

Financial Accounting: A Business Perspective 11e

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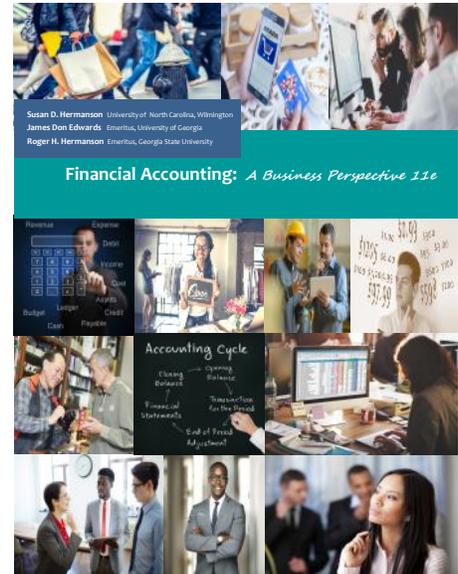
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Highlights of 11e:

- Former Irwin/McGraw Hill title recently revised (2018 copyright)
- New lead author and extensive author involvement in the revision of the text and all supplements to ensure relevance of chapter content and seamless integration with all supplementary materials.
- A current, fully up-to-date text (all accounting standards through 2017 are incorporated). Extensive revisions from prior edition with new content, new examples, and updated assignments.
- A great way to give your students a high-quality product at a low cost. A great value decision!

Background: This book went through many editions with Business Publications, Inc. an imprint of Richard D. Irwin Publishers, and was among the company's best sellers. After Irwin's titles were sold to McGraw, the new owner dropped the project to avoid cannibalizing their native product. The authors brought the book to Textbook Media and we published 9e back in 2006.

Brief Description: Thoroughly updated in 2017, 11e builds on the strengths of previous editions and continues to provide a thorough understanding of how to use accounting information to analyze business performance and make business decisions. Uses real companies to illustrate many of the accounting concepts, and covers a variety of issues associated with these actual businesses to provide a real-world perspective. Combines solid coverage of financial accounting for business students, regardless of the selected major, and provides non-accounting majors a solid foundation for making effective use of accounting information.

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More on 11e:

One of the ... most important things accomplished in this revision was to bring Dr. Susan Hermanson in as lead author of the text. She is a coauthor on previous editions of our Managerial Accounting text.

With Susan directing the development of 11e, know that there was a high level of personal involvement in updating this textbook by the author team, including bringing it up to date with all FASB pronouncements through early 2018. Susan oversaw the revising and working the solutions to all questions, exercises, and problems in each chapter of the book. All supplements including the Solutions Manual, Instructor's Resource Guide, Test Bank, Power Point Slides®, and Study Guide were personally revised by the authors.

The focus of 11e remains on giving your students an understanding of how to use accounting information to analyze business performance and make business decisions. Like previous editions, 11e takes a business perspective, seeking to involve the business student more in real-world business applications as we introduce and explain the subject matter. The authors use the annual reports of real companies to illustrate many of the accounting concepts. Your students are familiar with many of the companies used in 11e, including Apple, The Home Depot, and Coca-Cola Company.



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Preface

The Latest Revision

One of the most important things accomplished in this revision was to bring Dr. Susan Hermanson in as lead author of the text. She is a coauthor on previous editions of our Managerial Accounting text and has decided to become involved in this text also.

The most important content and revision changes were the following:

- (1) Chapter 5, Accounting Theory, was thoroughly revised to bring it completely up to date with the latest Financial Accounting Standards Board (FASB) pronouncements (up through early 2018).
- (2) The new FASB rules on accounting for leases are included in a new Appendix to Chapter 11.
- (3) The old rules regarding trading equity securities and available-for-sale equity securities in Chapter 14 were deleted and the new coverage using one Marketable Equity Securities account to include all marketable equity securities and adjusting them to fair market values at the end of each accounting period was substituted.
- (4) Also, there was heavy author personal involvement in revising and working the solutions to all questions, exercises, and problems in each chapter of the book. All supplements including the Instructor's Resource Guide, Test Bank, PowerPoint Slides, and Study Guide were personally revised by the authors.

One goal in publishing this book is to give the students a break in lowering the cost of attending college. Students are graduating with enormous student debts to try to pay off over their lifetimes. With no sacrifice in quality, this completely up-to-date text sells for only a fraction of the cost of other competing texts.

Philosophy and Purpose

Imagine that you have graduated from college without taking an accounting course. You are employed by a company as a sales person, and you eventually become the sales manager of a territory. While attending a sales managers' meeting, financial results are reviewed by the Vice President of Sales and terms such as gross margin percentage, cash flows from operating activities, and LIFO

inventory methods are being discussed. The Vice President eventually asks you to discuss these topics as they relate to your territory. You try to do so, but it is obvious to everyone in the meeting that you do not know what you are talking about.

Financial accounting principles courses teach you the "language of business" so you understand terms and concepts used in business decisions. If you understand how accounting information is prepared, you will be in an even stronger position when faced with a management decision based on accounting information.

We wrote this text to give you an understanding of how to use accounting information to analyze business performance and make business decisions. The text takes a business perspective. We use the annual reports of real companies to illustrate many of the accounting concepts. You are familiar with many of the companies we use, such as Apple, The Home Depot, and Coca-Cola Company.

Gaining an understanding of accounting terminology and concepts, however, is not enough to ensure your success. You also need to be able to find financial information on the Internet, analyze various business situations, work effectively as a member of a team, and communicate your ideas clearly. This text was created to help you develop these skills.

Curriculum Concerns

Significant changes have been recommended for accounting education. Some parties have expressed concern that recent accounting graduates do not possess the necessary set of skills to succeed in an accounting career. The typical accounting graduate seems unable to successfully deal with complex and unstructured "real world" accounting problems and generally lacks communication and interpersonal skills. One recommendation is the greater use of active learning techniques in a reenergized classroom environment. The traditional lecture and structured problem solving method approach is being supplemented or replaced with a more informal classroom setting dealing with cases, simulations, and group projects. Both inside and outside the classroom, there is more two-way communication between (1) professor and student and (2) student and student. Study groups are formed so that students can tutor other students. The purposes of these recommendations include enhancing

students' critical thinking skills, written and oral communication skills, and interpersonal skills.

One of the most important benefits you can obtain from a college education is that you “learn how to learn.” The concept that you gain all of your learning in school and then spend the rest of your life applying that knowledge is not valid. Change is occurring at an increasingly rapid pace. You will probably hold many different jobs during your career, and you will probably work for many different companies. Much of the information you learn in college will be obsolete in just a few years. Therefore, you will be expected to engage in life-long learning. Memorizing and application are much less important than the higher order learning skills of critical analysis and evaluation.

With this changing environment in mind, we have developed a text that will lend itself to developing the skills that will lead to success in your future career in business. The section at the end of each chapter titled, “Beyond the Numbers—Critical Thinking,” provides the opportunity for you to address unstructured case situations, the analysis of real companies' financial situations, ethics cases, and team projects. For many of these items, you will use written and oral communication skills in presenting your results.

Objectives and Overall Approach of the Eleventh Edition The Accounting Education Change Commission (AECC) made the following statement regarding the role of the first-year accounting course in preparing students for success in their future careers:

The first course in accounting can significantly benefit those who enter business, government, and other organizations, where decision-makers use accounting information. These individuals will be better prepared for their responsibilities if they understand the role of accounting information in decision-making by managers, investors, government regulators, and others. All organizations have accountability responsibilities to their constituents, and accounting, properly used, is a powerful tool in creating information to improve the decisions that affect those constituents.¹

A working knowledge of accounting has become even more important in the decades since the AECC made its statement. Indeed, modern business professionals are expected to have such knowledge at the outset of their careers.

One of the purposes of the first course should be to recruit accounting majors. To help accomplish this, the text has a section preceding each chapter entitled, “Careers in Accounting.”

We retained a solid coverage of accounting that serves business students well regardless of the majors they select. Those who choose not to major in accounting, which is a majority of those taking this course, will become better

users of accounting information because they will know something about the preparation of that information.

Approach and Organization

Business Emphasis

Without actual business experience, business students sometimes lack a frame of reference in attempting to apply accounting concepts to business transactions. We seek to involve the business student more in real world business applications as we introduce and explain the subject matter.

- “An Accounting Perspective: Business Insight” boxes throughout the text provide examples of how companies featured in text examples use accounting information every day, or they provide other useful information.
- “Accounting Perspective: Uses of Technology” boxes throughout the text demonstrate how technology has affected the way accounting information is prepared, manipulated, and accessed.
- “Think About It” boxes throughout the text call upon the student to synthesize key concepts as they are introduced in the text.
- Some chapters contain “A Broader Perspective.” These situations, taken from annual reports of real companies and from articles in current business periodicals relate to subject matter discussed in that chapter or present other useful information. These real world examples demonstrate the business relevance of accounting.
- Real world questions and real world business decision cases are included in almost every chapter.
- The Annual Report Appendix included with this text contains significant portions of the annual report of Apple Inc. Many of the real world questions and business decision cases are based on this annual report.
- Throughout the text we have included numerous references to the annual reports of many companies.
- Most of the chapters contain a section entitled, “Analyzing and Using the Financial Results.” This section discusses and illustrates a ratio or other analysis technique that pertains to the content of the chapter. For instance, this section in Chapter 4 discusses the current ratio as it relates to a classified balance sheet.
- Many of the chapters contain end-of-chapter questions, exercises, or business decision cases that require the student to refer to the Annual Report Appendix and answer certain questions. As stated earlier, this appendix is included with the text and contains significant portions of the annual report of Apple Inc.
- Each chapter contains a section entitled, “Beyond the Numbers—Critical Thinking.” This section contains business decision cases, annual report analysis

¹ Accounting Education Change Commission, *Position Statement No. Two*, “The First Course in Accounting” (Torrance, CA, June 1992), pp. 1–2.

problems, writing assignments based on the Ethical Perspective and Broader Perspective boxes, group projects, and Internet projects.

Pedagogy

Students often come into accounting principles courses feeling anxious about learning the subject matter. Recognizing this apprehension, we studied ways to make learning easier and came up with some helpful ideas on how to make this edition work even better for students.

- Improvements in the text’s content reflect feedback from adopters, suggestions by reviewers, and a serious study of the learning process itself by the authors and editors. New subject matter is introduced only after the stage has been set by transitional paragraphs between topic headings. These paragraphs provide students with the reasons for proceeding to the new material and explain the progression of topics within the chapter.
- The Introduction contains a section entitled “How to Study the Chapters in This Text,” which should be very helpful to students.
- Each chapter has an “Understanding the Learning Objectives” section. These “summaries” enable the student to determine how well the Learning Objectives were accomplished. We were the first authors (1974) to ever include Learning Objectives in an accounting text. These objectives have been included at the beginning of the chapter, as marginal notes within the chapter, at the end of the chapter, and in supplements such as the Test Bank, Instructors’ Resource Guide, Computerized Test Bank, and Study Guide. The objectives are also indicated for each exercise and problem.
- Demonstration problems and solutions are included for each chapter, and a different one appears for each chapter in the Study Guide. These demonstration problems help students to assess their own progress by showing them how problems that focus on the topic(s) covered in the chapter are worked before students do assigned homework problems.
- Key terms are printed in another color for emphasis. End-of-chapter glossaries contain the definition and the page number where the new term was first introduced and defined. Students can easily turn back to the original discussion and study the term’s significance in context with the chapter material.
- Each chapter includes a “Self-Test” consisting of true-false and multiple-choice questions. The answers and explanations appear at the end of the chapter. These self-tests are designed to determine whether the student has learned the essential information in each chapter.
- In the margin beside each exercise and problem, we

have included a description of the requirements and the related Learning Objective(s). These descriptions let students know what they are expected to do in the problem.

- Throughout the text we use examples taken from everyday life to relate an accounting concept being introduced or discussed to students’ experiences.

Ethics

There is no better time to emphasize high ethical standards to students. This text includes many items throughout the text entitled, “An Ethical Perspective.” These items present situations in which students are likely to find themselves throughout their careers. They range from resisting pressure by a superior or a client to do the wrong thing to deciding between alternative corporate behaviors that have environmental and profit consequences.

End-of-Chapter Materials

At the end of each chapter is a section entitled “**Beyond the Numbers—Critical Thinking**”. The problems and cases in this section are designed to help students develop their skills in analysis, evaluation, and writing. **Business Decision Cases** require critical thinking in complex situations often based on real companies. The **Annual Report Analysis** section requires analyzing annual reports and interpreting the results in writing. The **Ethics Cases** require students to respond in writing to situations they are likely to encounter in their careers. These cases do not necessarily have one right answer. The **Group Projects** for each chapter teach students how to work effectively in teams, a skill that was stressed by the AECC and is becoming increasingly necessary for success in business. The **Internet Projects** teach students how to retrieve useful financial information from the Internet.

A team approach can also be introduced in the classroom using the regular exercises and problems in the text. Teams can be assigned the task of presenting their solutions to exercises or problems to the rest of the class. Using this team approach in class can help reenergize the classroom by creating an active, informal environment in which students learn from each other. (Two additional group projects are described in the Instructor’s Resource Guide. These projects are designed to be used throughout the semester or quarter.)

We have included a vast amount of other resource materials for each chapter *within* the text from which the instructor may draw: (1) one of the largest selections of end-of-chapter questions, exercises, and problems available; (2) several comprehensive review problems that allow students to review all major concepts covered to that point; and (3) from one to three business decision cases per chapter. Other key features regarding end-of-chapter material follow.

- A uniform chart of accounts appears at the end of this textbook, p. CA-1. This uniform chart of accounts is used consistently throughout the first 11 chapters. We believe students will benefit from using the same chart of accounts for all homework problems in those chapters.
- Many of the end-of-chapter problem materials (questions, exercises, problems, business decision cases, other “Beyond the Numbers” items, and comprehensive review problems) have been updated. Each exercise and problem is identified with the learning objective(s) to which it relates.
- All end-of-chapter Exercises and problems have been traced back to the chapters to ensure that nothing is asked of a student that does not appear in the book. This feature was a strength of previous editions, ensuring that instructors could confidently assign problems without having to check for applicability. Also, we took notes while teaching from the text and clarified problem and exercise instructions that seemed confusing to our students.

Supplements for the Instructor

A complete package of supplemental teaching aids contains all you need to efficiently and effectively teach the course.

Instructor’s Resource Guide This guide contains sample syllabi for both semester-and quarter-based courses. Each chapter contains: (1) a summary of major concepts; (2) learning objectives from the text; (3) space for the instructor’s own notes; (4) an outline of the chapter with an indication of when each exercise can be worked; and (5) detailed lecture notes that also refer to specific end-of-chapter exercise and problem materials illustrating these concepts. Also included are (6) a summary of the estimated time, learning objective(s), level of difficulty, and content of each exercise and problem that is useful in deciding which items to cover in class or to assign as homework. The Instructor’s Resource Guide for Chapter 17 contains a case study based on Hasbro, Inc. This company is one of the world’s leading manufacturer and marketer of toys, games, puzzles, and infant care products. You may want to assign this case as a special project to individuals or to teams. The results of the analysis, with recommendations, could then be presented to the class. The Instructor’s Resource Guide is provided to adopters in both Word and PDF formats.

Solutions Manual The solutions manual contains suggested discussion points for each ethics case as well as detailed answers to questions, exercises, two series of problems, business decision cases, most “Beyond the

Numbers” items, comprehensive review problems, and some group projects. The Solutions Manual is provided to adopters in both Word and PDF files.

Test Bank The test bank contains approximately 3,000 questions and problems to choose from in preparing examinations. This test bank contains true-false questions, multiple-choice questions, and short problems for each chapter. Questions and problems are *classified by the learning objective* to which they relate. The Test Bank is provided to adopters in both Word and PDF files. A computer test bank version is also available for selecting questions and printing exams.

PowerPoint Slides An average of 26 PowerPoint slides exist for each chapter. These slides illustrate the most important points in the chapter. They can be used as a basis for classroom lectures and/or discussions.

Supplements for the Student

In addition to the text, the package of support items for the student includes the following:

Study Guide Included for each chapter are learning objectives, a reference outline, a chapter review, and an additional demonstration problem and solution. If students use the study guide throughout the course, their knowledge of accounting will be enhanced significantly. The study guide is a valuable learning tool in that it includes matching, true-false, and multiple-choice questions, completion questions, and exercises. Solutions to all exercises and questions are also included. The Study Guide is available to students in online or PDF format. It can be purchased at the publisher’s website (www.textbookmedia.com).

Online Lecture Guide Chapter highlights in downloadable pdf chapter files to accompany the textbook.

Check Figures Check figures are available at the end of this textbook, p. CF-1. They show key amounts that students can check to see if they are on the right track when working the exercises and problems.

We are indebted to all our previous coauthors who have contributed to the project in the past, especially R. F. “Sully” Salmonson who worked on many of the early editions.

Susan D. Hermanson
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Acknowledgments

The development of all eleven editions of *Financial Accounting: A Business Perspective* was an evolving and challenging process. Significant changes are taking place in the first course in accounting in schools across the country, and the authors and publisher worked hard throughout the development of this text to stay on top of those changes. Recent editions are the product of extensive market research including interviews with adopters and nonadopters and comprehensive reviews by faculty. In particular, we are grateful to the following individuals for their valuable contributions and suggestions.

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Dr. Hermanson is a highly regarded teacher at both the graduate and undergraduate levels. She has received eight teaching awards, most notably the UNCW Chancellor's Teaching Excellence Award. She has served as a faculty advisor to the Beta Alpha Psi Accounting Honorary Society as well as the Beta Gamma Sigma Honorary Society. In addition, she is a frequent Chair of Honor's Theses in support of the Honor's College at UNCW.

Dr. Hermanson served as Dixon Hughes Goodman Faculty Fellow from 2008–2016, until being named as Cameron Distinguished Professor of Accounting. Before joining UNCW in 2000, Dr. Hermanson was on the faculty at the University of Tampa and the University of Nevada Las Vegas. She earned her Ph.D. in accounting from Texas A&M University. She worked in public accounting through the rank of senior auditor with Arthur Andersen & Co.

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Professor Edwards is a past President of the American Accounting Association and a past national Vice President and executive committee member of the Institute of Management Accountants. He has served on the board of directors of the American Institute of Certified Public Accountants and as chairman of the Georgia State Board of Accountancy. He was an original trustee of the Financial Accounting Foundation, the parent organization of the FASB, and a member of the Public Review Board of Arthur Andersen & Co.

He has published in *The Accounting Review*, *The Journal of Accountancy*, *The Journal of Accounting Research*, *Management Accounting*, and *The Harvard Business History Review*. He is also the author of *History of Public Accounting in the United States*. He has served on various American Institute of Certified Public Accountants committees and boards, including the Objectives of Financial Statements Committee, Standards of Professional Conduct Committee, and the CPA Board of Examiners. He was the managing editor of the centennial issue of *The Journal of Accountancy*.

In 1974, Beta Alpha Psi, the National Accounting Fraternity, selected Professor Edwards for its first annual Outstanding Accountant of the Year award. This selection is made from industry, government, and educational leaders. In 1975, he was selected by the American Accounting Association as its Outstanding Educator.

He has served the AICPA as president of the Benevolent Fund, chairman of the Awards Committee, member of the Professional Ethics Committee and Program for World Congress of Accountants. He was on the Education Standards Committee of the International Federation of Accountants and the Committee on Planning for the Institute of Management Accountants. He was the director of the Seminar for Management Accountants–Financial Reporting for the American Accounting Association. He is also a member of the Financial Executives Institute.

He received the 1993 AICPA Gold Medal Award, the highest award given by the Institute. A Doctor Honoris Causa (Honorary Doctorate) from the University of Paris was awarded to him in 1994. He is the first accountant to receive this distinction in France. The Academy of Accounting Historians awarded him the 1994 Hourglass Award which is the highest international honor in the field of Accounting History. He was inducted into the Ohio State University Accounting Hall of Fame in 2001.

Roger H. Hermanson

Regents Professor Emeritus of Accounting and Ernst & Young–J. W. Holloway Memorial Professor Emeritus at Georgia State University. He received his doctorate at Michigan State University in 1963 and held the CPA in Georgia. Professor Hermanson taught and later served as chairperson of the Division of Accounting at the University of Maryland. He has authored or coauthored approximately one-hundred articles for professional and scholarly journals and has co-authored numerous editions of several textbooks, including *Accounting Principles*, *Financial Accounting*, *Management Accounting*, *Survey of Financial and Managerial Accounting*, *Auditing Theory and Practice*, *How Accounting Works*,

Principles of Financial and Managerial Accounting, and *Computerized Accounting with Peachtree Complete III*. He served as the editor of the Plaid Series of 85 programmed learning books on accounting, business, and economics. He also has served on the editorial boards of the *Journal of Accounting Education*, *New Accountant*, *Accounting Horizons*, and *Management Accounting*. Professor Hermanson has served as coeditor of the Trends in Accounting Education column for *Management Accounting*. He has held the office of Vice President of the American Accounting Association and served on its executive committee. He was also a member of the Institute of Management Accountants, the American Institute of Certified Public Accountants, and the Financial Executives Institute.

Professor Hermanson has been awarded two excellence in teaching awards, a doctoral fellow's award, and a Distinguished Alumni Professor award; and he was selected as the Outstanding Faculty Member for 1985 by the Federation of Schools of Accountancy. He has served as a consultant to many companies and organizations. In 1990, Professor Hermanson was named Accounting Educator of the Year by the Georgia Society of CPAs.

CAREERS in Accounting

CPAs as
CEOs



Source: wavebreakmedia/Shutterstock.com

A Career as a CEO

Are you a leader? Would you enjoy someday becoming the president or chief executive officer (CEO) of the company you work for? Then you should consider a degree in accounting. The accounting field greatly values individuals with leadership potential. Accounting students with the most job offers and the highest starting salaries are also likely to be the ones who best demonstrate an ability to lead others. Recruiters in public accounting (i.e., auditing, tax, consulting) and private accounting (i.e., financial reporting, cost accounting, financial analysis, internal auditing) alike demonstrate a strong preference for students with leadership potential.

Fortunately, you do not have to run a company to demonstrate leadership abilities to college recruiters. Some examples of leadership potential that would look good on a résumé include organizing a successful fund-raiser, participating effectively as an officer in a student club, or taking the lead in a group project. If you do not have a résumé yet, stop by the career placement center at your college and ask them to assist you in preparing one. Many students at your level already have a résumé, and it takes time to refine and develop an effective one. A well-prepared résumé will be important for securing internship opportunities and part-time work in the business field, as well as for landing that first job upon graduation.

Did you know that the current and former CEOs of many of the largest manufacturing, merchandising, and service organizations in the United States hold degrees in accounting? Phil Knight at Nike, Doug Ivester of Coca-Cola, Lynn Townsend at Chrysler, Thomas J. Falk of Kimberly-Clark (Kleenex), Duane McDougall of Willamette Industries (building products), and Al Reser of Reser Fine Foods (e.g., potato salad) as well as current or former presidents of Home Depot, McDonald's, and John H. Harland all have degrees in accounting. It is really not that surprising that accounting majors are so successful because accounting provides an excellent foundation in business. With a strong accounting foundation and the continued development of leadership abilities over your career, you might become a CEO yourself someday.

Merchandising Transactions

Introduction to Inventories and the Classified Income Statement

Your study of accounting began with service companies as examples because they are the least complicated type of business. You are now ready to apply the accounting process to a more complex business: a merchandising company. Although the fundamental accounting concepts for service businesses apply to merchandising businesses, merchandise accounting requires some additional accounts and techniques to record sales and purchases.

The normal flow of goods from manufacturer to final customer is as follows:



Manufacturers produce goods from raw materials and normally sell them to wholesalers. After performing certain functions, such as packaging or labeling, **wholesalers** sell the goods to retailers. **Retailers** sell the goods to final customers. The two middle boxes in the diagram represent merchandising companies. These companies buy goods in finished form for resale.

This chapter begins by comparing the income statement of a service company with that of a merchandising company. Then, we describe (1) how to record merchandise-related transactions, (2) a classified income statement, and (3) the gross margin percentage. Finally, in the Appendix, we explain the work sheet and the closing process for a merchandising company.

Two Income Statements Compared: Service Company and Merchandising Company

In Exhibit 6.1, we compare the main divisions of an income statement for a service company with those for a merchandising company. To determine profitability or net income, a service company deducts total expenses incurred from revenues earned. A merchandising company is a more complex business and, therefore, has a more complex income statement.

As shown in Exhibit 6.1, merchandising companies must deduct from revenues the cost of the goods they sell to customers to arrive at gross margin. Then, they deduct other expenses. The income statement of a merchandising company has three main divisions: (1) sales revenues, which result from the sale of goods by the company; (2) cost of goods sold, which is an expense that indicates how much the company paid for the goods sold; and (3) expenses, which are the company's other expenses in running the business.

Learning Objectives

After studying this chapter, you should be able to:

1. Record journal entries for sales transactions involving merchandise.
2. Briefly describe cost of goods sold and the distinction between perpetual and periodic inventory procedures.
3. Record journal entries for purchase transactions involving merchandise.
4. Describe the freight terms, and record transportation costs.
5. Determine cost of goods sold.
6. Prepare a classified income statement.
7. Analyze and use the financial results—gross margin percentage.
8. Prepare a work sheet and closing entries for a merchandising company (Appendix).

SERVICE COMPANY Income Statement For the Year Ended December 31, 2018		MERCHANDISING COMPANY Income Statement For the Year Ended December 31, 2018	
Service revenues	\$13,200	Sales revenues	\$262,000
		Cost of goods sold	<u>159,000</u>
		Gross margin	\$103,000
Expenses	<u>6,510</u>	Expenses	<u>74,900</u>
Net income	<u>\$ 6,690</u>	Net income	<u>\$ 28,100</u>

Exhibit 6.1 Condensed Income Statements of a Service Company and a Merchandising Company Compared

In the next two sections, we discuss the first two main divisions of the income statement of a merchandising company. The third division (expenses) is similar to expenses for a service company, which we illustrated in preceding chapters. As you study these sections, keep in mind how the divisions of the merchandising income statement are related to each other and produce the final figure—net income or net loss—which indicates the profitability of the company.

Sales Revenues

Objective 1

Record journal entries for sales transactions involving merchandise.

The sale of goods occurs between two parties. The seller of the goods transfers them to the buyer in exchange for cash or a promise to pay at a later date. This exchange is a relatively simple business transaction. Sellers make sales to create revenues; this inflow of assets in the form of cash or accounts receivable results from selling goods to customers.

In Exhibit 6.1, we show a condensed income statement to emphasize its major divisions. Next, we describe the more complete income statement actually prepared by accountants. The merchandising company that we use to illustrate the income statement is Hanlon Retail Food Store. This section explains how to record sales revenues, including the effect of trade discounts. Then, we explain how to record two deductions from sales revenues: sales discounts and sales returns and allowances (Exhibit 6.2). The amount that remains is net sales. The formula for determining **net sales** is:

$$\text{Net sales} = \text{Gross sales} - (\text{Sales discounts} + \text{Sales returns and allowances})$$

HANLON RETAIL FOOD STORE Partial Income Statement For the Year Ended December 31, 2018			
Operating revenues:			
Gross sales			\$282,000
Less: Sales discounts	\$ 5,000		
Sales returns and allowances	<u>15,000</u>	<u>20,000</u>	
Net sales			<u>\$262,000</u>

Exhibit 6.2 Partial Income Statement of Merchandising Company

Recording Gross Sales

In a sales transaction, the seller transfers the legal ownership (title) of the goods to the buyer. Usually, the physical delivery of the goods occurs at the same time as the sale of the goods. A business document called an *invoice* (a *sales invoice* for the seller and a *purchase invoice* for the buyer) becomes the basis for recording the sale.

An **invoice** is a document prepared by the seller of merchandise and sent to the buyer. The invoice contains the details of a sale, such as the number of units sold, unit price, total price billed, terms of sale, and manner of shipment. A retail company prepares the invoice at the point of sale. A wholesale company, which supplies goods to retailers, prepares the invoice after the shipping department notifies the accounting department that it has shipped the goods to the retailer. Exhibit 6.3 is an example of an invoice prepared by a wholesale company for goods sold to a retail company.

NOTE TO THE STUDENT

A common example of an invoice is a sales ticket. It serves as the merchant's sales invoice and the customer's purchase invoice.

Using the invoice as the source document, a wholesale company records the revenue from the sale at the time of the sale for the following reasons:

1. The seller has passed *legal title* of the goods to the buyer, and the goods are now the responsibility and property of the buyer.
2. The seller has established the selling price of the goods.
3. The seller has completed its obligation.
4. The seller has exchanged the goods for another asset, such as cash or accounts receivable.
5. The seller can determine the costs incurred in selling the goods.

Each time a company makes a sale, the company earns revenue. This revenue increases a revenue account called *Sales*. Recall from Chapter 2 that credits increase revenues. Therefore, the firm credits the Sales account for the amount of the sale.

BRYAN WHOLESALE CO. 476 Mason Street Detroit, Michigan 48823		Invoice No.: 1258 Date: Dec. 19, 2018		
Customer's Order No.: 218				
Sold to:	Baier Company			
Address:	2255 Hannon Street Big Rapids, Michigan 48106			
Terms:	Net 30, FOB Destination	Date Shipped:	Dec. 19, 2018	
		Shipped by:	Nagel Trucking Co.	
Description	Item Number	Quantity	Price per Unit	Total Amount
portable speaker	Model No. 5868-24393	200	\$100	\$20,000
		Total		\$20,000

Exhibit 6.3 Invoice

An Accounting Perspective

Uses of Technology A database management system stores related data—such as monthly sales data (salespersons, customers, products, and sales amounts)—independent of the application. Once you have defined this information in the database management system, you can use commands to answer questions such as the following: Which products have been sold to which customers? What are the amounts of sales by individual salespersons? You could also print a customer list sorted by ZIP code, the alphabet, or salesperson.

Usually, sales are for cash or on account. When a sale is for cash, the company credits the Sales account and debits Cash. For example, it records a \$20,000 sale for cash as follows:

Cash	20,000	20,000
Sales		
To record the sales of merchandise for cash.		

When a sale is on account, it credits the Sales account and debits Accounts Receivable. The following entry records a \$20,000 sale on account:

Accounts Receivable	20,000	20,000
Sales		
To record the sales of merchandise on account.		

Usually, a seller quotes the gross selling price, also called the invoice price, of goods to the buyer. However, sometimes a seller quotes a list price of goods along with available trade discounts. In this latter situation, the buyer must calculate the gross selling price. The list price less all trade discounts is the gross selling price. Merchandising companies that sell goods use the **gross selling price** as the credit to sales.

Determining Gross Selling Price when Companies Offer Trade Discounts

A **trade discount** is a percentage deduction, or discount, from the specified list price or catalog price of merchandise. Companies use trade discounts to:

1. Reduce the cost of catalog publication. A seller can use a catalog for a longer time by printing list prices in the catalog and giving separate discount sheets to salespersons whenever prices change.
2. Grant quantity discounts.
3. Allow quotation of different prices to various customers, such as retailers and wholesalers.

NOTE TO THE STUDENT

Have you ever noticed at a paint store or a plumbing supplies shop that professional painters and plumbers generally pay less for the paint and plumbing supplies they use in their businesses than you have to pay? Painters and plumbers have to make a profit on items they must use in their businesses. A portion of this profit arises from trade discounts received on their purchases.

The seller's invoice may show trade discounts. However, sellers do not record trade discounts in their accounting records because the discounts are used only to calculate the gross selling price. Nor do trade discounts appear on the books of the purchaser. To illustrate, assume an invoice contains the following data:

List price, 200 swimsuits at \$24	\$4,800
Less: Trade discount, 30%	<u>1,440</u>
Gross selling price (invoice price)	<u>\$3,360</u>

The seller records a sale of \$3,360. The purchaser records a purchase of \$3,360. Thus, neither the seller nor the purchaser enters list prices and trade discounts on their books.

NOTE TO THE STUDENT

The order in which the discounts are applied does not matter because the result is the same. Here is proof:

Example: A \$100 sale with a chain trade discount of 5%, 3%, and 1%.

Solution:

$$\$100 \times 95\% \times 97\% \times 99\% = \$91.23$$

$$\$100 \times 99\% \times 95\% \times 97\% = \$91.23$$

Sometimes the list price of a product is subject to several trade discounts; this series of discounts is a **chain discount**. Chain discounts exist, for example, when a wholesaler receives two trade discounts for services performed, such as packaging and distributing. When more than one discount is given, the buyer applies each discount to the declining balance successively. If a product has a list price of \$100 and is subject to trade discounts of 20% and 10%, the gross selling price (invoice price) would be $\$100 - 0.2(\$100) = \$80$; $\$80 - 0.1(\$80) = \$72$, computed as follows:

List price	\$100
Less 20%	<u>-20</u>
	\$ 80
Less 10%	<u>-8</u>
Gross selling price (invoice price)	<u>\$ 72</u>

You could obtain the same results by multiplying the list price by the complements of the trade discounts allowed. The complement of 20% is 80% because $20\% + 80\% = 100\%$. The complement of 10% is 90% because $10\% + 90\% = 100\%$. Thus, the gross selling price is $\$100 \times 0.8 \times 0.9 = \72 .

Recording Deductions from Gross Sales

Two common deductions from gross sales are (1) sales discounts and (2) sales returns and allowances. Sellers record these deductions in contra revenue accounts to the Sales account. Contra accounts have normal balances that are opposite to the balance of the account they reduce. For example, because the Sales account normally has a credit balance, the Sales Discounts account and Sales Returns and Allowances account have debit balances. We explain the methods of recording these contra revenue accounts next.

Sales Discounts Whenever a company sells goods on account, it clearly specifies terms of payment on the invoice. For example, the invoice in Exhibit 6.3 states the terms of payment as “net 30.”

NOTE TO THE STUDENT

A company offers sales discounts to encourage early payment. The longer a company has to wait for payment from a customer, the more likely the customer is to not pay at all.

Net 30 is sometimes written as “n/30.” Either way, this term means that the buyer may not take a discount and must pay the entire amount of the invoice (\$20,000) on or before 30 days after December 19, 2018 (invoice date)—or January 18, 2019. In Exhibit 6.3, if the terms had read “n/10/EOM” (*EOM* means “end of month”), the buyer could not take a discount, and the invoice would be due on the 10th day of the month following the month of sale—or January 10, 2019. Credit terms vary from industry to industry.

In some industries, credit terms include a *cash discount* of 1% to 3% to induce early payment of an amount due. A cash discount is a deduction from the invoice price that can be taken

Reinforcing Problem

E6 5 Calculate gross selling price and final payment.

only if the invoice is paid within a specified time. A **cash discount** differs from a trade discount in that a cash discount is a deduction from the gross selling price for the prompt payment of an invoice. In contrast, a trade discount is a deduction from the list price to determine the gross selling price (or invoice price). Sellers call a cash discount a **sales discount** and buyers call it a **purchase discount**. Companies often state cash discount terms as follows:

- **2/10, n/30**—A buyer who pays within 10 days following the invoice date may deduct a discount of 2% of the invoice price. If payment is not made within the discount period, the entire invoice price is due 30 days from the invoice date.
- **2/EOM, n/60**—A buyer who pays by the end of the month of purchase may deduct a 2% discount from the invoice price. If payment is not made within the discount period, the entire invoice price is due 60 days from the invoice date.
- **2/10/EOM, n/60**—A buyer who pays by the 10th of the month following the month of purchase may deduct a 2% discount from the invoice price. If payment is not made within the discount period, the entire invoice price is due 60 days from the invoice date.

Sellers cannot record the sales discount before they receive the payment because they do not know when the buyer will pay the invoice. A cash discount taken by the buyer reduces the cash that the seller actually collects from the sale of the goods, so the seller must indicate this fact in its accounting records. The following entries show how to record a sale and a subsequent sales discount.

Assume that on July 12, a business sold merchandise for \$2,000 on account; terms are 2/10, n/30. On July 21 (nine days after invoice date), the business received a \$1,960 check in payment of the account. The required journal entries for the seller are:

July	12	Accounts Receivable	2,000	
		Sales		2,000
		To record sale on account; terms 2/10, n/30.		
	21	Cash	1,960	
		Sales Discounts	40	
		Accounts Receivable		2,000
		To record collection on account, less a discount.		

The **Sales Discounts account** is a contra revenue account to the Sales account. In the income statement, the seller deducts this contra revenue account from gross sales. Sellers use the Sales Discounts account (rather than directly reducing the Sales account) so that management can examine the sales discounts figure to evaluate the company's sales discount policy. Note that the Sales Discounts account is not an expense incurred in generating revenue. Rather, the purpose of the account is to reduce recorded revenue to the amount actually realized from the sale.

Sales Returns and Allowances Merchandising companies usually allow customers to return goods that are defective or unsatisfactory for a variety of reasons, such as wrong color, wrong size, wrong style, wrong amounts, or inferior quality. In fact, when their policy is satisfaction guaranteed, some companies allow customers to return goods simply because they do not like the merchandise. A **sales return** is merchandise returned by a buyer. Sellers and buyers regard a sales return as a cancellation of a sale. Alternatively, some customers keep unsatisfactory goods, and the seller gives them an allowance off the original price. A **sales allowance** is a deduction from the original invoiced sales price granted when the customer keeps the merchandise but is dissatisfied for any of a number of reasons, including inferior quality, damage, or deterioration in transit. When a seller agrees to the sales return or sales allowance, the seller sends the buyer a credit memorandum indicating a reduction (crediting) of the buyer's account receivable. A credit memorandum is a document that provides space for the name and address of the concerned parties, followed by a space for the reason for the credit and the amount to be credited. A credit memorandum becomes the basis for recording a sales return or a sales allowance.

In theory, sellers could record both sales returns and sales allowances as debits to the Sales account because they cancel part of the recorded selling price. However, because the amount of sales returns and sales allowances is useful information to management, it should be shown separately. The amount of returns and allowances in relation to goods sold can indicate the quality of the goods (high-return percentage, equals low quality) or of pressure applied by salespersons (high-return percentage, equals high-pressure sales). Thus, sellers record sales returns and sales allowances in a separate *Sales Returns and Allowances account*. The **Sales Returns and Allowances account** is a contra revenue account (to Sales) that records the selling price of merchandise returned by buyers or reductions in selling prices granted. (Some companies use separate accounts for sales returns and for sales allowances, but this text does not.)

Following are two examples illustrating the recording of sales returns in the Sales Returns and Allowances account:

1. Assume that a customer returns \$300 of goods sold on account. If payment has not yet been received, the required entry is:

Sales Returns and Allowances	300	
Accounts Receivable		300
To record a sales return from a customer.		

2. Assume that the customer has already paid the account and the seller gives the customer a cash refund. Now, the credit is to Cash rather than to Accounts Receivable. If the customer has taken a 2% discount when paying the account, the company will return to the customer the sales price less the sales discount amount. For example, if a customer returns goods that sold for \$300, on which a 2% discount was taken, the following entry would be made:

Sales Returns and Allowances	300	
Cash		294
Sales Discount		6
To record a sales return from a customer who had taken a discount and was sent a cash refund.		

The debit to the Sales Returns and Allowances account is for the full selling price of the purchase. The credit of \$6 reduces the balance of the Sales Discounts account.

Next, we illustrate the recording of a sales allowance in the Sales Returns and Allowances account. Assume that a company grants a \$400 allowance to a customer for damage resulting from improperly packed merchandise. If the customer has not yet paid the account, the required entry would be:

Sales Returns and Allowances	400	
Accounts Receivable		400
To record a sales allowance granted for damaged merchandise.		

If the customer has already paid the account, the credit is to Cash instead of Accounts Receivable. If the customer took a 2% discount when paying the account, the company would refund only the net amount (\$392). Sales Discounts would be credited for \$8. The entry would be:

Sales Returns and Allowances	400	
Cash		392
Sales Discount		8
To record a sales allowance when a customer has paid and taken a 2% discount.		

An Accounting Perspective

Business Insight When examining a company's sales cycle, management and users of financial data should be aware of any seasonal changes that may affect its reported sales. Systemax, Inc., is a national retailer of personal computers and related products and services. Systemax includes the following disclosure in its annual report regarding seasonality:

Our earnings and cash flows are seasonal in nature, with the fourth quarter of the fiscal year generating higher earnings and cash flows than the other quarters.

An Accounting Perspective

Business Insight For many retailers, a large percentage of their annual sales occurs during the period from Thanksgiving to Christmas. They attempt to stock just the right amount of goods to meet demand. Because this is a difficult estimate to make accurately, many retailers end up with a large amount of unsold goods at the end of this season. The usual way they unload these goods is to offer huge discounts during the following period.

Reporting Net Sales in the Income Statement

Exhibit 6.4 shows how a company could report sales, sales discounts, and sales returns and allowances in the income statement. More often, the income statement in a company's annual report begins with "Net sales" because sales details are not important to external financial statement users.

Cost of Goods Sold

The second main division of an income statement for a merchandising business is cost of goods sold. **Cost of goods sold** is the cost to the seller of the goods sold to customers. For a merchandising company, the cost of goods sold can be relatively large. All merchandising companies have a quantity of goods on hand called *merchandise inventory* to sell to customers. **Merchandise inventory** (or *inventory*) is the quantity of goods available for sale at any given time. Cost of goods sold is determined by computing the cost of (1) the beginning inventory, (2) the net cost of goods purchased, and (3) the ending inventory.

Look at the cost of goods sold section of Hanlon Retail Food Store's income statement in Exhibit 6.5. The merchandise inventory on January 1, 2018, was \$24,000. The net

Objective 2

Briefly describe cost of goods sold and the distinction between perpetual and periodic inventory procedures.

Real-World Example

Abercrombie & Fitch recently reported net sales of \$3.469 billion and cost of goods sold of \$1.257 billion. The cost of goods sold was about 36% of sales.

HANLON RETAIL FOOD STORE Partial income Statement For the Year Ended December 31, 2018

Operating revenues:		
Gross sales		\$282,000
Less: Sales discounts	\$ 5,000	
Sales returns and allowances	15,000	20,000
Net sales		<u>\$262,000</u>

*This exhibit is the same as Exhibit 6.2, repeated here for your convenience.

Exhibit 6.4 Partial Income Statement*

<u>Cost of goods sold:</u>		
Merchandise inventory, January 1, 2018		\$ 24,000
Purchases		\$167,000
Less: Purchase discounts	\$3,000	
Purchase returns and allowances	8,000	11,000
Net Purchases		\$156,000
Add: Transportation-in		10,000
Net cost of purchases		166,000
Cost of goods available for sale		\$190,000
Less: Merchandise inventory, December 31, 2018		31,000
Cost of goods sold		<u>\$159,000</u>

Exhibit 6.5 Determination of Cost of Goods Sold for Hanlon Retail Food Store

cost of purchases for the year was \$166,000. Thus, Hanlon had \$190,000 of merchandise available for sale during 2018. On December 31, 2018, the merchandise inventory was \$31,000, meaning that this amount was left unsold. Subtracting the unsold inventory (the ending inventory), \$31,000, from the amount Hanlon had available for sale during the year, \$190,000, gives the cost of goods sold for the year of \$159,000. Understanding this relationship shown on Hanlon Retail Food Store's partial income statement gives you the necessary background to determine the cost of goods sold as presented in this section.

Two Procedures for Accounting for Inventories

To determine the cost of goods sold, accountants must have accurate merchandise inventory figures. Accountants use two basic methods for determining the amount of merchandise inventory—perpetual inventory procedure and periodic inventory procedure. We mention perpetual inventory procedure only briefly here. In the next chapter, we emphasize perpetual inventory procedure and further compare it with periodic inventory procedure.

When discussing inventory, we need to clarify whether we are referring to the physical goods on hand or the Merchandise Inventory account, which is the financial representation of the physical goods on hand. The difference between perpetual and periodic inventory procedures is the frequency with which the Merchandise Inventory account is updated to reflect what is physically on hand. Under the **perpetual inventory procedure**, the Merchandise Inventory account is continuously updated to reflect items on hand. For example, your supermarket uses a scanner to ring up your purchases. When your box of Rice Krispies crosses the scanner, the Merchandise Inventory account shows that one less box of Rice Krispies is on hand.

Under the **periodic inventory procedure**, the Merchandise Inventory account is updated periodically after a physical count has been made. Usually, the physical count takes place immediately before the preparation of financial statements.

Perpetual Inventory Procedure Companies use the perpetual inventory procedure in a variety of business settings. Historically, companies that sold merchandise with a high individual unit value, such as automobiles, furniture, and appliances, used the perpetual inventory procedure. Today, computerized cash registers, scanners, and accounting software programs automatically keep track of inflows and outflows of each inventory item. Computerization makes it economical for many retail stores to use the perpetual inventory procedure even for goods of low unit value, such as groceries.

Under the perpetual inventory procedure, the Merchandise Inventory account provides close control by showing the cost of the goods that are supposed to be on hand at any particular time. Companies debit the Merchandise Inventory account for each purchase

and credit it for the cost of each sale so that the current balance is shown in the account at all times. Usually, firms also maintain detailed unit records showing the quantities of each type of goods that should be on hand. Company personnel also take a physical inventory by actually counting the units of inventory on hand. Then they compare this physical count with the records showing the units that should be on hand. Chapter 7 describes the perpetual inventory procedure in more detail.

Periodic Inventory Procedure Merchandising companies selling low unit value merchandise (such as nuts and bolts, nails, Christmas cards, or pencils) that have not computerized their inventory systems often find that the extra costs of recordkeeping under the perpetual inventory procedure more than outweigh the benefits. These merchandising companies often use the periodic inventory procedure.

Under the periodic inventory procedure, companies do not use the Merchandise Inventory account to record each purchase and cost of sale of merchandise. Instead, a company corrects the balance in the Merchandise Inventory account as the result of a physical inventory count at the end of the accounting period. Also, the company usually does not maintain other records showing the exact number of units that should be on hand. Although the periodic inventory procedure reduces recordkeeping, it also reduces control over inventory items.

Companies using the periodic inventory procedure make no entries to the Merchandise Inventory account nor do they maintain unit records during the accounting period. Thus, these companies have no up-to-date balance against which to compare the physical inventory count at the end of the period. Also, these companies make no attempt to determine the cost of goods sold at the time of each sale. Instead, they calculate the cost of all the goods sold during the accounting period at the *end* of the period. To determine the cost of goods sold, a company must know:

1. Beginning inventory (cost of goods on hand at the beginning of the period).
2. Net cost of purchases during the period.
3. Ending inventory (cost of unsold goods at the end of the period).

The company would show this information as follows:

Beginning inventory	\$ 34,000
Add: Net cost of purchases during the period	140,000
Cost of goods available for sale during the period	\$174,000
Deduct: Ending inventory	20,000
Cost of goods sold during the period	<u>\$154,000</u>

In this schedule, notice that the company began the accounting period with \$34,000 of merchandise and purchased an additional \$140,000, making a total of \$174,000 of goods that could have been sold during the period. Then, a physical inventory showed that \$20,000 remained unsold, which implies that \$154,000 was the cost of goods sold during the period. Of course, the \$154,000 is not necessarily the precise amount of goods sold because no actual record was made of the dollar cost of the goods sold. The periodic inventory procedure basically assumes that everything not on hand at the end of the period has been sold. This method disregards problems such as theft or breakage because the Merchandise Inventory account contains no up-to-date balance at the end of the accounting period against which to compare the physical count.

Purchases of Merchandise

Under the periodic inventory procedure, a merchandising company uses the **Purchases account** to record the cost of merchandise bought for resale during the current accounting period. The Purchases account, which is increased by debits, appears with the income statement accounts in the chart of accounts.

To illustrate entries affecting the Purchases account, assume that Hanlon Retail Food Store made two purchases of merchandise from Smith Wholesale Company. Hanlon purchased \$30,000 of merchandise on credit (on account) on May 4, and Hanlon purchased \$20,000 of merchandise for cash on May 21. The required journal entries for Hanlon are:

May	4	Purchases	30,000	
		Accounts Payable		30,000
		To record purchases of merchandise on account.		
	21	Purchases	20,000	
		Cash		20,000
		To record purchase of merchandise for cash.		

Objective 3

Record journal entries for purchase transactions involving merchandise.

Deductions from Purchases

The buyer deducts purchase discounts and purchase returns and allowances from purchases to arrive at net purchases. The accountant records these items in contra accounts to the Purchases account.

Purchase Discounts Companies often purchase merchandise under credit terms that permit them to deduct a stated cash discount if they pay invoices within a specified time. Assume that credit terms for Hanlon's May 4 purchase are 2/10, n/30. If Hanlon pays for the merchandise by May 14, the store may take a 2% discount. Thus, Hanlon must pay only \$29,400 to settle the \$30,000 account payable. The entry to record the payment of the invoice on May 14 is:

May	14	Accounts Payable	30,000	
		Cash		29,400
		Purchase Discount		600
		To record payment on account within the discount period.		

The buyer records the purchase discount only when the invoice is paid within the discount period and the discount is taken. The **Purchase Discounts account** is a contra account to Purchases that reduces the recorded invoice price of the goods purchased to the price actually paid. Hanlon reports purchase discounts in the income statement as a deduction from purchases.

Companies base purchase discounts on the invoice price of goods. If an invoice shows purchase returns or allowances, they must be deducted from the invoice price before calculating purchase discounts. For example, in the previous transaction, the invoice price of goods purchased was \$30,000. If Hanlon returned \$2,000 of the goods, the seller calculates the 2% purchase discount on \$28,000.

Interest Rate Implied in Cash Discounts To decide whether you should take advantage of discounts by using your cash or borrowing, make this simple analysis. Assume that you must pay \$10,000 within 30 days or \$9,800 within 10 days to settle a \$10,000 invoice with terms of 2/10, n/30. Assume further that you are able to borrow money from a bank on a short-term basis at an annual interest rate of 12%. By advancing your payment by 20 days from the final due date, you can secure a 2% discount of \$200. The interest expense incurred to borrow \$9,800 at 12% per year for 20 days is \$65.33, calculated as $(\$9,800 \times .12 \times 20/360)$. You would save \$134.67 $(\$200 - \$65.33)$ by borrowing the money and paying the invoice within the discount period.

In terms of an annual rate of interest, the 2% rate of discount for 20 days is equivalent to a 36% annual rate: $(360 \div 20) \times 2\%$. The formula is:

$$\text{Equivalent annual rate of interest} = \frac{\text{The number of days in a year (assumed to be 360)}}{\text{The number of days from the end of the discount period until the final due date}} \times \text{The percentage rate of discount}$$

Reinforcing Problem

E6-1 Apply rules of debit and credit for merchandise-related accounts.

Reinforcing Problems

E6-2 Prepare entries for merchandise purchase/sale, return, and allowance on both buyer's and seller's books.
E6-3 Determine end of the discount period and prepare an entry to record payment.
E6-4 Calculate the effect of trade and cash discounts on payment.

You can convert all cash discount terms to their approximate annual interest rate equivalents by use of this formula. Thus, a company could afford to pay up to 36% $[(360 \div 20) \times 2\%]$ on borrowed funds to take advantage of discount terms of 2/10, n/30. The company could pay 18% on terms of 1/10, n/30.

Purchase Returns and Allowances A purchase return occurs when a buyer returns merchandise to a seller. When a buyer receives a reduction in the price of goods shipped, a purchase allowance results. The buyer commonly uses a debit memorandum to notify the seller that the account payable with the seller is being reduced (Accounts Payable is debited). The buyer may use a copy of a debit memorandum to record the returns or allowances, or it may wait for a credit memorandum from the seller to confirm the reduction.

Both returns and allowances reduce the buyer's debt to the seller and decrease the cost of the goods purchased. The buyer may want to know the amount of returns and allowances as the first step in controlling the costs incurred in returning unsatisfactory merchandise or negotiating purchase allowances. For this reason, buyers record purchase returns and allowances in a separate **Purchase Returns and Allowances account**. If Hanlon returned \$350 of merchandise to Smith Wholesale before paying for the goods, it would make this journal entry:

Accounts Payable	350	
Purchase Returns and Allowances		350
To record return of damaged merchandise to supplier.		

The entry would have been the same to record a \$350 allowance; only the explanation would change.

If Hanlon had already paid the account, the debit would be to Cash instead of Accounts Payable because Hanlon would receive a refund of cash. If the company took a discount at the time it paid the account, only the net amount would be refunded. For instance, if a 2% discount had been taken, Hanlon's journal entry for the return would be:

Cash	343	
Purchase Discounts	7	
Purchase Returns and Allowances		350
To record return of damaged merchandise to supplier and record receipt of cash.		

Purchase Returns and Allowances is a contra account to the Purchases account, and the income statement shows it as a deduction from purchases. When purchase discounts and purchase returns and allowances are deducted from purchases, the result is **net purchases**.

Transportation Costs

Transportation costs are an important part of cost of goods sold. To understand how to account for transportation costs, you must know the meaning of the following terms:

Objective 4

Describe the freight terms, and record transportation costs.

- **FOB shipping point** means “free on board at shipping point.” The buyer incurs all transportation costs after the merchandise has been loaded on a railroad car or truck at the point of shipment. Thus, the buyer is *ultimately* responsible for paying the freight charges.
- **FOB destination** means “free on board at destination.” The seller ships the goods to their destination without charge to the buyer. Thus, the seller is *ultimately* responsible for paying the freight charges.
- **Passage of title** is a term that indicates the transfer of the legal ownership of goods. Title to the goods normally passes from seller to buyer at the FOB point. Thus, when goods are shipped FOB shipping point, title usually passes to the buyer at the shipping point. When goods are shipped FOB destination, title usually passes at the destination.
- **Freight prepaid** means the *seller* must *initially* pay the freight at the time of shipment.

- **Freight collect** indicates the *buyer* must *initially* pay the freight bill upon the arrival of the goods.

To illustrate the use of these terms, assume that a company ships goods FOB shipping point, freight collect. Title passes at the shipping point. The buyer is responsible for paying the \$100 freight costs and does so. The seller makes no entry for freight charges; the entry on the *buyer's books* is:

Transportation-In (or Freight-In)	100	
Cash		100
To record payment of freight bill on goods purchased.		

The **Transportation-In account** records the inward freight costs of acquiring merchandise. Transportation-In is an adjunct account in that it is added to net purchases to arrive at **net cost of purchases**. An **adjunct account** is closely related to another account (Purchases, in this instance), and its balance is added to the balance of the related account in the financial statements. Recall that a contra account is just the opposite of an adjunct account. Buyers deduct a contra account, such as accumulated depreciation, from the related fixed asset account in the financial statements.

When shipping goods FOB destination, freight prepaid, the seller is responsible for and pays the freight bill. Because the seller cannot bill a separate freight cost to the buyer, the buyer shows no entry for freight on its books. The seller, however, has undoubtedly considered the freight cost in setting selling prices. The following entry is required on the *seller's books*:

Delivery Expense (or Transportation-Out Expense)	100	
Cash		100
To record freight cost on goods sold.		

When the terms are FOB destination, the seller records the freight costs as **delivery expense**; this selling expense appears on the income statement with other selling expenses.

NOTE TO THE STUDENT

An easy way to interpret FOB terms is to identify either the destination or shipping point as the location where the goods change ownership.

FOB terms are especially important at the end of an accounting period. Goods in transit then belong to either the seller or the buyer, and one of these parties must include these goods in its ending inventory. Goods shipped FOB destination belong to the seller while in transit, and the seller includes these goods in its ending inventory. Goods shipped FOB shipping point belong to the buyer while in transit, and the buyer records these goods as a purchase and includes them in its ending inventory. For example, assume that a seller ships goods on December 30, 2017, and they arrive at their destination on January 5, 2018. If terms are FOB destination, the seller includes the goods in its December 31, 2017, inventory, and neither seller nor buyer records the exchange transaction until January 5, 2018. If terms are FOB shipping point, the buyer includes the goods in its December 31, 2017, inventory, and both parties record the exchange transaction as of December 30, 2017.

Sometimes the seller prepays the freight as a convenience to the buyer, even though the buyer is ultimately responsible for it. The buyer merely reimburses the seller for the freight paid. For example, assume that Wood Company sold merchandise to Loud Company with terms of FOB shipping point, freight prepaid. The freight charges were \$100. The following entries are necessary on the books of the buyer and the seller:

Buyer—Loud Company			Seller—Wood Company		
Transportation-In	100		Accounts Receivable	100	
Accounts Payable		100	Cash		100

Reinforcing Problem

E6-6 Determine cash discount available and amount of cash paid.

Reinforcing Problems

E6-7 Prepare entries for purchase, transportation-in, purchase discounts, and payment.

P6-1 Journalize merchandise transactions for two different companies.

P6-2 Journalize merchandise transactions on both the buyer's and seller's books.

Such entries are necessary because Wood initially paid the freight charges when not required to do so. Therefore, Loud Company must reimburse Wood for the charges. If the buyer pays freight for the seller (e.g., FOB destination, freight collect), the buyer merely deducts the freight paid from the amount owed to the seller. The following entries are necessary on the books of the buyer and the seller:

Buyer—Loud Company			Seller—Wood Company		
Accounts Payable	100		Delivery Expense	100	
Cash		100	Accounts Receivable		100

Purchase discounts may be taken only on the purchase price of goods. Therefore, a buyer who owes the seller for freight charges cannot take a discount on the freight charges owed, even if the buyer makes payment within the discount period. We summarize our discussion of freight terms and the resulting journal entries to record the freight charges in Exhibit 6.6.

Merchandise Inventory

Merchandise inventory is the cost of goods on hand and available for sale at any given time. To determine the cost of goods sold in any accounting period, management needs

Shipping point: Detroit → Destination: San Diego

Goods travel from shipping point to destination

If shipping terms are:

<p><i>FOB shipping point</i>—Buyer incurs the freight charges</p> <p><i>Freight prepaid</i>—Seller initially pays the freight charges</p>	<p><i>FOB destination</i>—Seller incurs the freight charge</p> <p><i>Freight collect</i>—Buyer initially pays the freight charges</p>
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If the freight terms are combined as follows:

Terms	Party that Initially Pays	Party That Ultimately Bears Expense
(1) FOB shipping point, freight collect	Buyer	Buyer
(2) FOB destination, freight prepaid	Seller	Seller
(3) FOB shipping point, freight prepaid	Seller	Buyer
(4) FOB destination, freight collect	Buyer	Seller

Explanations:

FOB shipping point, freight collect—The buyer both incurs and initially pays the freight charges. The proper party (buyer) paid the freight. The buyer debits Transportation-In and credits Cash.

FOB destination, freight prepaid—The seller both incurs and initially pays the freight charges. The proper party (seller) paid the freight. The seller debits Delivery Expense and credits Cash.

FOB shipping point, freight prepaid—The buyer incurs the freight charges, and the seller initially pays the freight charges. The buyer must reimburse the seller for the freight charges. The seller debits Accounts Receivable and credits Cash upon paying the freight. The buyer debits Transportation-In and credits Accounts Payable when informed of the freight charges.

FOB destination, freight collect—The seller incurs the freight charges, and the buyer initially pays the freight charges. The buyer deducts the freight charges from the amount owed to the seller. The buyer debits Accounts Payable and credits Cash when paying the freight. The seller debits Delivery Expense and credits Accounts Receivable when informed of the freight charges.

Exhibit 6.6 Summary of Shipping Terms

inventory information. Management must know its cost of goods on hand at the start of the period (beginning inventory), the net cost of purchases during the period, and the cost of goods on hand at the close of the period (ending inventory). Because the ending inventory of the preceding period is the beginning inventory for the current period, management already knows the cost of the beginning inventory. Companies record purchases, purchase discounts, purchase returns and allowances, and transportation-in throughout the period. Therefore, management needs to determine only the cost of the inventory at the end of the period in order to calculate cost of goods sold.

Taking a Physical Inventory Under the periodic inventory procedure, company personnel determine ending inventory cost by taking a *physical inventory*. Taking a **physical inventory** consists of counting physical units of each type of merchandise on hand. To calculate inventory cost, they multiply the number of each kind of merchandise by its unit cost. Then, they combine the total costs of the various kinds of merchandise to provide the total ending inventory cost.

NOTE TO THE STUDENT

A physical inventory is required whether the inventory system is periodic or perpetual. A complicating factor is placing a value on the unsold inventory that has been counted. We discuss several approaches to pricing the unsold items in the next chapter.

In taking a physical inventory, company personnel must be careful to count all goods owned, regardless of where they are located, and include them in the inventory. Thus, companies should include goods shipped to potential customers on approval in their inventories. Similarly, companies should not treat **consigned goods** (goods delivered to another party who attempts to sell them for a commission) as sold goods. These goods remain the property of the owner (consignor) until sold by the consignee and must be included in the owner's inventory.

Merchandise in transit is merchandise in the hands of a freight company on the date of a physical inventory. As stated above, buyers must record merchandise in transit at the end of the accounting period as a purchase if the goods were shipped FOB shipping point and they have received title to the merchandise. In general, the goods belong to the party who ultimately bears the transportation charges.

Determining Cost of Goods Sold

When accounting personnel know the beginning and ending inventories and the various items making up the net cost of purchases, they can determine the cost of goods sold. To illustrate, assume the following account balances for Hanlon Retail Food Store as of December 31, 2018:

Merchandise Inventory, January 1, 2018	\$ 24,000	Dr.
Purchases	167,000	Dr.
Purchase Discounts	3,000	Cr.
Purchase Returns and Allowances	8,000	Cr.
Transportation-In	10,000	Dr.

By taking a physical inventory, Hanlon determined the December 31, 2018, merchandise inventory to be \$31,000. Hanlon then calculated its cost of goods sold, as shown in Exhibit 6.7. This computation appears in a section of the income statement directly below the calculation of net sales.

In Exhibit 6.7, Hanlon's beginning inventory (\$24,000) plus net cost of purchases (\$166,000) is equal to **cost of goods available for sale** (\$190,000). The firm deducts the ending inventory cost (\$31,000) from cost of goods available for sale to arrive at cost of goods sold (\$159,000).

Objective 5

Determine cost of goods sold.

Reinforcing Problem

E6-8 Determine cost of goods sold.

<u>Cost of goods sold:</u>			
Merchandise inventory, January 1, 2018			\$ 24,000
Purchases		\$167,000	
Less: Purchase discounts	\$3,000		
Purchase returns and allowances	8,000	11,000	
Net Purchases		\$156,000	
Add: Transportation-in		10,000	
Net cost of purchases			166,000
Cost of goods available for sale			\$190,000
Less: Merchandise inventory, December 31, 2018			31,000
Cost of goods sold			<u>\$159,000</u>

*This exhibit is the same as Exhibit 6.5, repeated here for your convenience.

Exhibit 6.7 Determination of Cost of Goods Sold for Hanlon Retail Food Store*

Another way of looking at this relationship is the following diagram:



Beginning inventory and net cost of purchases combine to form cost of goods available for sale. Hanlon allocates the cost of goods available for sale into ending inventory (which is the cost of the goods *not* sold) and cost of goods sold.

NOTE TO THE STUDENT

The word “stolen” often implies a burglar entering and taking a company’s assets. However “stolen” also includes goods taken by employees or by shoplifting customers. An executive of a Midwest department store chain remarked that stealing by employees was much more frequent than shoplifting by customers.

To continue the calculation appearing in Exhibit 6.7, net cost of purchases (\$166,000) is equal to purchases (\$167,000), *less* purchase discounts (\$3,000) and purchase returns and allowances (\$8,000), *plus* transportation-in (\$10,000).

As shown in Exhibit 6.7, ending inventory cost (merchandise inventory) appears in the income statement as a deduction from cost of goods available for sale to compute cost of goods sold. Ending inventory cost (merchandise inventory) is also a current asset in the end-of-period balance sheet.

An Accounting Perspective

Uses of Technology A perpetual inventory system provides an additional advantage over a periodic system in terms of inventory control. Accounting software packages often include an inventory module that updates inventory quantities and costs on a perpetual basis. This assists managers in the planning of inventory purchases. A company never wants to have too little inventory, lest it miss sales due to a “stockout” situation. On the other hand, having too much inventory presents other problems. Excess inventory could result in extra storage costs, “shrinkage” due to theft and spoilage, and a loss in value due to obsolescence. A perpetual system provides information to help maintain the “Goldilocks level” of inventory at all times—not too much; not too little; but just right!

Lack of Control under Periodic Inventory Procedure

Companies use the periodic inventory procedure because of its simplicity and relatively low cost. However, the periodic inventory procedure provides little control over inventory. Firms assume that any items not included in the physical count of inventory at the end of the period have been sold. Thus, they mistakenly assume that items that actually were stolen to have been sold, and they include their cost in cost of goods sold.

To illustrate, suppose that the cost of goods available for sale was \$200,000 and ending inventory was \$60,000. These figures suggest that the cost of goods sold was \$140,000. Now suppose that \$2,000 of goods were actually shoplifted during the year. If such goods had not been stolen, the ending inventory would have been \$62,000, and the cost of goods sold only \$138,000. Thus, the \$140,000 cost of goods sold calculated under the periodic inventory procedure includes both the cost of the merchandise delivered to customers and the cost of merchandise stolen.

Classified Income Statement

In preceding chapters, we illustrated the unclassified (or single-step) income statement. An **unclassified income statement** has only two categories: revenues and expenses. In contrast, a **classified income statement** divides both revenues and expenses into operating and nonoperating items. The statement also separates operating expenses into selling and administrative expenses. A classified income statement is also called a multiple-step income statement.

In Exhibit 6.8, we present a classified income statement for Hanlon Retail Food Store. This statement uses the previously presented data on sales (Exhibit 6.4) and cost of goods sold (Exhibit 6.7), together with additional assumed data on operating expenses and other expenses and revenues. Note in Exhibit 6.8 that a classified income statement has the following four major sections:

1. Operating revenues
2. Cost of goods sold
3. Operating expenses
4. Nonoperating revenues and expenses (other revenues and other expenses)

The classified income statement shows important relationships that help in analyzing how well the company is performing. For example, by deducting cost of goods sold from operating revenues, you can determine by what amount sales revenues exceed the cost of items being sold. If this margin, called **gross margin**, is lower than desired, a company may need to increase its selling prices and/or decrease its cost of goods sold. The classified income statement subdivides operating expenses into selling and administrative expenses. Thus, statement users can see how much expense is incurred in selling the product and how much in administering the business. Statement users can also make comparisons with other

Objective 6

Prepare a classified income statement.

Reinforcing Problems

P6-3 Prepare and post journal entries, and prepare a trial balance and classified income statement.

Annual Report Analysis 6-3 Classify income statement items and calculate gross margin percentages.

HANLON RETAIL FOOD STORE
Income Statement
For the Year Ended December 31, 2018

<u>Operating revenues:</u>			
Gross sales			\$282,000
Less: Sales discounts		\$ 5,000	
Sales return and allowances		15,000	20,000
Net sales			\$262,000
<u>Cost of goods sold:</u>			
Merchandise inventory, January 1, 2018			\$24,000
Purchases		\$167,000	
Less: Purchase discount	\$3,000		
Purchase returns and allowances	8,000	11,000	
Net purchases		\$156,000	
Add: Transportation-in		10,000	
Net cost of purchases			166,000
Cost of goods available for sale			\$190,000
Less: Merchandise inventory, December 31, 2018			31,000
Cost of goods sold			159,000
Gross margin			\$103,000
<u>Operating expenses:</u>			
<u>Selling expenses:</u>			
Salaries and commissions expense		\$ 26,000	
Salespersons' travel expense		3,000	
Delivery expense		2,000	
Advertising expense		4,000	
Rent expense—store building		2,500	
Supplies expense		1,000	
Utilities expense		1,800	
Depreciation expense—store equipment		700	
Other selling expense		400	\$41,400
<u>Administrative expenses:</u>			
Salaries expense, executive		\$29,000	
Rent expense—administrative building		1,600	
Insurance expense		1,500	
Supplies expense		800	
Depreciation expense—office equipment		1,100	
Other administrative expenses		300	34,300
Total operating expenses			75,700
Income from operations			\$ 27,300
<u>Nonoperating revenues and expenses:</u>			
<u>Nonoperating revenues:</u>			
Interest revenue			1,400
			\$ 28,700
<u>Nonoperating expenses:</u>			
Interest expense			600
Net income			\$ 28,100

Exhibit 6.8 Classified Income Statement for a Merchandising Company

An Accounting Perspective

Business Insight Management chooses whether to use a classified or unclassified income statement to present a company's financial data. This choice may be based either on how the company's competitors present their data or on the costs associated with assembling the data.

years' data for the same business and with other businesses. Nonoperating revenues and expenses appear at the bottom of the income statement because they are less significant in assessing the profitability of the business.

NOTE TO THE STUDENT

What do you think the gross margin rates for different types of retail stores in your area, such as jewelry versus groceries, would be? Would you rather purchase goods from a store with a high or a low gross margin rate?

Next, we explain the major headings of the classified income statement in Exhibit 6.8. The terms in some of these headings are already familiar to you. Although future exhibits of classified income statements may vary somewhat in form, we retain the basic organization.

- 1. Operating revenues** are the revenues generated by the major activities of the business—usually the sale of products or services or both.
- 2. Cost of goods sold** is the major expense in merchandising companies. Note the cost of goods sold section of the classified income statement in Exhibit 6.8. This chapter has already discussed the items used in calculating cost of goods sold. Merchandisers usually highlight the amount by which sales revenues exceed the cost of goods sold in the top part of the income statement. The excess of net sales over cost of goods sold is the **gross margin or gross profit**. To express gross margin as a percentage rate, we divide gross margin by net sales. In Exhibit 6.8, the gross margin rate is approximately 39.3% ($\$103,000/\$262,000$). The gross margin rate indicates that out of each sales dollar, approximately 39 cents is available to cover other expenses and produce net income. Business owners watch the gross margin rate closely because a small percentage fluctuation can cause a large dollar change in net income. Also, a downward trend in the gross margin rate may indicate a problem, such as the theft of merchandise. For instance, one Southeastern sporting goods company, Sportstown, Inc., suffered significant gross margin deterioration from increased shoplifting and employee theft. Sportstown eventually filed for bankruptcy due to its large losses.
- 3. Operating expenses** for a merchandising company are those expenses, other than cost of goods sold, incurred in the normal business functions of a company. Usually, operating expenses are either selling expenses or administrative expenses. **Selling expenses** are expenses that a company incurs in selling and marketing efforts. Examples include salaries and commissions of salespersons, travel expenses for salespersons, delivery, advertising, rent (or depreciation, if owned) and utilities on a sales building, sales supplies used, and depreciation on delivery trucks used in sales. **Administrative expenses** are expenses that a company incurs in the overall management of a business. Examples include administrative salaries, rent (or depreciation, if owned) and utilities on an administrative building, insurance expense, administrative supplies used, and depreciation on office equipment. Certain operating expenses may be shared by the selling and administrative functions. For example, a company might incur rent, taxes, and insurance on a building for both sales and administrative purposes. Expenses covering both the

selling and administrative functions must be analyzed and prorated between the two functions on the income statement. For instance, if \$1,000 of depreciation expense relates 60% to selling and 40% to administrative based on the square footage or number of employees, the income statement would show \$600 as a selling expense and \$400 as an administrative expense.

Real-World Example

Abercrombie & Fitch had operating expenses of \$2,085 million on a gross margin of \$2,158 million for income from operations in 2015 of \$73 million.

- 4. Nonoperating revenues (other revenues) and nonoperating expenses (other expenses)** are revenues and expenses not related to the sale of products or services regularly offered for sale by a business. An example of a nonoperating revenue is interest that a business earns on notes receivable. An example of a nonoperating expense is interest incurred on money borrowed by the company.

Important Relationships in the Income Statement

To summarize the most important relationships in the income statement of a merchandising firm in equation form:

1. **Net sales** = Gross sales – (Sales discounts + Sales returns and allowances).
2. **Net purchases** = Purchases – (Purchase discounts + Purchase returns and allowances).
3. **Net cost of purchases** = Net purchases + Transportation-in.
4. **Cost of goods sold** = Beginning inventory + Net cost of purchases – Ending inventory.
5. **Gross margin** = Net sales – Cost of goods sold.
6. **Income from operations** = Gross margin – Operating (selling and administrative) expenses.
7. **Net income** = Income from operations + Nonoperating revenues – Nonoperating expenses.

Each of these relationships is important because of the way it relates to an overall measure of business profitability. For example, a company may produce a high gross margin on sales. However, because of large sales commissions and delivery expenses, the owner may realize only a very small percentage of the gross margin as profit. The classifications in the income statement allow a user to focus on the whole picture as well as on how net income was derived (statement relationships).

**Analyzing and Using the Financial Results—
Gross Margin Percentage**

As discussed earlier, you can calculate the **gross margin percentage** by using the following formula:

$$\text{Gross Margin percentage} = \frac{\text{Gross Margin}}{\text{Net Sales}}$$

To demonstrate the use of this ratio, consider the following information from the 2016 Annual Report of Abercrombie & Fitch.

(\$ millions)	2016	2015	2014
Revenues	\$3,327	\$3,519	\$3,744
Gross profit	2,029	2,158	2,314
Gross profit (margin) percentage	$\frac{\$2,029}{\$3,327} = 60.99\%$	$\frac{\$2,158}{\$3,519} = 61.32\%$	$\frac{\$2,314}{\$3,744} = 61.81\%$

Reinforcing Problem

E6-13 Account analysis of inventory and accounts payable.

An Ethical Perspective

World Auto Parts Corporation

John Bentley is the chief financial officer for World Auto Parts Corporation. The company buys approximately \$500 million of auto parts each year from small suppliers all over the world and resells them to auto repair shops in the United States.

Most of the suppliers have cash discount terms of 2/10, n/30. John has instructed his personnel to pay invoices on the 30th day after the invoice date but to take the 2% discount even though they are not entitled to do so. Whenever a supplier complains, John instructs his purchasing agent to find another supplier who will go along with this practice. When some

of his own employees questioned the practice, John responded as follows:

This practice really does no harm. These small suppliers are much better off to go along and have our business than to not go along and lose it. For most of them, we are their largest customer. Besides, if they are willing to sell to others at a 2% discount, why should they not be willing to sell to us at that same discount even though we pay a little later? The benefit to our company is very significant. Last year our profits were \$100 million. A total of \$10 million of the profits was attributable to this practice. Do you really want me to change this practice and give up \$10 million of our profits?

In spite of declining sales, Abercrombie's gross margin held at a rather high 61% to 62% over those three years.

Understanding the Learning Objectives

- In a sales transaction, the seller transfers the legal ownership (title) of the goods to the buyer.
- An invoice is a document, prepared by the seller of merchandise and sent to the buyer, that contains the details of a sale, such as the number of units sold, unit price, total price, terms of sale, and manner of shipment.
- Usually, sales are for cash or on account. When a sale is for cash, the debit is to Cash and the credit is to Sales. When a sale is on account, the debit is to Accounts Receivable and the credit is to Sales.
- When companies offer trade discounts, the gross selling price (gross invoice price) at which the sale is recorded is equal to the list price minus any trade discounts.
- Two common deductions from gross sales are (1) sales discounts and (2) sales returns and allowances. These deductions are recorded in contra revenue accounts to the Sales account. Both the Sales Discounts account and the Sales Returns and Allowances account normally have debit balances. $\text{Net sales} = \text{Sales} - (\text{Sales discounts} + \text{Sales returns and allowances})$.
- Sales discounts arise when the seller offers the buyer a cash discount, of say 1% to 3%, to induce early payment of an amount due.
- Sales returns result from merchandise being returned by a buyer because the goods are considered unsatisfactory or have been damaged. A sales allowance is a deduction from the original invoiced sales price granted to a customer when the customer keeps the merchandise but is dissatisfied.

Objective 7

Analyze and use the financial results—gross margin percentage.

Objective 1

Record journal entries for sales transactions involving merchandise.

Objective 2

Briefly describe cost of goods sold and the distinction between perpetual and periodic inventory procedures.

- Cost of goods sold = Beginning inventory + Net cost of purchases – Ending inventory. Net cost of purchases = Purchases – (Purchase discounts + Purchase returns and allowances) + Transportation-in.
- Two methods of accounting for inventory are the perpetual inventory procedure and the periodic inventory procedure. Under the perpetual inventory procedure, the inventory account is continuously updated during the accounting period. Under the periodic inventory procedure, the inventory account is updated only periodically—after a physical count has been made.

Objective 3

Record journal entries for purchase transactions involving merchandise.

- Under the periodic inventory procedure, purchases of merchandise are recorded by debiting Purchases and crediting Cash (for cash purchases) or crediting Accounts Payable (for purchases on account).
- Two common deductions from purchases are (1) purchase discounts and (2) purchase returns and allowances. In the general ledger, both of these items normally carry credit balances. From the buyer's side of the transactions, cash discounts are purchase discounts, and merchandise returns and allowances are purchase returns and allowances.

Objective 4

Describe the freight terms, and record transportation costs.

- *FOB shipping point* means “free on board at shipping point”—the buyer incurs the freight.
- *FOB destination* means “free on board at destination”—the seller incurs the freight.
- *Passage of title* is a term indicating the transfer of the legal ownership of goods.
- Freight prepaid is when the seller must initially pay the freight at the time of shipment.
- Freight collect is when the buyer must initially pay the freight on the arrival of the goods.

Objective 5

Determine cost of goods sold.

- Expansion and application of the relationship introduced in Learning Objective 2: Beginning inventory + Net cost of purchases = Cost of goods available for sale. Cost of goods available for sale – Ending inventory = Cost of goods sold.

Objective 6

Prepare a classified income statement.

- A classified income statement has four major sections: operating revenues, cost of goods sold, operating expenses, and nonoperating revenues and expenses.
- Operating revenues are the revenues generated by the major activities of the business—usually, the sale of products or services or both.
- Cost of goods sold is the major expense in merchandising companies.
- Operating expenses for a merchandising company are those expenses other than cost of goods sold incurred in the normal business functions of a company. Usually, operating expenses are classified as either selling expenses or administrative expenses.
- Nonoperating revenues and expenses are revenues and expenses not related to the sale of products or services regularly offered for sale by a business.

Objective 7

Analyze and use the financial results—gross margin percentage.

- Gross margin percentage = Gross margin/Net sales.
- The gross margin rate indicates the amount of sales dollars available to cover expenses and produce net income.

Objective 8

Prepare a work sheet and closing entries for a merchandising company (Appendix).

- Except for the merchandise-related accounts, the work sheet for a merchandising company is the same as that for a service company.
- Any revenue accounts and contra purchases accounts in the Adjusted Trial Balance credit column of the work sheet are carried to the Income Statement credit column.

- Beginning inventory, contra revenue accounts, Purchases, Transportation-In, and expense accounts in the Adjusted Trial Balance debit column are carried to the Income Statement debit column.
- Ending merchandise inventory is entered in the Income Statement credit column and in the Balance Sheet debit column.
- Closing entries may be prepared directly from the work sheet. The first journal entry debits all items appearing in the Income Statement credit column and credits Income Summary. The second entry credits all items appearing in the Income Statement debit column and debits Income Summary. The third entry debits Income Summary and credits the Retained Earnings account (assuming positive net income). The fourth entry debits the Retained Earnings account and credits the Dividends account.

APPENDIX

The Work Sheet for a Merchandising Company

Exhibit 6.9 shows a work sheet for a merchandising company. Lyons Company is a small sporting goods firm. The exhibit for Lyons Company focuses on merchandise-related accounts. Thus, we do not show the fixed assets (land, building, and equipment). Except for the merchandise-related accounts, the work sheet for a merchandising company is the same as that for a service company. Recall that use of a work sheet assists in the preparation of the adjusting and closing entries. The work sheet also contains all the information needed for the preparation of the financial statements.

To further simplify this example, assume Lyons needs no adjusting entries at month-end. The trial balance is from the ledger accounts at December 31, 2018. The \$7,000 merchandise inventory in the trial balance is the beginning inventory. The sales and sales-related accounts and the purchases and purchases-related accounts summarize the merchandising activity for December 2018.

Completing the Work Sheet

Lyons carries any revenue accounts (Sales) and contra purchases accounts (Purchase Discounts, Purchase Returns and Allowances) in the Adjusted Trial Balance credit columns of the work sheet to the Income Statement credit column. It carries beginning inventory, contra revenue accounts (Sales Discounts, Sales Returns and Allowances), Purchases, Transportation-In, and expense accounts (Selling Expenses, Administrative Expenses) in the Adjusted Trial Balance debit column to the Income Statement debit column.

Assume that ending inventory is \$8,000. Lyons enters this amount in the Income Statement credit column because it is deducted from cost of goods available for sale (beginning inventory plus net cost of purchases) in determining cost of goods sold. It also enters the ending inventory in the Balance Sheet debit column to establish the proper balance in the Merchandise Inventory account. The beginning and ending inventories are on the Income Statement because Lyons uses both to calculate cost of goods sold in the income statement. Net income of \$5,843 for the period balances the Income Statement columns. The firm carries the net income to the Statement of Retained Earnings credit column. Retained earnings of \$18,843 balances the Statement of Retained Earnings columns. Lyons Company carries the retained earnings to the Balance Sheet credit column.

Lyons carries all other asset account balances (Cash, Accounts Receivable, and ending Merchandise Inventory) to the Balance Sheet debit column. It also carries the liability (Accounts Payable) and Capital Stock account balances to the Balance Sheet credit column. The balance sheet columns total to \$29,543.

Objective 8

Prepare a work sheet and closing entries for a merchandising company (Appendix).

Reinforcing Problem

E6-11 Prepare a partial work sheet using merchandise-related accounts.

Financial Statements for a Merchandising Company

Once the work sheet has been completed, Lyons prepares the financial statements. After entering any adjusting and closing entries in the journal, the firm posts them to the ledger. This process clears the records for the next accounting period. Finally, it prepares a post-closing trial balance.

Reinforcing Problems

P6-5 and P6-5A Prepare a work sheet, classified income statement, statement of retained earnings, classified balance sheet, and closing entries.

Income Statement Exhibit 6.10 shows the income statement Lyons prepared from its work sheet in Exhibit 6.9. The focus in this income statement is on determining the cost of goods sold.

Statement of Retained Earnings The statement of retained earnings, as you recall, is a financial statement that summarizes the transactions affecting the Retained Earnings account balance. In Exhibit 6.11, the statement of retained earnings shows an increase in equity resulting from net income and a decrease in equity resulting from dividends.

Balance Sheet The balance sheet, Exhibit 6.12, contains the assets, liabilities, and stockholders' equity items taken from the work sheet. Note the \$8,000 ending inventory is a current asset. The Retained Earnings account balance comes from the statement of retained earnings.

Closing Entries

Recall from Chapter 4 that the closing process normally takes place after the accountant has prepared the financial statements for the period. The closing process closes revenue

LYONS COMPANY Worksheet For the Month Ended December 31, 2018

Acct. No.	Account Titles	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Statement of Retained Earnings		Balance Sheet	
		Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
100	Cash	19,663				19,663						19,663	
103	Accounts Receivable	1,880				1,880						1,880	
105	Merchandise Inventory, December 1	7,000				7,000		7,000	8,000			8,000	
200	Accounts Payable		700				700						700
300	Capital Stock		10,000				10,000						10,000
310	Retained Earnings, December 1		15,000				15,000				15,000		
320	Dividends	2,000				2,000				2,000			
410	Sales		14,600				14,600		14,600				
411	Sales Discounts	44				44		44					
412	Sales Returns and Allowances	20				20		20					
500	Purchases	6,000				6,000		6,000					
501	Purchases Discounts		82				82		82				
502	Purchase Returns and Allowances		100				100		100				
503	Transportation-In	75				75		75					
557	Miscellaneous Selling Expenses	2,650				2,650		2,650					
567	Miscellaneous Administrative Expenses	1,150				1,150		1,150					
		40,482	40,482			40,482	40,482	16,939	22,782				
	Net Income							5,843			5,843		
								22,782	22,782	2,000	20,843	29,543	10,700
	Retained Earnings, December 31									18,843			18,843
										20,843	20,843	29,543	29,543

Exhibit 6.9 Work Sheet for a Merchandising Company

LYONS COMPANY
Income Statement
For the Month Ended December 31, 2018

<u>Operating revenues:</u>		
Gross sales		\$14,600
Less: Sales discounts	\$ 44	
Sales return and allowances	20	64
Net sales		<u>\$14,536</u>
<u>Cost of goods sold:</u>		
Merchandise inventory, January 1, 2018		\$ 7,000
Purchases	\$ 6,000	
Less: Purchase discount	\$ 82	
Purchase returns and allowances	100	182
Net purchases		<u>\$5,818</u>
Add: Transportation-in	75	
Net cost of purchases		<u>5,893</u>
Cost of goods available for sale		\$12,893
Less: Merchandise inventory, December 31, 2018		<u>8,000</u>
Cost of goods sold		<u>4,893</u>
Gross margin		<u>\$ 9,643</u>
<u>Operating expenses:</u>		
Miscellaneous selling expense		\$ 2,650
Miscellaneous administrative expense		<u>1,150</u>
Total operating expenses		<u>3,800</u>
Net income		<u><u>\$ 5,843</u></u>

Exhibit 6.10 Income Statement for a Merchandising Company

LYONS COMPANY
Statement of Retained Earnings
For the Month Ended December 31, 2018

Retained earnings, December 1, 2018	\$15,000
Add: Net income for the month	<u>5,843</u>
Total	\$20,843
Deduct: Dividends	<u>2,000</u>
Retained earnings, December 31, 2018	<u><u>\$18,843</u></u>

Exhibit 6.11 Statement of Retained Earnings

and expense accounts by transferring their balances to a clearing account called Income Summary and then to Retained Earnings. The closing process reduces the revenue and expense account balances to zero so that information for each accounting period may be accumulated separately.

LYONS COMPANY
Balance Sheet
December 31, 2018

Assets		
Cash		\$19,663
Accounts receivable		1,880
Merchandise inventory		8,000
Total assets		<u>\$29,543</u>
Liabilities and Stockholders' Equity		
Liabilities:		
Accounts payable		\$ 700
Stockholders' equity:		
Capital stock	\$10,000	
Retained earnings	18,843	
Total stockholders' equity		<u>28,843</u>
Total liabilities and stockholders' equity		<u>\$29,543</u>

Exhibit 6.12 Balance Sheet for a Merchandising Company

Reinforcing Problem

E6-12 Prepare and post closing entries using T-accounts.

Lyons's accountant would prepare closing entries directly from the work sheet in Exhibit 6.9 using the same procedure presented in Chapter 4. The closing entries for Lyons Company follow.

The first journal entry *debits* all items appearing in the Income Statement credit column of the work sheet and *credits* Income Summary for the total of the column, \$22,782.

1st Entry

2018					
Dec.	31	Merchandise Inventory (ending)			
		Sales		8,000	
		Purchase Discounts		14,600	
		Purchase Returns and Allowances		82	
		Income Summary		100	
		To close accounts with a credit balance in the Income Statement columns and to establish ending merchandise inventory.			22,782

The second entry *credits* all items appearing in the Income Statement debit column and *debits* Income Summary for the total of that column, \$16,939.

2nd Entry

2018					
Dec.	31	Income Summary		16,939	
		Merchandise Inventory (beginning)			7,000
		Sales Discounts			44
		Sales Returns and Allowance			20
		Purchases			6,000
		Transportation-In			75
		Miscellaneous Selling Expenses			2,650
		Miscellaneous Administrative Expenses			1,150
		To close accounts with a debit balance in the Income Statement columns.			

The third entry closes the credit balance in the Income Summary account of \$5,843 to the Retained Earnings account.

3rd Entry	2018			
	Dec. 31	Income Summary	5,843	
		Retained Earnings		5,843
		To close the Income Summary account to the Retained Earnings account.		

NOTE TO THE STUDENT

How would this closing entry be different if the company had a net loss?

The fourth entry closes the Dividends account balance of \$2,000 to the Retained Earnings account by debiting Retained Earnings and crediting Dividends.

4th Entry	2018			
	Dec. 31	Retained Earnings	2,000	
		Dividends		2,000
		To close the Dividends account to the Retained Earnings account.		

Note how the first three closing entries tie into the totals in the Income Statement columns of the work sheet in Exhibit 6.9. In the first closing journal entry, the credit to the Income Summary account is equal to the total of the Income Statement credit column. In the second entry, the debit to the Income Summary account is equal to the subtotal of the Income Statement debit column. The difference between the totals of the two Income Statement columns (\$5,843) represents net income and is the amount of the third closing entry.

Demonstration Problem

The following transactions occurred between Companies C and D in June of 2018:

- June 10** Company C purchased merchandise from Company D for \$80,000; terms 2/10/EOM, n/60, FOB destination, freight prepaid.
- 11** Company D paid freight of \$1,200.
- 14** Company C received an allowance of \$4,000 from the gross selling price because of damaged goods.
- 23** Company C returned \$8,000 of goods purchased because they were not the quality ordered.
- 30** Company D received payment in full from Company C.

- a.** Journalize the transactions for Company C.
- b.** Journalize the transactions for Company D.

◀ Required

Solution to Demonstration Problem

a. General Journal

General Journal

Date		Account Titles and Explanation	Post. Ref.	Debit					Credit					
2018		Company C												
June	10	Purchases		8	0	0	0	0						
		Accounts Payable								8	0	0	0	0
		Purchased merchandise from Company D; terms 2/10/EOM, n/60.												
	14	Accounts Payable		4	0	0	0							
		Purchase Return and Allowances								4	0	0	0	
		Received an allowance from Company D for damaged goods.												
	23	Accounts Payable		8	0	0	0							
		Purchase Returns and Allowances								8	0	0	0	
		Returned merchandise to Company D because of improper quality.												
	30	Accounts Payable (\$80,000 - \$4,000 - \$8,000)		6	8	0	0	0						
		Purchase Discounts (\$68,000 x 0.02)									1	3	6	0
		Cash (\$68,000 - \$1,360)								6	6	6	4	0
		Paid the amount due to Company D.												

b. General Journal

General Journal

Date		Account Titles and Explanation	Post. Ref.	Debit					Credit					
2018		Company D												
June	10	Accounts Receivable		8	0	0	0	0						
		Sales								8	0	0	0	0
		Sold merchandise to Company C; terms 2/10/EOM, n/60.												
	11	Delivery Expense		1	2	0	0							
		Cash								1	2	0	0	
		Paid freight on sale of merchandise shipped FOB destination, freight prepaid.												
	14	Sales Returns and Allowances		4	0	0	0							
		Accounts Receivable								4	0	0	0	
		Granted an allowance to Company C for damaged goods.												
	23	Sales Returns and Allowances		8	0	0	0							
		Accounts Receivable								8	0	0	0	
		Merchandise returned from Company C due to improper quality.												
	30	Cash (\$68,000 - \$1,360)		6	6	6	4	0						
		Sales Discounts (\$68,000 x 0.02)			1	3	6	0						
		Accounts Receivable (\$80,000 - \$4,000 - \$8,000)								6	8	0	0	0
		Received the amount due from Company C.												

New Terms

Adjunct account Closely related to another account; its balance is added to the balance of the related account in the financial statements. 237

Administrative expenses Expenses a company incurs in the overall management of a business. 243

Cash discount A deduction from the invoice price that can be taken only if the invoice is paid within a specified time. To the seller, it is a sales discount; to the buyer, it is a purchase discount. 230

Chain discount Occurs when the list price of a product is subject to a series of trade discounts. 229

Classified income statement Divides both revenues and expenses into operating and nonoperating items. The statement also separates operating expenses into selling and administrative expenses. Also called the multiple-step income statement. 241

Consigned goods Goods delivered to another party who attempts to sell the goods for the owner at a commission. 239

Cost of goods available for sale Equal to beginning inventory plus net cost of purchases. 239

Cost of goods sold Shows the cost to the seller of the goods sold to customers; under the periodic inventory procedure, cost of goods sold is computed as Beginning inventory + Net cost of purchases – Ending inventory. 232, 243

Delivery expense A selling expense recorded by the seller for freight costs incurred when terms are FOB destination. 237

FOB destination Means “free on board at destination”; goods are shipped to their destination without charge to the buyer; the seller is responsible for paying the freight charges. 236

FOB shipping point Means “free on board at shipping point”; buyer incurs all transportation costs after the merchandise is loaded on a railroad car or truck at the point of shipment. 236

Freight collect Terms that require the buyer to pay the freight bill on arrival of the goods. 237

Freight prepaid Terms that indicate the seller has paid the freight bill at the time of shipment. 236

Gross margin or gross profit Net sales – Cost of goods sold; identifies the number of dollars available to cover expenses other than cost of goods sold. 243

Gross margin percentage Gross margin divided by net sales. 244

Gross selling price (also called the invoice price) The list price less all trade discounts. 228

Income from operations Gross margin – Operating (selling and administrative) expenses. 244

Invoice A document prepared by the seller of merchandise and sent to the buyer. It contains the details of a sale, such as the number of units sold, unit price, total price billed, terms of sale, and manner of shipment. It is a purchase invoice from the buyer’s point of view and a sales invoice from the seller’s point of view. 227

Manufacturers Companies that produce goods from raw materials and normally sell them to wholesalers. 225

Merchandise in transit Merchandise in the hands of a freight company on the date of a physical inventory. 239

Merchandise inventory The quantity of goods available for sale at any given time. 232, 238

Net cost of purchases Net purchases + Transportation-in. 237, 244

Net income Income from operations + Nonoperating revenues – Nonoperating expenses. 244

Net purchases Purchases – (Purchase discounts + Purchase returns and allowances). 236, 244

Net sales Gross sales – (Sales discounts + Sales returns and allowances). 226, 244

Nonoperating expenses (other expenses) Expenses incurred by a business that are not related to the acquisition and sale of the products or services regularly offered for sale. 244

Nonoperating revenues (other revenues) Revenues not related to the sale of products or services regularly offered for sale by a business. 244

Operating expenses Those expenses other than cost of goods sold incurred in the normal business functions of a company. 243

Operating revenues Those revenues generated by the major activities of a business. 243

Passage of title A legal term used to indicate transfer of legal ownership of goods. 236

Periodic inventory procedure A method of accounting for merchandise acquired for sale to customers wherein the cost of merchandise sold and the cost of merchandise on hand are determined only at the end of the accounting period by taking a physical inventory. 233

Perpetual inventory procedure A method of accounting for merchandise acquired for sale to customers wherein the Merchandise Inventory account is continuously updated to reflect items on hand; this account is debited for each purchase and credited for each sale so that the current balance is shown in the account at all times. 233

Physical inventory Consists of counting physical units of each type of merchandise on hand. 239

Purchase discount See *cash discount*.

Purchase Discounts account A contra account to Purchases that reduces the recorded gross invoice cost of the purchase to the price actually paid. 235

Purchase Returns and Allowances account An account used under the periodic inventory procedure to record the cost of merchandise returned to a seller and to record reductions in selling prices granted by a seller because merchandise was not satisfactory to a buyer; viewed as a reduction in the recorded cost of purchases. 236

Purchases account An account used under the periodic inventory procedure to record the cost of goods or merchandise bought for resale during the current accounting period. 234

Retailers Companies that sell goods to final consumers. 225

Sales allowance A deduction from original invoiced sales price granted to a customer when the customer keeps the merchandise but is dissatisfied for any of a number of reasons, including inferior quality, damage, or deterioration in transit. 230

Sales discount See *cash discount*.

Sales Discounts account A contra revenue account to Sales; it is shown as a deduction from gross sales in the income statement. 230

Sales return From the seller's point of view, merchandise returned by a buyer for any of a variety of reasons; to the buyer, a purchase return. 230

Sales Returns and Allowances account A contra revenue account to Sales used to record the selling price of merchandise returned by buyers or reductions in selling prices granted. 231

Selling expenses Expenses a company incurs in selling and marketing efforts. 243

Trade discount A percentage deduction, or discount, from the specified list price or catalog price of merchandise to arrive at the gross invoice price; granted to particular categories of customers (e.g., retailers and wholesalers). Also see *chain discount*. 228

Transportation-In account An account used under periodic inventory procedure to record inward freight costs incurred in the acquisition of merchandise; a part of cost of goods sold. 237

Unclassified income statement Shows only major categories for revenues and expenses. Also called the single-step income statement. 241

Wholesalers Companies that normally sell goods to other companies (retailers) for resale. 225

Self-Test

True/False

Indicate whether each of the following statements is true or false.

- To compute net sales, sales discounts are added to, and sales returns and allowances are deducted from, gross sales.
- Under the perpetual inventory procedure, the Merchandise Inventory account is debited for each purchase and credited for each sale.
- Purchase discounts and purchase returns and allowances are recorded in contra accounts to the Purchases account.
- In taking a physical inventory, consigned goods delivered to another party who attempts to sell the goods are not included in the ending inventory of the company that sent the goods.
- A classified income statement consists of only two categories of items: revenues and expenses.

Multiple Choice

Select the best answer for each of the following questions.

- A seller sold merchandise that has a list price of \$4,000 on account, giving a trade discount of 20%. The entry on the books of the seller is:

a.	Accounts Receivable	3,200	
	Trade Discounts	800	
	Sales		4,000
b.	Accounts Receivable	4,000	
	Sales		4,000
c.	Accounts Receivable	3,200	
	Trade Discounts	800	
	Sales		4,000
d.	Accounts Receivable	3,200	
	Sales		3,200

- X Company began the accounting period with \$60,000 of merchandise, and net cost of purchases was \$240,000. A physical inventory showed \$72,000 of merchandise unsold at the end of the period. The cost of goods sold of Y Company for the period is
 - \$300,000.
 - \$228,000.
 - \$252,000.
 - \$168,000.
 - None of the above is correct.
- A business purchased merchandise for \$12,000 on account; terms are 2/10, n/30. If \$2,000 of the merchandise was returned and the remaining amount due was paid within the discount period, the purchase discount would be
 - \$240.
 - \$200.
 - \$1,200.
 - \$1,000.
 - \$3,600.
- A classified income statement consists of all of the following major sections *except*
 - operating revenues.
 - cost of goods sold.
 - operating expenses.
 - nonoperating revenues and expenses.
 - current assets.
- (Appendix) Closing entries for merchandise-related accounts include all of the following *except* which one?
 - A credit to Sales Discounts
 - A credit to Merchandise Inventory for the cost of ending inventory
 - A debit to Purchase Discounts
 - A credit to Transportation-In
 - A debit to Sales

Now turn to page 272 to check your answers.

Questions

- Which account titles are likely to appear in a merchandising company's ledger that do not appear in the ledger of a service enterprise?
- What entry is made to record a sale of merchandise on account under the periodic inventory procedure?
- Describe trade discounts and chain discounts.
- Sales discounts and sales returns and allowances are deducted from sales on the income statement to arrive at net sales. Why not deduct these directly from the Sales account by debiting Sales each time a sales discount, return, or allowance occurs?
- What are the two basic procedures for accounting for inventory? How do these two procedures differ?
- What useful purpose does the Purchases account serve?
- What do the letters *FOB* stand for? When terms are *FOB destination*, who incurs the cost of freight?
- What type of an expense is delivery expense? Where is this expense reported in the income statement?
- The periodic inventory procedure is said to afford little control over inventory. Explain why.
- How does the accountant arrive at the total dollar amount of the inventory after taking a physical inventory?
- How is cost of goods sold determined under the periodic inventory procedure?
- If the cost of goods available for sale and the cost of the ending inventory are known, what other amount appearing on the income statement can be calculated?
- What are the major sections in a classified income statement for a merchandising company, and in what order do these sections appear?
- What is gross margin? Why might management be interested in the percentage of gross margin to net sales?
- (Appendix)** After closing entries are posted to the ledger, which types of accounts have balances? Why?
- Apple** Based on the financial statements of Apple Inc., in the Annual Report Appendix, how much were the research and development expenses and the selling, general, and administrative expenses for 2016? For each of the three years shown, what percentage of net sales were these expenses? Is the trend favorable or unfavorable?
- Apple** Based on the financial statements of Apple Inc., in the Annual Report Appendix, what was the 2016 cost of sales? For each of the three years shown, what percentage of net sales were these expenses? Is the trend favorable or unfavorable?

Exercises

In the following table, indicate how to increase or decrease (debit or credit) each account, and indicate its normal balance (debit or credit).

Title of Account	Increased by (debit or credit)	Decreased by (debit or credit)	Normal Balance (debit or credit)
Merchandise Inventory			
Sales			
Sales Returns and Allowances			
Sales Discounts			
Accounts Receivable			
Purchases			
Purchase Returns and Allowances			
Purchase Discounts			
Accounts Payable			
Transportation-In			

Exercise 6-1

Apply rules of debit and credit for merchandise-related accounts (L.O. 1, 3)

- Silver Company purchased \$48,200 of merchandise from Milton Company on account. Before paying its account, Silver Company returned damaged merchandise with an invoice price of \$8,340. Assuming use of the periodic inventory procedure, prepare entries on both companies' books to record both the purchase/sale and the return.

Exercise 6-2

Prepare entries for merchandise purchase/sale, return, and allowance on both buyer's and seller's books (L.O. 1, 3)

- b. Show how any of the required entries would change assuming that Milton Company granted an allowance of \$6,820 on the damaged goods instead of giving permission to return the merchandise.

Exercise 6-3

Determine end of discount period and prepare an entry to record payment (L.O. 1, 3)

What is the last payment date on which the cash discount can be taken on goods sold on March 5 for \$47,300; terms 3/10/EOM, n/60? Assume that the bill is paid on this date, and prepare the correct entries on both the buyer's and seller's books to record the payment.

Exercise 6-4

Calculate effect of trade and cash discounts on payment (L.O. 1, 3)

You have purchased merchandise with a list price of \$32,500. Because you are a wholesaler, you are granted a trade discount of 48%. The cash discount terms are 2/EOM, n/60. How much will you remit if you pay the invoice by the end of the month of purchase? How much will you remit if you do not pay the invoice until the following month?

Exercise 6-5

Calculate gross selling price and final payment (L.O. 1, 3)

Lasky Company sold merchandise with a list price of \$72,000 on July 1. For each of the following independent assumptions, calculate (1) the gross selling price used to record the sale and (2) the amount that the buyer would have to remit when paying the invoice.

Trade Discount Granted	Credit Terms	Date Paid
a. 30%, 20%	2/10, n/30	July 10
b. 40%, 10%	2/EOM, n/60	August 10
c. 30%, 10%,	5% 3/10/EOM, n/60	August 10
d. 40%	1/10, n/30	July 12

Exercise 6-6

Determine cash discount available and amount of cash paid (L.O. 1, 3, 4)

Raiser Company purchased goods at a gross selling price of \$3,150 on August 1. Discount terms of 2/10, n/30 were available. For each of the following independent situations, determine (1) the cash discount available on the final payment and (2) the amount paid if payment is made within the discount period.

Transportation Terms	Freight Paid (by)	Purchase Allowance Granted
a. FOB shipping point	\$240 (buyer)	\$520
b. FOB destination	120 (seller)	370
c. FOB shipping point	180 (seller)	920
d. FOB destination	192 (buyer)	150

Exercise 6-7

Prepare entries for purchase, transportation-in, purchase discounts, and payment (L.O. 3, 4)

Stuart Company purchased goods for \$72,000 on June 14, under the following terms: 3/10, n/30; FOB shipping point, freight collect. The bill for the freight was paid on June 15, \$850.

- a. Assume that the invoice was paid on June 24, and prepare all entries required on Stuart Company's books.
- b. Assume that the invoice was paid on July 11. Prepare the entry to record the payment made on that date.

Exercise 6-8

Determine cost of goods sold (L.O. 2, 3, 5)

Cramer Company uses the periodic inventory procedure. Determine the cost of goods sold for the company assuming purchases during the period were \$43,200, transportation-in was \$450, purchase returns and allowances were \$1,200, beginning inventory was \$27,500, purchase discounts were \$2,400, and ending inventory was \$14,500.

In each case, use the following information to calculate the missing information:

	Case 1	Case 2	Case 3
Gross sales	\$640,000	\$?	\$?
Sales discounts	?	25,600	19,200
Sales returns and allowances	19,200	44,800	32,000
Net sales	608,000	1,209,600	?
Merchandise inventory, January 1	256,000	?	384,000
Purchases	384,000	768,000	?
Purchase discounts	7,680	13,440	12,800
Purchase returns and allowances	24,320	31,360	32,000
Net purchases	352,000	?	672,000
Transportation-in	25,600	38,400	32,000
Net cost of purchases	377,600	761,600	?
Cost of goods available for sale	?	1,081,600	1,088,000
Merchandise inventory, December 31	?	384,000	448,000
Cost of goods sold	320,000	?	640,000
Gross margin	?	512,000	320,000

Exercise 6-9

Supply missing amounts in the income statement (L.O. 1–4, 6)

In each of the following equations, supply the missing term(s):

- Net sales = Gross sales – (_____ + Sales returns and allowances).
- Cost of goods sold = Beginning inventory + Net cost of purchases – _____.
- Gross margin = _____ – Cost of goods sold.
- Income from operations = _____ – Operating expenses.
- Net income = Income from operations + _____ – _____.

Exercise 6-10

Supply missing terms in formulas showing income statement relationships (L.O. 6)

Given the balances in this partial trial balance, indicate how the balances would be treated in the work sheet. The ending inventory is \$78. (The amounts are unusually small for ease in rewriting the numbers. We purposely left out the Statement of Retained Earnings columns because they are not used.)

Exercise 6-11

Prepare a partial work sheet using merchandise-related accounts (based on Appendix) (L.O. 8)

Accounts Titles	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
Merchandise Inventory	120									
Sales		840								
Sales Discounts	18									
Sales Returns and Allowances	48									
Purchases	600									
Purchase Discounts		12								
Purchase Returns and Allowances		24								
Transportation-In	36									

Exercise 6-12

Prepare and post closing entries using T-accounts (based on Appendix) (L.O. 8)

Using the data in Exercise 6-11, prepare closing entries for the preceding accounts. Do not close the Income Summary account.

Problems**Problem 6-1**

Journalize merchandise transactions for two different companies (L.O. 1, 3, 4)

a. Spencer Sporting Goods Company engaged in the following transactions in April 2018:

- Apr.**
- 1 Sold merchandise on account for \$345,000; terms 2/10, n/30, FOB shipping point, freight collect.
 - 5 \$54,200 of the goods sold on account on April 1 were returned for a full credit. Payment for these goods had not yet been received.
 - 8 A sales allowance of \$6,200 was granted on the merchandise sold on April 1 because the merchandise was damaged in shipment.
 - 10 Payment was received for the net amount due from the sale of April 1.

b. High Stereo Company engaged in the following transactions in July 2018:

- July**
- 2 Purchased merchandise on account at a cost of \$76,200; terms 2/10, n/30, FOB destination, freight prepaid.
 - 15 Sold merchandise for \$98,400, terms 2/10, n/30, FOB destination, freight prepaid.
 - 16 Paid freight costs on the merchandise sold, \$2,420.
 - 20 High Stereo Company was granted an allowance of \$2,600 on the purchase of July 2 because of damaged merchandise.
 - 31 Paid the amount due on the purchase of July 2.

Required 

Prepare journal entries to record the transactions.

Problem 6-2

Journalize merchandise transactions on both buyer's and seller's books (L.O. 1, 3, 4)

Mars Musical Instrument Company and Tiger Company engaged in the following transactions with each other during July 2018:

- July**
- 2 Mars Musical Instrument Company purchased merchandise on account with a list price of \$54,000 from Tiger Company. The terms were 3/EOM, n/60, FOB shipping point, freight collect. Trade discounts of 15%, 10%, and 5% were granted by Tiger Company.
 - 5 The buyer paid the freight bill on the purchase of July 2, \$1,250.
 - 6 The buyer returned damaged merchandise with an invoice price of \$2,800 to the seller and received full credit.

On the last day of the discount period, the buyer paid the seller for the merchandise.

Required 

Prepare all the necessary journal entries for the buyer and the seller.

Problem 6-3

Prepare and post journal entries, and prepare a trial balance and classified income statement (L.O. 1–6)

The following data for June 2018 are for Rusk Company's first month of operations:

- June**
- 1 Rusk Company was organized, and the stockholders invested \$1,128,000 cash, \$356,000 of merchandise inventory, and a \$288,000 plot of land in exchange for capital stock.
 - 4 Merchandise was purchased for cash, \$444,000; FOB shipping point, freight collect.
 - 9 Cash of \$12,130 was paid to a trucking company for delivery of the merchandise purchased June 4.
 - 13 The company sold merchandise on account, \$316,000; terms 2/10, n/30.
 - 15 The company sold merchandise on account, \$250,400; terms 2/10, n/30.
 - 16 Of the merchandise sold June 13, \$31,680 was returned for credit.

- 20 Salaries for services received were paid as follows: to office employees, \$31,680; to salespersons, \$94,560.
- 22 The company collected the net amount due on the remaining accounts receivable arising from the sale of June 13.
- 24 The company purchased merchandise on account at a cost of \$361,600; terms 2/10, n/30, FOB shipping point, freight collect.
- 26 The company returned \$57,600 of the merchandise purchased June 24 to the vendor for credit.
- 27 A trucking company was paid \$7,600 for delivery to Rusk Company of the goods purchased June 24.
- 29 The company sold merchandise on account, \$421,000; terms 2/10, n/30.
- 30 Sold merchandise for cash, \$172,800.
- 30 Payment was received for the sale of June 15.
- 30 Paid store rent for June, \$46,400.
- 30 Paid the amount due on the purchase of June 24.

The inventory on hand at the close of business on June 30 was \$723,000 at cost.

◀ Additional data

- a. Prepare journal entries for the transactions.
- b. Post the journal entries to the proper ledger accounts. Use the account numbers in the chart of accounts shown in a separate file at the end of the text. Assume that all postings are from page 20 of the general journal.
- c. Prepare a trial balance as of June 30, 2018.
- d. Prepare a classified income statement for the month ended June 30, 2018. No adjusting entries are needed.

◀ Required

The Western Wear Company, a wholesaler of western wear clothing, sells to retailers. The company entered into the following transactions in May 2018:

- May 1 The Western Wear Company was organized as a corporation. The stockholders purchased stock at par for the following assets in the business: \$462,000 cash, \$168,000 merchandise, and \$200,000 land.
- 1 Paid rent on administrative offices for May, \$25,200.
- 5 The company purchased merchandise from Carl Company on account, \$189,000; terms 2/10, n/30. Freight terms were FOB shipping point, freight collect.
- 8 Cash of \$8,400 was paid to a trucking company for delivery of the merchandise purchased May 5.
- 14 The company sold merchandise on account, \$315,000; terms 2/10, n/30.
- 15 Paid Carl Company the amount due on the purchase of May 5.
- 16 Of the merchandise sold May 14, \$13,860 was returned for credit.
- 19 Salaries for services received were paid for May as follows: office employees, \$16,800; salespersons, \$33,600.
- 24 The company collected the net amount remaining of the accounts receivable arising from the sale of May 14.
- 25 The company purchased merchandise on account from Bond Company, \$151,200; terms 2/10, n/30. Freight terms were FOB shipping point, freight collect.
- 27 Of the merchandise purchased May 25, \$25,200 was returned to the vendor.
- 28 A trucking company was paid \$2,100 for delivery to The Western Wear Company of the goods purchased May 25.
- 29 The company sold merchandise on open account, \$15,120; terms 2/10, n/30.
- 30 Cash sales were \$74,088.
- 30 Cash of \$100,800 was received from the sale of May 14.
- 31 Paid Bond Company for the merchandise purchased on May 25, taking into consideration the merchandise returned on May 27.

Problem 6-4

Prepare and post journal entries, prepare trial balance, classified income statement, and classified balance sheet (L.O. 1–6)

Additional data 

The inventory on hand at the close of business on May 31 is \$299,040.

Required 

From the data given for the Western Wear Company:

- a. Prepare journal entries for the transactions.
- b. Post the journal entries to the proper ledger accounts. Use the account numbers in the chart of accounts shown in a separate file at the end of the text. Assume that all postings are from page 15 of the general journal.
(There were no adjusting journal entries.)
- c. Prepare a trial balance.
- d. Prepare a classified income statement for the month ended May 31, 2018.
- e. Prepare a classified balance sheet as of May 31, 2018.

Problem 6-5

Prepare work sheet, classified income statement, statement of retained earnings, classified balance sheet, and closing entries (based on Appendix) (L.O. 5–8)

The following data are for Leone Lumber Company:

LEONE LUMBER COMPANY
Trial Balance
December 31, 2018

Acct. No.	Account Title	Debits	Credits
100	Cash	\$ 90,640	
103	Accounts Receivable	159,520	
105	Merchandise Inventory, January 1, 2018	285,200	
107	Supplies on Hand	5,360	
108	Prepaid Insurance	4,800	
112	Prepaid Rent	57,600	
170	Equipment	88,000	
171	Accumulated Depreciation—Equipment		\$ 17,600
200	Accounts Payable		102,800
300	Capital Stock		220,000
310	Retained Earnings, 1/1/18		219,640
410	Sales		1,122,360
412	Sales Returns and Allowances	5,160	
418	Interest Revenue		1,000
500	Purchases	500,840	
502	Purchases Returns and Allowances		4,040
503	Transportation-In	7,840	
505	Advertising Expense	78,000	
508	Sales Salaries Expense	138,400	
509	Office Salaries Expense	80,800	
510	Officers' Salaries Expense	160,000	
511	Utilities Expense	4,800	
536	Legal and Accounting Expense	10,000	
540	Interest Expense	600	
567	Miscellaneous Administrative Expense	9,880	
		<u>\$1,687,440</u>	<u>\$1,687,440</u>

Additional data 

1. A total of \$3,400 of the prepaid insurance has expired.
2. An inventory of supplies showed that \$1,700 of inventory is still on hand.
3. Prepaid rent expired during the year is \$50,600.
4. Depreciation expense on store equipment is \$8,800.
5. Accrued sales salaries are \$4,000.
6. Accrued office salaries are \$3,000.
7. Merchandise inventory on hand is \$350,000.

Prepare the following:

Required

- a. A work sheet for the year ended December 31, 2018. Refer to the chart of accounts shown in a separate file at the end of the text for any other account numbers you need.
- b. A classified income statement. The only selling expenses are sales salaries, advertising, supplies, and depreciation expense—equipment.
- c. A statement of retained earnings.
- d. A classified balance sheet.
- e. Required closing entries.

Alternate Problems

a. Candle Carpet Company engaged in the following transactions in August 2018:

- Aug. 2 Sold merchandise on account for \$320,000; terms 2/10, n/30, FOB shipping point, freight collect.
- 18 Received payment for the sale of August 2.
- 20 A total of \$12,000 of the merchandise sold on August 2 was returned, and a full refund was made because it was the wrong merchandise.
- 28 An allowance of \$17,500 was granted on the sale of August 2 because some merchandise was found to be damaged; \$17,500 cash was returned to the customer.

Problem 6-1A

Journalize merchandise transactions for two different companies (L.O. 1, 3, 4)

b. Lee Furniture Company engaged in the following transactions in August 2018:

- Aug. 4 Purchased merchandise on account at a cost of \$155,000; terms 2/10, n/30, FOB shipping point, freight collect.
- 6 Paid freight of \$2,800 on the purchase of August 4.
- 10 Sold goods for \$110,000; terms 2/10, n/30.
- 12 Returned \$26,000 of the merchandise purchased on August 4.
- 14 Paid the amount due on the purchase of August 4.

Prepare journal entries for the transactions.

Required

Edwardo Auto Parts Company and Spoon Company engaged in the following transactions with each other during August 2018:

Problem 6-2A

Journalize merchandise transactions on both buyer's and seller's books (L.O. 1, 3, 4)

- Aug. 15 Edwardo Auto Parts Company purchased merchandise on account with a list price of \$220,000 from Spoon Company. Trade discounts of 20% and 10% were allowed. Terms were 2/10, n/30, FOB destination, freight prepaid.
- 16 The seller paid the freight charges, \$2,800.
- 17 The buyer requested an allowance of \$4,700 against the amount due because the goods were damaged in transit.
- 20 The seller granted the allowance requested on August 17.

The buyer paid the amount due on the last day of the discount period.

Record all of the entries required on the books of both the buyer and the seller.

Required

Problem 6-3A

Prepare and post journal entries, and prepare trial balance and classified income statement (L.O. 1–6)

Gardner Company engaged in the following transactions in June 2018, the company's first month of operations:

- June**
- 1 Stockholders invested \$384,000 cash and \$250,000 of merchandise inventory in the business in exchange for capital stock.
 - 3 Merchandise was purchased on account, \$192,000; terms 2/10, n/30, FOB shipping point, freight collect.
 - 4 Paid freight on the June 3 purchase, \$5,280.
 - 7 Merchandise was purchased on account, \$96,000; terms 2/10, n/30, FOB destination, freight prepaid.
 - 10 Sold merchandise on account, \$230,400; terms 2/10, n/30, FOB shipping point, freight collect.
 - 11 Returned \$28,800 of the merchandise purchased on June 3.
 - 12 Paid the amount due on the purchase of June 3.
 - 13 Sold merchandise on account, \$240,000; terms 2/10, n/30, FOB destination, freight prepaid.
 - 14 Paid freight on sale of June 13, \$14,400.
 - 20 Paid the amount due on the purchase of June 7.
 - 21 \$48,000 of the goods sold on June 13 were returned for credit.
 - 22 Received the amount due on sale of June 13.
 - 25 Received the amount due on sale of June 10.
 - 29 Paid rent for the administration building for June, \$19,200.
 - 30 Paid sales salaries of \$57,600 for June.
 - 30 Purchased merchandise on account, \$48,000; terms 2/10, n/30, FOB destination, freight prepaid.

Additional data 

Required 

The inventory on hand on June 30 was \$288,000.

- a. Prepare journal entries for the transactions.
- b. Post the journal entries to the proper ledger accounts. Use the account numbers in the chart of accounts shown in a separate file at the end of the text. Assume that all postings are from page 10 of the general journal.
- c. Prepare a trial balance as of June 30, 2018.
- d. Prepare a classified income statement for the month ended June 30, 2018. No adjusting entries are needed.

Problem 6-4A

Prepare and post journal entries; prepare trial balance and classified income statement (L.O. 1–6)

Organized on May 1, 2018, Noah Cabinet Company engaged in the following transactions:

- May**
- 1 The stockholders invested \$900,000 in this new business by purchasing capital stock.
 - 1 Purchased merchandise on account from String Company, \$46,800; terms n/60, FOB shipping point, freight collect.
 - 3 Sold merchandise for cash, \$28,800.
 - 6 Paid transportation charges on May 1 purchase, \$1,440 cash.
 - 7 Returned \$3,600 of merchandise to String Company due to improper size.
 - 10 Requested and received an allowance of \$1,800 from String Company for improper quality of certain items.
 - 14 Sold merchandise on account to Texas Company, \$18,000; terms 2/20, n/30, FOB shipping point, freight collect.
 - 16 Issued cash refund for return of merchandise relating to sale made on May 3, \$180.
 - 18 Purchased merchandise on account from Tan Company invoiced at \$28,800; terms 2/15, n/30, FOB shipping point, freight collect.
 - 18 Received a bill for freight charges of \$900 from Ball Trucking Company on the purchase from Tan Company.
 - 19 Texas Company returned \$360 of merchandise purchased on May 14.
 - 24 Returned \$2,880 of defective merchandise to Tan Company. Received full credit.

- 28 Texas Company remitted balance due on sale of May 14.
- 31 Paid Tan Company for the purchase of May 18 after adjusting for the transaction of May 24.
- 31 Paid miscellaneous selling expenses of \$8,200.
- 31 Paid miscellaneous administrative expenses of \$11,800.

The May 31 inventory is \$62,600.

◀ Additional data

From the data for Noah Cabinet Company:

◀ Required

- a. Journalize the transactions. Round all amounts to the nearest dollar.
- b. Post the entries to the proper ledger accounts. Use the account numbers appearing in the chart of account shown in a separate file at the end of the text. Assume all postings are from page 5 of the general journal. (There were no adjusting journal entries.)
- c. Prepare a trial balance.
- d. Prepare a classified income statement for the month ended May 31, 2018.

The following data are for Bayer Lamp Company:

Problem 6-5A

Prepare a work sheet, classified income statement, statement of retained earnings, classified balance sheet, and closing entries (based on Appendix (L.O. 5–8))

BAYER LAMP COMPANY
Trial Balance
December 31, 2018

Acct. No.	Account Title	Debits	Credits
100	Cash	\$ 278,800	
103	Accounts Receivable	193,200	
105	Merchandise Inventory, January 1, 2018	166,400	
108	Prepaid Insurance	11,600	
130	Land	240,000	
140	Building	440,000	
141	Accumulated Depreciation—Building		\$ 132,000
174	Store Fixtures	222,400	
175	Accumulated Depreciation—Store Fixtures		44,480
200	Accounts Payable		151,600
300	Capital Stock		450,000
310	Retained Earnings, 1/1/18		480,720
410	Sales		2,206,000
411	Sales Discounts	14,800	
412	Sales Returns and Allowances	8,000	
418	Interest Revenue		1,600
500	Purchases	1,251,600	
501	Purchases Discounts		10,400
502	Purchases Returns and Allowances		5,600
503	Transportation-In	29,200	
505	Advertising Expense	48,000	
508	Sales Salaries Expense	256,000	
509	Office Salaries Expense	296,000	
519	Delivery Expense	18,400	
540	Interest Expense	8,000	
		\$3,482,400	\$3,482,400

- 1. Depreciation expense on the store building is \$8,800.
- 2. Depreciation expense on the store fixtures is \$22,240.
- 3. Accrued sales salaries are \$5,600.
- 4. Insurance expired in 2018 is \$10,000.
- 5. Cost of merchandise inventory on hand December 31, 2018, is \$222,000.

◀ Additional data

Prepare the following:

- a. A work sheet for the year ended December 31, 2018. Refer to the chart of accounts shown in a separate file at the end of the text for any other account numbers you need.
- b. A classified income statement. The only administrative expenses are office salaries and insurance. The building depreciation is on the store building.
- c. A statement of retained earnings.
- d. A classified balance sheet.
- e. The required closing entries.

Beyond the Numbers—Critical Thinking

Business Decision Case 6-1

Prepare income statements and evaluate feasibility (L.O. 5, 6)

Candy's Shirts, Inc., has an opportunity to purchase 30,000 shirts with the logo of her favorite school in January 2017. Candy, who is not currently in business, is considering buying these shirts and then renting a display cart from which to sell these shirts (called a kiosk) in a shopping mall. Based on the following information and estimates, Candy needs to decide if the business would be profitable:

1. Cost of the 30,000 shirts, all of which must be purchased in January 2017, is \$330,000.
2. Candy thinks it would take two years to sell all of the shirts. She estimates her sales at 20,000 shirts in 2017 and 10,000 shirts in 2018.
3. Rent of the kiosk would be \$1,100 per month in 2017 and \$1,200 per month in 2018.
4. Candy can buy some counters on which to display the merchandise for \$3,000. She could sell the counters for \$500 at the end of the second year.
5. Candy estimates the cost to decorate her kiosk would be \$2,000.
6. Candy would hire employees and pay them \$1 per shirt sold.
7. Candy plans to sell the shirts for \$22 each.
8. Candy and her husband will invest \$100,000 in the business in exchange for capital stock. She plans to borrow \$400,000 from their family banker. Interest expense on this loan will be \$40,000 in 2017 and \$5,000 in 2018. Candy plans to repay \$300,000 on January 2, 2018, and the remaining \$100,000 on July 1, 2018.
9. Candy needs to rent some storage space because all 30,000 shirts cannot be stored at the kiosk. Storage space costs \$2,000 per year.
 - a. Prepare estimated income statements for 2017 and 2018 for Candy's business. Does it appear that the business will be profitable?
 - b. Will Candy have the cash available to pay the bank loan as she planned?

Business Decision Case 6-2

Analyze the importance of the gross margin percentage (L.O. 8)

In the Annual Report Appendix, refer to the consolidated statements of income for Apple Inc. Calculate the gross margin percentage and write an explanation of what the results mean for each of the three years presented.

Annual Report Analysis 6-3

Classify income statement items and calculate gross margin percentages (L.O. 6, 7)

Refer to the consolidated statements of income of Apple Inc., in the Annual Report Appendix. Identify the 2016, 2015, and 2014 net sales; cost of sales; research and development expenses; selling, general, and administrative expenses; and operating income. Do the results present a favorable trend? Comment on the results.

Ethics Case—Writing Experience 6-4

Respond to questions regarding ethics case

Based on the ethics case related to World Auto Parts Corporation on page 245, respond in writing to the following questions:

- a. Do you agree that the total impact of this practice could be as much as \$10 million?
- b. Are the small suppliers probably better off going along with the practice?
- c. Is this practice ethical?

In teams of two or three students, go to the library (or find an annual report at www.sec.gov/edgar/searchedgar/companysearch.html) to locate one merchandising company's annual report for the most recent year. Calculate the company's gross margin percentage for each of the most recent three years. As a team, write a memorandum to the instructor showing your calculations and commenting on the results. The heading of the memorandum should contain the date, to whom it is written, from whom, and the subject matter.

In a team of two or three students, contact a variety of businesses in your area and inquire as to the types of sales discount terms they offer to credit customers and the types of purchase discount terms they are offered by their suppliers. Calculate the approximate annual rate of interest implied in several of the more common discount terms. For instance, the implied annual rate of interest on terms of 2/10, n/30 is 36%, assuming we use a 360-day year. Present your findings in a written report to your instructor.

In a team of two or three students, obtain access to several annual reports of companies in different industries (see www.sec.gov/edgar/searchedgar/companysearch.html). Examine their income statements and identify differences in their formats. Discuss these differences within your group, and then present your findings in a report to your instructor.

Visit the Hasbro, Inc., website at:

www.hasbro.com

Browse around the site for interesting information. What products does Hasbro sell? What journal entries would Hasbro make to record sales of these products? Write a report to your instructor summarizing your experience at this site.

Group Project 6-5

Undertake library project concerning annual reports—gross margin percentages (L.O. 7)

Group Project 6-6

Investigate sales and purchase discounts offered

Group Project 6-7

Study income statements in annual reports

Internet Project 6-8

Investigate the Hasbro website

Answers to Self-Test

True/False

- 1. False.** Sales discounts, as well as sales returns and allowances, are deducted from gross sales.
- 2. True.** Under the perpetual inventory procedure, the Merchandise Inventory account is debited for each purchase and credited for each sale.
- 3. True.** Purchase Discounts and Purchase Returns and Allowances are contra accounts to the Purchases

account. The balances of those accounts are deducted from purchases to arrive at net purchases.

- 4. False.** Consigned goods delivered to another party for attempted sale are included in the ending inventory of the company that sent the goods.
- 5. False.** An unclassified income statement, not a classified income statement, has only two categories of items.

Multiple Choice

- 1. d.** Trade discounts are not recorded on the books of either a buyer or a seller. In other words, the invoice price of sales (purchases) is recorded:
 $\$4,000 \times 0.8 = \$3,200$
- 2. b.** The cost of goods sold is computed as follows:

Beginning inventory	\$ 60,000
Net cost of purchases	<u>240,000</u>
Cost of goods available for sale	\$300,000
Ending inventory	<u>72,000</u>
Cost of goods sold	<u>\$228,000</u>

$$\begin{aligned} \text{Purchase discount} &= (\$12,000 - \$2,000) \times 0.02 \\ &= \$200 \end{aligned}$$

- 3. b.** Purchase discounts are based on invoice prices less purchase returns and allowances, if any.

- 4. e.** All of the sections mentioned in (a–d) appear in a classified income statement. Current assets appear on a classified balance sheet.
- 5. b.** Merchandise Inventory is debited for the cost of ending inventory.