rent expense	\$291	\$228	\$245
Interest paid	\$215	\$213	\$137
Income taxes paid, net of refunds	\$2,155	\$1,258	\$1,833
Acquisitions^(a)			
Fair value of assets acquired	\$ 678	\$ 1,089	\$ 78
Cash paid and debt issued	(522)	(1,096)	(64)
SVE minority interest eliminated	–	216	–
Liabilities assumed	<u>\$ 156</u>	<u>\$ 209</u>	<u>\$ 14</u>

(a) In 2005, these amounts include the impact of our acquisition of General Mills, Inc.'s 40.5% ownership interest in SVE for \$750 million. The excess of our purchase price over the fair value of net assets acquired is \$250 million and is included in goodwill. We also reacquired rights to distribute global brands for \$263 million which is included in other nonamortizable intangible assets.

Management's Responsibility for Financial Reporting

To Our Shareholders:

At PepsiCo, our actions — the actions of all our associates — are governed by our Worldwide Code of Conduct. This code is clearly aligned with our stated values — a commitment to sustained growth, through empowered people, operating with responsibility and building trust. Both the code and our core values enable us to operate with integrity — both within the letter and the spirit of the law. Our code of conduct is reinforced consistently at all levels and in all countries. We have maintained strong governance policies and practices for many years.

The management of PepsiCo is responsible for the objectivity and integrity of our consolidated financial statements. The Audit Committee of the Board of Directors has engaged independent registered public accounting firm, KPMG LLP, to audit our consolidated financial statements and they have expressed an unqualified opinion.

We are committed to providing timely, accurate and understandable information to investors. Our commitment encompasses the following:

Maintaining strong controls over financial reporting. Our system of internal control is based on the control criteria framework of the Committee of Sponsoring Organizations of the Treadway Commission published in their report titled, Internal Control — Integrated Framework. The system is designed to provide reasonable assurance that transactions are executed as authorized and accurately recorded; that assets are safeguarded; and that accounting records are sufficiently reliable to permit the preparation of financial statements that conform in all material respects with accounting principles generally accepted in the U.S. We maintain disclosure controls and procedures designed to ensure that information required to be disclosed in reports under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the specified time periods. We monitor these internal controls through self-assessments and an ongoing program of internal audits. Our internal controls are reinforced through our Worldwide Code of Conduct, which sets forth our commitment to conduct business with integrity, and within both the letter and the spirit of the law.

Exerting rigorous oversight of the business. We continuously review our business results and strategies. This encompasses financial discipline in our strategic and daily business decisions. Our Executive Committee is actively involved — from understanding strategies and alternatives to reviewing key initiatives and financial performance. The intent is to ensure we remain objective in our assessments, constructively challenge our approach to potential business opportunities and issues, and monitor results and controls.

Engaging strong and effective Corporate Governance from our Board of Directors. We have an active, capable and diligent Board that meets the required standards for independence, and we welcome the Board's oversight as a representative of our shareholders. Our Audit Committee is comprised of independent directors with the financial literacy, knowledge and experience to provide appropriate oversight. We review our critical accounting policies, financial reporting and internal control matters with them and encourage their direct communication with KPMG LLP, with our General Auditor, and with our General Counsel. We also have a senior compliance officer to lead and coordinate our compliance policies and practices.

Providing investors with financial results that are complete, transparent and understandable. The consolidated financial statements and financial information included in this report are the responsibility of management. This includes preparing the financial statements in accordance with accounting principles generally accepted in the U.S., which require estimates based on management's best judgment.

PepsiCo has a strong history of doing what's right. We realize that great companies are built on trust, strong ethical standards and principles. Our financial results are delivered from that culture of accountability, and we take responsibility for the quality and accuracy of our financial reporting.



Peter A. Bridgman
Senior Vice President and Controller



Richard Goodman
Chief Financial Officer



Indra K. Nooyi
President and Chief Executive Officer

Management's Report on Internal Control over Financial Reporting

To Our Shareholders:

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act. Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based upon the framework in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, our management concluded that our internal control over financial reporting is effective as of December 30, 2006.

KPMG LLP, an independent registered public accounting firm, has audited the consolidated financial statements included in this Annual Report and, as part of their audit, has issued their attestation report, included herein, (1) on our management's assessment of the effectiveness of our internal controls over financial reporting and (2) on the effectiveness of our internal control over financial reporting.

During our fourth fiscal quarter of 2006, we began migrating certain of our financial processing systems to SAP software. This software implementation is part of our ongoing Business Process Transformation initiative, and we plan to continue implementing such software throughout other parts of our businesses over the course of the next few years. In connection with the SAP implementation, we are modifying the design and documentation of our internal control processes and procedures relating to the new software.

Except as described above, there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting during our fourth fiscal quarter of 2006.



Peter A. Bridgman
Senior Vice President and Controller



Richard Goodman
Chief Financial Officer



Indra K. Nooyi
President and Chief Executive Officer

Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders PepsiCo, Inc.:

We have audited the accompanying Consolidated Balance Sheet of PepsiCo, Inc., and Subsidiaries as of December 30, 2006, and December 31, 2005, and the related Consolidated Statements of Income, Cash Flows and Common Shareholders' Equity for each of the years in the three-year period ended December 30, 2006. We have also audited management's assessment, included in Management's Report on Internal Control over Financial Reporting that PepsiCo, Inc., and Subsidiaries maintained effective internal control over financial reporting as of December 30, 2006, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). PepsiCo, Inc.'s, management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on these consolidated financial statements, an opinion on management's assessment, and an opinion on the effectiveness of PepsiCo, Inc.'s, internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audit of the consolidated financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial

statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of PepsiCo, Inc., and Subsidiaries as of December 30, 2006, and December 31, 2005, and the results of their operations and their cash flows for each of the years in the three-year period ended December 30, 2006, in conformity with United States generally accepted accounting principles. Also, in our opinion, management's assessment that PepsiCo, Inc., maintained effective internal control over financial reporting as of December 30, 2006, is fairly stated, in all material respects, based on criteria established in Internal Control — Integrated Framework issued by COSO. Furthermore, in our opinion, PepsiCo, Inc., maintained, in all material respects, effective internal control over financial reporting as of December 30, 2006, based on criteria established in Internal Control — Integrated Framework issued by COSO.

As discussed in Note 7 to the consolidated financial statements, PepsiCo, Inc., and Subsidiaries adopted the provisions of FASB Statement No. 158, "Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans — an amendment to FASB Statements No. 87, 88, 106 and 132(R)," as of December 30, 2006.

KPMG LLP

KPMG LLP
New York, New York
February 16, 2007

APPENDIX B

SUBSIDIARY LEDGERS AND SPECIAL JOURNALS

THE NAVIGATOR ✓

- Understand *Concepts for Review*
- Read *Feature Story*
- Scan *Study Objectives*
- Read *Preview*
- Read text and answer *Before You Go On*
p. 486–487 p. 499
- Work *Demonstration Problem*
- Review *Summary of Study Objectives*
- Complete *Assignments*

CONCEPTS FOR REVIEW

Before studying this chapter, you should know or, if necessary, review:

- a. What a double-entry system is. (Ch. 3, p. 69)
- b. How to post a transaction. (Ch. 3, p. 79)
- c. The steps in the accounting cycle. (Ch. 1, p. 15)

FEATURE STORY

Different Roads for Different Folks

Most people begin working in the hospitality industry in one functional area and progress up the career ladder to become general managers, after which they reach the district, regional, and finally corporate level if they so choose.

Brian P. Garavuso is one of the rare breeds in the hospitality business. He has worked in the accounting and financial aspects of the industry and then became intrigued with the ever-changing technology. Rather than being a controller, then a general manager, and finally corporate, or going strictly the financial route and becoming a chief financial officer, he is currently the chief information officer of **Hilton Grand Vacations Company**.

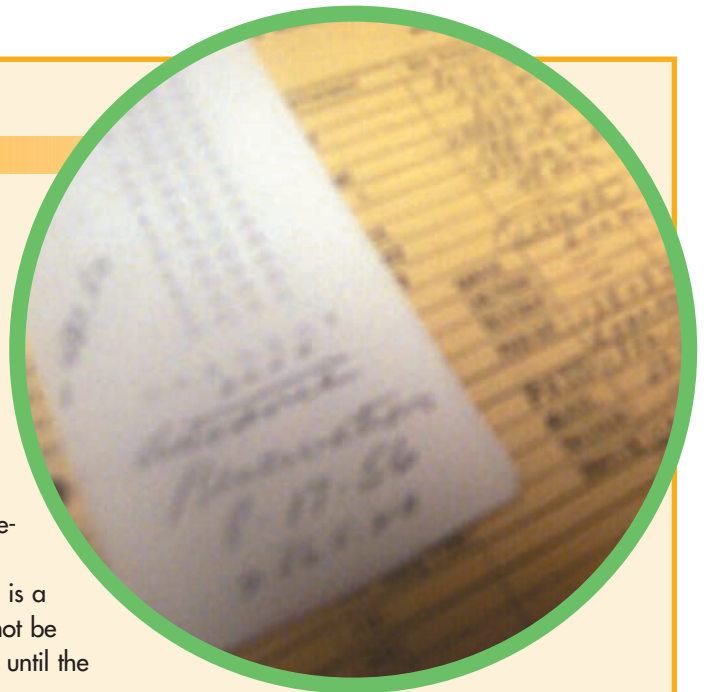
Garavuso states some specific types of journals that are unique to the hospitality industry. “The city ledger is basically an accounts receivable journal, and the guest ledger represents the amount of money owed to the hotel for those guests that are staying in the hotel,” says Garavuso. “Another important

and unique journal in our industry is the advance deposit ledger. This gives a detailed listing of amounts received from future guests to secure their reservations. This is a liability and cannot be taken as revenue until the guest arrives.”

Of course, there are also the special journals that all businesses use. Garavuso says the cash receipts journal is quite useful when reconciling deposits to the bank statements. This journal helps the business identify deposits in transit and is also useful for reconciling accounts receivable accounts. The cash payments or disbursements journal, by contrast, is very important for managing cash flow. This journal also assists managers and owners in analyzing income statements when researching actual versus budget variances. For expense management, the purchases journal is the key. In some systems, the purchases journal

is also the accounts payable expense journal, which represents invoices entered in the system.

As you can see from the previous chapters, Mr. Garavuso has made a smart career choice—accounting and technology really go hand in hand. Recalling his accounting days, he is one who will always insist on the use of subsidiary ledgers and special journals. With computers, and even in a manual system, all subsidiary ledgers and special journals allow businesses to keep transactions grouped by type, eliminate all of the posting detail from the general ledger, and



STUDY OBJECTIVES

After studying this appendix, you should be able to

1. Describe the nature and the purpose of a subsidiary ledger.
2. Explain how special journals are used in journalizing.
3. Indicate how a multicolumn journal is posted.

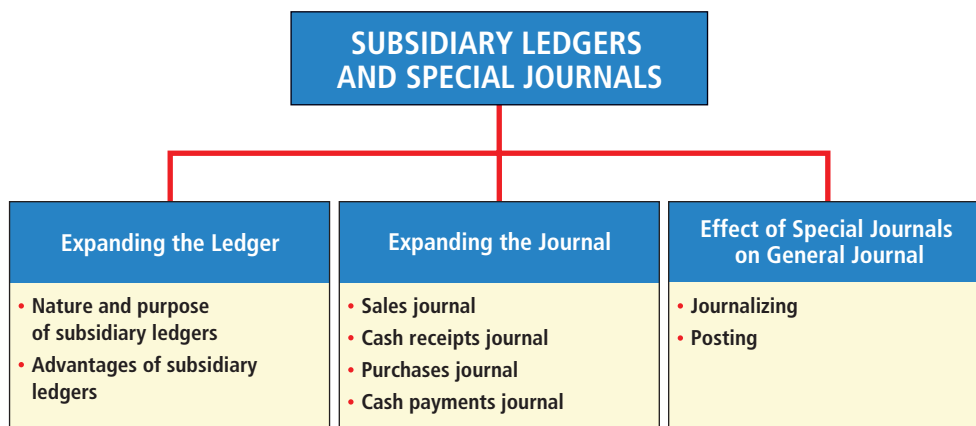


PREVIEW OF APPENDIX B

In the first five chapters of this book, you saw how you can complete an entire accounting cycle so that transactions can be accounted for in any given business. However, that is only the first step. All the examples and practice exercises you have completed thus far are exactly what they are—examples and practices. Think of all the individual transactions that happen at all the **Disney** businesses on any given day, from guests staying at their hotels, to guests eating at their restaurants, to guests paying at the entrance of a theme park, to guests buying souvenirs at a Disney store at a local mall. Then you also have Disney buying food from a purveyor, paying its employees, paying bills to a linen cleaning company, paying its electricity bill, and so on. If Disney has one general ledger and one general journal to account for all its transactions, it will be very difficult for Disney to do any analysis or to look up any specific information.

The ease of obtaining information and analyses—and other reasons, such as facilitating the recording process and better organization of data—is why special ledgers and journals are useful in the accounting process.

The content and organization of Appendix B are as follows:



EXPANDING THE LEDGER—SUBSIDIARY LEDGERS

NATURE AND PURPOSE OF SUBSIDIARY LEDGERS

STUDY OBJECTIVE 1

Describe the nature and the purpose of a subsidiary ledger.

Imagine a business that has several thousand charge (credit) customers and shows the transactions with these customers in only one general ledger account—Accounts Receivable. It would be virtually impossible to determine the balance owed by an individual customer at any specific time. Similarly, the amount payable to one creditor would be difficult to locate quickly from a single Accounts Payable account in the general ledger.

Instead, companies use subsidiary ledgers to keep track of individual balances. A **subsidiary ledger** is a group of accounts with a common characteristic (for example, all accounts receivable). The subsidiary ledger frees the general ledger from the details of individual balances. A subsidiary ledger is an addition to, and an expansion of, the general ledger.

There are two common subsidiary ledgers:

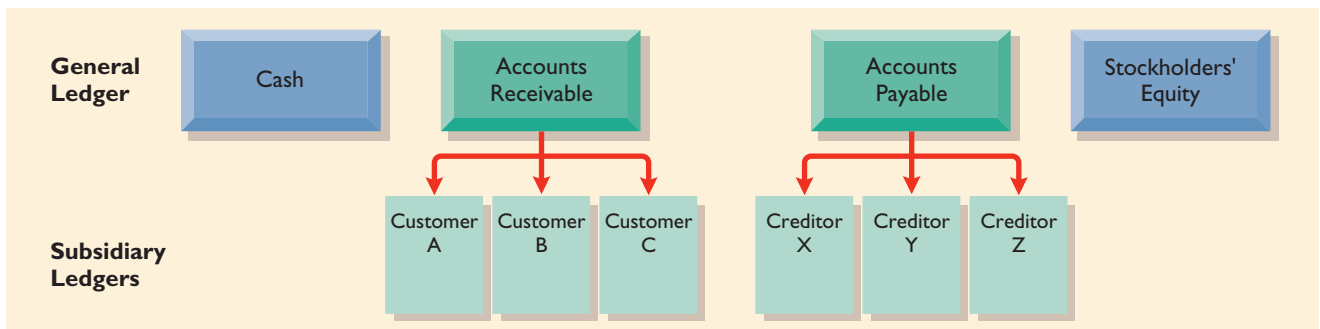
1. The **accounts receivable** (or **customers' subsidiary ledger**), which collects transaction data of individual customers.
2. The **accounts payable** (or **creditors' subsidiary ledger**), which collects transaction data of individual creditors.

In each of these subsidiary ledgers, individual accounts are usually arranged in alphabetical order.

The detailed data from a subsidiary ledger are summarized in a general ledger account. For example, the detailed data from the accounts receivable subsidiary ledger are summarized in Accounts Receivable in the general ledger. The general ledger account that summarizes subsidiary ledger data is called a **control account**. An overview of the relationship of subsidiary ledgers to the general ledger is shown in Illustration B-1. The general ledger control accounts and subsidiary ledger accounts are shown in green. Note that cash and stockholders' equity in this illustration are not control accounts because there are no subsidiary ledger accounts related to these accounts.

Illustration B-1

Relationship of general ledger and subsidiary ledgers



Each general ledger control account balance must equal the composite balance of the individual accounts in the related subsidiary ledger at the end of an accounting period. For example, the balance in Accounts Payable in Illustration B-1 must equal the total of the subsidiary balances of Creditors X + Y + Z.

EXAMPLE

An example of a control account and a subsidiary ledger for Larson Enterprises, a firm that sells souvenirs and children's giveaways for restaurants, is provided in Illustration B-2. (The explanation column in these accounts is not shown in this and subsequent illustrations due to space considerations.)

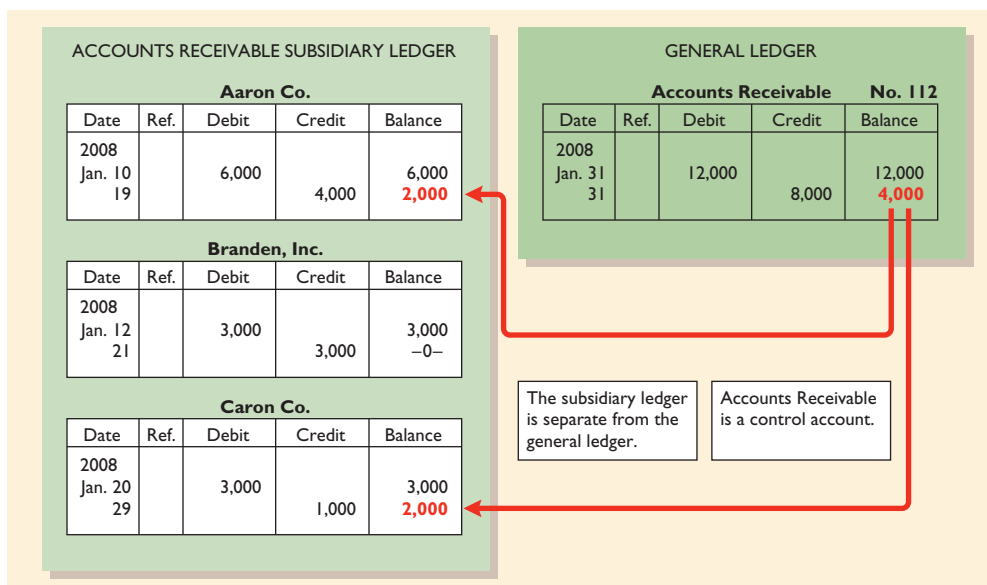


Illustration B-2

Relationship between general and subsidiary ledgers

The example is based on the transactions listed in Illustration B-3.

Illustration B-3

Sales and collection transactions

Credit Sales			Collections on Account		
Jan. 10	Aaron Co.	\$ 6,000	Jan. 19	Aaron Co.	\$ 4,000
12	Branden, Inc.	3,000	21	Branden, Inc.	3,000
20	Caron Co.	3,000	29	Caron Co.	1,000
		<u>\$12,000</u>			<u>\$ 8,000</u>

The total debits (\$12,000) and credits (\$8,000) in Accounts Receivable in the general ledger are reconcilable to the detailed debits and credits in the subsidiary accounts. Also, the balance of \$4,000 in the control account agrees with the total of the balances in the individual accounts (Aaron Co. \$2,000 + Branden, Inc., \$0 + Caron Co. \$2,000) in the subsidiary ledger.

As shown, postings are made monthly to the control accounts in the general ledger. This practice allows monthly financial statements to be prepared. Postings to the individual accounts in the subsidiary ledger are made daily. Daily posting ensures that account information is current. This enables the company to monitor credit limits, to bill customers, and to answer inquiries from customers about their account balances.

ADVANTAGES OF SUBSIDIARY LEDGERS

Subsidiary ledgers have at least four advantages:

1. **They show transactions affecting one customer or one creditor in a single account**, thus providing up-to-date information on specific account balances.
2. **They free the general ledger of excessive details.** As a result, a trial balance of the general ledger does not contain vast numbers of individual account balances.
3. **They help locate errors in individual accounts** by reducing the number of accounts in one ledger and by using control accounts.
4. **They make possible a division of labor** in posting. One employee can post to the general ledger while someone else posts to the subsidiary ledgers.

TECHNOLOGY IN ACTION

Rather than relying on customer or creditor names in a subsidiary ledger, a computerized system expands the account number of the control account in a prespecified manner. For example, if Accounts Receivable was numbered 10010, the first account in the accounts receivable subsidiary ledger might be numbered 10010-0001. Most systems allow inquiries about specific accounts in the subsidiary ledger (by account number) or about the control account. With the latter, the system would automatically total all the subsidiary accounts whenever an inquiry to the control account was made. The various uniform systems of accounts also provide a suggested chart of accounts for businesses to adopt as a turnkey.

BEFORE YOU GO ON...

▶ REVIEW IT

1. What is a subsidiary ledger, and what purpose does it serve?

2. What are two common subsidiary ledgers? What is the relationship between subsidiary ledgers and a general ledger?
3. What are the advantages of using and maintaining subsidiary ledgers?

▶ DO IT

The following information relates to Sims Frozen Slushies for its first month of operations. Determine the balances that appear in the accounts payable subsidiary ledger. What Accounts Payable balance appears in the general ledger at the end of January?

Credit Purchases			Cash Paid		
Jan. 5	Devon Co.	\$11,000	Jan. 9	Devon Co.	\$7,000
11	Shelby Co.	7,000	14	Shelby Co.	2,000
22	Taylor Co.	14,000	27	Taylor Co.	9,000

ACTION PLAN

- Subtract cash paid from credit purchases to determine the balances in the accounts payable subsidiary ledger.
- Sum the individual balances to determine the Accounts Payable balance.

SOLUTION

Subsidiary ledger balances: Devon Co. \$4,000 (\$11,000 – \$7,000); Shelby Co. \$5,000 (\$7,000 – \$2,000); Taylor Co. \$5,000 (\$14,000 – \$9,000). General ledger Accounts Payable balance: \$14,000 (\$4,000 + \$5,000 + \$5,000).

EXPANDING THE JOURNAL— SPECIAL JOURNALS

So far you have learned to journalize transactions in a two-column general journal and to post each entry to the general ledger. This procedure is satisfactory in only the very smallest companies. To expedite journalizing and posting, most companies use special journals *in addition to the general journal*.

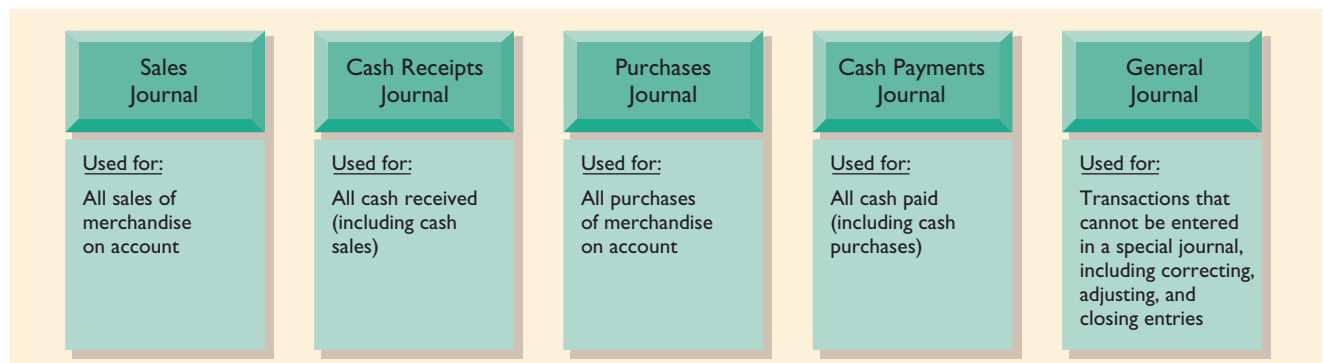
A **special journal** is used to record similar types of transactions. Examples would be all sales of merchandise on account or all cash receipts. What special journals a company uses depends largely on the types of transactions that occur frequently. Most merchandising enterprises use the journals shown in Illustration B-4 to record transactions daily.

STUDY OBJECTIVE 2

Explain how special journals are used in journalizing.

Illustration B-4

Use of special journals and the general journal



If a transaction cannot be recorded in a special journal, it is recorded in the general journal. For example, if you had special journals only for the four types of transactions shown in Illustration 10-4, purchase returns and allowances would be recorded in the general journal. So would sales returns and allowances. Similarly, **correcting, adjusting, and closing entries are recorded in the general journal.** Other types of special journals sometimes may be used in some situations. For example, when sales returns and allowances are frequent, special journals may be used to record these transactions.

The use of special journals *permits greater division of labor* because several people can record entries in different journals at the same time. For example, one employee may journalize all cash receipts, and another may journalize all credit sales. Also, the use of special journals *reduces the time needed to complete the posting process*. With special journals, some accounts may be posted monthly, instead of daily, as will be illustrated later in this Appendix.

SALES JOURNAL

The **sales journal** is used to record sales of merchandise on account. Cash sales of merchandise are entered in the cash receipts journal. Credit sales of assets other than merchandise are entered in the general journal.

Journalizing Credit Sales

Karns Food Wholesale uses a **perpetual inventory** system. Under this system, each entry in the sales journal results in one entry *at selling price*—a debit to Accounts Receivable (a control account) and a credit of equal amount to Sales—and another entry *at cost*—a debit to Cost of Goods Sold and a credit of equal amount to Merchandise Inventory (a control account). A sales journal with two amount columns can show on only one line a sales transaction at both selling price and cost. The two-column sales journal of Karns Food Wholesale is shown in Illustration B-5, using assumed credit sales transactions (for sales invoices 101–107). The reference (Ref.) column is not used in journalizing. It is used in posting the sales journal, as explained in the next section. Also note that, unlike the general journal, an explanation is not required for each entry in a special journal. Finally, note that each invoice is prenumbered to ensure that all invoices are journalized.

HELPFUL HINT

Postings are also made daily to individual ledger accounts in the inventory subsidiary ledger to maintain a perpetual inventory.

Illustration B-5

Journalizing the sales journal—perpetual inventory system

KARNS FOOD WHOLESALE					
Sales Journal					S1
Date	Account Debited	Invoice No.	Ref.	Accts. Receivable Dr. Sales Cr.	Cost of Goods Sold Dr. Merchandise Inventory Cr.
2008					
May 3	Abbot Sisters	101		10,600	6,360
7	Babson Co.	102		11,350	7,370
14	Carson Bros.	103		7,800	5,070
19	Deli Co.	104		9,300	6,510
21	Abbot Sisters	105		15,400	10,780
24	Deli Co.	106		21,210	15,900
27	Babson Co.	107		14,570	10,200
				<u>90,230</u>	<u>62,190</u>

Posting the Sales Journal

Postings from the sales journal are made *daily* to the individual accounts receivable in the subsidiary ledger. Posting to the general ledger is made *monthly*. Illustration B-6 shows both the daily and the monthly postings.

Illustration B-6

Posting the sales journal

KARNIS FOOD WHOLESALE Sales Journal						SI
Date	Account Debited	Invoice No.	Ref.	Accts. Receivable Dr. Sales Cr.	Cost of Goods Sold Dr. Merchandise Inventory Cr.	
2008						
May 3	Abbot Sisters	101	✓	10,600	6,360	
7	Babson Co.	102	✓	11,350	7,370	
14	Carson Bros.	103	✓	7,800	5,070	
19	Deli Co.	104	✓	9,300	6,510	
21	Abbot Sisters	105	✓	15,400	10,780	
24	Deli Co.	106	✓	21,210	15,900	
27	Babson Co.	107	✓	14,570	10,200	
				<u>90,230</u>	<u>62,190</u>	
				(112) / (401)	(505) / (120)	

Totals are posted at the end of the accounting period to the general ledger.

Individual amounts are posted daily to the subsidiary ledger.

ACCOUNTS RECEIVABLE SUBSIDIARY LEDGER				
Abbot Sisters				
Date	Ref.	Debit	Credit	Balance
2008				
May 3	SI	10,600		10,600
21	SI	15,400		26,000
Babson Co.				
Date	Ref.	Debit	Credit	Balance
2008				
May 7	SI	11,350		11,350
27	SI	14,570		25,920
Carson Bros.				
Date	Ref.	Debit	Credit	Balance
2008				
May 14	SI	7,800		7,800
Deli Co.				
Date	Ref.	Debit	Credit	Balance
2008				
May 19	SI	9,300		9,300
24	SI	21,210		30,510

GENERAL LEDGER				
Accounts Receivable No. 112				
Date	Ref.	Debit	Credit	Balance
2008				
May 31	SI	90,230		90,230
Merchandise Inventory No. 120				
Date	Ref.	Debit	Credit	Balance
2008				
May 31	SI		62,190	62,190 ¹
Sales No. 401				
Date	Ref.	Debit	Credit	Balance
2008				
May 31	SI		90,230	90,230
Cost of Goods Sold No. 505				
Date	Ref.	Debit	Credit	Balance
2008				
May 31	SI	62,190		62,190

The subsidiary ledger is separate from the general ledger.

Accounts Receivable is a control account.

¹The normal balance for Merchandise Inventory is a debit. But, because of the sequence in which we have posted the special journals, with the sales journals first, the credits to Merchandise Inventory are posted before the debits. This posting sequence explains the credit balance, in Merchandise Inventory, which exists only until the other journals are posted.

A check mark (✓) is inserted in the reference posting column to indicate that the daily posting to the customer’s account has been made. A check mark (✓) is used in this illustration because the subsidiary ledger accounts are not numbered. At the end of the month, the column totals of the sales journal are posted to the general ledger. Here, the column totals are a debit of \$90,230 to Accounts Receivable (account No. 112), a credit of \$90,230 to Sales (account No. 401), a debit of \$62,190 to Cost of Goods Sold (account No. 505), and a credit of \$62,190

to Merchandise Inventory (account No. 120). Insertion of the account numbers below the column total indicates that the postings have been made. In both the general ledger and the subsidiary ledger accounts, the reference **S1** indicates that the posting came from page 1 of the sales journal.

Proving the Ledgers

The next step is to “prove” the ledgers. To do so, we must determine two things: (1) The total of the general ledger debit balances must equal the total of the general ledger credit balances. (2) The sum of the subsidiary ledger balances must equal the balance in the control account. The proof of the postings from the sales journal to the general and the subsidiary ledgers is shown in Illustration B-7.

Illustration B-7

Proving the equality of the postings from the sales journal

Postings to General Ledger		Debit Postings to the Accounts Receivable Subsidiary Ledger	
General Ledger		Subsidiary Ledger	
<u>Credits</u>			
Merchandise Inventory	\$62,190	Abbot Sisters	\$26,000
Sales	90,230	Babson Co.	25,920
	<u>\$152,420</u>	Carson Bros.	7,800
		Deli Co.	<u>30,510</u>
			<u>\$90,230</u>
<u>Debits</u>			
Accounts Receivable	\$90,230		
Cost of Goods Sold	62,190		
	<u>\$152,420</u>		

Advantages of the Sales Journal

The use of a special journal to record sales on account has a number of advantages. First, the one-line entry for each sales transaction saves time. In the sales journal, it is not necessary to write out the four account titles for each transaction. Second, only totals, rather than individual entries, are posted to the general ledger. This saves posting time and reduces the possibilities of errors in posting. Finally, **a division of labor results**, because one individual can take responsibility for the sales journal.

CASH RECEIPTS JOURNAL

All receipts of cash are recorded in the **cash receipts journal**. The most common types of cash receipts are cash sales of merchandise and collections of accounts receivable. Many other possibilities exist, such as receipt of money from bank loans and cash proceeds from disposal of equipment. A one- or two-column cash receipts journal would not have space enough for all possible cash receipt transactions. Therefore, a multicolumn cash receipts journal is used.

Generally, a cash receipts journal includes the following columns: debit columns for cash and sales discounts; and credit columns for accounts receivable, sales, and “other” accounts. The Other Accounts category is used when the cash receipt does not involve a cash sale or a collection of accounts receivable. Under a perpetual inventory system, each sales entry is accompanied by another entry that debits Cost of Goods Sold and credits Merchandise Inventory for the cost of the merchandise sold. This entry may be recorded separately. A six-column cash receipts journal is shown in Illustration B-8.

Illustration B-8

Journalizing and posting the cash receipts journal

KARNS FOOD WHOLESALE Cash Receipts Journal								
								CRI
Date	Account Credited	Ref.	Cash Dr.	Sales Discounts Dr.	Accounts Receivable Cr.	Sales Cr.	Other Accounts Cr.	Cost of Goods Sold Dr. Mdse. Inv. Cr.
2008								
May 1	Common Stock	311	5,000				5,000	
7			1,900			1,900		1,240
10	Abbot Sisters	✓	10,388	212	10,600			
12			2,600			2,600		1,690
17	Babson Co.	✓	11,123	227	11,350			
22	Notes Payable	200	6,000				6,000	
23	Carson Bros.	✓	7,644	156	7,800			
28	Deli Co.	✓	9,114	186	9,300			
			<u>53,769</u>	<u>781</u>	<u>39,050</u>	<u>4,500</u>	<u>11,000</u>	<u>2,930</u>
			(101)	(414)	(112)	(401)	(X)	(505)/(120)

Individual amounts are posted daily to the subsidiary ledger.

Totals are posted at the end of the accounting period to the general ledger.

ACCOUNTS RECEIVABLE SUBSIDIARY LEDGER				
Abbot Sisters				
Date	Ref.	Debit	Credit	Balance
2008				
May 3	SI	10,600		10,600
10	CRI		10,600	0-
21	SI	15,400		15,400
Babson Co.				
Date	Ref.	Debit	Credit	Balance
2008				
May 7	SI	11,350		11,350
17	CRI		11,350	0-
27	SI	14,570		14,570
Carson Bros.				
Date	Ref.	Debit	Credit	Balance
2008				
May 14	SI	7,800		7,800
23	CRI		7,800	0-
Deli Co.				
Date	Ref.	Debit	Credit	Balance
2008				
May 19	SI	9,300		9,300
24	SI	21,210		30,510
28	CRI		9,300	21,210

GENERAL LEDGER				
Cash No. 101				
Date	Ref.	Debit	Credit	Balance
2008				
May 31	CRI	53,769		53,769
Accounts Receivable No. 112				
Date	Ref.	Debit	Credit	Balance
2008				
May 31	SI	90,230		90,230
31	CRI		39,050	51,180
Merchandise Inventory No. 120				
Date	Ref.	Debit	Credit	Balance
2008				
May 31	SI		62,190	62,190
31	CRI		2,930	65,120
Notes Payable No. 200				
Date	Ref.	Debit	Credit	Balance
2008				
May 22	CRI		6,000	6,000
Common Stock No. 311				
Date	Ref.	Debit	Credit	Balance
2008				
May 1	CRI		5,000	5,000
Sales No. 401				
Date	Ref.	Debit	Credit	Balance
2008				
May 31	SI		90,230	90,230
31	CRI		4,500	94,730
Sales Discounts No. 414				
Date	Ref.	Debit	Credit	Balance
2008				
May 31	CRI	781		781
Cost of Goods Sold No. 505				
Date	Ref.	Debit	Credit	Balance
2008				
May 31	SI	62,190		62,190
31	CRI	2,930		65,120

Accounts Receivable is a control account.

The subsidiary ledger is separate from the general ledger.

Additional credit columns may be used if they significantly reduce postings to a specific account. For example, a loan company, such as **Household International**, receives thousands of cash collections from customers. A significant saving in posting would result from using separate credit columns for Loans Receivable and Interest Revenue, rather than using the Other Accounts credit column. In contrast, a retailer that has only one interest collection a month would not find it useful to have a separate column for Interest Revenue.

Journalizing Cash Receipts Transactions

To illustrate the journalizing of cash receipts transactions, we will continue with the May transactions of Karns Food Wholesale. Collections from customers relate to the entries recorded in the sales journal in Illustration B-5. The entries in the cash receipts journal are based on the following cash receipts:

- May 1 Stockholders invest \$5,000 in the business.
- 7 Cash sales of merchandise total \$1,900 (cost, \$1,240).
- 10 A check for \$10,388 is received from Abbot Sisters in payment of invoice No. 101 for \$10,600 less a 2 percent discount.
- 12 Cash sales of merchandise total \$2,600 (cost, \$1,690).
- 17 A check for \$11,123 is received from Babson Co. in payment of invoice No. 102 for \$11,350 less a 2 percent discount.
- 22 Cash is received by signing a note for \$6,000.
- 23 A check for \$7,644 is received from Carson Bros. in full for invoice No. 103 for \$7,800 less a 2 percent discount.
- 28 A check for \$9,114 is received from Deli Co. in full for invoice No. 104 for \$9,300 less a 2 percent discount.

Further information about the six columns in the cash receipts journal (see Illustration B-8) follows.

DEBIT COLUMNS

1. **Cash.** The amount of cash actually received in each transaction is entered in this column. The column total indicates the total cash receipts for the month.
2. **Sales Discounts.** Karns includes a Sales Discounts column in its cash receipts journal. By doing so, it is not necessary to enter sales discount items in the general journal. As a result, the collection of an account receivable within the discount period is expressed on one line in the appropriate columns of the cash receipts journal.

CREDIT COLUMNS

3. **Accounts Receivable.** The Accounts Receivable column is used to record cash collections on account. The amount entered here is the amount to be credited to the individual customer's account.
4. **Sales.** The Sales column records all cash sales of merchandise. Cash sales of other assets (plant assets, for example) are not reported in this column.
5. **Other Accounts.** The Other Accounts column is used whenever the credit is other than to Accounts Receivable or Sales. For example, in the first entry, \$5,000 is entered as a credit to Common Stock. This column is often referred to as the **sundry accounts column**.

DEBIT AND CREDIT COLUMN

6. **Cost of Goods Sold and Merchandise Inventory.** This column records debits to Cost of Goods Sold and credits to Merchandise Inventory.

HELPFUL HINT

When is an account title entered in the "Account Credited" column of the cash receipts journal?
 Answer: A *subsidiary ledger* title is entered there whenever the entry involves a collection of accounts receivable. A *general ledger* account title is entered there whenever the entry involves an account that is not the subject of a special column (and an amount must be entered in the Other Accounts column). No account title is entered there if neither of the foregoing applies.

In a multicolumn journal, generally only one line is needed for each entry. Debit and credit amounts for each line must be equal. When the collection from Abbot Sisters on May 10 is journalized, for example, three amounts are indicated. Note also that the Account Credited column is used to identify both general ledger and subsidiary ledger account titles. General ledger accounts are illustrated in the May 1 and May 22 entries. A subsidiary account is illustrated in the May 10 entry for the collection from Abbot Sisters.

When the journalizing of a multicolumn journal has been completed, the amount columns are totaled, and the totals are compared to prove the equality of debits and credits. The proof of the equality of Karns's cash receipts journal is shown in Illustration B-9. Totaling the columns of a journal and proving the equality of the totals is called **footing** and **cross-footing** a journal.

<u>Debits</u>		<u>Credits</u>	
Cash	\$53,769	Accounts Receivable	\$39,050
Sales Discounts	781	Sales	4,500
Cost of Goods Sold	2,930	Other Accounts	11,000
	<u>\$57,480</u>	Merchandise Inventory	2,930
			<u>\$57,480</u>

Illustration B-9

Proving the equality of the cash receipts journal

Posting the Cash Receipts Journal

Posting a multicolumn journal involves the following steps.

1. All column totals except for the Other Accounts total are posted once at the end of the month to the account title(s) specified in the column heading (such as Cash or Accounts Receivable). Account numbers are entered below the column totals to show that they have been posted. Cash is posted to account No. 101, accounts receivable to account No. 112, merchandise inventory to account No. 120, sales to account No. 401, sales discounts to account No. 414, and cost of goods sold to account No. 505.
2. The individual amounts making up the Other Accounts total are posted separately to the general ledger accounts specified in the Account Credited column. See, for example, the credit posting to Common Stock. The total amount of this column is not posted. The symbol (X) is inserted below the total to this column to indicate that the amount has not been posted.
3. The individual amounts in a column, posted in total to a control account (Accounts Receivable, in this case), are posted daily to the subsidiary ledger account specified in the Account Credited column. See, for example, the credit posting of \$10,600 to Abbot Sisters.

The symbol **CR** is used in both the subsidiary and the general ledgers to identify postings from the cash receipts journal.

Proving the Ledgers

After posting of the cash receipts journal is completed, it is necessary to prove the ledgers. As shown in Illustration B-10 (page 494), the general ledger totals are in agreement. Also, the sum of the subsidiary ledger balances equals the control account balance.

STUDY OBJECTIVE 3

Indicate how a multicolumn journal is posted.

Illustration B-10

Proving the ledgers after posting the sales and the cash receipts journals

Accounts Receivable Subsidiary Ledger		General Ledger	
Abbot Sisters	\$15,400	Debits	
Babson Co.	14,570	Cash	\$53,769
Deli Co.	21,210	Accounts Receivable	51,180
	<u>\$51,180</u>	Sales Discounts	781
		Cost of Goods Sold	65,120
			<u>\$170,850</u>
		Credits	
		Notes Payable	\$ 6,000
		Common Stock	5,000
		Sales	94,730
		Merchandise Inventory	65,120
			<u>\$170,850</u>

Illustration B-11

Journalizing and posting the purchases journal

HELPFUL HINT
A single-column purchases journal needs only to be footed to prove the equality of debits and credits.

KARNS FOOD WHOLESALE Purchases Journal					PI
Date	Account Credited	Terms	Ref.	Merchandise Inventory Dr.	Accounts Payable Cr.
2008					
May 6	Jasper Beef Inc.	2/10, n/30	✓	11,000	
10	Eaton and Howe Inc.	3/10, n/30	✓	7,200	
14	Fabor and Son	1/10, n/30	✓	6,900	
19	Jasper Beef Inc.	2/10, n/30	✓	17,500	
26	Fabor and Son	1/10, n/30	✓	8,700	
29	Eaton and Howe Inc.	3/10, n/30	✓	12,600	
				<u>63,900</u>	
				(120)/(201)	

ACCOUNTS PAYABLE SUBSIDIARY LEDGER				
Eaton and Howe Inc.				
Date	Ref.	Debit	Credit	Balance
2008				
May 10	PI		7,200	7,200
29	PI		12,600	19,800

Fabor and Son				
Date	Ref.	Debit	Credit	Balance
2008				
May 14	PI		6,900	6,900
26	PI		8,700	15,600

Jasper Beef Inc.				
Date	Ref.	Debit	Credit	Balance
2008				
May 6	PI		11,000	11,000
19	PI		17,500	28,500

GENERAL LEDGER				
Merchandise Inventory No. 120				
Date	Ref.	Debit	Credit	Balance
2008				
May 31	SI		62,190	62,190
31	CR I		2,930	65,120
31	PI	63,900		1,220

Accounts Payable No. 201				
Date	Ref.	Debit	Credit	Balance
2008				
May 31	PI		63,900	63,900

Individual amounts are posted daily to the subsidiary ledger.

Totals are posted at the end of the accounting period to the general ledger.

The subsidiary ledger is separate from the general ledger.

Accounts Payable is a control account.

PURCHASES JOURNAL

All purchases of merchandise on account are recorded in the **purchases journal**. Each entry in this journal results in a debit to Merchandise Inventory and a credit to Accounts Payable. When a one-column purchases journal is used (as in Illustration B-11), other types of purchases on account and cash purchases cannot be journalized in it. For example, credit purchases of equipment or supplies must be recorded in the general journal. Likewise, all cash purchases are entered in the cash payments journal. As illustrated later, where credit purchases for items other than merchandise are numerous, the purchases journal is often expanded to a multicolumn format. The purchases journal for Karns Food Wholesale is shown in Illustration B-11.

Journalizing Credit Purchases of Merchandise

Entries in the purchases journal are made from purchase invoices. The journalizing procedure is similar to that for a sales journal. In contrast to the sales journal, the purchases journal may not have an invoice number column, because invoices received from different suppliers will not be in numerical sequence. To assure that all purchase invoices are recorded, some companies consecutively number each invoice upon receipt and then use an internal document number column in the purchases journal.

The entries for Karns Food Wholesale are based on the assumed credit purchases shown in Illustration B-12.

<u>Date</u>	<u>Supplier</u>	<u>Amount</u>
5/6	Jasper Beef, Inc.	\$11,000
5/10	Eaton and Howe Poultry Inc.	7,200
5/14	Fabor and Son Seafood	6,900
5/19	Jasper Beef Inc.	17,500
5/26	Fabor and Son Seafood	8,700
5/29	Eaton and Howe Poultry Inc.	12,600

Illustration B-12

Credit purchases transactions

Posting the Purchases Journal

The procedures for posting the purchases journal are similar to those for the sales journal. In this case, postings are made daily to the **accounts payable ledger** and monthly to Merchandise Inventory and Accounts Payable in the **general ledger**. In both ledgers, P1 is used in the reference column to show that the postings are from page 1 of the purchases journal.

Proof of the equality of the postings from the purchases journal to both ledgers is shown in Illustration B-13.

HELPFUL HINT

Postings to subsidiary ledger accounts are done daily because it is often necessary to know a current balance for the subsidiary accounts.

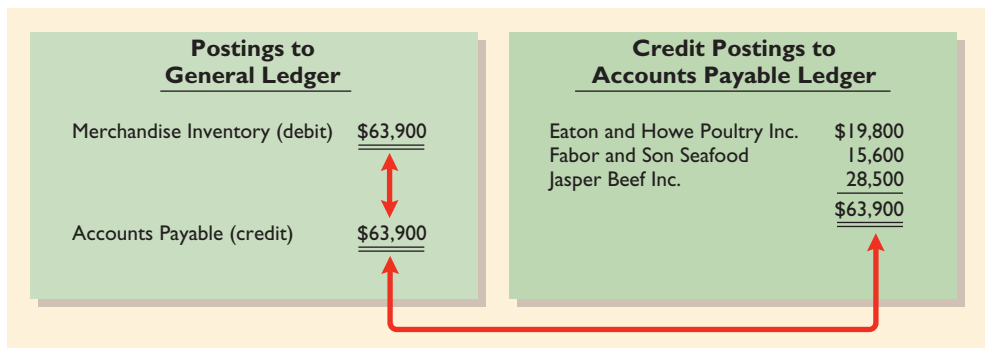


Illustration B-13

Proving the equality of the purchases journal

Expanding the Purchases Journal

HELPFUL HINT

A multicolumn purchases journal must be footed and cross-footed to prove the equality of debits and credits.

Illustration B-14

Multicolumn purchases journal

Some companies expand the purchases journal to include all types of purchases on account. Instead of one column for merchandise inventory and accounts payable, they use a multicolumn format. The multicolumn format usually includes a credit column for accounts payable and debit columns for purchases of merchandise, of office supplies, of store supplies, and other accounts. Illustration B-14 is an example of a multicolumn purchases journal for Hanover Table Linen Co. The posting procedures are similar to those illustrated earlier for posting the cash receipts journal.

HANOVER TABLE LINEN CO.									
Purchases Journal									
P1									
Date	Account Credited	Ref.	Accounts Payable Cr.	Merchandise Inventory Dr.	Office Supplies Dr.	Store Supplies Dr.	Other Accounts Dr.		
							Account	Ref.	Amount
2008									
June 1	Signe Audio	✓	2,000		2,000				
3	Wright Co.	✓	1,500	1,500					
5	Orange Tree Co.	✓	2,600				Equipment	157	2,600
30	Sue's Business Forms	✓	800			800			
			56,600	43,000	7,500	1,200			4,900

CASH PAYMENTS JOURNAL

ALTERNATIVE TERMINOLOGY
The cash payments journal is sometimes called the *cash disbursements journal*.

All disbursements of cash are entered in a **cash payments journal**. Entries are made from prenumbered checks. Because cash payments are made for various purposes, the cash payments journal has multiple columns. A four-column journal is shown in Illustration B-15.

Journalizing Cash Payments Transactions

The procedures for journalizing transactions in this journal are similar to those described earlier for the cash receipts journal. Each transaction is entered on one line, and for each line there must be equal debit and credit amounts. The entries in the cash payments journal in Illustration B-15 are based on the following transactions for Karns Food Wholesale:

- May 1 Check No. 101 for \$1,200 issued for the annual premium on a fire insurance policy.
- 3 Check No. 102 for \$100 issued in payment of freight when terms were FOB shipping point.
- 8 Check No. 103 for \$4,400 issued for the purchase of merchandise.
- 10 Check No. 104 for \$10,780 sent to Jasper Beef Inc. in payment of May 6 invoice for \$11,000 less a 2 percent discount.
- 19 Check No. 105 for \$6,984 mailed to Eaton and Howe Poultry in payment of May 10 invoice for \$7,200 less a 3 percent discount.
- 23 Check No. 106 for \$6,831 sent to Fabor and Son Seafood in payment of May 14 invoice for \$6,900 less a 1 percent discount.
- 28 Check No. 107 for \$17,150 sent to Jasper Beef Inc. in payment of May 19 invoice for \$17,500 less a 2 percent discount.
- 30 Check No. 108 for \$500 issued to stockholders as a cash dividend.

Note that whenever an amount is entered in the Other Accounts column, a specific general ledger account must be identified in the Account Debited column.

Illustration B-15

Journalizing and posting the cash payments journal

KARNS FOOD WHOLESALE
Cash Payments Journal

Date	Ck. No.	Account Debited	Ref.	Other Accounts Dr.	Accounts Payable Dr.	Merchandise Inventory Cr.	Cash Cr.
2008							CPI
May 1	101	Prepaid Insurance	130	1,200			1,200
3	102	Mdse. Inventory	120	100			100
8	103	Mdse. Inventory	120	4,400			4,400
10	104	Jasper Beef Inc.	✓		11,000	220	10,780
19	105	Eaton & Howe Poultry	✓		7,200	216	6,984
23	106	Fabor and Son Seafood	✓		6,900	69	6,831
28	107	Jasper Beef Inc.	✓		17,500	350	17,150
30	108	Dividends	332	500			500
				6,200	42,600	855	47,945
				(x)	(201)	(120)	(101)

Individual amounts are posted daily to the subsidiary ledger.

Totals are posted at the end of the accounting period to the general ledger.

ACCOUNTS PAYABLE SUBSIDIARY LEDGER

Eaton and Howe Poultry

Date	Ref.	Debit	Credit	Balance
2008				
May 10	PI		7,200	7,200
19	CPI	7,200		—
29	PI		12,600	12,600

Fabor and Son Seafood

Date	Ref.	Debit	Credit	Balance
2008				
May 14	PI		6,900	6,900
23	CPI	6,900		—
26	PI		8,700	8,700

Jasper Beef Inc.

Date	Ref.	Debit	Credit	Balance
2008				
May 6	PI		11,000	11,000
10	CPI	11,000		—
19	PI		17,500	17,500
28	CPI	17,500		—

GENERAL LEDGER

Cash No. 101

Date	Ref.	Debit	Credit	Balance
2008				
May 31	CR1	53,769		53,769
31	CPI		47,945	5,824

Merchandise Inventory No. 120

Date	Ref.	Debit	Credit	Balance
2008				
May 3	CPI	100		100
8	CPI	4,400		4,500
31	SI		62,190	57,690
31	CR1		2,930	60,620
31	PI	63,900		3,280
31	CPI		855	2,425

Prepaid Insurance No. 130

Date	Ref.	Debit	Credit	Balance
2008				
May 1	CPI	1,200		1,200

Accounts Payable No. 201

Date	Ref.	Debit	Credit	Balance
2008				
May 31	PI		63,900	63,900
31	CPI	42,600		21,300

Dividends No. 332

Date	Ref.	Debit	Credit	Balance
2008				
May 30	CPI	500		500

Accounts Payable is a control account.

The subsidiary ledger is separate from the general ledger.

The entries for checks No. 101, 102, and 103 illustrate this situation. Similarly, a subsidiary account must be identified in the Account Debited column whenever an amount is entered in the Accounts Payable column. See, for example, the entry for check No. 104.

After the cash payments journal has been journalized, the columns are totaled. The totals are then balanced to prove the equality of debits and credits.

Posting the Cash Payments Journal

The procedures for posting the cash payments journal are similar to those for the cash receipts journal. The amounts recorded in the Accounts Payable column are posted individually to the subsidiary ledger and in total to the control account. Merchandise Inventory and Cash are posted only in total at the end of the month. Transactions in the Other Accounts column are posted individually to the appropriate account(s) affected. No totals are posted for this column.

The posting of the cash payments journal is shown in Illustration B-15 (page 497). Note that the symbol *CP* is used as the posting reference. After postings are completed, the equality of the debit and credit balances in the general ledger should be determined. In addition, the control account balances should agree with the subsidiary ledger total balance. The agreement of these balances is shown in Illustration B-16.

Illustration B-16

Proving the ledgers after postings from the sales, cash receipts, purchases, and cash payments journals

<u>Accounts Payable Subsidiary Ledger</u>		<u>General Ledger</u>	
Eaton and Howe Poultry	\$12,600	<u>Debits</u>	
Fabor and Son Seafood	8,700	Cash	\$ 5,824
	<u>\$21,300</u>	Accounts Receivable	51,180
		Merchandise Inventory	2,425
		Prepaid Insurance	1,200
		Dividends	500
		Sales Discounts	781
		Cost of Goods Sold	65,120
			<u>\$127,030</u>
		<u>Credits</u>	
		Notes Payable	\$ 6,000
		Accounts Payable	21,300
		Common Stock	5,000
		Sales	94,730
			<u>\$127,030</u>

*E*FFECTS OF SPECIAL JOURNALS ON THE GENERAL JOURNAL

Special journals for sales, purchases, and cash substantially reduce the number of entries that are made in the general journal. **Only transactions that cannot be entered in a special journal are recorded in the general journal.** For example, the general journal may be used to record such transactions as granting of credit to a customer for a sales return or allowance, granting of credit from a supplier for purchases returned, acceptance of a note receivable from a customer, and purchase of equipment by issuing a note payable. Also, correcting, adjusting, and closing entries are made in the general journal.

The general journal has columns for date, account title and explanation, reference, and debit and credit amounts. When control and subsidiary accounts are not involved, the procedures for journalizing and posting of transactions are the same as those described in earlier chapters. When control and subsidiary accounts are involved, two changes from the earlier procedures are required:

1. In *journalizing*, both the control and the subsidiary accounts must be identified.
2. In *posting*, there must be a dual posting: once to the control account and once to the subsidiary account.

To illustrate, assume that on May 31, Karns Food Wholesale returns \$500 of merchandise for credit to Fabor and Son. The entry in the general journal and the posting of the entry are shown in Illustration B-17. Note that if cash is received instead of credit granted on this return, then the transaction is recorded in the cash receipts journal.

KARNS FOOD WHOLESALE
General Journal

GI				
Date	Account Title and Explanation	Ref.	Debit	Credit
2008 May 31	Accounts Payable—Fabor and Son Merchandise Inventory (Received credit for returned goods)	201/✓ 120	500	500

ACCOUNTS PAYABLE SUBSIDIARY LEDGER

Fabor and Son Seafood

Date	Ref.	Debit	Credit	Balance
2008				
May 14	PI		6,900	6,900
23	CPI	6,900		—0—
26	PI		8,700	8,700
31	GI	500		8,200

GENERAL LEDGER

Merchandise Inventory No. 120

Date	Ref.	Debit	Credit	Balance
2008				
May 31	GI		500	500

Accounts Payable No. 201

Date	Ref.	Debit	Credit	Balance
2008				
May 31	PI		63,900	63,900
31	CPI	42,600		21,300
31	GI	500		20,800

Illustration B-17

Journalizing and posting the general journal

Observe in the journal that two accounts are indicated for the debit, and two postings (“201/✓”) are indicated in the reference column. One amount is posted to the control account and the other to the creditor’s account in the subsidiary ledger.

BEFORE YOU GO ON...

▶ REVIEW IT

1. What types of special journals are frequently used to record transactions? Why are special journals used?
2. Explain how transactions recorded in the sales journal and the cash receipts journal are posted.
3. Indicate the types of transactions that are recorded in the general journal when special journals are used.

▶ DO IT

Vilas Company has the following selected transactions: (1) purchase of equipment for cash, (2) cash sales, (3) sales returns and allowances, (4) payment of cash dividends, and (5) sales of merchandise on account. Identify the journals in which each transaction should be entered.

ACTION PLAN

- Know the content of each special journal.
- Understand the effect of special journals on the general journal.

SOLUTION

(1) Purchase of equipment for cash—cash payments journal. (2) Cash sale—cash receipts journal. (3) Sales return and allowance—general journal. (4) Payment of cash dividends—cash payments journal. (5) Sale of merchandise on account—sales journal.

DEMONSTRATION PROBLEM

Dion Restaurant Equipment Company uses a six-column cash receipts journal with the following columns: Cash (Dr.), Sales Discounts (Dr.), Accounts Receivable (Cr.), Sales (Cr.), Other Accounts (Cr.), and Cost of Goods Sold (Dr.) and Merchandise Inventory (Cr.). Cash receipts transactions for the month of July 2008 are as follows.

- July 3 Cash sales total \$5,800 (cost, \$3,480).
 5 A check for \$6,370 is received from Jeltz Deli in payment of an invoice dated June 26 for \$6,500, terms 2/10, n/30.
 9 An additional investment of \$5,000 in cash is made in the business by stockholders.
 10 Cash sales total \$12,519 (cost, \$7,511).
 12 A check for \$7,275 is received from R. Eliot Seafood House in payment of a \$7,500 invoice dated July 3, terms 3/10, n/30.
 15 A customer advance of \$700 cash is received for future sales.
 20 Cash sales total \$15,472 (cost, \$9,283).
 22 A check for \$5,880 is received from Beck Hamburger in payment of a \$6,000 invoice dated July 13, terms 2/10, n/30.
 29 Cash sales total \$17,660 (cost, \$10,596).
 31 Cash of \$200 is received on interest earned for July.

ACTION PLAN

- Record all cash receipts in the cash receipts journal.
- The “account credited” indicates items posted individually to the subsidiary ledger or general ledger.
- Record cash sales in the cash receipts journal—not in the sales journal.
- The total debits must equal the total credits.

Instructions

- (a) Journalize the transactions in the cash receipts journal.
 (b) Contrast the posting of the Accounts Receivable and Other Accounts columns.

SOLUTION TO DEMONSTRATION PROBLEM

(a) **DION RESTAURANT EQUIPMENT COMPANY**
Cash Receipts Journal CR1

Date	Account Credited	Ref.	Cash Dr.	Sales Discounts Dr.	Accounts Receivable Cr.	Sales Cr.	Other Accounts Cr.	Cost of Goods Sold Dr. Mdse. Inv. Cr.
2008								
July 3			5,800			5,800		3,480
5	Jeltz Deli		6,370	130	6,500			
9	Common Stock		5,000				5,000	
10			12,519			12,519		7,511
12	R. Eliot Seafood House		7,275	225	7,500			
15	Unearned Revenues		700				700	
20			15,472			15,472		9,283
22	Beck Hamburger		5,880	120	6,000			
29			17,660			17,660		10,596
31	Interest Revenue		200				200	
			76,876	475	20,000	51,451	5,900	30,870

(b) The Accounts Receivable column is posted as a credit to Accounts Receivable. The individual amounts are credited to the customers' accounts identified in the Account Credited column, which are maintained in the accounts receivable subsidiary ledger.

The amounts in the Other Accounts column are only posted individually. They are credited to the account titles identified in the Account Credited column.

SUMMARY OF STUDY OBJECTIVES

- 1. Describe the nature and the purpose of a subsidiary ledger.** A subsidiary ledger is a group of accounts with a common characteristic. It facilitates the recording process by freeing the general ledger from details of individual balances.
- 2. Explain how special journals are used in journalizing.** A special journal is used to group similar types of transactions. In a special journal, generally only one line is used to record a complete transaction.
- 3. Indicate how a multicolumn journal is posted.** In posting a multicolumn journal:
 - (a) All column totals except for the Other Accounts column are posted once at the end of the month to the account title specified in the column heading.
 - (b) The total of the Other Accounts column is not posted. Instead, the individual amounts comprising the total are posted separately to the general ledger accounts specified in the Account Credited column.
 - (c) The individual amounts in a column posted in total to a control account are posted daily to the subsidiary ledger accounts specified in the Account Credited column.

GLOSSARY

- Accounts payable (creditors') subsidiary ledger** A subsidiary ledger that contains accounts of individual creditors (p. 484).
- Accounts receivable (customers') subsidiary ledger** A subsidiary ledger that contains individual customer accounts (p. 484).
- Cash payments journal** A special journal used to record all cash paid (p. 496).
- Cash receipts journal** A special journal used to record all cash received (p. 490).
- Control account** An account in the general ledger that summarizes a subsidiary ledger (p. 485).
- Cross-footing** The proving of the equality of the totals in a journal (p. 493).
- Footing** The totaling of a column of a journal (p. 493).
- Purchases journal** A special journal used to record all purchases of merchandise on account (p. 495).
- Sales journal** A special journal used to record all sales of merchandise on account (p. 488).
- Special journal** A journal that is used to record similar types of transactions, such as all credit sales (p. 487).
- Subsidiary ledger** A group of accounts with a common characteristic (p. 484).

EXERCISES

- B-1** Identify in the ledger (general or subsidiary) in which each of the following accounts is shown. *Identify subsidiary ledger accounts.* (SO 1)
1. Rent Expense
 2. Accounts Receivable—Char
 3. Notes Payable
 4. Accounts Payable—Thebeau
- B-2** Identify the journal in which each of the following transactions is recorded. *Identify special journals.* (SO 2)
1. Cash sales
 2. Payment of dividends
 3. Cash purchase of land
 4. Credit sales
 5. Purchase of merchandise on account
 6. Receipt of cash for services performed
- B-3** Indicate whether each of the following debits and credits is included in the cash receipts journal. (Use “Yes” or “No” to answer this question.) *Identify entries to cash receipts journal.* (SO 2)
1. Debit to Sales
 2. Credit to Merchandise Inventory
 3. Credit to Accounts Receivable
 4. Debit to Accounts Payable
- B-4** Paris Vacation Resorts, Inc., uses a multicolumn cash receipts journal. Indicate which column(s) is (are) posted only in total, only daily, or both in total and daily. *Indicate postings to cash receipts journal.* (SO 3)
1. Accounts Receivable
 2. Sales Discounts
 3. Cash
 4. Other Accounts
- B-5** Bayou Oaks Country Club uses special journals and a general journal. Identify the journal in which each of the following transactions is recorded. *Identify transactions for special journals.* (SO 2)
1. Purchased equipment on account.
 2. Purchased merchandise on account.
 3. Paid utility expense in cash.
 4. Sold merchandise on account.
- B-6** Miguel Taoueria uses both special journals and a general journal as described in this appendix. On June 30, after all monthly postings had been completed, the Accounts Receivable control account in the general ledger had a debit balance of \$320,000; the Accounts Payable control account had a credit balance of \$87,000. *Determine control account balances, and explain posting of special journals.*

502 APPENDIX B Subsidiary Ledgers and Special Journals

The July transactions recorded in the special journals are summarized below. No entries affecting accounts receivable and accounts payable were recorded in the general journal for July.

Sales journal	Total sales \$161,400
Purchase journal	Total purchases \$56,400
Cash receipts journal	Accounts Receivable column total \$141,000
Cash payments journal	Accounts Payable column total \$47,500

Instructions

- (a) What is the balance of the Accounts Receivable control account after the monthly postings on July 31?
- (b) What is the balance of the Accounts Payable control account after the monthly postings on July 31?
- (c) To what account(s) is (are) the column total of \$161,400 in the sales journal posted?
- (d) To what account(s) is (are) the accounts receivable column total of \$141,000 in the cash receipts journal posted?

Explain postings to subsidiary ledger. (SO 1, 3)

B-7 Presented below is the subsidiary accounts receivable account of Nathan Ross:

Date	Ref.	Debit	Credit	Balance
2008				
Sept. 2	S31	61,000		61,000
9	G4		14,000	47,000
27	CR8		47,000	-0-

Instructions

Write a memo to Mr. Murphy, the general manager, that explains each transaction.

Post various journals to control and subsidiary accounts. (SO 1, 2)

B-8 On September 1, the balance of the Accounts Receivable control account in the general ledger of John’s Produce, Inc., was \$11,960. The customers’ subsidiary ledger contained account balances as follows: Jana Seafood \$2,440; Bingson Bakery \$2,640; Cavanaugh Pancakes \$2,060; Bickford Grille \$4,820. At the end of September, the various journals contained the following information:

Sales journal: Sales to Bickford Grille \$800; to Jana Seafood \$1,260; to Iman Groceries \$1,030; to Cavanaugh Pancakes \$1,100.

Cash receipts journal: Cash received from Cavanaugh Pancakes \$1,310; from Bickford Grille \$2,300; from Iman Groceries \$380; from Kingston Bakery \$1,800; from Jana Seafood \$1,240.

General journal: An allowance is granted to Bickford Grille \$220.

Instructions

- (a) Set up control and subsidiary accounts, and enter the beginning balances. Do not construct the journals.
- (b) Post the various journals. Post the items as individual items or as totals, whichever would be the appropriate procedure. (No sales discounts given.)
- (c) Prepare a list of customers, and prove the agreement of the controlling account with the subsidiary ledger at September 30, 2008.

Record transactions in sales and purchases journals. (SO 1, 2)

B-9 Sing Tao Beverages uses special journals and a general journal. The following transactions occurred during September 2008.

- Sept. 2 Sold merchandise on account to Mephisto, invoice no. 101, \$520, terms n/30. The cost of the merchandise sold was \$300.
- 10 Purchased merchandise on account from Fantasia Bar & Grill \$600, terms 2/10, n/30.
- 12 Purchased office equipment on account from Office Express \$6,500.
- 21 Sold merchandise on account to Shinhan, invoice no. 102 for \$800, terms 2/10, n/30. The cost of the merchandise sold was \$480.
- 25 Purchased merchandise on account from Manion Wholesale \$810, terms n/30.
- 27 Sold merchandise to Miller Brewery for \$700 cash. The cost of the merchandise sold was \$400.

Instructions

- (a) Draw a sales journal (see Illustration E-6) and a single-column purchases journal (see Illustration E-11). (Use page 1 for each journal.)
- (b) Record the transaction(s) for September that should be journalized in the sales journal and the purchases journal.

B-10 Svenska Shirts uses special journals and a general journal. The following transactions occurred during May 2008.

Record transactions in cash receipts and cash payments journals.

- May 1 I. Svenska invested \$60,000 cash in the business in exchange for common stock.
- 2 Sold merchandise to Sherrick Country Club for \$6,300 cash. The cost of the merchandise sold was \$4,200.
- 3 Purchased merchandise for \$8,200 from J. Rome using check no. 101.
- 14 Paid salary to H. Potter \$700 by issuing check no. 102.
- 16 Sold merchandise on account to Denmark Diner for \$900, terms n/30. The cost of the merchandise sold was \$630.
- 22 A check of \$9,000 is received from Irish Pub in full for invoice 101; no discount given.

Instructions

- (a) Draw a multicolumn cash receipts journal (see Illustration B-8) and a multicolumn cash payments journal (see Illustration B-15). (Use page 1 for each journal.)
- (b) Record the transaction(s) for May that should be journalized in the cash receipts journal and cash payments journal.

EXPLORING THE WEB

B-11 Peachtree is one of the leading accounting software packages. Information related to this package is found at its Web site.

Address: www.Peachtree.com/Peachtreeaccountingline/first/features_main.cfm

Steps

1. Go to the Peachtree site.
2. Choose **General Ledger**. Answer question (a) below.
3. Choose **Accounts Payable**. Answer question (b) below.

Instructions

- (a) What are three key features of the general ledger module highlighted by the company?
- (b) What are three key features of the payables management module highlighted by the company?



Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.

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