

## 3

## OBJECTIVES

After reading this chapter, you will be able to:

- 1 Understand the components of an accounting system.
- 2 Know the major steps in the accounting cycle.
- 3 Prepare journal entries in the general journal.
- 4 Post to the general ledger and prepare a trial balance.
- 5 Prepare adjusting entries.
- 6 Prepare financial statements.
- 7 Prepare closing entries.
- 8 Complete a worksheet (spreadsheet).
- 9 Prepare reversing entries.
- 10 Use subsidiary ledgers.
- 11 Understand special journals.
- 12 Convert cash-basis financial statements to accrual-basis (Appendix).

## Review of a Company's Accounting System

### Houston, We Have a Problem!

Maintaining an accounting information system is essential to ensuring that economic transactions and financial information are properly entered into the accounting records and that financial reports are prepared in an accurate and timely fashion. The consequences of a dysfunctional accounting system can lead to widespread organizational problems. For example, at **NASA**, problems with the implementation of an enterprise-wide accounting system were blamed for more than \$565 billion of inadequately documented year-end adjustments. A 2003 Government Accounting Office (GAO) report indicated that the existing accounting system impaired NASA's ability to collect, maintain, and report the full costs of its projects and programs. Further, the GAO noted that NASA's accounting system could not provide adequate cost data for planning purposes nor did it enable effective monitoring of work performed. Instances such as this illustrate the critical need of a well-functioning accounting system as an ingredient to any successful business endeavor.

In addition to organizational problems caused by sloppy bookkeeping, well-known cases such as **Enron**, **WorldCom**, and **HealthSouth** have shown how inadequate controls over accounting systems can result in massive financial frauds. To address these concerns, Section 404 of the **Sarbanes-Oxley Act** requires management to take responsibility for establishing and maintaining adequate internal controls over financial reporting



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as well as providing an assessment of the effectiveness of the internal controls. The existence of effective internal controls over financial reporting, coupled with independent verification of these controls, should reduce the probability of accounting irregularities occurring while improving transparency of the financial reporting process. A 2004 survey by Financial Executives International (FEI) estimates that first-year compliance costs with Section 404 will average \$4.6 million and 35,000 hours of internal manpower for each of the largest U.S. companies. While the costs and benefits of the internal control reporting responsibilities are controversial, one goal of these new regulations is to ensure that each company's accounting system produces relevant and reliable financial reports.

### FOR FURTHER INVESTIGATION

For a discussion of the effects of Sarbanes-Oxley Act on the accounting profession, consult the Business & Company Resource Center (BCRC):

- *Revenge of the Bean Counters: No longer frail in the face of fraud, accounting firms are thriving on new laws that give them real clout.* Daren Fonda, *Time*, 0040-781X, March 29, 2004, v163, i13, p38.

A primary objective of financial reporting is to provide information that is useful to present and potential investors, and to creditors and other users in making rational investment, credit, and similar decisions.<sup>1</sup> A company provides this information in its financial statements and the accompanying notes. These statements are the result of the company's financial accounting process, which we discuss throughout this book. To understand financial accounting, you need to be familiar with the accounting system that a company uses to accumulate the information in its financial statements. This system is the topic of this chapter.

## THE ACCOUNTING SYSTEM

A major purpose of a company's accounting system is to provide useful information to both external users and to the company's managers for making operating decisions. Many transactions result in important financial and managerial accounting information. **An accounting system is the means by which a company records and stores the financial and managerial information from its transactions so that it can retrieve and report the information in an accounting statement.** All companies have accounting systems, ranging from the very simple, such as a checkbook, to the very complex, involving the use of networked computers.

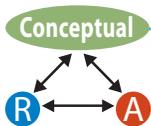
In this chapter we present the basics of a *financial* accounting system that a company can use in either a manual or a computer accounting process. For convenience, our discussion is primarily in terms of a manual system. The components of an accounting system include (1) the framework for operation of the system, (2) the input source documents, (3) the records used to store accounting information, and (4) the output reports. We discuss each of these components in later sections.

1 Understand the components of an accounting system.

### Accounting Equation

The steps in a company's accounting system include:

- identifying the events occurring within its economic environment that are financial transactions,
- gathering the documents related to these transactions,
- analyzing the documents to determine the relevant financial information to be recorded,
- recording the financial information, and
- storing this information for future retrieval and use.

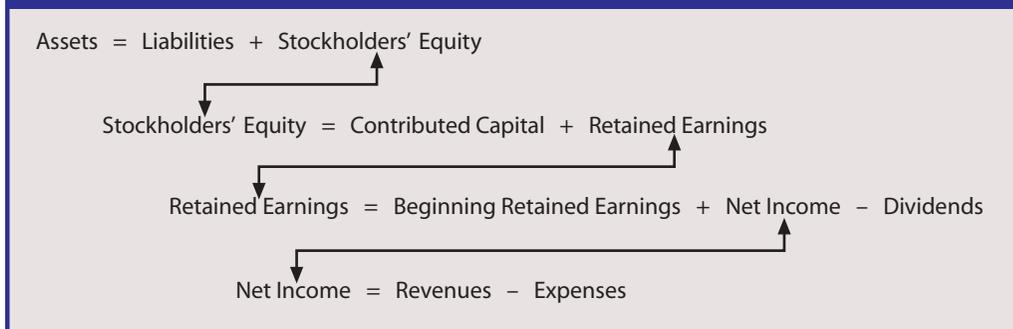


A basic accounting model provides a framework for the accounting system and is the basis for recording transactions. This model for a corporation, called the **residual equity theory** model, is usually expressed in an equation as follows:

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

where **assets** are the corporation's economic resources, **liabilities** are its obligations owed to creditors, and **stockholders' equity** is the owners' residual interest in its assets. This equation must remain in balance at all times because each side presents a different "picture" of the same information. That is, the left side summarizes the corporation's economic resources while the right side summarizes the sources of (or claims to) the economic resources. Other equations related to information wanted by external users evolve from this basic equation. We show these interrelated equations in Exhibit 3-1.

1. "Objectives of Financial Reporting by Business Enterprises," *FASB Statement of Financial Accounting Concepts No. 1* (Stamford, Conn.: FASB, 1978), par. 34.

**EXHIBIT 3-1 Interrelated Accounting Equations**

**Contributed capital** includes the amounts of stockholder investments resulting from the sale of shares of stock by the corporation, while **retained earnings** is the lifetime amount of net income reinvested in the corporation and not distributed to stockholders.<sup>2</sup> **Dividends** (which are *not* expenses) are the amounts distributed to stockholders as a return on their investment. **Revenues** are charges to customers for goods or services provided and **expenses** are the costs incurred by the corporation to provide the goods or services.<sup>3</sup>

### Transactions, Events, and Supporting Documents

For financial accounting purposes, a change in a company's economic resources (assets), obligations (liabilities), or residual interest (stockholders' equity) may be caused by a transaction or an event. A **transaction** involves the transfer of something valuable between the company and another party. An **event** is a "happening" that affects the company. The event may be *internal*, such as using equipment in operations, or *external*, such as a decline in the value of an asset. The company records the transactions and events affecting its economic resources and obligations in its accounting system. The company uses business documents, or **source documents**, relating to these transactions and events as initial information for the recording process. These documents (such as sales invoices, checks, and freight bills) normally contain information about the monetary amount to be recorded, the parties involved, the terms of the transactions, and other relevant information. After the company records a transaction or event, it stores the supporting source documents to verify its accounting records.

### Accounts

Within the accounting system, a company uses accounts to store the recorded monetary information from its transactions and events. It keeps a separate account for each asset, liability, revenue, expense, and other stockholders' equity item. Examples of these accounts include Cash, Accounts Receivable (amounts due from customers), Buildings, Accounts Payable (amounts owed to suppliers), Mortgage Payable, Sales Revenue, Cost of Goods Sold, Salaries Expense, Capital Stock, Retained Earnings, and Dividends Distributed. The company assigns each account a number in its **chart of accounts**, a numbering system designed to organize its accounts efficiently and to minimize errors in the recording process.

2. A company may also have accumulated other comprehensive income which we discuss in Chapters 4 and 5.
3. In this chapter, for simplicity, we include *gains* (those revenues from other than the sale of goods or services) in revenues and we include *losses* (those costs incurred that provide no revenues) in expenses. Throughout the book, we discuss and classify gains and losses separately from revenues and expenses.

An account can be in several physical forms. It might be a location on a computer disk or a standardized business form in a manual system. A single logical format is used for all accounts. The format for the accounts in a manual system is called a *T-account*. Each T-account has a left (or *debit*) and a right (or *credit*) side for storing monetary information. Since each account accumulates information about both increases and decreases resulting from various transactions or events, there is a “double-entry” rule for recording these changes. **In the double-entry system, for each transaction or event that a company records, the total dollar amount of the debits entered in all the related accounts must be equal to the total dollar amount of the credits.**

The framework of an accounting system includes the accounts in the basic accounting equation as well as the double-entry system. In an accounting system, all accounts on the left side of the equation (assets) are increased by debits (entries on the left side of the accounts) and decreased by credits, while accounts on the right side of the equation (liabilities and stockholders' equity) are increased by credits (entries on the right side of the accounts) and decreased by debits. The left side of Exhibit 3-2 shows this relationship.

Permanent Accounts						Temporary Accounts			
Assets		=	Liabilities		+	Stockholders' Equity			
<b>Asset Accounts</b>			<b>Liability Accounts</b>			<b>Capital Stock Accounts</b>		<b>Revenue Accounts</b>	
(debit)	(credit)		(debit)	(credit)	(debit)	(credit)	(debit)	(credit)	
Increase	Decrease		Decrease	Increase	Decrease	Increase	Decrease	Increase	
+	-		-	+	-	+	-	+	
						<b>Retained Earnings</b>		<b>Expense Accounts</b>	
					(debit)	(credit)	(debit)	(credit)	
					Decrease	Increase	Increase	Decrease	
					-	+	+	-	
							<b>Dividend Accounts</b>		
							(debit)	(credit)	
							Increase	Decrease	
							+	-	

For example, suppose that stockholders invest \$20,000 in a corporation by purchasing 2,000 shares of its no-par stock at \$10 per share. The corporation records this transaction as a debit (increase) of \$20,000 to an asset account, Cash, and as a \$20,000 credit (increase) to a contributed capital account in stockholders' equity, Capital Stock. Note that the accounting equation remains in balance (both sides increase by \$20,000) and that the total debits equal the total credits.

Assets		=	Liabilities		+	Stockholders' Equity	
Cash						Capital Stock	
(debit)						(credit)	
+						+	
20,000						20,000	

Accounts are classified as permanent (or real) accounts and temporary (or nominal) accounts. The **permanent accounts** are the asset, liability, and stockholders' equity accounts whose balances at the *end* of the accounting period are carried forward into the

next accounting period. The accounts on the far right of Exhibit 3-2, namely the revenue, expense, and dividend accounts, are **temporary accounts**. They are “temporarily” used to determine the changes in retained earnings that occur *during* an accounting period, and their account balances are *not* carried forward into the next period. Exhibit 3-2 also shows the rules for recording transactions in temporary accounts. Because an increase in revenues causes an increase in retained earnings, the rules for recording transactions in revenue accounts are the same as those for retained earnings. However, because an increase in temporary accounts such as expenses and dividends causes a decrease in retained earnings, the rules for recording transactions in these accounts are the *opposite* of those for retained earnings.<sup>4</sup> For instance, since the payment of dividends reduces retained earnings, an increase in a Dividend account is recorded as a debit.

Sometimes a company will use a **contra** (or negative) account to show a reduction in a related account. The rules for increasing or decreasing a contra account are also exactly the *opposite* of those for the related account. A contra account may be related to a permanent account or to a temporary account. For instance, a company uses an Accumulated Depreciation account to accumulate the depreciation recorded for Buildings. We illustrate contra accounts in a later section.

**The balance of an account on a particular date is the difference between the total debits and credits recorded in that account.** A company uses these balances in the preparation of its financial statements.

## Financial Statements

A company’s financial statements are summary reports from its accounting system. These statements are based on the interrelated equations presented earlier. As we introduced in Chapter 2, the major financial statements of a company include (1) the income statement, (2) the balance sheet (alternatively called the statement of financial position), and (3) the statement of cash flows.<sup>5</sup> A company prepares its financial statements at the end of each fiscal year, called the **accounting period**. The set of financial statements and accompanying supporting schedules and notes, along with other information distributed to the various external users, is called the company’s **annual report**. A company often prepares financial statements for a shorter time period, such as three months. These are called **interim** (or quarterly) statements.

**The income statement summarizes the results of a company’s income-producing activities for the accounting period.** In the income statement, the company’s net income is determined by subtracting the total expenses from the total revenues. A supporting schedule (statement) is usually prepared to tie the income statement to the balance sheet. **The statement of retained earnings summarizes the amount of a company’s net income retained in the business.** This procedure involves adding the net income for the period to the balance in the retained earnings account at the beginning of the period, and subtracting the dividends distributed to stockholders.

**The balance sheet summarizes the amounts of a company’s assets, liabilities, and stockholders’ equity at the end of the accounting period.** The stockholders’ equity section includes the ending retained earnings balance from the statement of retained earnings. The balance sheet is so named because it is an expansion of the basic accounting equation, which always remains in balance. Because of the “linkage” between the income statement, statement of retained earnings, and balance sheet due to net income and retained earnings, these financial statements are said to be **articulated**. We illustrate these statements later in Examples 3-5, 3-6, and 3-7.



4. Since *gains* are similar to revenues and *losses* are similar to expenses, the rules for increasing these accounts are the same as those for revenues and expenses, respectively.

5. Some companies also have a fourth major financial statement for reporting their “comprehensive income.” We discuss this topic in Chapters 4 and 5.

The third major statement, **the statement of cash flows, summarizes a company's cash receipts and cash payments during the accounting period.** We do not show it here but briefly discuss it in Chapter 4 and more fully in Chapter 22. The statement of cash flows articulates with the balance sheet because it reconciles the beginning cash balance with the ending cash balance. We also discuss other supporting schedules, such as the schedule of changes in stockholders' equity and the schedule of investing and financing activities not involving cash receipts or cash payments, in Chapters 4 and 22.



### SECURE YOUR KNOWLEDGE 3-1

- The framework of the financial accounting system is based on an equality between the corporation's resources (assets) and the claims on those resources (liabilities and stockholders' equity).
- The inputs to this accounting system are source documents that contain information about transactions (internal or external) that affect a corporation's economic resources or obligations.
- The monetary information from transactions is recorded and stored in accounts so that each transaction has a dual effect on the accounting system (debits equal credits).
- The output of a financial accounting system is the financial statements: the income statement, the statement of retained earnings, the balance sheet, and the statement of cash flows.

## THE ACCOUNTING CYCLE

A company completes a series of steps during each accounting period to record, store, and report the accounting information contained in its transactions. These steps are referred to as the **accounting cycle**. The *major* steps include:

1. Record the daily transactions in a journal
2. Post the journal entries to the accounts in the ledger
3. Prepare and post adjusting entries
4. Prepare the financial statements
5. Prepare and post closing entries for the revenue, expense, and dividend accounts

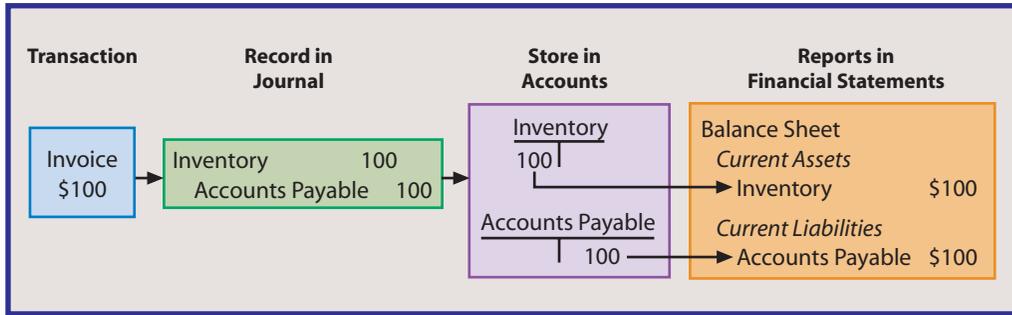
We explain each of the steps in the accounting cycle in the following sections. We explain the steps in terms of a manual accounting system, but most companies use a computer system based on accounting software. This software follows the same procedures as a manual system. We briefly discuss this software at the end of the chapter.

Before we discuss these steps, on the top of the next page we show a diagram so you can see how accounting information from one transaction "flows through" a company's accounting system. For simplicity, the diagram assumes the company purchases inventory of \$100 on credit, but has not yet sold or paid for the inventory by the end of the accounting period. You can see that the accounting cycle starts with the company recording the transaction based on the information in a source document (in this case, an invoice). The information is then stored in the company's accounts until needed. Finally, the cycle ends with reporting the information on one of the company's financial statements (in this case, its balance sheet).

### Recording in the General Journal (Step 1)

A company initially records its transactions (and events) in a journal. A company *could* record all its transactions in a single journal, called the **general journal**. We use a general

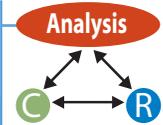
2 Know the major steps in the accounting cycle.



journal in this chapter. However, many companies have a number of different **special journals**, each designed to record a particular type of transaction. We briefly discuss special journals in a later section of this chapter.

The general journal consists of a date column, a column to list the accounts affected by each transaction, a column to list the account numbers (to save space, we do *not* use account numbers in the subsequent comprehensive illustration), a debit column, and a credit column to list the amounts recorded as a debit or credit to each account. Just below each journal entry is a written explanation of the transaction. **The process of recording the transaction in the journal is called journalizing. The resulting entry is referred to as a journal entry.** We show a general journal in Example 3-2 later in this chapter.

There are a number of advantages to using a general journal. First, it helps prevent errors. Because the accounts and debit and credit amounts for each transaction are initially recorded on a single journal page, rather than directly in the numerous accounts, it is easier to verify the equality of the debits and credits. Second, all the transactional information (including the explanation) is recorded in one place, thereby providing a complete “picture” of the transaction. This is especially useful during the auditing process, or if an error is discovered later in the accounting cycle, because the general journal can be reviewed to determine the nature of the transaction. Finally, since the transactions are recorded as they occur, the journal provides a chronological record of the company’s financial transactions.



To show the entire accounting cycle, we present a comprehensive example throughout this section. Dapple Corporation incorporates on January 1, 2007 as a wholesaler. It purchases one product from suppliers and resells this inventory to commercial customers. It opens for business on April 1, 2007. The company uses a perpetual inventory system. Under a **perpetual inventory system**, the inventory account is updated each time the company makes a purchase or sale. When the company purchases inventory, it records the increase (debit) directly in its Inventory account. When it makes a sale, it makes *two* journal entries. The first entry records the sales revenue at the retail price. The second entry records an increase (debit) in the Cost of Goods Sold account (a major expense) and a decrease (credit) in the Inventory account for the cost of the inventory.<sup>6</sup> During 2007, the company engages in several transactions. Example 3-1 lists these transactions and an analysis of the accounts and amounts to be debited and credited. This analysis is based on a review of the related source documents. Some of these transactions are partially condensed and overly simplified so that we may show a variety of transactions.

Based on the transactional analysis listed in Example 3-1, the company prepares the general journal entries shown in Example 3-2. Traditionally, for each entry, the accounts to be debited are listed first. The accounts to be credited are listed next and indented. Finally, a brief explanation of the journal entry is made.

**3** Prepare journal entries in the general journal.

6. Some small companies use a periodic inventory system. We briefly discuss the periodic inventory system later in this chapter. We also discuss both the perpetual and periodic inventory systems more fully in Chapter 8.

**EXAMPLE 3-1 2007 Transactions and Analyses (Dapple Corporation)**

<b>Date</b>	<b>Transaction</b>	<b>Analysis</b>
01/01	Various stockholders invest in Dapple by purchasing 2,000 shares of no-par stock at \$10 per share.	Asset account Cash increased (debited) by \$20,000; stockholders' equity account Capital Stock increased (credited) by \$20,000.
01/16	Dapple purchases 2 acres of land as a building site, paying \$1,500 an acre.	Asset account Land increased (debited) by \$3,000; asset account Cash decreased (credited) by \$3,000.
03/30	A building is built and equipment purchased for \$15,320 and \$2,120, respectively. Dapple pays \$10,840 and signs a 12% note (interest and principal to be paid after 2 years) for the \$6,600 balance.	Asset accounts Building and Equipment increased (debited) by \$15,320 and \$2,120, respectively; asset account Cash decreased (credited) by \$10,840; liability account Notes Payable increased (credited) by \$6,600.
03/30	Dapple purchases a 1-year comprehensive insurance policy for \$360.	Asset account Prepaid Insurance increased (debited) by \$360; asset account Cash decreased (credited) by \$360.
03/31	Dapple purchases \$7,300 of inventory on credit from Bark Company.	Asset account Inventory increased (debited) by \$7,300; liability account Accounts Payable increased (credited) by \$7,300.
04/02	Dapple sells inventory at total cash selling price of \$8,000. The cost of the inventory was \$5,090.	Asset account Cash increased (debited) by \$8,000; revenue account Sales Revenue increased (credited) by \$8,000. Expense account Cost of Goods Sold increased (debited) by \$5,090; Asset account Inventory decreased (credited) by \$5,090.
04/08	Dapple pays \$7,300 to Bark for inventory purchase on 03/31.	Liability account Accounts Payable decreased (debited) by \$7,300; asset account Cash decreased (credited) by \$7,300.
07/15	Dapple makes \$3,300 cash purchase of inventory.	Asset account Inventory increased (debited) by \$3,300; asset account Cash decreased (credited) by \$3,300.
09/01	Dapple sells one acre of land (original cost \$1,500) for \$1,320. It accepts a 6-month, 15% note from buyer.	Asset account Notes Receivable increased (debited) by \$1,320; loss account Loss on Sale of Land increased (debited) by \$180; asset account Land decreased (credited) by \$1,500.
10/01	Dapple pays the first 6 months' salaries (April through September) totaling \$1,800 to employees.	Expense account Salaries Expense increased (debited) by \$1,800; asset account Cash decreased (credited) by \$1,800.
11/23	Dapple makes sales on credit of \$5,000 to Frank Company and \$4,000 to Knox Company. The cost of the inventory was \$5,400.	Asset account Accounts Receivable increased (debited) by \$9,000; revenue account Sales Revenue increased (credited) by \$9,000. Expense account Cost of Goods Sold increased (debited) by \$5,400; Asset account Inventory decreased (credited) by \$5,400.
12/01	Dapple rents part of its building to Fritz Company, receiving 3 months' rent in advance at \$150 per month.	Asset account Cash increased (debited) by \$450; liability account Unearned Rent increased (credited) by \$450.
12/02	Dapple collects \$2,000 of accounts receivable from Frank Company.	Asset account Cash increased (debited) by \$2,000; asset account Accounts Receivable decreased (credited) by \$2,000.
12/27	Dapple purchases \$1,900 of inventory on credit from Ajax Company.	Asset account Inventory increased (debited) by \$1,900; liability account Accounts Payable increased (credited) by \$1,900.
12/28	Dapple pays \$428 of miscellaneous operating expenses.	Expense account Other Expenses increased (debited) by \$428; asset account Cash decreased (credited) by \$428.
12/29	Dapple distributes dividends of \$500 (\$0.25 per share for 2,000 shares) to stockholders.	Dividends Distributed account increased (debited) by \$500; asset account Cash decreased (credited) by \$500.

**EXAMPLE 3-2 General Journal Entries (Dapple Corporation)**

Date	Account Titles and Explanations	Debit	Credit
2007			
Jan. 1	Cash Capital Stock Issued 2,000 shares of no-par stock at \$10 per share.	20,000	20,000
16	Land Cash Purchased 2 acres of land at \$1,500 per acre.	3,000	3,000
Mar. 30	Building Equipment Cash Notes Payable Purchased a building and equipment. The note bears annual interest of 12% and the principal and interest are due on March 30, 2009.	15,320 2,120	10,840 6,600
30	Prepaid Insurance Cash Purchased a 1-year comprehensive insurance policy.	360	360
31	Inventory Accounts Payable Purchased inventory for resale on credit from Bark Company.	7,300	7,300
Apr. 2	Cash Sales Revenue To record cash sales.	8,000	8,000
2	Cost of Goods Sold Inventory To record cost of sales.	5,090	5,090
8	Accounts Payable Cash Paid Bark Company for purchases made on credit on March 31.	7,300	7,300
July 15	Inventory Cash Purchased inventory for resale.	3,300	3,300
Sept. 1	Notes Receivable Loss Land Sold 1 acre of land at less than its cost, incurring a loss. Buyer issued a note due in 6 months and bearing 15% annual interest.	1,320 180	1,500
Oct. 1	Salaries Expense Cash Paid 6 months' of employees' salaries.	1,800	1,800
Nov. 23	Accounts Receivable Sales Revenue Made sales on credit to the Frank Company (\$5,000) and Knox Company (\$4,000).	9,000	9,000
23	Cost of Goods Sold Inventory To record cost of sales.	5,400	5,400

(continued)

**Posting to the Ledger (Step 2)**

A general ledger is the entire group of accounts for a company. It might take several forms, such as a storage location on a computer disk, or in the case of our manual system, a loose-leaf binder with a page for each T-account. After a company journalizes its transactions and events in a general journal, it updates each account in the general ledger. This is done through the process of **posting**. Posting involves transferring the date and debit and credit amounts from the journal entries in the general journal to the debit and credit

**4** Post to the general ledger and prepare a trial balance.

**EXAMPLE 3-2 (Continued)**

Date	Account Titles and Explanations	Debit	Credit
Dec. 1	Cash Unearned Rent Received 3 months' rent in advance at \$150 per month. Company owes use of portion of building to Fritz Company for the 3-month period.	450	450
2	Cash Accounts Receivable Frank Company paid a portion of its accounts receivable.	2000	2000
27	Inventory Accounts Payable Purchased inventory on credit from Ajax Company.	1,900	1,900
28	Other Expenses Cash Paid miscellaneous operating expenses.	428	428
29	Dividends Distributed Cash Distributed dividends of \$0.25 per share to stockholders.	500	500

sides of the accounts in the general ledger. Thus, **after posting, the general ledger accounts contain the same information as in the general journal, just in a different format.** Example 3-3 shows *all* the accounts in the general ledger of the Dapple Corporation. To conserve space, these accounts include the postings not only for the journal entries shown in Example 3-2, but also for the *adjusting* entries (*Adj* is shown in the account) and the *closing* entries (*Cl*) discussed later in Examples 3-4 and 3-9.<sup>7</sup>

### Trial Balance

After a company prepares and posts its journal entries for the accounting period, it determines the balance in each account. Then a trial balance is often prepared. **A trial balance is a working paper that lists all the company's general ledger accounts and their account balances.** These account balances are listed in either the debit or the credit column. The trial balance is used to verify that the total of the debit balances is equal to the total of the credit balances. This working paper is not shown here but is included on the worksheet in Example 3-10.



If a trial balance does not balance, there is an error. To find the error, add the debit and credit columns of the trial balance again. If the column totals do not agree, check the amounts in the debit and credit columns to be sure that a debit or credit account balance was not mistakenly listed in the wrong column. If the error is still not found, compute the difference in the column totals and divide by 9. When the difference is evenly divisible by 9, there is a good chance that a *transposition* or a *slide* has occurred. A transposition occurs when two digits in a number are mistakenly reversed. For instance, if the \$1,500 Land balance is listed as \$5,100 on the trial balance in Example 3-10, the debit column would total \$49,550 instead of \$45,950. The difference, \$3,600, is evenly divisible by 9. A slide occurs when the digits are listed in the correct order but are mistakenly moved one decimal place to the left or right. For instance, in Example 3-10 if the \$1,900 Accounts Payable balance is listed as \$190, the credit column would total \$44,240 instead of \$45,950. The \$1,710 difference is evenly divisible by 9.

7. A company may also use subsidiary ledgers, such as an accounts receivable subsidiary ledger and an accounts payable subsidiary ledger. We discuss subsidiary ledgers later in this chapter.

**EXAMPLE 3-3 General Ledger (Dapple Corporation)**

<b>Cash</b>		01/16 3,000		<b>Accumulated Depreciation: Building</b>		<b>Interest Revenue</b>	
01/01	20,000	03/30	10,840	12/31 Adj 264		12/31 Cl	66
04/02	8,000	03/30	360	<b>Equipment</b>		<b>Rent Revenue</b>	
12/01	450	04/08	7,300	03/30	2,120	12/31 Cl	150
12/02	2,000	07/15	3,300	<b>Accumulated Depreciation: Equipment</b>		<b>Cost of Goods Sold</b>	
		10/01	1,800	12/31 Adj 120		04/02	5,090
		12/28	428			10/23	5,400
		12/29	500			<b>Salaries Expense</b>	
-----				<b>Accounts Payable</b>		12/31 Cl 2,700	
Balance	2,922			04/08	7,300	12/31 Adj	900
				12/27 1,900		<b>Other Expenses</b>	
<b>Accounts Receivable</b>				-----		12/28 428	
11/23	9,000	12/02 2,000		Balance 1,900		<b>Loss on Sale of Land</b>	
-----				<b>Notes Payable</b>		09/01 180	
Balance	7,000			03/30 6,600		<b>Depreciation Expense: Building</b>	
				<b>Salaries Payable</b>		12/31 Adj 264	
<b>Allowance for Doubtful Accounts</b>				12/31 Adj 900		<b>Depreciation Expense: Equipment</b>	
		12/31 Adj 170		<b>Interest Payable</b>		12/31 Adj 120	
<b>Notes Receivable</b>				12/31 Adj 594		<b>Bad Debts Expense</b>	
09/01	1,320			<b>Income Taxes Payable</b>		12/31 Adj 170	
				12/31 Adj 600		<b>Insurance Expense</b>	
<b>Interest Receivable</b>				<b>Unearned Rent</b>		12/31 Adj 270	
12/31 Adj	66			12/31 Adj 150		<b>Interest Expense</b>	
				12/01 450		12/31 Adj 594	
<b>Inventory</b>		04/02 5,090		Balance 300		<b>Income Tax Expense</b>	
03/31	7,300	11/23	5,400	<b>Capital Stock</b>		12/31 Adj 600	
07/15	3,300			01/01 20,000		<b>Income Summary</b>	
12/27	1,900			<b>Retained Earnings</b>		12/31 Cl 15,816	
-----				12/31 Cl 500		12/31 Cl 1,400	
Balance	2,010			Balance 900		12/31 Adj 600	
<b>Prepaid Insurance</b>				<b>Dividends Distributed</b>			
03/30	360	12/31 Adj 270		12/29 500		12/31 Cl 500	
-----				<b>Sales Revenue</b>			
Balance	90			12/31 Cl 17,000		04/02 8,000	
						11/23 9,000	
<b>Land</b>		09/01 1,500					
01/16	3,000						
-----							
Balance	1,500						
<b>Building</b>							
03/30	15,320						

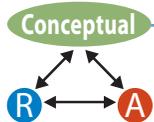
If a transposition or slide has occurred, the error may have occurred when the account balances were transferred from the accounts to the trial balance or when the account balances were computed initially. To find the error, first compare the account balances listed on the trial balance with the account balances listed in the ledger. Then recompute the ledger account balances, and if no error is found, double-check the postings. Finally, review the journal entries for accuracy.

If the trial balance is in balance, it is likely that (1) equal debit entries and credit entries were recorded for each transaction; (2) the debit and credit entries are posted to the accounts; and (3) the account balances are correctly computed. The equality of the debit and credit totals, however, does not necessarily mean that the information in the accounting system is error-free. A trial balance does not pick up several types of errors. First, an entire transaction may not have been journalized. Second, an entire transaction may not

have been posted to the accounts. Third, equal debits and credits, but of the wrong amount, may have been recorded for a transaction. Fourth, a transaction may have been journalized to a wrong account. Finally, a journal entry may have been posted to the wrong account.

### Preparation of Adjusting Entries (Step 3)

#### 5 Prepare adjusting entries.



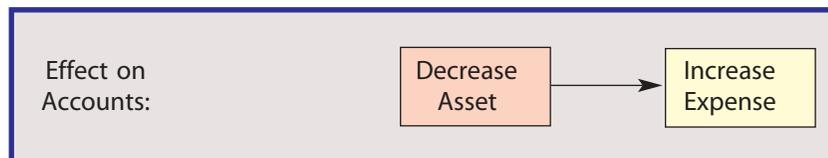
Most companies use generally accepted accounting principles which require the accrual method of accounting. Under *accrual accounting*, a company records revenues in the accounting period in which they are earned and realized (or realizable). The company also records (matches) expenses in the accounting period in which they are incurred, regardless of the inflow or outflow of cash. In many instances, not all accounts are up to date at the end of the accounting period. A company must *adjust* certain amounts so that all its revenues and expenses are recorded and its balance sheet accounts have correct ending balances. **Adjusting entries are journal entries made at the end of the accounting period so that a company's financial statements include the correct amounts for the current period.**

An adjusting entry ordinarily affects both a permanent (balance sheet) and a temporary (income statement) account. Adjusting entries may be classified into three categories. These categories and the types of balance sheet accounts involved in the adjusting entries are:

1. Apportionment of prepaid and deferred items
  - a. Prepaid expenses
  - b. Deferred revenues
2. Recording of accrued items
  - a. Accrued expenses
  - b. Accrued revenues
3. Recording estimated items

### Prepaid Expenses

A prepaid expense (sometimes called a prepaid asset) is a good or service purchased by a company for its operations but not fully used up by the end of the accounting period. When the company initially purchases the good or service, it records the *cost* as an asset (prepaid expense). At the end of the accounting period, the company has used some of these goods or services to generate revenues. The costs are systematically *matched*, as expenses, against the current revenues, while the unused cost remains as an asset on the balance sheet. Examples of prepaid expenses include prepaid rent, office supplies, and prepaid insurance. Below we show the effect of a prepaid expense adjusting entry on a company's accounts. Then we explain Dapple Corporation's related adjusting entry.



In the Dapple Corporation example, it purchased a one-year comprehensive insurance policy on March 30, 2007. It recorded an asset, Prepaid Insurance, for \$360. At the end of the year, nine months of insurance coverage has expired while three months of coverage remains in force. The cost is apportioned as an expense on a straight-line basis (an equal amount each month). Insurance Expense is increased (debited) by \$270 (\$30 per month for nine months) and Prepaid Insurance decreased (credited) by \$270. The result is a \$270 increase in expenses and a \$90 remaining balance in the asset Prepaid Insurance. Example 3-4 shows this adjusting entry which is posted to the ledger accounts shown in Example 3-3. Since the December 31 date of the adjusting entries is the same as

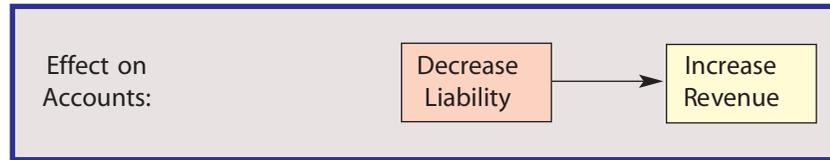
**EXAMPLE 3-4 Adjusting Entries for 2007 (Dapple Corporation)**

Date	Account Titles and Explanations	Debit	Credit
<i>Adjusting Entries</i>			
Dec. 31	Insurance Expense Prepaid Insurance To record expiration of 9 months of insurance coverage purchased on March 30.	270	270
31	Unearned Rent Rent Revenue To record earning of 1 month of rent revenue from receipt collected in advance on December 1.	150	150
31	Salaries Expense Salaries Payable To record 3 months' salaries earned by employees but not yet paid.	900	900
31	Interest Expense Interest Payable To record interest accumulated on the note payable issued on March 30 and due March 30, 2009.	594	594
31	Interest Receivable Interest Revenue To record interest accumulated on the note receivable accepted on September 1.	66	66
31	Depreciation Expense: Building Accumulated Depreciation: Building To record 9 months' depreciation on building acquired March 30.	264	264
31	Depreciation Expense: Equipment Accumulated Depreciation: Equipment To record 9 months' depreciation on equipment acquired March 30.	120	120
31	Bad Debts Expense Allowance for Doubtful Accounts To record estimated uncollectible accounts receivable.	170	170
31	Income Tax Expense Income Taxes Payable To record income taxes for the period.	600	600

the December 31 date for the closing entries (which we discuss in Example 3-9), each adjusting entry date is followed by the abbreviation *Adj* to clarify the postings.

### Deferred Revenues

Deferred (or unearned) revenue is payment received by a company in advance for the future sale of inventory or performance of services. Initially the company usually records a liability because it has an obligation to provide the goods or services. When the company has provided the goods or services to the customer, it eliminates the liability and records the revenue in an adjusting entry. Although the adjusting entry may be made at the time the goods or services are provided, it may also be made at the end of the accounting period. Below we show the effect of a deferred revenue adjusting entry on a company's accounts. Then we explain Dapple Corporation's related adjusting entry.

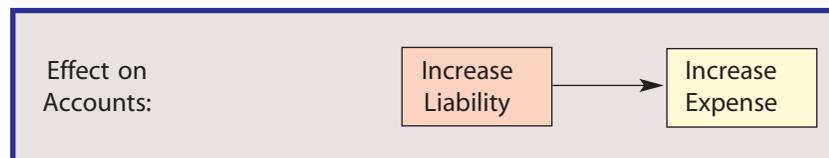


On December 1, Dapple Corporation received \$450 for three months' rent in advance. It recorded the receipt as a liability, Unearned Rent. On December 31 it must make an adjusting entry because it has now earned one month of rent. The adjusting entry is a debit (decrease) of \$150 to Unearned Rent and a credit (increase) of \$150 to Rent Revenue. The result is a \$150 increase in revenues and a \$300 remaining balance in the liability Unearned Rent. Example 3-4 shows this adjusting entry.

A company might *initially* record the entire prepayment of a cost as an expense (instead of as an asset) or the entire receipt in advance as a revenue (instead of a liability). In this case the company must still make adjusting entries at the end of the accounting period, but they are different in form and amount. For example, Dapple Corporation *could* have recorded the March 30 payment as a \$360 debit to Insurance Expense (instead of Prepaid Insurance) and it *could* have recorded the December 1 receipt of \$450 as a credit to Rent Revenue (instead of Unearned Rent). In this case the adjusting entry procedure is to calculate the appropriate ending balances in the permanent accounts and adjust the accounts accordingly. For instance, Prepaid Insurance should have an ending balance of \$90. The year-end adjusting entry must *reduce* the expense and *increase* the Prepaid Insurance account by this amount. The adjusting entry is a debit (increase) to Prepaid Insurance for \$90 and a credit (decrease) to Insurance Expense for \$90. Similarly, Unearned Rent should have an ending balance of \$300. The year-end adjusting entry must *reduce* the revenue and *increase* the Unearned Rent account by this amount. The adjusting entry is a debit (decrease) to Rent Revenue for \$300 and a credit (increase) to Unearned Rent for \$300. The results of these adjusting entries are the *same* balances in the respective accounts as we show in the comprehensive illustration. Be careful to determine how advance payments and receipts were initially recorded before determining the adjusting entry.

### Accrued Expenses

An accrued expense is an expense that a company has incurred during the accounting period but has neither paid nor recorded. To match expenses against revenues and to reflect the proper liabilities at the end of the period, a company must make an adjusting entry for each accrued expense. Below we show the effect of an accrued expense adjusting entry on a company's accounts. Then we explain Dapple Corporation's related adjusting entries.



Dapple Corporation has three accrued expenses it has not yet recorded: employees' salaries, interest, and income taxes.

**Accrued Salaries** For simplicity, assume the company pays employees' salaries every six months, making the last \$1,800 payment on October 1. At the end of December, its employees have earned salaries for three months (October through December) although they have not been paid. The adjusting entry is a debit (increase) to Salaries Expense for \$900 and a credit (increase) to Salaries Payable for \$900. The result is a \$900 increase in expenses and a \$900 ending balance in the liability, Salaries Payable. Example 3-4 shows this adjusting entry.

**Accrued Interest** On March 30, Dapple Corporation issued a \$6,600, 12% note payable due at the end of two years. Although it will not *pay* the principal and interest until 2009,

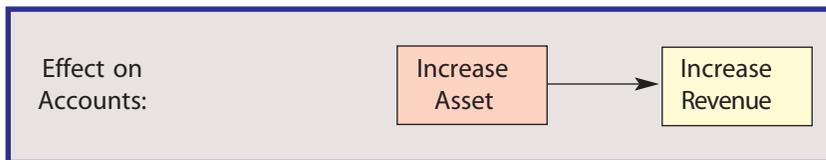


Credit: ©Getty Images/PhotoDisc

nine months of interest expense has accumulated and is a liability at the end of 2007. The interest is computed using the equation:  $\text{Interest} = \text{Principal} \times \text{Rate} \times \text{Time}$ , where time is expressed as a fraction of a year. The adjusting entry involves a debit (increase) to Interest Expense for \$594 ( $\$6,600 \times 0.12 \times 9/12$ ) and a credit (increase) to Interest Payable for \$594, as we show in Example 3-4.

**Accrued Income Taxes** Corporations are subject to a federal (and often state) income tax. Although a corporation may not pay its income taxes until the following period, they are an expense and year-end obligation of the period in which the corporation earned the income. The adjusting entry for income taxes is prepared *after* all the other adjusting entries because the amount is computed by multiplying the income tax rate times the current income before income taxes. Based on its current income before income taxes and on the current tax rate,<sup>8</sup> Dapple Corporation calculates that its 2007 income taxes are \$600, with the entire amount payable in 2008. The adjusting entry is a debit (increase) to Income Tax Expense for \$600 and a credit (increase) to Income Taxes Payable for \$600, and is shown as the last item in Example 3-4.

**Accrued Revenues** An accrued revenue is a revenue that a company has earned during the accounting period but has neither received nor recorded. The company must make an adjusting entry to increase its assets and revenues at the end of the period. Below we show the effect of an accrued revenue adjusting entry on a company's accounts. Then we explain Dapple Corporation's related adjusting entry.

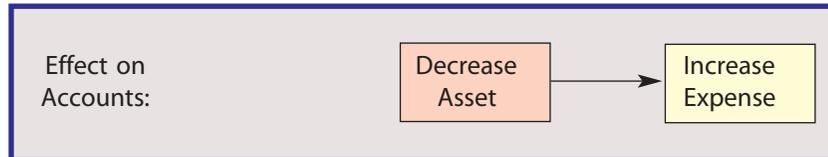


On September 1, Dapple Corporation accepted a \$1,320, 15% note as payment when it sold an acre of land. Although it will not collect the note and interest until 2008, the company has earned four months of interest in 2007. The company records the \$66 of interest ( $\$1,320 \times 0.15 \times 4/12$ ) as a debit (increase) to Interest Receivable and a credit (increase) to Interest Revenue. The result is a \$66 increase in revenues and a \$66 increase in the asset Interest Receivable. Example 3-4 shows this adjusting entry.

8. As we show in Example 3-6, the Dapple Corporation's income before income taxes is \$2,000. Multiplying this amount by an assumed tax rate of 30% yields income taxes of \$600.

### Estimated Items

Certain other adjusting entries are based on estimated amounts because they relate, at least in part, to expected future events. Adjustments involving (1) the depreciation on assets such as buildings and equipment, and (2) the uncollectibility of some accounts receivable are both based upon estimates. Below we show the effect of an estimated item adjusting entry on a company's accounts. Then we explain Dapple Corporation's related adjusting entries.



**Depreciation Expense** When a company acquires an asset such as a machine, sales fixture, or building to use in its operations, the company records the cost as an economic resource (asset). The company expects to use the asset for several periods after which it will dispose of the asset at a value much less than its original cost. The difference between the original cost and an estimate of this later value (alternatively called residual value, salvage value, scrap value, or trade-in value) is the asset's **depreciable cost**. This depreciable cost is allocated as an expense to each accounting period in which the asset is used. This cost allocation process is referred to as **depreciation**. One depreciation method is straight-line depreciation, which allocates a proportionate amount as an expense to each accounting period. Its computation is as follows:

$$\text{Annual Depreciation Expense} = \frac{\text{Cost} - \text{Estimated Residual Value}}{\text{Estimated Service Life}}$$

The company records depreciation at the end of the accounting period in an adjusting entry. The entry increases Depreciation Expense and decreases the remaining depreciable cost of the asset. However, the company does *not* record this decrease directly in the asset account. Instead it *increases* a contra (negative) asset account entitled Accumulated Depreciation. This contra account is subtracted from the asset account on the company's balance sheet. The resulting balance is referred to as the *book value* (or carrying value) of the asset.

Dapple Corporation has two depreciable assets, the building and equipment acquired on March 30, 2007. The company estimates that these assets will have lives of 35 years and 12 years, respectively. The company estimates that the residual value of the building will be \$3,000 and the residual value of the equipment will be \$200 at the end of these lives. Since it used the building and equipment for only nine months during 2007, the depreciation expense is \$264  $\{[(\$15,320 - \$3,000) \div 35] \times 9/12\}$  on the building and \$120  $\{[(\$2,120 - \$200) \div 12] \times 9/12\}$  on the equipment. The adjusting entry for the building is a debit (increase) to Depreciation Expense: Building for \$264 and a credit (increase) to the contra-asset Accumulated Depreciation: Building for \$264. The adjusting entry for the equipment is a debit to Depreciation Expense: Equipment for \$120 and a credit to the contra-asset Accumulated Depreciation: Equipment for \$120. The result is an increase in expenses and a *decrease* in the book value that the company reports on its balance sheet for the building and the equipment. Example 3-4 shows these adjusting entries.

**Bad Debt Expense** Many companies make a large amount of their sales on credit. Regardless of a company's collection efforts, it is likely to have a certain amount of bad debts—customer accounts that will not be collected. Although a company may not know which specific customers will not pay their accounts until a later accounting period, it must match bad debt expense against revenues in the *period of the sale*. Furthermore, the company must reduce its assets so that at the end of the period its accounting records show the amount of accounts receivable that it expects to collect. The adjusting entry to record the increase in expenses and the decrease in assets requires an estimate of future uncollectible accounts. However, since the company does not know in the period of sale

which specific customers will default on their accounts, it does not directly reduce Accounts Receivable. Instead it *increases* a contra-asset account, Allowance for Doubtful Accounts. This account is deducted from Accounts Receivable on the company's balance sheet to report the estimated collectible amount.

For example, assume for simplicity that Dapple Corporation estimates its bad debts to be 1% of total sales. Since the balance in the Sales Revenue account totals \$17,000, the adjusting entry is a debit (increase) to Bad Debts Expense for \$170 and a credit (increase) to the contra-asset Allowance for Doubtful Accounts for \$170. The result is an increase in expenses and a *decrease* in the collectible accounts receivable shown on the company's balance sheet. Example 3-4 shows this adjusting entry.

**Summary** We show the basic framework for adjusting entries in Exhibit 3-3. This framework will be helpful to you in visualizing the appropriate debit and credit entry for each type of adjusting entry. However, you must be careful to identify the proper accounts to use in each adjusting entry. Note that for an estimated item, under the Accounts Credited column, we show the use of a contra-account because typically a company credits (increases) such an account (e.g., accumulated depreciation) to decrease the book value of the related asset.

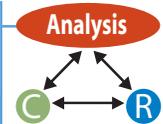


EXHIBIT 3-3 Framework for Adjusting Entries		
Type of Adjusting Entry	Accounts Debited	Accounts Credited
Prepaid Expense:	Debit (increase) Expense	Credit (decrease) Asset
Deferred Revenue:	Debit (decrease) Liability	Credit (increase) Revenue
Accrued Expense:	Debit (increase) Expense	Credit (increase) Liability
Accrued Revenue:	Debit (increase) Asset	Credit (increase) Revenue
Estimated Item:	Debit (increase) Expense	Credit (decrease) Asset [credit (increase) contra account]



### LINK TO ETHICAL DILEMMA

As a newly hired accountant at a Fortune 500 company, you were excited when the controller showed confidence in your abilities by delegating to you the responsibility to make many of the routine adjusting entries related to the preparation of the year-end financial statements. The controller was pleased with the diligence with which you completed the task and assured you that he would not hesitate to increase your responsibilities in the financial reporting department. You were on the fast-track to a promotion. However, three months later, as you were preparing the adjusting entries for the next fiscal quarter, you realized that you had overlooked several adjustments that you should have recorded at year-end. While the overlooked adjustments would most likely not be considered material to last year's financial statements, you are certain that your boss would lose confidence in your abilities. Realizing that you can easily fix the mistake by incorporating the overlooked adjustments into the first quarter adjusting entries for this year, what course of action should you take?

### Preparation of the Financial Statements (Step 4)

After a company prepares and posts the adjusting entries to the general ledger accounts, it prepares its financial statements. This procedure involves several steps. First, the balance

**EXAMPLE 3-5 Adjusted Trial Balance (Dapple Corporation)****Adjusted Trial Balance  
December 31, 2007**

	Debit	Credit
Cash	\$ 2,922	
Accounts receivable	7,000	
Allowance for doubtful accounts		\$ 170
Notes receivable	1,320	
Interest receivable	66	
Inventory	2,010	
Prepaid insurance	90	
Land	1,500	
Building	15,320	
Accumulated depreciation: building		264
Equipment	2,120	
Accumulated depreciation: equipment		120
Accounts payable		1,900
Notes payable		6,600
Salaries payable		900
Interest payable		594
Income taxes payable		600
Unearned rent		300
Capital stock		20,000
Retained earnings		0
Dividends distributed	500	
Sales revenue		17,000
Interest revenue		66
Rent revenue		150
Cost of goods sold	10,490	
Salaries expense	2,700	
Other expenses	428	
Loss on sale of land	180	
Depreciation expense: building	264	
Depreciation expense: equipment	120	
Bad debts expense	170	
Insurance expense	270	
Interest expense	594	
Income tax expense	600	
Totals	<u>\$48,664</u>	<u>\$48,664</u>

of each account in the ledger is recomputed if necessary. Next, an adjusted trial balance is frequently prepared; it is similar to a trial balance. **An adjusted trial balance lists all the accounts and the account balances of a company after adjustments (but before closing) in either a debit or a credit column.** The adjusted trial balance is used to verify that the total of the debit balances is equal to the total of the credit balances. This working paper also helps in the preparation of the company's financial statements because all the accounts and amounts included in the financial statements are listed on the adjusted trial balance. Example 3-5 shows the Dapple Corporation's adjusted trial balance. Finally, the company prepares its income statement, statement of retained earnings, and balance sheet in sequential order directly from the information in the adjusted trial balance.

**Income Statement**

Example 3-6 shows Dapple Corporation's income statement for 2007. Sales revenue is listed first. Because the cost of goods sold is directly related to sales, it is shown next. Cost of Goods Sold is deducted to determine the Gross Profit. Operating Expenses (often classified into two groups, Selling Expenses and Administrative Expenses) are deducted next

to determine the Income from Operations. The total of the Other Items section (for recurring items that are not directly related to ongoing operations) is deducted to determine the Income Before Income Taxes. Finally the Income Tax Expense is deducted to determine the Net Income of \$1,400. The \$0.70 Earnings Per Share is computed by dividing the \$1,400 net income by the 2,000 shares owned by the stockholders.



**Retained Earnings Statement**

Example 3-7 shows the retained earnings statement of the Dapple Corporation for 2007. Because 2007 is its first year of operations, the company did not have a beginning retained earnings balance. It did, however, earn net income of \$1,400 and distributed dividends of \$500, resulting in ending retained earnings (the excess of total earnings over total dividends) of \$900.

**EXAMPLE 3-6 Income Statement**

**DAPPLE CORPORATION**

**Income Statement**  
**For Year Ended December 31, 2007**

Sales revenue		\$17,000
Cost of goods sold		<u>(10,490)</u>
Gross profit		\$ 6,510
Operating expenses		
Salaries expense	\$ 2,700	
Other expenses	428	
Depreciation expense: building	264	
Depreciation expense: equipment	120	
Bad debts expense	170	
Insurance expense	<u>270</u>	
Total operating expenses		<u>(3,952)</u>
Income from operations		\$ 2,558
Other items		
Loss on sale of land	\$ (180)	
Interest revenue	66	
Rent revenue	150	
Interest expense	<u>(594)</u>	<u>(558)</u>
Income before income taxes		\$ 2,000
Income tax expense		<u>(600)</u>
Net Income		<u>\$ 1,400</u>
Earnings per share (2,000 shares)		<u><u>\$ 0.70</u></u>

**EXAMPLE 3-7 Retained Earnings Statement**

**DAPPLE CORPORATION**

**Statement of Retained Earnings**  
**For Year Ended December 31, 2007**

Retained earnings, January 1, 2007	\$ 0
Add: Net income for 2007	<u>1,400</u>
	\$1,400
Less: Dividends for 2007	<u>(500)</u>
Retained earnings, December 31, 2007	<u><u>\$ 900</u></u>



**Balance Sheet**

Example 3-8 shows the Dapple Corporation's balance sheet at the end of 2007. It includes three sections: assets, liabilities, and stockholders' equity. The assets are divided into current assets and property and equipment. The *current assets* are cash and those assets that are expected to be converted into cash or consumed within one year or the operating cycle, whichever is longer. Current assets generally include cash, receivables, temporary investments in marketable securities, inventories, and prepaid items such as insurance and office supplies. *Property and equipment* contains the longer-lived operational assets of the company. This section includes both nondepreciable assets and depreciable assets listed at their book values. The liabilities are divided into current liabilities and long-term liabilities. *Current liabilities* are those obligations that will become due within one year or the operating cycle, whichever is longer, and are expected to be paid with current assets or the creation of other current liabilities. *Long-term liabilities* are obligations that do not meet the current liability criteria. Stockholders' equity includes contributed capital (capital stock) and retained earnings. Total assets amount to \$31,794, and equal the total of liabilities plus stockholders' equity.

**EXAMPLE 3-8 Balance Sheet**

**DAPPLE CORPORATION**

**Balance Sheet  
December 31, 2007**

**Assets**

Current Assets

Cash		\$ 2,922
Accounts receivable	\$ 7,000	
Less: Allowance for doubtful accounts	(170)	6,830
Notes receivable (due March 1, 2008)		1,320
Interest receivable		66
Inventory		2,010
Prepaid insurance		90
Total current assets		\$13,238

Property and equipment

Land		\$ 1,500
Building	\$15,320	
Less: Accumulated depreciation	(264)	15,056
Equipment	\$ 2,120	
Less: Accumulated depreciation	(120)	2,000
Total property and equipment		\$18,556

Total Assets \$31,794

**Liabilities**

Current Liabilities

Accounts payable	\$ 1,900
Salaries payable	900
Income taxes payable	600
Unearned rent	300
Total current liabilities	\$ 3,700

Long-Term Liabilities

Notes payable (due March 30, 2009)	\$ 6,600
Interest payable (due March 20, 2009)	594
Total long-term liabilities	\$ 7,194

Total Liabilities \$10,894

**Stockholders' Equity**

Contributed Capital	
Capital stock, no par (2,000 shares)	\$20,000
Retained Earnings	900
Total Stockholders' Equity	\$20,900

Total Liabilities and Stockholders' Equity \$31,794

**Preparation of Closing Entries (Step 5)**

The next step in the accounting process involves preparing and posting closing entries. Closing entries are journal entries that a company makes at the end of the accounting period (1) to reduce the balance in each temporary account to zero, and (2) to update the retained earnings account.

A company uses the temporary accounts (namely, all the revenue, expense, and dividend accounts) during each accounting period to accumulate and summarize information for its

**7** Prepare closing entries.

net income and dividends *for that period*. After the period is over and the company's financial statements are prepared, the balances in these accounts are no longer needed. Furthermore, these accounts must begin the *next* accounting period with a zero balance to summarize the company's net income and dividend information for the next period. Also, the company's permanent stockholders' equity account, Retained Earnings, must be updated for the net income and dividend information contained in the temporary accounts.

The revenue and expense accounts are closed to a temporary closing account called Income Summary. The resulting balance in this account is the company's net income (or loss) for the period. This balance is then transferred to Retained Earnings.

The closing process is straightforward. Each temporary income statement account is debited or credited for the amount that will result in a zero balance in that account. The total of the credits to these accounts is recorded as a debit to the Income Summary account, and the total of the debits is recorded as a credit to Income Summary. A resulting *credit* balance in the Income Summary account is the net income for the period, and is the same amount as that shown on the company's income statement. This credit balance is closed to zero with a debit entry to Income Summary and a credit entry to Retained Earnings for the amount of the net income. If, on the other hand, there is a *debit* balance in the Income Summary account, this means there is a net loss for the period. This debit balance is closed to zero with a debit entry to Retained Earnings and a credit entry to Income Summary for the amount of the net loss. Finally, the Dividends Distributed account is credited for the amount necessary to reduce its balance to zero; the corresponding debit to Retained Earnings reduces it for the amount of the dividends.

Example 3-9 shows the closing entries for the Dapple Corporation which are posted to the ledger accounts shown in Example 3-3. The abbreviation *Cl* is used to identify each December 31 closing entry. The temporary income statement accounts that have a credit balance are closed first. These include all the revenue accounts. The total credit to Income Summary is \$17,216.

The temporary income statement accounts that have a debit balance are closed next. These include all the expense accounts. The total debit to Income Summary is \$15,816.

**EXAMPLE 3-9 Closing Entries for 2007 (Dapple Corporation)**

Date	Account Titles and Explanations	Debit	Credit
<b>Closing Entries</b>			
Dec. 31	Sales Revenue	17,000	
	Interest Revenue	66	
	Rent Revenue	150	
	Income Summary		17,216
	To close the temporary accounts with credit balances.		
31	Income Summary	15,816	
	Cost of Goods Sold		10,490
	Salaries Expense		2,700
	Other Expenses		428
	Loss on Sale of Land		180
	Depreciation Expense: Building		264
	Depreciation Expense: Equipment		120
	Bad Debts Expense		170
	Insurance Expense		270
	Interest Expense		594
	Income Tax Expense		600
	To close the temporary accounts with debit balances.		
31	Income Summary	1,400	
	Retained Earnings		1,400
	To close the income summary balance (net income) to retained earnings.		
31	Retained Earnings	500	
	Dividends Distributed		500
	To close the dividends to retained earnings.		

The Income Summary account now has a credit balance of \$1,400 (\$17,216 credit less the \$15,816 debit). This amount is the net income we computed on the income statement (Example 3-6). It is transferred to Retained Earnings by a debit to Income Summary for \$1,400 (which creates a zero balance in this account) and a credit to Retained Earnings for \$1,400 (which increases this account for the amount of the net income). Finally, the debit balance in the Dividends Distributed account is reduced to zero by a debit to Retained Earnings for \$500 and a credit to Dividends Distributed for \$500.

The result of the closing entries is that (1) all of the company's revenue, expense, and dividend accounts are closed (have zero balances) and are ready to accumulate the net income and dividend information for the next accounting period, (2) the ending balance in its Retained Earnings account is increased by \$900 because of the excess of net income over dividends, and (3) only the permanent balance sheet accounts are open (have nonzero account balances).

After the closing entries are prepared and posted, many companies will prepare a post-closing trial balance. A **post-closing trial balance is prepared to verify that the total of the debit balances is equal to the total of the credit balances in all of the company's permanent accounts.** We do not show this working paper here. The accounting cycle is now complete and a new cycle for the next accounting period begins.



### SECURE YOUR KNOWLEDGE 3-2

- An accounting cycle is composed of five key steps:
  - Recording in a journal
  - Posting to the ledger
  - Preparing and posting adjusting entries
  - Preparing financial statements
  - Preparing and posting closing entries
- Adjusting entries apply accrual accounting concepts to ensure that all revenues earned and all expenses incurred during a period are recorded, regardless of the inflow or outflow of cash.
- Deferred revenues and prepaid expenses result when the cash inflow or outflow occurs prior to the recognition of the revenue or the expense.
- Accrued revenues and expenses result when the recognition of the revenue or expense occurs prior to the cash inflow or outflow.
- Closing entries are required at the end of the accounting cycle to reduce the temporary accounts to zero and to update the retained earnings account for changes that have occurred during the period.

### Additional Issues

For simplicity, we ignored several common items in the Dapple Corporation example. In this section we briefly discuss returns, allowances, and discounts, as well as the periodic inventory system.

#### Returns, Allowances, and Discounts

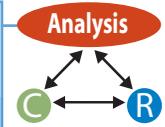
Most companies have sales returns and allowances, as well as purchases returns and allowances. Some also have sales discounts and purchases discounts. How a company records them depends on its accounting system.

When a customer returns merchandise and receives a refund, this is called a **sales return**. When a customer agrees to keep damaged merchandise and the company refunds a portion of the selling price, this is called a **sales allowance**. In either case, these are a reduction in the company's sales revenue. To record these transactions, some companies will create an account, Sales Returns and Allowances, which is a contra-account to the Sales Revenue account. Others will record these transactions directly as a reduction in the

Sales Revenue account. For instance, suppose that Dapple Corporation had previously made a \$500 credit sale to a customer, but the customer returned the item because it was defective. We show both ways of recording this return below<sup>9</sup>:

<i>Using Contra-Account</i>		<i>Reducing Sales Revenue account</i>	
Sales Returns & Allowances	500	Sales	500
Accounts Receivable	500	Accounts Receivable	500

Note that by using a contra-account, Dapple can determine its total sales returns and allowances simply by looking at the account balance. However, this approach requires an additional account in the company's accounting system. If Dapple records the return directly as a reduction in the sales revenue account, it has one less account in its accounting system. However, it will have to examine the details of the sales revenue account to determine its sales returns and allowances. In a computerized accounting system it is not difficult, however, to design a program to do this.



Some companies offer a discount on credit sales for prompt payment within a discount period. If a customer pays within the discount period, the company receives an amount that is less than the original selling price. This difference is called a **sales (or cash) discount**. A sales discount is also a reduction in the company's sales revenue. We show how to record sales discounts in Chapter 7.

When a company has sales returns and allowances (and sales discounts), the company must report its net sales on its income statement. **Net sales** are a company's sales less its sales returns and allowances and sales discounts. For instance, we will slightly modify the amounts in the Dapple Corporation example. Still assume that Dapple Corporation had sales revenue of \$17,000, but that it had sales returns and allowances of \$250 and sales discounts of \$40. In this case, its net sales would be \$16,710 (\$17,000 – \$250 – \$40) and it would report this amount on its 2007 income statement as follows:

Sales (net of \$250 returns and \$40 discounts)      \$16,710

A company usually also has purchases returns and allowances. When the company returns inventory to its supplier, this is called a **purchases return**. When the company agrees to keep damaged inventory and receives a refund from its supplier, this is called a **purchases allowance**. In either case, these are a reduction in the cost of the company's inventory. To record these transactions, some companies will create an account, Purchases Returns and Allowances, which is a contra-account to the Inventory account. Other companies will record these transactions directly as a reduction in the Inventory account. For instance, suppose that Dapple returned \$300 of inventory that it had purchased on credit from its supplier. We show both ways of recording the return as follows:

<i>Using Contra-Account</i>		<i>Reducing Inventory Account</i>	
Accounts Payable	300	Accounts Payable	300
Purchases Returns & Allowances	300	Inventory	300

Some suppliers offer a discount on credit sales for prompt payment within the discount period. To the purchasing company, this is a **purchases discount**. A purchases discount is also a reduction in the company's inventory. We show how to record purchases discounts in Chapter 8.

### Periodic Inventory System

As we noted earlier in the chapter, some small companies use a periodic inventory system. Under a **periodic inventory system**, a company records its purchases of inventory using a Purchases account, so that the Inventory account balance does not change during the

9. Since the inventory was returned by the customer, Dapple Corporation would also "reverse" its original Cost of Goods Sold entry by debiting Inventory and crediting Cost of Goods Sold for the cost of the returned inventory.

accounting period. Also, at the time of sale, the company does not make a second journal entry to record the increase in cost of goods sold and decrease in inventory. Instead, it takes a physical inventory at the end of the accounting period. The company then *derives* its cost of goods sold by first computing its cost of goods available for sale. The cost of goods available for sale is the beginning inventory plus the net purchases (purchases less returns and allowances and any purchases discounts). The company then deducts its ending inventory from the cost of goods available for sale to determine its cost of goods sold.

For instance, assume that Dapple Corporation uses a periodic inventory system instead of a perpetual inventory system, and that it also had purchases returns and allowances as well as purchases discounts. Using slightly different numbers than we did in the original example, assume that Dapple made purchases of \$12,600, had purchases returns and allowances of \$300, and had taken purchases discounts of \$100. Also assume that Dapple takes a physical inventory at the end of 2007 to determine that its ending inventory is \$2,140. On Dapple Corporation's income statement for 2007, it would show cost of goods sold of \$10,060, computed as follows:



Inventory, 1/1/2007	\$ 0
Purchases	12,600
Purchases returns and allowances	(300)
Purchases discounts	(100)
Cost of goods available for sale	<u>\$12,200</u>
Less: Inventory, 12/31/2007	<u>(2,140)</u>
Cost of goods sold	\$10,060

Even though a company uses a perpetual inventory system, in certain situations it may use a periodic inventory approach like we show above to estimate its inventory, as we discuss in Chapter 9.

We used a relatively simple accounting system to show a company's accounting cycle. Certain additional complexities are common in companies today. These include a worksheet (spreadsheet), reversing entries, subsidiary ledgers, special journals, and computer software. We discuss each of these topics in the sections that follow.

## WORKSHEET (SPREADSHEET)

### 8 Complete a worksheet (spreadsheet).

At the end of an accounting period, a company prepares adjusting entries, closing entries, and its financial statements. A company often first prepares a worksheet to minimize errors, simplify recording of adjusting and closing entries in the general journal, and make it easier to prepare the financial statements. A worksheet is *not* a substitute for any accounting records or financial statements; it is merely a working paper designed for these purposes.

A worksheet may be a large sheet of multicolumn accounting paper. A common way of preparing an electronic worksheet is to use a software package such as Microsoft Excel®. Example 3-10 shows a worksheet for the Dapple Corporation. This worksheet is based on the same information as we presented earlier in the chapter. It has a column for listing all the ledger accounts, plus debit and credit columns for the trial balance, adjustments, adjusted trial balance, income statement, retained earnings statement, and balance sheet. There are five steps in completing a worksheet.

**Step 1:** The process of completing the worksheet begins with preparing the trial balance. All of the company's accounts and account balances (prior to adjustments) are listed and the debit and credit columns of the trial balance are totaled to verify the equality of the debits and credits. Note that since this is the first year of operations for the Dapple Corporation, the Inventory, Accumulated Depreciation: Building, Accumulated Depreciation: Equipment, and Retained Earnings accounts do not have balances (prior to adjustments). Normally these accounts *do* have balances so we include them in the illustrated trial balance.

**EXAMPLE 3-10 Worksheet (Dapple Corporation)**

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Dapple Corporation												
2	Worksheet												
3	For Year Ended Dec. 31, 2007												
4													
5													
6		Trial Balance		Adjustments		Income Statement		Retained Earnings Statement		Balance Sheet			
7	Account Titles	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit		
8	Cash	2,922										2,922	
9	Accounts receivable	7,000										7,000	
10	Notes receivable	1,320										1,320	
11	Inventory	2,010										2,010	
12	Prepaid insurance	360			(a) 270							90	
13	Land	1,500										1,500	
14	Building	15,320										15,320	
15	Acc. depreciation : building		0		(f) 264								264
16	Equipment	2,120										2,120	
17	Acc. depreciation : equipment		0		(g) 120								120
18	Accounts payable		1,900										1,900
19	Notes payable		6,600										6,600
20	Unearned rent		450	(b) 150									300
21	Capital stock		20,000										20,000
22	Retained earnings (1/1/07)		0								0		
23	Dividends distributed	500								500			
24	Sales revenue		17,000				17,000						
25	Cost of goods sold	10,490				10,490							
26	Salaries expense	1,800		(c) 900		2,700							
27	Other expenses	428				428							
28	Loss on sale of land	180				180							
29		45,950	45,950										
30	Insurance expense			(a) 270		270							
31	Rent revenue				(b) 150		150						
32	Salaries payable				(c) 900								900
33	Interest expense			(d) 594		594							
34	Interest payable				(d) 594								594
35	Interest receivable			(e) 66								66	
36	Interest revenue				(e) 66		66						
37	Depreciation expense: bldg			(f) 264		264							
38	Depreciation expense: equip			(g) 120		120							
39	Bad debts expense			(h) 170		170							
40	Allow. for doubtful accounts				(h) 170								170
41				2,534	2,534	15,216	17,216						
42	Income tax expense			(i) 600		600							
43	Income taxes payable				(i) 600								600
44						15,816	17,216						
45	Net income					1,400					1,400		
46				3,134	3,134	17,216	17,216	500	1,400				
47	Retained earnings, 12/31/07							900					900
48								1,400	1,400			32,348	32,348
49													
50													
51	(a) To record 9 months of insurance expense												
52	(b) To record 1 month of rent revenue												
53	(c) To record 3 months of accrued salaries expense												
54	(d) To record 9 months of accrued interest expense												
55	(e) To record 9 months of accrued interest revenue												
56	(f) To record 9 months depr expense on building												
57	(g) To record 9 months depr expense on equipment												
58	(h) To record estimated bad debts expense												
59	(i) To record income tax expense												

**Step 2:** The accounts are analyzed to determine the necessary adjustments, which are initially entered in the adjustments columns on the worksheet. If an adjustment involves an account that does not currently have a balance, the account title is entered on the first available line below the other account titles. Each of the adjusting journal entries we show in Example 3-4 is initially prepared as shown on the worksheet. Note that the adjusting entry for income taxes is not made until after the income before income taxes is computed. Note also that the accounts in each adjusting entry are *keyed* with the same letter of the alphabet to reduce the likelihood of error. Explanations keyed to these entries are entered at the bottom of the worksheet. They are similar to the adjusting entry explanations that we included in Example 3-4. The adjustments columns are subtotaled to prove the equality of the debits and credits. At this point, some companies prepare an adjusted trial balance in a next set of columns. For an adjusted trial balance, the adjustment amounts are combined with the trial balance amounts to determine the new account balances. This step may be omitted as we did in the Dapple Corporation worksheet. If we had included adjusted trial balance columns, they would look like Example 3-5.

**Step 3:** The trial balance amount of each account is combined with the adjustments to that account and carried over to the proper column of the financial statement in which the account is located. For instance, the \$360 debit balance in Prepaid Insurance is combined with the \$270 credit adjustment, and the new balance of \$90 is carried over to the debit column of the balance sheet.

**Step 4:** The income statement debit and credit columns are subtotaled. Ordinarily the debit column total differs from the credit column total, the difference being the income (or loss) before income taxes. For the Dapple Corporation the \$17,216 credit total exceeds the \$15,216 debit total, indicating income before income taxes of \$2,000. At this point, the applicable tax rate (30% in this case) is multiplied by the income before income taxes to determine the income taxes (\$600). The adjusting entry for income taxes is recorded, and the amounts are carried to the proper columns of the financial statements.

**Step 5:** The financial statement debit and credit columns are totaled in sequential order. First the income statement columns are totaled. The difference between the debit and credit totals is the net income or loss for the period. For the Dapple Corporation the net income is \$1,400. This amount is used to balance the income statement columns. It is also entered in the retained earnings statement credit column. We use the arrows in Example 3-10 for illustrative purposes; they ordinarily are not included on the worksheet. The beginning retained earnings balance (\$0 in this case) is combined with the net income to determine the \$1,400 credit total. The \$500 debit total is the dividends distributed. The \$900 difference is the ending retained earnings. It is used to balance the retained earnings statement columns and is also transferred to the balance sheet credit column. Finally, the balance sheet debit and credit columns are totaled. The \$32,348 total of the debit and credit columns indicates that the system is in balance and the worksheet is complete.

The worksheet is prepared as a preliminary step, before recording the adjusting and closing entries in the general journal and preparing the financial statements. A brief review of the Dapple Corporation worksheet indicates how a worksheet helps in the accounting process. All the adjusting entries are developed and shown on the worksheet in their basic format. They now must be recorded in the general journal. The closing entries are also simplified. The \$17,216 total of the income statement credit column is credited to Income Summary, while the individual accounts with credit balances are debited. Similarly, the \$15,816 debit subtotal is debited to Income Summary, while the individual accounts with debit balances are credited. The remaining closing entries involve closing both net income and dividends to Retained Earnings. Finally, the worksheet helps in preparing the actual financial statements. The amounts from the worksheet columns for each financial statement are rearranged in the proper order on that financial statement. For instance, note how easy it would be to prepare the income statement, retained earnings statement, and balance sheet shown in Examples 3-6, 3-7, and 3-8 from the respective worksheet columns. The worksheet is very useful in preparing *interim* (such as quarterly) financial statements when a company does not actually adjust or close its accounts. The adjusting entries needed to update the financial statements may be made on the worksheet only, thereby enabling the company to keep its accounts on an annual basis.

## REVERSING ENTRIES

### 9 Prepare reversing entries.

After a company adjusts and closes its accounts for the current period, it begins a new accounting cycle for the next accounting period. Prior to journalizing the daily transactions of the new accounting period in the general journal, most companies prepare reversing entries. **A reversing entry is the exact reverse (accounts and amounts) of an adjusting entry.** A company usually makes reversing entries at the same time as closing entries but dates them the first day of the *next* accounting period. A reversing entry is

*optional* and has one purpose: to simplify the recording of a later transaction related to the adjusting entry. A reversing entry enables a company to routinely record the later transaction, without having to consider the possible impact of the prior adjusting entry.

As a general guideline, reversing entries *should* be made for any adjusting entry that creates a new balance sheet account as follows:

1. Adjusting entries that create accrued revenues or expenses to be collected or paid in the next accounting period
2. Adjusting entries related to prepayments of costs initially recorded as expenses or receipts-in-advance initially recorded as revenues

Reversing entries *should not* be made for:

1. Adjusting entries related to prepayments of costs initially recorded as assets or receipts-in-advance initially recorded as liabilities
2. Adjusting entries related to estimated items such as depreciation or bad debts

These guidelines are just that, *guidelines*. They are no substitute for good accounting judgment.

### Example: Reversing Entry

The Dapple Corporation should consider reversing two of the adjusting entries recorded in Example 3-4. That is, the entries to record accrued interest revenue and accrued salaries expense. Each of these is related to a transaction that will occur in the *next* accounting period. The entry to record income taxes is generally not reversed because complex tax laws require careful analysis for each journal entry. Although the adjusting entry for interest expense created an accrued expense, Interest Payable, this entry is not reversed because the subsequent transaction will not occur until 2009. Example 3-11 illustrates reversing entries and how they simplify the recording of subsequent transactions for Interest Revenue and Salaries Expense.

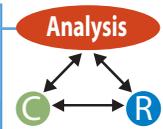
For each of these accounts, in the left column we first assume a reversing entry is *not* made so you can see the complex subsequent journal entry and analysis that is needed. In the right column we assume a reversing entry is made so you can see the much simpler subsequent journal entry and analysis.

Whether or not it makes reversing entries, the Dapple Corporation will collect \$1,419 on March 1, 2008 for the 15%, six-month note receivable accepted on September 1, 2007. The \$1,419 includes the \$1,320 note and \$99 of interest ( $\$1,320 \times 0.15 \times 6/12$ ). If it does not make a reversing entry, when Dapple records this collection it must determine what portion of the interest relates to 2007 (\$66 of Interest Receivable) and what portion is Interest Revenue for 2008 (\$33 for two months). Often this analysis is complex and impractical. The use of a reversing entry eliminates this analysis. The entire amount of the \$99 received in excess of the face value of the note is credited to Interest Revenue. Since the reversing entry created a \$66 *debit* balance in Interest Revenue, the \$99 credit results in a \$33 *credit* balance, the two months of interest for 2008, in the Interest Revenue account.

Similarly, on April 1, 2008 the Dapple Corporation will pay its employees another 6 months of salaries, or \$1,800. If Dapple does not make a reversing entry, when it pays the salaries it must determine what portion of the salary payment relates to 2007 (\$900 of Salaries Payable) and what portion is Salaries Expense for 2008 (\$900 for 3 months). The use of a reversing entry eliminates this analysis. The entire \$1,800 payment is debited to Salaries Expense. When combined with the \$900 *credit* balance in Salaries Expense established by the reversing entry, the result is a \$900 *debit* balance, the amount representing three months of salaries expense for 2008. ♦

### Alternative Procedures

As we indicated in the discussion of the adjusting entry for deferred revenues, some companies initially record the receipt of revenues in advance of being earned as a revenue instead of



**EXAMPLE 3-11 Reversing Entries (Dapple Corporation)**

<b>Accrued Revenue</b>			
<b>Adjusting Entry</b>			
	12/31/07	Interest Receivable	66
		Interest Revenue	66
	12/31/07	Revenues and expenses are CLOSED.	
<i>If reversing entry is not made:</i>		<i>If reversing entry is made:</i>	
<b>Reversing Entry</b>			
1/1/08	None	1/1/08	Interest Revenue 66
			Interest Receivable 66
<b>Subsequent Entry</b>			
3/1/08	Cash	1,419	3/1/08
	Notes Receivable	1,320	
	Interest Receivable	66	
	Interest Revenue	33	
<b>Analysis of Subsequent Entry</b>			
Interest of \$99 is collected, but \$66 was recorded in Interest Receivable at end of last period. Consequently, Interest Receivable must be credited for \$66 and Interest Revenue credited for \$33.		Interest of \$99 is collected and credited to Interest Revenue. Because reversing entry was made for \$66, the net result in Interest Revenue is a \$33 credit balance.	
<b>Accrued Expense</b>			
<b>Adjusting Entry</b>			
	12/31/07	Salaries Expense	900
		Salaries Payable	900
	12/31/07	Revenues and expenses are CLOSED.	
<i>If reversing entry is not made:</i>		<i>If reversing entry is made:</i>	
<b>Reversing Entry</b>			
1/1/08	None	1/1/08	Salaries Payable 900
			Salaries Expense 900
<b>Subsequent Entry</b>			
4/1/08	Salaries Expense	900	4/1/08
	Salaries Payable	900	
	Cash	1,800	
<b>Analysis of Subsequent Entry</b>			
Salaries of \$1,800 for 6 months are paid, but \$900 was recorded in Salaries Payable at end of last period. Consequently, Salaries Payable must be debited for \$900 and Salaries Expense debited for \$900.		Salaries of \$1,800 for 6 months are paid and debited to Salaries Expense. Because reversing entry was made for \$900, the net result in Salaries Expense is a \$900 debit balance.	

a liability. We showed that Dapple Corporation *could* have recorded the December 1 receipt of three months' advance rent as a credit to Rent Revenue for \$450. In this case the adjusting entry is a debit to Rent Revenue for \$300 and a credit to Unearned Rent for \$300. This adjusting entry creates a balance sheet account and should be reversed. On January 1, 2008 a reversing entry should be made debiting Unearned Rent for \$300 and crediting Rent Revenue for \$300. This entry eliminates the Unearned Rent account balance and creates a \$300 balance in Rent Earned for the two months of 2008. No further adjusting entry is needed in 2008.

### SUBSIDIARY LEDGERS

Even in the relatively simple Dapple Corporation example, the general ledger contains many accounts. For a larger company that sells to many customers and purchases from many suppliers, the general ledger is much larger because the company incurs additional types of expenses and earns other types of revenues. The company also must keep adequate records of amounts owed by each customer and to each supplier.

**10** Use subsidiary ledgers.

To (1) reduce the size of the general ledger, (2) minimize errors, (3) divide the accounting task, and (4) keep up-to-date records of its credit customers and suppliers, a company creates subsidiary ledgers that are *not* part of the double-entry system. A **subsidiary ledger is a group of accounts, all of which relate to one specific company activity.** Most companies have separate subsidiary ledgers for accounts receivable and accounts payable. These ledgers enable a company to better focus on the collection and payment process for the receivables and payables. Many companies also use subsidiary ledgers for major categories of accounts, such as property and equipment, selling expenses, and administrative expenses. The *accounts receivable* subsidiary ledger contains the individual accounts of all the company's credit customers. Since the individual customer accounts have debit balances, this subsidiary ledger has a *total* debit balance (computed by preparing a *schedule* of the individual customer account balances).

When a company uses this subsidiary ledger, it still keeps an Accounts Receivable account in the general ledger. This account is referred to as a **control account** because its debit balance must be equal to that of the subsidiary ledger. In a computerized accounting system, each posting to the Account Receivable control account is also automatically posted to the applicable subsidiary ledger account. Similarly, the *accounts payable* subsidiary ledger contains the individual accounts of all the company's credit suppliers. Since these accounts have credit balances, the credit total of this subsidiary ledger must agree with the credit total of the Accounts Payable control account in the general ledger. If the Dapple Corporation used a subsidiary ledger for the accounts receivable, the ledger and control account balances at the end of 2007 would appear as we show in Example 3-12.

#### EXAMPLE 3-12 Accounts Receivable Control Account and Subsidiary Ledger

Ending Account Balances for 2007

General Ledger		Subsidiary Ledger										
<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black; padding: 5px;">Accounts Receivable</td> </tr> <tr> <td style="padding: 5px;">Balance 7,000  </td> </tr> </table>	Accounts Receivable	Balance 7,000	}	<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center; border-bottom: 1px solid black; padding: 5px;">Frank Company</td> </tr> <tr> <td style="padding: 5px;">Balance 3,000  </td> <td style="border-left: 1px solid black; width: 20px;"></td> </tr> <tr> <td colspan="2" style="text-align: center; border-bottom: 1px solid black; padding: 5px;">Knox Company</td> </tr> <tr> <td style="padding: 5px;">Balance 4,000  </td> <td style="border-left: 1px solid black; width: 20px;"></td> </tr> </table>	Frank Company		Balance 3,000		Knox Company		Balance 4,000	
Accounts Receivable												
Balance 7,000												
Frank Company												
Balance 3,000												
Knox Company												
Balance 4,000												

## SPECIAL JOURNALS

When a company increases in size and complexity, it needs to efficiently record and summarize many daily transactions. Special journals are used for this purpose. A **special journal is a journal used by a company to record its transactions with a similar characteristic.** A company uses these journals (1) to divide the accounting task, (2) to reduce the time needed to complete the various accounting activities, and (3) to provide for a chronological listing of similar transactions. There are four common types of transactions for which special journals are usually established: (1) sales of merchandise on credit, (2) purchases of merchandise on credit, (3) cash receipts, and (4) cash payments. A company still needs a general journal to record various other transactions or events not repetitive enough to require the use of special journals.

The major journals and their uses are:

1. *Sales Journal.* Used to record all (and only) sales of merchandise on credit.
2. *Purchases Journal.* Used to record all (and only) purchases of merchandise on credit.
3. *Cash Receipts Journal.* Used to record all cash receipts.
4. *Cash Payments Journal.* Used to record all cash payments.

**11** Understand special journals.

5. *General Journal*. Used to record adjusting, closing, and reversing entries and other transactions not recorded in the special journals.

Because operating procedures and transactions vary across companies, each company organizes its special journals in a way best suited to its operations.



### SECURE YOUR KNOWLEDGE 3-3

- A worksheet is a tool designed to minimize errors, simplify the recording of adjusting and closing entries in the general journal, and help in preparing financial statements.
- A reversing entry is the exact reverse of an adjusting entry and is used to simplify the recording of a later transaction related to the adjusting entry.
- A subsidiary ledger is a group of accounts for one specific company activity that sums to the total of the related control account in the general ledger.
- Special journals such as the sales journal, purchases journal, cash receipts journal and cash payments journal are tools used to record business transactions with similar characteristics that allow for increased efficiency and effectiveness in the accounting cycle.

## COMPUTER SOFTWARE

In this chapter (and throughout the book) we use a manual accounting system for convenience. In the business world, however, most companies use computer software to process their accounting information. Software has been developed by software companies for the subsidiary ledgers and special journals we discussed earlier, as well as other financial accounting functions relating to accounts receivable, accounts payable, inventory, payroll, and the general ledger. We briefly describe each type of software next.

### Accounts Receivable

Because a company generates much of the cash needed for its operations from the collection of accounts receivable, the software for accounts receivable is a very important aspect of a computer system. Accounts receivable software generally is designed to provide up-to-date balances in customers' accounts by immediately recording invoices and cash receipts from customers; print out monthly statements (bills) for customers; monitor sales returns and allowances as well as sales discounts taken by customers; generate a credit history of each customer to help avoid uncollectible accounts; and provide projections of future cash inflows.

### Accounts Payable

Accounts payable software monitors and controls the cash a company pays to suppliers. In the case of a retailer or wholesaler, payments for purchases of inventory for resale is the primary activity. The software for accounts payable generally is designed to provide up-to-date balances in suppliers' accounts by immediately recording purchase orders and cash payments to suppliers; generate a list to verify the quantity and unit price of an order when it is received from a supplier; monitor purchases returns and allowances and purchases discounts taken; write checks; and provide projections of future cash outflows.

### Inventory

Inventory is a very important asset for many companies. Most inventory software is linked to a company's accounts receivable and accounts payable software. Inventory software generally is designed to provide an up-to-date count of the number of units of each item of

inventory by immediately recording all unit purchases and sales; highlight when a minimum or maximum stock level has been reached for each item of inventory; print price tags for newly acquired inventory; prepare reports on slow-moving or obsolete inventory items; and provide unit prices when a physical count of the inventory is taken.

### Payroll

Software for a company's payroll was one of the first to be developed. Payroll software can be very complex because of the various federal, state, and local tax laws. Payroll software may be designed to compute the salaries earned by each employee based on pay rates and overtime; allocate the salaries across departments in the company; calculate federal, state, and local withholding taxes; compute other voluntary withholdings such as for investments in retirement plans; print payroll checks; generate comparisons of actual with projected salaries; and prepare various tax-withholding reports.

### General Ledger

General ledger software is broader than the name implies and includes many aspects of a company's accounting system. General ledger software usually includes all special journals and the general journal for recording transactions, a chart of accounts, and the ledger accounts on disks for storing the recorded information. Usually, the software is capable of preparing a trial balance and financial statements at any point in time. Frequently, supporting schedules (e.g., depreciation) and budgets also may be generated. The general ledger software of a company usually is linked to its accounts receivable, accounts payable, inventory, and payroll software.

## APPENDIX: CASH-BASIS ACCOUNTING

As we mentioned earlier in this chapter, most companies use accrual accounting. Under *accrual accounting*, a company records revenues in the accounting period in which they are earned and realized, and records expenses in the accounting period they are incurred. A few companies such as small retail stores and professionals such as dentists, doctors, and architects use cash-basis accounting. Under *cash-basis accounting*, a company records revenues when it collects cash from sales and records expenses when it pays cash for its operations. On its income statement, then, the company computes its net income as the difference between its cash receipts and cash payments. In other words, net income is the same as the net operating cash flow for the period. The company may choose not to prepare a balance sheet. However, it frequently will keep track of certain assets such as amounts owed by customers (accounts receivable), amounts paid in advance (prepaid expenses), and any property and equipment it owns. It also frequently will keep track of certain liabilities such as amounts owed to suppliers (accounts payable) and amounts owed to employees (accrued expenses). Cash-basis accounting, however, is not allowed under generally accepted accounting principles.

Sometimes a company that is using cash-basis accounting must prepare its financial statements based on accrual accounting. This might happen, for instance, if it applies for a bank loan and the bank requires financial statements prepared using generally accepted accounting principles. In this case, the company must convert its cash-basis income statement to an accrual-basis income statement and must prepare a related balance sheet. This involves making adjustments to the cash receipts to convert them to sales revenues and making adjustments to the cash payments to convert them to cost of goods sold and operating expenses. It also involves combining the information it has about its assets and liabilities into a formal balance sheet.

Exhibit 3-4 shows the basic adjustments that a company must make to convert its cash receipts and cash payments into accrual-based revenues, cost of goods sold, and operating expenses. In addition, the company must include depreciation expense on its property and equipment in the operating expenses.

**12** Convert cash-basis financial statements to accrual-basis.

**EXHIBIT 3-4 Adjustments to Convert Cash-Basis to Accrual-Basis Accounting**

Cash Basis	→ Adjustments	→ Accrual Basis
Collections from customers	{ + Ending accounts receivable - Beginning accounts receivable }	= Sales revenue
Payments to suppliers	{ + Beginning inventory - Ending inventory + Ending accounts payable - Beginning accounts payable }	= Cost of goods sold
Payments for other operating costs	{ + Beginning prepaid expenses - Ending prepaid expenses + Ending accrued expenses - Beginning accrued expenses }	= Operating expenses (except depreciation)

**Example: Cash-Basis Accounting**

Assume that Gretta Gropples starts Gropples Company (a small retail store organized as a sole proprietorship) on January 1, 2007 by investing cash of \$20,000. Gropples Company uses cash-basis accounting but wants to prepare its financial statements on an accrual basis. At the end of the year, the company's checkbook shows cash receipts from customers of \$95,000, cash payments of \$106,000, and an ending cash balance of \$9,000. Based on a physical inventory, the company determined that its inventory at the end of 2007 is \$7,200. It also determined that at the end of 2007, customers owed it \$4,300, and that it owed suppliers \$5,100 and employees \$500. The company examined its checkbook and found that during 2007:

1. It paid suppliers \$54,000 and paid other operating costs of \$29,000. Included in the other operating costs was \$6,000 that it paid on January 1 for two years of rent on store space.
2. It paid \$8,000 for store equipment on January 1. It planned to use straight-line depreciation and expected to use the store equipment for five years, after which the store equipment would have a zero residual value.
3. Gretta withdrew \$15,000 during the year.

Based on this information, using accrual accounting the company prepared its income statement for 2007 that we show in Example 3-13 and its balance sheet at the end of 2007 that we show in Example 3-14.

In Example 3-13, Gropples Company computed its \$99,300 sales revenues by adding the \$4,300 ending accounts receivable to the \$95,000 it collected from customers. The company computed its \$51,900 cost of goods sold by subtracting the \$7,200 ending inventory and adding the \$5,100 ending accounts payable to the \$54,000 it paid to suppliers. It computed the \$26,500 other operating expenses by subtracting the \$3,000 prepaid rent (the cost of the remaining year of rent it had paid for in advance) and adding the \$500 ending salaries payable to the \$29,000 it paid for other operating costs. It computed the \$1,600 depreciation expense by dividing the \$8,000 cost of the store equipment by the five-year estimated life.

In Example 3-14, most of the amounts come from the initial information we presented for the company. The \$1,600 accumulated depreciation is the depreciation to date (one year, in this example; in later years, this amount would increase each year by the amount of the annual depreciation expense). The company computed the \$24,300 amount of the G. Gropples capital account by adding the \$19,300 net income and subtracting the \$15,000 withdrawals from the \$20,000 initial investment.

In more complex situations, a company may have items such as deferred revenues and accrued revenues, sales returns and allowances, purchases returns and allowances,

**EXAMPLE 3-13 Income Statement (Gropgles Company)****GROPPLER COMPANY****Income Statement  
For Year Ended December 31, 2007**

Sales revenue		\$99,300 <sup>a</sup>
Cost of goods sold		<u>(51,900)<sup>b</sup></u>
Gross profit		\$47,400
Operating expenses		
Depreciation expenses	\$ 1,600 <sup>d</sup>	
Other operating expenses	<u>26,500<sup>c</sup></u>	
Total expenses		<u>(28,100)</u>
Net Income		<u>\$19,300</u>

<sup>a</sup>\$95,000 collections from customers + \$4,300 ending accounts receivable.

<sup>b</sup>\$54,000 payments to suppliers – \$7,200 ending inventory + \$5,100 ending accounts payable.

<sup>c</sup>\$29,000 payments for other operating costs – \$3,000 ending prepaid rent ( $\$6,000 \times 1/2$ ) + \$500 ending salaries payable.

<sup>d</sup>\$8,000 store equipment  $\div$  5 years.

and interest revenue and expense, as well as gains or losses on sales of equipment. In these cases the company may make additional adjustments to determine its revenues and expenses, and may provide more detail in the revenues, cost of goods sold, and operating expenses sections of its income statement. For convenience, the company may prepare a worksheet to help it determine these amounts. Regardless of how simple or complex the adjustments are, the intent is to report the company's financial statements on an accrual basis according to generally accepted accounting principles. ♦

**EXAMPLE 3-14 Balance Sheet (Gropgles Company)****GROPPLER COMPANY****Balance Sheet  
December 31, 2007**

<b>Assets</b>		<b>Liabilities</b>	
<b>Current Assets</b>		<b>Current Liabilities</b>	
Cash	\$ 9,000	Accounts payable	\$ 5,100
Accounts receivable	4,300	Salaries payable	<u>500</u>
Inventory	7,200	Total liabilities	\$ 5,600
Prepaid rent	<u>3,000</u>		
Total current assets	\$23,500	<b>Owner's Equity</b>	
Property and Equipment		G. Gropgles, capital	\$24,300 <sup>a</sup>
Store equipment	\$ 8,000		
Less: Accumulated depreciation	<u>(1,600)</u>		
Total property and equipment	6,400		
Total Assets	<u>\$29,900</u>	Total Liabilities	<u>\$29,900</u>

<sup>a</sup>\$20,000 beginning investment + \$19,300 net income (from Example 3-13) – \$15,000 withdrawals.

## SUMMARY

At the beginning of the chapter, we identified several objectives you would accomplish after reading the chapter. The objectives are listed below, each followed by a brief summary of the key points in the chapter discussion.

1. **Understand the components of an accounting system.** The components of an accounting system include: (1) the framework for operating the system, (2) the input source documents, (3) the records used to store accounting information, and (4) the output reports.
2. **Know the major steps in the accounting cycle.** The major steps in the accounting cycle include: (1) recording (journalizing) daily transactions in a journal, (2) posting the journal entries to the accounts in the general ledger, (3) preparing and posting adjusting entries, (4) preparing the financial statements, and (5) preparing and posting closing entries for the revenue, expense, and dividend accounts.
3. **Prepare journal entries in the general journal.** To make a journal entry to record a transaction, enter the date in the date column. Next, enter the title of the account and amount to be debited in the account titles column and debit column, respectively. Then, enter the title of the account and amount to be credited in the account titles column and credit column, respectively. Finally, write a short explanation of the transaction in the account titles column.
4. **Post to the general ledger and prepare a trial balance.** To post to the general ledger, for each journal entry, first transfer from the general journal the date and the amount debited to the account in the general ledger. Next, transfer the date and the amount credited to the account in the general ledger. To prepare a trial balance at the end of the accounting period, first compute the balance in each account. Then, list each account and list its balance in the debit or credit column of the working paper (trial balance). Finally, total the debit and credit columns to verify that the totals are equal.
5. **Prepare adjusting entries.** Adjusting entries are journal entries made at the end of the accounting period so that a company's financial statements include the correct amounts for the current period. Adjusting entries are made to: (1) apportion prepaid and deferred items, (2) record accrued items, and (3) record estimated items. Adjusting entries are made in the usual manner in the general journal.
6. **Prepare financial statements.** To prepare a company's financial statements, first prepare an adjusted trial balance to verify that the total of the debit balances is equal to the total of the credit balances in the company's accounts. Then, prepare the income statement, which includes the company's revenues, expenses, and net income. Next, prepare the retained earnings statement, which shows the change in retained earnings because of the company's net income and dividends. Finally, prepare the balance sheet, which includes the company's assets, liabilities, and stockholders' equity.
7. **Prepare closing entries.** Closing entries are journal entries of a company made at the end of the accounting period (1) to reduce the balance in each temporary account (revenue, expense, and dividend accounts) to zero, and (2) to update the retained earnings account. Closing entries are made in the usual manner in the general journal.
8. **Complete a worksheet (spreadsheet).** To complete a worksheet, first list each account and list its balance in the debit or credit column of the trial balance. Second, enter the adjusting entries as debits or credits in the adjustments columns. Third, combine the trial balance amount of each account with the adjustments to that account and carry over the resulting amount to the proper column of the financial statement in which the account is included. Fourth, subtotal the income statement debit and credit columns, make an adjusting entry for any income taxes on the difference between the columns (the pretax income), and carry the adjustment amounts to the appropriate financial statement columns. Finally, subtotal the income statement columns. List the difference as net income (or net loss), write the amount in the debit (credit) column and balance the income statement columns. Transfer the net income (net loss) amount to the retained earnings columns and balance these columns. Then transfer the retained earnings balance to the balance sheet credit column and balance these columns.
9. **Prepare reversing entries.** A reversing entry is the exact reverse (accounts and amounts) of an adjusting entry. Reversing entries are made at the end of an accounting period to simplify the recording of later transactions. A reversing entry enables a company to routinely record the later transaction without having to consider the possible impact of the prior adjusting entry.
10. **Use subsidiary ledgers.** A subsidiary ledger is a group of accounts, all of which pertain to one specific company activity. Most companies have subsidiary ledgers for accounts receivable and accounts payable to better focus on collections from customers and payments for payables. When a company uses a subsidiary ledger it still maintains a *control account* in its general ledger. The balance of the control account must be equal to the total of the balances of all the individual accounts in the subsidiary ledger.
11. **Understand special journals.** The major special journals are the: (1) sales journal (for sales on credit), (2) purchases journal (for purchases on credit), (3) cash receipts journal, (4) cash payments journal, and (5) general journal (for miscellaneous transactions).

12. **Convert cash-basis financial statements to accrual-basis (Appendix).** First, start with the income statement. Make adjustments to the collections from customers for any changes in accounts receivable. Make adjustments to the payments to suppliers for any changes in inventory and accounts payable. Make adjustments to the payments for other operating costs for any changes in prepaid expenses or accrued expenses, and for depreciation expense. Complete the accrual-basis income statement using the resulting amounts. Use the cash balance from the company's checkbook and the information from the preceding adjustments (e.g., accounts receivable, accounts payable, etc.) to prepare the ending balance sheet.

## QUESTIONS

- Q3-1** What is a primary objective of financial reporting?
- Q3-2** What is an *accounting system*?
- Q3-3** Discuss the relationship between the accounting equation and the double-entry system of recording transactions.
- Q3-4** What is the difference between a *permanent* and a *temporary* account? Give examples of each.
- Q3-5** What are the major financial statements of a company and what information does each summarize?
- Q3-6** Define the following:
- Account*
  - Contra account*
  - Ledger*
  - Journal*
  - Posting*
- Q3-7** Why is it advantageous to a company to initially record each of its transactions in a journal?
- Q3-8** What is a perpetual accounting system? What journal entries are involved?
- Q3-9** Give examples of transactions that:
- Increase an asset and a liability.
  - Increase an asset and stockholders' equity.
  - Increase an asset and decrease an asset.
  - Decrease an asset and a liability.
  - Decrease an asset and stockholders' equity.
- Q3-10** Give examples of transactions that:
- Increase inventory account and a liability.
  - Decrease inventory account and a liability.
  - Increase inventory account and decrease an asset.
  - Decrease inventory account and increase an asset.
- Q3-11** What are the steps that a company completes in the accounting cycle? Briefly discuss each step.
- Q3-12** Why are adjusting entries necessary?
- Q3-13** What are *prepaid expenses* and *deferred revenues*? Give an example of an adjusting entry to update each of these items at year-end.
- Q3-14** What are *accrued expenses* and *accrued revenues*? Give an example of an adjusting entry to record each of these items.
- Q3-15** Give two examples of adjusting entries to record estimated items. Include in one example a discussion of how depreciation is computed.
- Q3-16** What is the difference between a *trial balance* and an *adjusted trial balance*? Why is the latter a useful accounting working paper?
- Q3-17** What is the difference between a sales return and a sales discount? How does each affect net sales?
- Q3-18** What is a periodic inventory system? How is cost of goods sold computed when a company uses a periodic inventory system?
- Q3-19** What are the objectives of closing entries?
- Q3-20** Show, without amounts, the form of the closing entries for a retail store using a perpetual inventory system.
- Q3-21** What is a *worksheet*? How does the use of a worksheet facilitate the completion of the accounting cycle?
- Q3-22** What are *reversing entries* and why are they used? Give an example of an adjusting entry and a reversing entry for salaries payable, and the later entry to pay the salaries.
- Q3-23** What is a *subsidiary ledger* and a *control account*, and why are they used? Give an example of how they work.
- Q3-24** What are *special journals* and what advantages are achieved by using them?
- Q3-25** What are the major special journals? Give an example of transactions that would be recorded in each journal.
- Q3-26** Identify the common software for the financial accounting functions.
- Q3-27** What is cash-basis accounting? What must a company do to convert its cash-basis accounting records to an accrual-based income statement?

## EXERCISES

**E3-1 Financial Statement Interrelationship** Draw a diagram that shows the interrelationship between the beginning balance sheet, income statement, retained earnings statement, and ending balance sheet.

**E3-2 Journal Entries** The Mead Company uses a perpetual inventory system and engaged in the following transactions during the month of May:

Date	Transaction
May 1	Made cash sales of \$6,300; the cost of the inventory was \$3,700.
5	Purchased \$2,000 of inventory on credit.
9	Made credit sales of \$3,300; the cost of the inventory sold was \$1,900.
13	Paid sales salaries of \$900 and office salaries of \$600.
14	Paid for the May 5 purchases.
18	Purchased sales equipment costing \$8,000; made a down payment of \$2,000 and agreed to pay the balance in 60 days.
21	Purchased \$600 of inventory for cash.
27	Sold land that had originally cost \$1,900 for \$2,600.

### Required

Record the preceding transactions in a general journal.

**E3-3 Journal Entries** The following are selected accounts and account balances of the Sawyer Company on May 31:

	Debit (Credit)
Cash	\$12,523
Accounts receivable	23,052
Inventory	16,300
Office equipment	35,860
Accumulated depreciation	(10,540)
Notes payable	(3,400)
Accounts payable	(3,500)
Sales revenue	(47,872)
Gain on sale of office equipment	(400)
Cost of goods sold	22,354
Utility expense	1,124

The Sawyer Company entered into the following transactions during June:

Date	Transaction
June 3	Sold for \$700 office equipment that had cost \$2,000 and has associated accumulated depreciation of \$1,500.
7	Made sales of \$2,000 on credit; the cost of the inventory sold was \$1,200.
10	Purchased \$1,000 of inventory for cash.
15	Purchased new office equipment costing \$4,000, paying \$1,500 and signing a 90-day note for the balance.
16	Received check for June 7 credit sale.
17	Made cash sales of \$4,200; the cost of the inventory sold was \$2,300.
20	Purchased \$2,600 of inventory on credit.
24	Returned \$200 of defective inventory from the June 20 purchase for a credit to its account.
29	Paid for the June 20 purchase less the return.
30	Paid the monthly utility bill, \$210.

### Required

- Record the preceding transactions in a general journal.
- Post to the accounts.

**E3-4 Basic Income Statement** The following are selected account balances of the Rule Corporation at the end of 2007:

	Debit	Credit
Operating expenses	\$3,800	
Sales returns	600	
Sales revenue		\$16,200
Cost of goods sold	8,300	
Interest expense	800	
Gain on sale of land		500

The company is subject to a 30% income tax rate and stockholders own 800 shares of its capital stock.

**Required**

Prepare a 2007 income statement for Rule Corporation.

**E3-5 Periodic Inventory System** Raynolde Company uses a periodic inventory system. At the end of 2007, the following information is available:

Purchases returns and allowances	\$ 1,400
Inventory, 12/31/2007	11,900
Purchases	21,200
Inventory, 1/1/2007	10,800
Purchases discounts	600

**Required**

Prepare a schedule to compute Raynolde Company's cost of goods sold for 2007.

**E3-6 Financial Statements** The Turtle Company has prepared the following adjusted trial balance for the year ended December 31, 2007:

	Debit	Credit
Cash	\$ 1,700	
Accounts receivable (net)	2,100	
Inventory	1,800	
Equipment	5,400	
Accumulated depreciation		\$ 1,700
Accounts payable		2,300
Salaries payable		300
Income taxes payable		360
Capital stock (400 shares)		3,200
Retained earnings		2,500
Dividends distributed	200	
Sales revenue		7,900
Cost of goods sold	4,300	
Selling expenses	1,800	
Administrative expenses	600	
Income tax expense	360	
Totals	<u>\$18,260</u>	<u>\$18,260</u>

**Required**

Prepare for 2007 in proper form: (1) an income statement, (2) a retained earnings statement, (3) an ending balance sheet, and (4) closing entries.

**E3-7 Adjusting Entries** Your examination of the records of the Sullivan Company provides the following information for the December 31, 2007 year-end adjustments:

1. Bad debts are to be recorded at 2% of sales. Sales totaled \$25,000 for the year.
2. Salaries at year-end that have accumulated but have not been paid total \$1,400.
3. Annual straight-line depreciation for the company's equipment is based on a cost of \$30,000, an estimated life of eight years, and an estimated residual value of \$2,000.
4. Prepaid insurance in the amount of \$800 has expired.
5. Interest that has been earned but not collected totals \$500.
6. Unearned rent in the amount of \$1,000 has become earned.

7. Interest on a note payable that has accumulated but has not been paid totals \$600.
8. The income tax rate is 30% on current income and is payable in the first quarter of 2008. The pretax income before the preceding adjusting entries is \$6,800.

**Required**

Prepare the adjusting entries to record the preceding information.

**E3-8 Adjusting Entries** The following are several transactions of the Pruitt Company that occurred during the current year and were recorded in *real* (that is, balance sheet) accounts unless indicated otherwise:

Date	Transaction
Apr. 1	Purchased a delivery van for \$10,000, paying \$1,000 down, and issuing a one-year, 12% note payable for the \$9,000 balance. It is estimated that the van has a four-year life and an \$800 residual value; the company uses straight-line depreciation. The interest on the note will be paid on the maturity date.
May 15	Purchased \$830 of office supplies.
June 2	Purchased a two-year comprehensive insurance policy for \$960.
Aug. 1	Received six months' rent in advance at \$260 per month and recorded the \$1,560 receipt as Rent Earned.
Sept. 15	Advanced \$600 to sales personnel to cover their future travel costs.
Nov. 1	Accepted a \$6,000, six-month, 12% (annual rate) note receivable from a customer, the interest to be collected when the note is collected.

The following information also is available:

1. On January 1, the Office Supplies account had a \$250 balance. On December 31, an inventory count showed \$190 of office supplies on hand.
2. The weekly (five-day) payroll of Pruitt Company amounts to \$2,000. All employees are paid at the close of business each Wednesday. A two-day accrual is required for the current year.
3. Sales personnel travel cost reports indicate that \$490 of advances had been used to pay travel expenses.
4. The income tax rate is 30% on current income and is payable in the first quarter of next year. The pretax income before the adjusting entries is \$8,655.

**Required**

On the basis of the above information, prepare journal entries to record whatever *adjustments* are necessary to bring the accounts up to date on December 31. Each journal entry explanation should show any related computations.

**E3-9 Adjusting Entries** The following partial list of accounts and account balances has been taken from the trial balance and the adjusted trial balance of the Barker Company:

	Trial Balance		Adjusted Trial Balance	
	Debit	Credit	Debit	Credit
Accumulated depreciation		\$5,200		\$6,600
Allowance for doubtful accounts		380		650
Income taxes payable		0		2,250
Interest payable		0		320
Prepaid insurance	\$350		\$90	
Salaries payable		0		720
Unearned rent		900		300

**Required**

Prepare the adjusting entry that caused the change in each account balance.

**E3-10 Closing Entries** The Collins Corporation shows the following inventory, dividends, revenue, and expense account balances before closing:

	Debit	Credit		Debit	Credit
Dividends distributed	\$ 250		Gain on sale of land		\$300
Sales revenue		\$2,400	Salaries expense	\$300	
Sales returns	200		Utilities expense	130	
Cost of goods sold	1,350		Miscellaneous expenses	120	
			Income tax expense	180	

**Required**

Prepare closing entries.

**E3-11 Worksheet for Service Company** The Grant Consulting Company has prepared a trial balance on the following partially completed worksheet for the year ended December 31, 2007:

	A	B	C	D	E	F	G	H	I	J	K
1								Retained			
2						Income		Earnings		Balance	
3		Trial Balance		Adjustments		Statement		Statement		Sheet	
4	Accounts	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
5	Cash	3,800									
6	Prepaid rent	2,400									
7	Office equipment	7,000									
8	Accumulated depreciation		1,400								
9	Notes payable (due 7/1/08)		2,000								
10	Capital stock (200 shares)		4,000								
11	Retained earnings (1/1/07)		3,200								
12	Dividends distributed	200									
13	Consulting revenues		6,100								
14	Salaries expense	2,500									
15	Miscellaneous expenses	800									
16	Totals	16,700	16,700								
17											

*Additional information:* (a) On January 1, 2007 the company had paid two years' rent in advance at \$100 a month on its office space, (b) the office equipment is being depreciated on a straight-line basis over a 10-year life, and no residual value is expected, (c) interest of \$150 has accrued on the note payable but has not been paid, and (d) the income tax rate is 30% on current income and will be paid in the first quarter of 2008.

**Required** 

1. Complete the worksheet.
2. Prepare financial statements for 2007.

**E3-12 Worksheet, Including Inventory** The Murphy Company prepared a trial balance on the following partially completed worksheet for the year ended December 31, 2007:

	A	B	C	D	E	F	G	H	I	J	K
1								Retained			
2						Income		Earnings		Balance	
3		Trial Balance		Adjustments		Statement		Statement		Sheet	
4	Accounts	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
5	Cash	2,500									
6	Accounts receivable	4,000									
7	Allowance for doubtful accounts		300								
8	Inventory	8,200									
9	Prepaid rent	3,600									
10	Equipment	30,000									
11	Accumulated depreciation		12,000								
12	Accounts payable		3,700								
13	Notes payable (due 7/1/08)		5,000								
14	Capital stock (1,000 shares)		8,900								
15	Retained earnings (1/1/07)		10,200								
16	Dividends distributed	1,000									
17	Sales revenues		45,000								
18	Cost of goods sold	21,000									
19	Salaries expense	7,100									
20	Utilities expense	3,300									
21	Advertising expense	4,400									
22	Totals	85,100	85,100								
23											

*Additional information:* (a) The equipment is being depreciated on a straight-line basis over a 10-year life, with no residual value; (b) salaries accrued but not recorded total \$500; (c) on January 1, 2007 the company had paid three years' rent in advance at \$100 per month; (d) bad debts are expected to be 1% of total sales; (e) interest of \$400 has accrued on the note payable; and (f) the income tax rate is 40% on current income and will be paid in the first quarter of 2008.

**Required** 

1. Complete the worksheet.
2. Prepare financial statements for 2007.
3. Prepare closing entries in the general journal.

**E3-13 Reversing Entries** On December 31, 2007 Adams Company made the following adjusting entries for its annual accounting period:

Depreciation Expense	2,400	
Accumulated Depreciation		2,400
To record depreciation on buildings.		
Interest Receivable	500	
Interest Revenue		500
To record interest on note receivable due January 28, 2008.		
Rent Expense	400	
Prepaid Rent		400
To record expired prepaid rent.		
Interest Expense	620	
Interest Payable		620
To record interest on note payable due March 16, 2008.		

#### Required

Prepare whatever reversing entries are appropriate.

**E3-14 Special Journals** The following are several transactions of a company that uses special journals:

Transaction	Journal
1. Purchase of inventory for cash.	_____
2. Sale of inventory on credit.	_____
3. Payment of sales salaries.	_____
4. Purchase of inventory on credit.	_____
5. Sale of merchandise for cash.	_____
6. Purchase of land by issuing note payable.	_____
7. Collection of short-term note receivable and related interest.	_____
8. Return of defective inventory to supplier for credit to account.	_____
9. Preparation of adjusting entries.	_____
10. Purchase of equipment for cash.	_____

#### Required

In the space provided, indicate in which journal the transaction would be recorded using the codes: *G* for general journal, *S* for sales journal, *P* for purchases journal, *CR* for cash receipts journal, and *CP* for cash payments journal.

**E3-15 Cash-Basis Accounting (Appendix)** Ellis Company keeps its accounting records on a cash basis during the year. At year-end, it adjusts its books to the accrual basis for preparing its financial statements. At the end of 2006, Ellis Company reported the following balance sheet items:

	<u>Debit</u>	<u>Credit</u>
Cash	\$ 2,700	
Accounts receivable	4,200	
Inventory	5,600	
Equipment	12,000	
Accumulated depreciation		\$ 4,800
Accounts payable		6,100
M. Ellis, capital		<u>13,600</u>
Totals	<u>\$24,500</u>	<u>\$24,500</u>

It is now the end of 2007. The company's checkbook shows a balance of \$4,700, which includes cash receipts from customers of \$51,300 and cash payments of \$49,300.

An examination of the cash payments show that: (1) \$30,600 was paid to suppliers, (2) \$12,700 was paid for other operating costs (including \$7,200 paid on January 1 for two years' annual rent), and (3) \$6,000 was withdrawn by M. Ellis.

On December 31, 2007, (1) customers owed Ellis Company \$5,900, (2) Ellis Company owed suppliers and employees \$7,000 and \$900, respectively, and (3) the ending inventory was \$6,300. Ellis is depreciating the equipment using straight-line depreciation over a 10-year life (no residual value).

### Required

Using accrual-based accounting, prepare (1) a 2007 income statement and (2) a December 31, 2007 balance sheet (show supporting calculations).

## PROBLEMS

**P3-1** *Journal Entries, Posting, and Trial Balance* The account balances of the Antil Company on November 1, 2007 are as follows:

	Debit	Credit		Debit	Credit
Cash	\$ 7,800		Patents	\$25,000	
Accounts receivable	12,530		Accounts payable		\$38,750
Allowance for doubtful accounts		\$ 740	Notes payable		2,400
Notes receivable	6,000		Common stock, no par		165,000
Inventory	25,121		Retained earnings, January 1, 2007		24,958
Prepaid insurance	840		Sales revenue		38,400
Office supplies	465		Sales returns and allowances	1,567	
Land	74,350		Cost of goods sold	32,000	
Buildings	66,580		Sales salaries expense	6,200	
Accumulated depreciation:			Office salaries expense	4,300	
buildings		21,400	Advertising expense	1,250	
Equipment	37,620		Utility expense	1,845	
Accumulated depreciation:			Interest revenue		550
equipment		11,480	Interest expense	210	

During the month of November, the following transactions took place:

Date	Transaction
Nov. 2	Made cash sales of \$3,400; the cost of the inventory sold was \$2,040.
3	Purchased \$900 of inventory for cash.
5	Sold an unused 1/2 acre of land for \$4,000; the land had originally cost \$3,650.
8	Purchased a two-year comprehensive insurance policy for \$528.
12	Leased an unused portion of its building to Charles Company, collecting six months' rent in advance at \$220 per month.
13	Made \$2,300 of sales on credit to Smith Company; the cost of the inventory sold was \$1,400.
16	Collected the \$200 monthly payment plus \$30 interest on a customer's note receivable.
17	Purchased \$1,600 of inventory on credit from Mason Company.
19	Granted Smith Company a \$200 allowance for defective inventory (from the November 13 transaction) and credited its account.
20	Purchased land for a future building site. Made a \$2,000 down payment and signed a 12%, 90-day \$6,000 note payable for the balance.
23	Collected the Smith Company account for the November 13 sale less the return.
26	Paid for the November 17 purchase of inventory.
27	Paid the city newspaper \$420 for advertising that had appeared during November.
30	Paid \$520 of sales salaries and \$390 of office salaries.

### Required

1. Prepare general journal entries to record the preceding transactions.
2. Post to the general ledger accounts.
3. Prepare a trial balance on November 30, 2007.

**P3-2 Financial Statements** The Stern Company uses a perpetual inventory system and has prepared the following *adjusted trial balance* on December 31, 2007:

	Debit	Credit
Cash	\$ 2,000	
Accounts receivable	2,700	
Allowance for doubtful accounts		\$ 250
Inventory	6,500	
Prepaid insurance	800	
Land	5,200	
Buildings and equipment	31,000	
Accumulated depreciation		15,000
Accounts payable		3,100
Salaries payable		420
Unearned rent		360
Income taxes payable		2,625
Note payable (due July 1, 2011)		5,000
Interest payable (due July 1, 2011)		750
Capital stock (1,500 shares)		9,000
Retained earnings, January 1, 2007		6,770
Dividends distributed	1,200	
Sales revenue		33,000
Sales returns	2,100	
Rent revenue		1,440
Cost of goods sold	15,040	
Selling expenses	4,800	
Administrative expenses	3,000	
Interest expense	750	
Income tax expense	2,625	
Totals	<u>\$77,715</u>	<u>\$77,715</u>

#### Required

Prepare in proper form for 2007 the company's: (1) income statement, (2) retained earnings statement, (3) ending balance sheet, and (4) closing entries in its general journal.

**P3-3 Financial Statements** The Nealy Company has prepared the following alphabetical *adjusted trial balance* on December 31, 2007:

	Debit	Credit
Accounts payable		\$ 6,400
Accounts receivable	\$ 5,700	
Accumulated depreciation: buildings		19,000
Accumulated depreciation: equipment		11,000
Additional paid-in capital		15,000
Administrative expenses	6,500	
Allowance for doubtful accounts		600
Buildings	42,000	
Capital stock, \$1 par (4,000 shares)		4,000
Cash	5,000	
Cost of goods sold	27,400	
Current income taxes payable		4,035
Dividends distributed	2,400	
Equipment	22,000	

	Debit	Credit
Income tax expense	4,035	
Interest expense	650	
Interest payable (due July 1, 2008)		650
Inventory	10,800	
Land	6,800	
Notes payable (due July 1, 2011)		10,000
Rent revenue		2,800
Retained earnings, January 1, 2007		14,500
Sales returns	4,900	
Sales revenue		59,800
Selling expenses	9,700	
Unearned rent		700
Unexpired insurance	1,600	
Wages payable		1,000
	\$149,485	\$149,485

### Required

Prepare the following 2007 items in proper form for the Nealy Company: (1) the income statement, (2) the retained earnings statement, (3) the ending balance sheet, and (4) the closing entries in the general journal. (*Hint:* For the ending balance sheet, the Capital Stock, Additional Paid-in Capital, and Retained Earnings accounts are summed to determine the total stockholders' equity.)

**P3-4 Adjusting Entries** The following 2007 information is available concerning the Drake Company, which adjusts and closes its accounts every December 31:

- Salaries accrued but unpaid total \$2,840 on December 31, 2007.
- The \$247 December utility bill arrived on December 31, 2007 and has not been paid or recorded.
- Buildings with a cost of \$78,000, 25-year life, and \$9,000 residual value are to be depreciated; equipment with a cost of \$44,000, eight-year life, and \$2,000 residual value is also to be depreciated. The straight-line method is to be used.
- A count of supplies indicates that the Store Supplies account should be reduced by \$128 and the Office Supplies account reduced by \$397 for supplies used during the year.
- The company holds a \$6,000, 12% (annual rate), six-month note receivable dated September 30, 2007 from a customer. The interest is to be collected on the maturity date.
- Bad debts expense is estimated to be 1% of annual sales. 2007 sales total \$65,000.
- An analysis of the company insurance policies indicates that the Prepaid Insurance account is to be reduced for the \$528 of expired insurance.
- A review of travel expense reports indicates that \$310 advanced to sales personnel (and recorded as Travel Expenses) has not yet been used by these personnel.
- The income tax rate is 30% on current income and will be paid in the first quarter of 2008. The pretax income of the company before adjustments is \$18,270.

### Required

Journalize the necessary adjusting entries for the company at the end of 2007. Show supporting calculations in your journal entry explanations.

**P3-5 Adjusting Entries** The Franklin Retail Company entered into the following transactions during 2007. [The transactions were properly recorded in *real* (balance sheet) accounts unless otherwise indicated.]

Date	Transaction
Jan. 25	Purchased \$480 of office supplies.
Feb. 1	Rented a warehouse from Tropple Company, paying one year's rent of \$3,600 in advance. Recorded the \$3,600 payment as rent expense.
Mar. 1	Borrowed \$10,000 from the bank, signing a one-year note at an annual interest rate of 12%. The interest was collected in advance by the bank. The company recorded the transaction as a debit to Cash \$8,800, debit to Interest Expense \$1,200, and credit to Notes Payable \$10,000.
May 1	Purchased office equipment for \$15,000, paying \$3,000 down and signing a two-year, 12% (annual rate) note payable for the balance. The office equipment is expected to have a useful life of 10 years and a residual value of \$1,500. Straight-line depreciation is appropriate.

Date	Transaction
May 31	Purchased a three-year comprehensive insurance policy for \$720.
Aug. 1	Sold land for \$9,000. The purchaser made a \$2,000 down payment and signed a one-year, 10% note for the balance. The interest and principal will be collected on the maturity date.
Oct. 1	Rented a portion of the retail floor space to a florist for \$120 per month, collecting eight months' rent in advance. Recorded the \$960 receipt as rent revenue.
Nov. 13	Issued checks to sales personnel totaling \$900. The checks are advances for expected travel costs during the remainder of the year.

On December 31, 2007 the following additional information is available:

- Property taxes for 2007 are due to be paid by April 1, 2008. The company has not paid or recorded its \$2,300 property taxes for 2007.
- The \$302 December utility bill has not been recorded or paid.
- Salaries accrued but not paid total \$927.
- Travel cost reports indicate that \$787 of travel advances have been used to pay travel expenses.
- The Office Supplies account had a balance of \$129 on January 1, 2007. A physical count on December 31, 2007 showed \$174 of office supplies on hand.
- On January 1, 2007 the Buildings account and the Store Equipment account had balances of \$100,000 and \$65,000, respectively. The buildings are expected to have an \$8,000 residual value, while the store equipment is expected to have a \$2,000 residual value at the end of their respective lives. They are being depreciated using the straight-line method over 20- and 10-year lives, respectively.
- The income tax rate is 30% on current income and is payable in the first quarter of 2008. The pretax income of the company before adjustments is \$27,749.

#### Required

On the basis of the preceding information, prepare journal entries to adjust the company's books as of December 31, 2007. Each entry explanation should include supporting computations. (Round to the nearest dollar.)

**P3-6** *Adjusting Entries* At the end of 2007 the Ritter Company prepared a trial balance, recorded and posted its adjusting entries, and then prepared an adjusted trial balance. Selected accounts and account balances from the trial balance and adjusted trial balance are as follows:

	Partial Trial Balance		Partial Adjusted Trial Balance	
	Debit	Credit	Debit	Credit
Depreciation expense	\$ 0		\$3,960	
Interest payable (due May 14, 2009)		\$ 0		\$ 810
Bad debts expense	0		410	
Utilities expense	1,480		1,682	
Rental revenue		1,650		2,635
Income tax expense	0		2,740	
Prepaid insurance	1,742		1,380	
Office salaries payable		0		540
Rent expense	0		800	
Accumulated depreciation		14,820		18,780
Interest receivable (due March 1, 2008)	0		320	
Prepaid rent	1,600		800	
Office salaries expense	5,600		6,140	
Income taxes payable		0		2,740
Insurance expense	300		662	
Allowance for doubtful accounts		130		540
Interest expense	0		810	
Unearned rent		600		0
Utilities payable		0		202
Interest revenue		620		940

	Partial Trial Balance		Partial Adjusted Trial Balance	
	Debit	Credit	Debit	Credit
Sales salaries expense	7,300		7,850	
Office supplies	1,150		700	
Rent receivable	0		385	
Advances to salespersons	770		220	
Office supplies expense	0		450	

**Required**

- By comparing the partial trial balance to the partial adjusted trial balance, determine the adjusting entries that the company made on December 31, 2007. Prepare your answers in general journal form.
- Assuming that the company uses reversing entries, indicate which adjusting entries should be reversed.

**P3-7 Adjusting Entries** The trial balance of the Trishia Company on December 31, 2007 (the end of its *annual* accounting period) included the following account balances *before* adjustments:

Notes receivable	\$ 10,000 debit
Insurance expense	3,000 debit
Delivery equipment	14,000 debit
Building	60,000 debit
Unearned rent	4,320 credit
Notes payable	7,200 credit
Office supplies expense	1,000 debit

Reviewing the company's recorded transactions and accounting records for 2007, you find the following data pertaining to the December 31, 2007 adjustments:

- On July 2, 2007 the company had accepted a \$10,000, nine-month, 10% (annual rate) note receivable from a customer. The interest is to be collected when the note is collected.
- On August 2, 2007 the company had paid \$3,000 for a two-year insurance policy.
- The building was acquired in 1995 and is being depreciated using the straight-line method over a 25-year life. It has an estimated residual value of \$8,000.
- The delivery equipment was purchased on April 2, 2007. It is to be depreciated using the straight-line method over a 10-year life, with an estimated residual value of \$2,000.
- On September 1, 2007 the company had received two years' rent in advance (\$4,320) for a portion of a building it is renting to Oscar Company.
- On December 1, 2007 the company had issued a \$7,200, three-month, 12% (annual rate) note payable to a supplier. The interest is to be paid when the note is paid.
- On January 2, 2007 the company purchased \$1,000 of office supplies. A physical count on December 31, 2007 revealed that there are \$400 of office supplies still on hand. No supplies were on hand at the beginning of the year.

**Required**

Prepare the adjusting entries that are necessary to bring the Trishia Company accounts up to date on December 31, 2007. Each journal entry explanation should summarize your calculations.

**P3-8 Income Statement Calculations** The Ferdon Company uses a periodic inventory system. The following is partial information from its income statements for 2007 and 2008:

	2007	2008
Beginning inventory	\$ (2)	\$ (4)
Sales	220,000	(6)
Purchases	118,000	140,000
Purchases returns	2,000	3,000
Ending inventory	48,000	74,000
Sales returns	1,000	3,000
Gross profit	(1)	77,000
Cost of goods sold	106,000	(5)
Expenses	65,000	62,000
Net income	(3)	15,000

**Required**

Fill in the blanks numbered 1 through 6. (*Hint:* It probably is easiest to work through the blanks according to the sequential numbers.)

**P3-9 Effects of Errors** During the current accounting period Page Company makes the following errors. The company uses a perpetual inventory system.

Error	Net Income	Total Assets	Total Liabilities	Total Stockholders' Equity
<i>Example:</i> Failed to record a cash sale.	U	U	N	U
1. The purchase of equipment for cash is recorded as a debit to Equipment and a credit to Accounts Payable.				
2. Failed to record the purchase of inventory on credit.				
3. Cash received from a customer in payment of its account is recorded as if the receipt were for a current period sale.				
4. Failed to record a credit sale.				
5. At the end of the year the receipt of money from a 60-day, 12% bank loan is recorded as a debit to Cash and a credit to Sales Revenue.				
6. Failed to record depreciation at the end of the current period.				

**Required**

Indicate the effect of the errors on the net income, total assets, total liabilities, and total stockholders' equity at the end of the accounting period by using the following code: O = overstated, U = understated, N = no effect. Disregard income taxes.

**P3-10 Errors in Financial Statements** At the end of the current year, the controller of the Jodi Corporation discovers the following items of information:

- Salaries are paid every Friday for a five-day work week. The normal weekly payroll is \$40,000. The year-end falls on a Tuesday this year.
- The company has a \$20,000, nine-month, 12% (annual rate) note payable outstanding at the end of the year. The note was issued on October 1; the interest is to be paid when the note is paid.
- Examining the Rent Expense account, the controller finds that it includes a \$4,800 advance payment for three months' rent. The payment was made on November 1.
- There are \$500 of office supplies left in the storeroom. At the beginning of the year there were no office supplies. During a year the company purchased \$3,500 of office supplies, which were debited to the Office Supplies account.
- The company received a large order in May with a \$13,000 advance payment. The advance payment was credited to Unearned Revenue. In November, the last of the order was received by the customer.

**Required**

For each of the preceding items, indicate the effect on net income, assets, liabilities, and stockholders' equity in the financial statements of the company for the year if the controller fails to make an adjusting entry for the item (ignore income taxes). (*Contributed by Paula L. Koch*)

**P3-11 Worksheet** The Fiorillo Company has the following account balances on December 31, 2007 prior to any adjustments:

	Debit	Credit		Debit	Credit
Cash	\$ 1,900		Accumulated depreciation:		
Accounts receivable	4,700		equipment		3,100
Allowance for doubtful accounts		\$ 60	Accounts payable		4,300
Inventory	8,700		Notes payable (due March 1, 2008)		1,400
Prepaid insurance	600		Unearned rent		1,200
Land	4,100		Mortgage payable (due		
Buildings	38,000		January 1, 2012)		7,300
Accumulated depreciation:			Capital stock (2,000 shares)		10,000
buildings		11,500	Retained earnings (January 1, 2007)		18,075
Equipment	10,700		Dividends distributed	1,300	

(continued)

	Debit	Credit		Debit	Credit
Sales revenue		49,355	Utilities expense	2,000	
Cost of goods sold	27,185		Office supplies expense	770	
Salaries expense	4,080		Delivery expense	1,275	
			Other expenses	980	

*Additional adjustment information:* (a) depreciation on buildings, \$1,100; on equipment, \$600, (b) bad debts expense, \$240, (c) interest accumulated but not paid: on note payable, \$50; on mortgage payable, \$530 (this interest is due during the next accounting period), (d) insurance expired, \$175, (e) salaries accrued but not paid \$370, (f) rent that was collected in advance and is now earned at year-end, \$800, (g) office supplies on hand at year-end, \$230 (expensed when originally purchased earlier in the year), and (h) the income tax rate is 30% on current income and is payable in the first quarter of 2008.

### Required

1. Transfer the account balances to a 10-column worksheet and prepare a trial balance.
2. Complete the worksheet.
3. Prepare the company's income statement, retained earnings statement, and balance sheet.
4. Prepare (a) adjusting, and (b) closing entries in the general journal.

**P3-12 Worksheet** The Langer Company has prepared the following partially completed worksheet for the year ended December 31, 2007:

	A	B	C	D	E	F	G	H	I	J	K
1											
2						Income		Retained		Balance	
3		Trial Balance		Adjustments		Statement		Statement		Sheet	
4	Accounts	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
5	Cash	1,000									
6	Accounts receivable	2,700									
7	Allowance for doubtful accounts		30								
8	Note receivable (due 5/1/08)	1,200									
9	Inventory	9,200									
10	Land	4,500									
11	Buildings and equipment	20,600									
12	Accumulated depreciation		8,790								
13	Accounts payable		4,050								
14	Notes payable (due 4/1/2010)		4,000								
15	Capital stock (2,000 shares)		5,000								
16	Retained earnings (1/1/07)		6,120								
17	Dividends distributed	600									
18	Sales revenue		25,140								
19	Rent revenue		550								
20	Cost of goods sold	9,050									
21	Salaries expense	2,750									
22	Delivery expense	720									
23	Heat and light expense	820									
24	Other expenses	540									
25	Totals	53,680	53,680								
26											

*The following additional information is available:* (a) salaries accrued but unpaid total \$250; (b) the \$80 heat and light bill for December has not been recorded or paid; (c) depreciation expense totals \$810 on the buildings and equipment; (d) interest accrued on the note payable totals \$380 (this will be paid when the note is repaid); (e) the company leases a portion of its floor space to Brix Specialty Company for \$50 per month, and Brix has not yet paid its December rent; (f) interest accrued on the note receivable totals \$80; (g) bad debts expense is \$70; and (h) the income tax rate is 30% on current income and is payable in the first quarter of 2008.

### Required

1. Complete the worksheet. (Round to the nearest dollar.)
2. Prepare the company's financial statements.
3. Prepare (a) adjusting, and (b) closing entries in the general journal.

**P3-13 Reversing Entries** During 2007, the Garson Company entered into two transactions involving promissory notes and properly recorded each transaction. These are listed next:

1. On November 1, 2007 it purchased land at a cost of \$8,000. It made a \$2,000 down payment and signed a note payable agreeing to pay the \$6,000 balance in 6 months plus interest at an *annual* rate of 10%.

2. On December 1, 2007 it accepted a \$4,200, three-month, 12% (*annual* interest rate) note receivable from a customer for the sale of merchandise. On December 31, 2007, the Garson Company made the following related adjustments:

Interest Expense	100	
Interest Payable		100
Interest Receivable	42	
Interest Revenue		42

**Required**

- Assuming that the Garson Company uses reversing entries, prepare journal entries to record:
  - The January 1, 2008 reversing entries
  - The March 1, 2008 \$4,326 collection of the note receivable
  - The May 1, 2008 \$6,300 payment of the note payable
- Assuming instead that the Garson Company does *not* use reversing entries, prepare journal entries to record the collection of the note receivable and the payment of the note payable.

**P3-14 Reversing Entries** On December 31, 2007 Cochran Company made the following proper year-end adjusting entries:

Date	Account Titles	Debit	Credit
Dec. 31	Bad Debts Expense	530	
	Allowance for Doubtful Accounts		530
31	Salaries Expense	940	
	Salaries Payable		940
31	Unearned Rent	1,230	
	Rent Revenue		1,230
31	Interest Expense	220	
	Interest Payable (due July 1, 2008)		220
31	Rent Receivable	310	
	Rent Revenue		310
31	Depreciation Expense	5,100	
	Accumulated Depreciation		5,100
31	Insurance Expense	312	
	Prepaid Insurance		312
31	Interest Receivable (due February 1, 2009)	225	
	Interest Revenue		225
31	Office Supplies	100	
	Office Supplies Expense		100
31	Advances to Salespersons	300	
	Salaries Expense		300
31	Income Tax Expense	4,300	
	Income Taxes Payable		4,300

**Required**

- Prepare journal entries to record whatever reversing entries you think are appropriate.
- Explain your reasoning for each reversing entry.

**P3-15 Comprehensive** On November 30, 2007 the Zu Company had the following account balances:

	Debit	Credit		Debit	Credit
Cash	\$ 3,090		Capital stock, no-par (2,000 shares)		\$20,000
Accounts receivable	9,900		Retained earnings (1/1/2007)		42,400
Allowance for doubtful accounts		\$ 100	Dividends distributed	\$ 2,000	
Inventory	17,750		Sales revenue		76,000
Supplies	1,400		Sales returns	6,300	
Land	9,000		Cost of goods sold	36,860	
Buildings and equipment	42,000		Salaries expense	12,500	
Accumulated depreciation		4,200	Advertising expense	8,100	
Accounts payable		10,700	Other expenses	4,500	

During the month of December the Zu Company entered into the following transactions:

Date	Transaction
Dec. 4	Made cash sales of \$3,000; the cost of the inventory sold was \$1,800.
7	Purchased \$2,400 of inventory on credit.
11	Customer returned \$600 (retail price) of inventory for credit to its account; the cost of the inventory returned was \$360.
14	Collected \$900 of accounts receivable.
18	Sold land for \$7,800; the land originally had cost \$5,000.
20	Made credit sales of \$4,000; the cost of the inventory sold was \$2,400.
21	Returned \$360 of defective inventory to supplier for credit to the Zu Company's account and reduced the inventory account.
27	Purchased \$1,250 of inventory for cash.
28	Paid \$1,100 of accounts payable.
31	Purchased land at a cost of \$6,000; made a \$1,000 down payment and signed a 12%, two-year note for the balance.

### Required

- Prepare general journal entries to record the preceding transactions.
- Post to the general ledger accounts.
- Prepare a year-end trial balance on a worksheet and complete the worksheet using the following information: (a) accrued salaries at year-end total \$1,200; (b) for simplicity, the building and equipment are being depreciated using the straight-line method over an estimated life of 20 years with no residual value; (c) supplies on hand at the end of the year total \$630; (d) bad debts expense for the year totals \$830; and (e) the income tax rate is 30%; income taxes are payable in the first quarter of 2008.
- Prepare the company's financial statements for 2007.
- Prepare the 2007 (a) adjusting and (b) closing entries in the general journal.

**P3-16 Comprehensive (Appendix)** Tina Tunxis is the owner of Valley Sales, a distributor of horticulture supplies. The following is the balance sheet of the company as of December 31, 2006:

Cash	\$ 2,300	Accounts payable	\$ 6,400
Accounts receivable	10,400	Salaries payable	1,200
Inventory	12,500		
Equipment	8,000		
Less: Accumulated depreciation	<u>(6,500)</u>	T. Tunxis, Capital	<u>\$19,100</u>
	<u>\$26,700</u>		<u>\$26,700</u>

Tina keeps very few records and has asked you to help her in the preparation of Valley Sales' 2007 financial statements. An analysis of the 2007 cash transactions recorded in the company's checkbook indicates deposits and checks as follows:

Total deposits: \$173,200; all were collections from customers except for a long-term \$10,000 bank loan.

Checks written: \$169,800 summarized as follows:

Inventory	\$123,100	Note payments (including interest of \$650)	\$ 2,650
Salaries	4,250	Office expense	3,400
Rent	4,800	Auto expense	4,100
Equipment	4,000	Withdrawals	23,500

Other information about the company is as follows:

- Accounts receivable at December 31, 2007, \$9,200.
- Accounts payable at December 31:
 

2006: Inventory	\$6,100	2007: Inventory	\$8,500
Office expense	<u>300</u>	Auto expense	<u>200</u>
	<u>\$6,400</u>		<u>\$8,700</u>
- Salaries payable at December 31, 2007, \$1,800.
- Equipment is depreciated by the straight-line method over a 10-year life. The equipment purchased in 2007 was acquired on July 1.
- Interest payable at December 31, 2007, \$140.
- The company uses a periodic inventory system. Inventory at December 31, 2007, \$17,400.

**Required**

1. Prepare a worksheet to summarize the transactions and adjustments of Valley Sales for 2007. (*Hint: Include debit and credit columns for both transactions and adjustments.*)
2. Prepare a 2007 income statement and a balance sheet as of December 31, 2007. (*Contributed by Walter A. Parker*)

**P3-17 AICPA Adapted Comprehensive (Appendix)** Presented next is information pertaining to Ward Specialty Foods, a calendar-year sole proprietorship, maintaining its books on the cash basis during the year. At year-end, however, Mary Ward's accountant adjusts the books to the accrual basis only for sales, purchases, and cost of sales, and records depreciation to more clearly reflect the business income.

**Trial Balance  
December 31, 2007**

	Debit	Credit
Cash	\$ 18,500	
Accounts receivable, 12/31/06	4,500	
Inventory, 12/31/06	20,000	
Equipment	35,000	
Accumulated depreciation, 12/31/06		\$ 9,000
Accounts payable, 12/31/06		4,800
Payroll taxes withheld		850
Mary Ward, withdrawals	24,000	
Mary Ward, capital, 12/31/06		33,650
Sales		187,000
Purchases	82,700	
Salaries	29,500	
Payroll taxes	2,900	
Rent	8,400	
Miscellaneous expense	3,900	
Insurance	2,400	
Utilities	3,500	
	<u>\$235,300</u>	<u>\$235,300</u>

During 2007, Ward signed a new eight-year lease for the store premises and is in the process of negotiating a loan for remodeling purposes. The bank requires Ward to present financial statements for 2007 prepared on the accrual basis. To do so, Ward's accountant obtained the following additional information:

1. Amounts due from customers totaled \$7,900 at December 31, 2007.
2. A review of the receivables at December 31, 2007 disclosed that an allowance for doubtful accounts of \$1,100 should be provided. Ward had no bad debt losses from the inception of the business through December 31, 2007.
3. The inventory amounted to \$23,000 at December 31, 2007 based on a physical count of goods priced at cost. No reduction to market was required.
4. On signing the new lease on October 1, 2007, Ward paid \$8,400 representing one year's rent in advance for the lease year ending October 1, 2008. The \$7,500 annual rental under the old lease was paid on October 1, 2006 for the lease year ended October 1, 2007.
5. On April 1, 2007, Ward paid \$2,400 to renew the comprehensive insurance coverage for one year. The premium was \$2,160 on the old policy, which expired on April 1, 2007.
6. Depreciation on the equipment was computed at \$5,800 for 2007.
7. Unpaid vendors' invoices for food purchases totaled \$8,800 at December 31, 2007.
8. Accrued expenses at December 31, 2006 and December 31, 2007 were as follows:

	12/31/06	12/31/07
Payroll taxes	\$250	\$400
Salaries	375	510
Utilities	275	450

After obtaining the preceding information, Ward's accountant prepared the following partially completed worksheet:

1	A	B	C	D	E	F	G
2		Cash Basis		Adjustments		Accrual Basis	
3	Accounts	Debit	Credit	Debit	Credit	Debit	Credit
3	Cash	\$18,500					
4	Accounts receivable	4,500					
5	Allowance for doubtful accounts						
6	Inventory	20,000					
7	Equipment	35,000					
8	Accumulated depreciation		\$9,000				
9	Prepaid rent						
10	Prepaid insurance						
11	Accounts payable		4,800				
12	Accrued expenses						
13	Payroll taxes withheld		850				
14	Ward, withdrawals	24,000					
15	Ward, capital		33,650				
16							
17	Sales		187,000				
18	Purchases	82,700					
19	Income summary - inventory						
20	Salaries	29,500					
21	Payroll taxes	2,900					
22	Rent	8,400					
23	Miscellaneous expenses	3,900					
24	Insurance	2,400					
25	Utilities	3,500					
26	Depreciation						
27	Bad debts						
28	Totals	\$235,300	\$235,300				
29							

#### Required

1. Complete the preceding worksheet to convert the trial balance of Ward Specialty Foods to the accrual basis for the year ended December 31, 2007.
2. Prepare the statement of changes in Mary Ward, Capital, for the year ended December 31, 2007.