CHAPTER 3

# The Accounting Cycle

## Capturing Economic Events

**AFTER STUDYING THIS CHAPTER, YOU SHOULD BE ABLE TO:**

## Learning Objectives

**LO3-1** Identify the steps in the accounting cycle and discuss the role of accounting records in an organization.

**LO3-2** Describe a ledger account and a ledger.

**LO3-3** Understand how balance sheet accounts are increased or decreased.

**LO3-4** Explain the double-entry system of accounting.

**LO3-5** Explain the purpose of a journal and its relationship to the ledger.

**LO3-6** Explain the nature of *net income, revenue,* and *expenses.*

**LO3-7** Apply the *realization* and *matching* principles in recording revenue and expenses.

**LO3-8** Understand how revenue and expense transactions are recorded in an accounting system.

**LO3-9** Prepare a trial balance and explain its uses and limitations.

**LO3-10** Distinguish between accounting cycle procedures and the *knowledge* of accounting.

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# KRAFT FOODS GROUP, INC.

Capturing the economic events of a *kool-Aid*™ stand is a fairly simple process. In fact, for most *kool-Aid*™ stands, a small notebook, a sharp pencil, and an empty shoebox may serve as a complete information system.

Capturing the economic activities of Kraft Foods Group, Inc.—one of the largest food companies in the world and the maker of *kool-Aid*™—is an entirely different matter. This corporate giant controls nearly $24 billion in total assets, earns more than $18 billion in annual revenue, and generates in excess of $3 billion in annual net cash flow from its operating activities. Employing nearly 24,000 people, and managing hundreds of manufacturing facilities and thousands of warehouses and distribution centers, Kraft Foods Group, Inc., must somehow capture the complex business transactions of its worldwide operations.

From *kool-Aid*™ stands to multinational corporations, efficiently and effectively capturing economic events—such as sales orders and raw material purchases—is absolutely essential for survival. Most enterprises use computer systems to account for these activities. Very few still use paper ledgers and handwritten journals to record daily activities and transactions. ■

Although Overnight Auto Service engaged in several business transactions in the previous chapter, we did not illustrate how these events were captured by Overnight for use by management and other interested parties. This chapter demonstrates how accounting systems record economic events related to a variety of business transactions.

## The Accounting Cycle

LO3-1

**LEARNING OBJECTIVE**
Identify the steps in the accounting cycle and discuss the role of accounting records in an organization.

In Chapter 2, we illustrated several transactions of Overnight Auto Service that occurred during the last week in January 2015. We prepared a complete set of financial statements immediately following our discussion of these transactions. For practical purposes, businesses do not prepare new financial statements after every transaction. Rather, they accumulate the effects of individual transactions in their *accounting records.* Then, at regular intervals, the data in these records are used to prepare financial statements, income tax returns, and other types of reports.

The sequence of accounting procedures used to record, classify, and summarize accounting information in financial reports at regular intervals is often termed the **accounting cycle.** The accounting cycle begins with the initial recording of business transactions and concludes with the preparation of a complete set of formal financial statements. The term *cycle* indicates that these procedures must be repeated continuously to enable the business to prepare new, up-to-date financial statements at reasonable intervals.

The accounting cycle generally consists of eight specific steps. In this chapter, we illustrate how businesses (1) journalize (record) transactions, (2) post each journal entry to the appropriate ledger accounts, and (3) prepare a trial balance. The remaining steps of the cycle will be addressed in Chapters 4 and 5. They include (4) making end-of-period adjustments, (5) preparing an adjusted trial balance, (6) preparing financial statements, (7) journalizing and posting closing entries, and (8) preparing an after-closing trial balance.

### THE ROLE OF ACCOUNTING RECORDS

The cyclical process of collecting financial information and maintaining accounting records does far more than facilitate the preparation of financial statements. Managers and employees of a business frequently use the information stored in the accounting records for such purposes as:

1. Establishing **accountability** for the assets and/or transactions under an individual's control.
2. Keeping track of routine business activities—such as the amounts of money in company bank accounts, amounts due from credit customers, or amounts owed to suppliers.
3. Obtaining detailed information about a particular transaction.
4. Evaluating the efficiency and performance of various departments within the organization.
5. Maintaining documentary evidence of the company's business activities. (For example, tax laws require companies to maintain accounting records supporting the amounts reported in tax returns.)

## The Ledger

LO3-2

**LEARNING OBJECTIVE**
Describe a ledger account and a ledger.

An accounting system includes a separate record for each item that appears in the financial statements. For example, a separate record is kept for the asset cash, showing all increases and decreases in cash resulting from the many transactions in which cash is received or paid. A similar record is kept for every other asset, for every liability, for owners' equity, and for every revenue and expense account appearing in the income statement.

The record used to keep track of the increases and decreases in financial statement items is termed a "ledger account" or, simply, an **account.** The entire group of accounts is kept together in an accounting record called a **ledger.** Exhibit 3–8 on page 110 illustrates the ledger of Overnight Auto Service.

## The Use of Accounts

An account is a means of accumulating in one place all the information about changes in specific financial statement items, such as a particular asset or liability. For example, the Cash account provides a company's current cash balance, a record of its cash receipts, and a record of its cash disbursements.

In its simplest form, an account has only three elements: (1) a title; (2) a left side, which is called the *debit* side; and (3) a right side, which is called the *credit* side. This form of an account, illustrated below and on the following page, is called a *T account* because of its resemblance to the letter "T." In a computerized system, of course, the elements of each account are stored and formatted electronically. More complete forms of accounts will be illustrated later.

**A T account—a ledger account in its simplest form**

| Title of Account | |
|---|---|
| Left or Debit Side | Right or Credit Side |

## Debit and Credit Entries

An amount recorded on the left, or debit, side of an account is called a **debit,** or a debit entry. Likewise, any amount entered on the right, or credit, side is called a **credit,** or a credit entry. In simple terms, debits refer to the left side of an account, and credits refer to the right side of an account.

To illustrate the recording of debits and credits in an account, let us go back to the eight cash transactions of Overnight Auto Service, described in Chapter 2. When these cash transactions are recorded in the Cash account, the receipts are listed on the debit side, and the payments are listed on the credit side. The dates of the transactions may also be listed, as shown in the following illustration:

**Cash transactions entered in ledger account**

| Cash | | | |
|---|---|---|---|
| 1/20 | 80,000 | 1/21 | 52,000 |
| 1/26 | 600 | 1/22 | 6,000 |
| 1/31 | 2,200 | 1/27 | 6,800 |
| | | 1/31 | 200 |
| | | 1/31 | 1,200 |
| 1/31 Balance | 16,600 | | |

Each debit and credit entry in the Cash account represents a cash receipt or a cash payment. The amount of cash owned by the business at a given date is equal to the *balance* of the account on that date.

**Determining the Balance of a T Account** The balance of an account is the difference between the debit and credit entries in the account. If the debit total exceeds the credit total, the account has a *debit balance;* if the credit total exceeds the debit total, the account has a *credit balance.*

In our illustrated Cash account, a line has been drawn across the account following the last cash transaction recorded in January. The total cash receipts (debits) recorded in January amount to $82,800, and the total cash payments (credits) amount to $66,200. By subtracting the credit total from the debit total ($82,800 − $66,200), we determine that the Cash account has a debit balance of *$16,600* on January 31.

This debit balance is entered in the debit side of the account just below the line. In effect, the line creates a "fresh start" in the account, with the month-end balance representing the *net result* of all the previous debit and credit entries. The Cash account now shows the amount of cash owned by the business on January 31. In a balance sheet prepared at this date, Cash in the amount of $16,600 would be listed as an asset.

**Debit Balances in Asset Accounts** In the preceding illustration of a Cash account, increases were recorded on the left, or debit, side of the account and decreases were recorded on the right, or credit, side. The increases were greater than the decreases and the result was a debit balance in the account.

L03-3

**LEARNING OBJECTIVE**
Understand how balance sheet accounts are increased or decreased.

All asset accounts *normally have debit balances*. It is hard to imagine an account for an asset such as land having a credit balance, as this would indicate that the business had disposed of more land than it had ever acquired. (For some assets, such as cash, it is possible to acquire a credit balance—but such balances are only *temporary*.)

The fact that assets are located on the *left* side of the balance sheet is a convenient means of remembering the rule that an increase in an asset is recorded on the *left* (debit) side of the account and an asset account normally has a debit *(left-hand)* balance.

**Asset accounts normally have debit balances**

| Any Asset Account | |
|---|---|
| Debit (to record an increase) | Credit (to record a decrease) |

**Credit Balances in Liability and Owners' Equity Accounts** Increases in liability and owners' equity accounts are recorded by credit entries and decreases in these accounts are recorded by debits. The relationship between entries in these accounts and their position on the balance sheet may be summed up as follows: (1) liabilities and owners' equity belong on the *right* side of the balance sheet, (2) an increase in a liability or an owners' equity account is recorded on the *right* (credit) side of the account, and (3) liability and owners' equity accounts normally have credit *(right-hand)* balances.

**Liability and owners' equity accounts normally have credit balances**

| Any Liability Account or Owners' Equity Account | |
|---|---|
| Debit (to record a decrease) | Credit (to record an increase) |

**Concise Statement of the Debit and Credit Rules** The use of debits and credits to record changes in assets, liabilities, and owners' equity may be summarized as follows:

**Debit and credit rules**

| Asset Accounts | Liability & Owners' Equity Accounts |
|---|---|
| Normally have debit balances. Thus, increases are recorded by debits and decreases are recorded by credits. | Normally have credit balances. Thus, increases are recorded by credits and decreases are recorded by debits. |

## DOUBLE-ENTRY ACCOUNTING—THE EQUALITY OF DEBITS AND CREDITS

The rules for debits and credits are designed so that *every transaction is recorded by equal dollar amounts of debits and credits*. The reason for this equality lies in the relationship of the debit and credit rules to the accounting equation:

$$\underbrace{\text{Assets}}_{\text{Debit Balances}} = \underbrace{\text{Liabilities} + \text{Owners' Equity}}_{\text{Credit Balances}}$$

If this equation is to remain in balance, any change in the left side of the equation (assets) *must be accompanied by an equal change* in the right side (either liabilities or owners' equity). According to the debit and credit rules that we have just described, increases in the left side of the equation (assets) are recorded by *debits,* while increases in the right side (liabilities and owners' equity) are recorded by *credits,* as illustrated below:

LO3-4

**LEARNING OBJECTIVE**
Explain the double-entry system of accounting.

| Assets | | = | Liabilities | | + | Owners' Equity | |
|---|---|---|---|---|---|---|---|
| Debit to increase (+) | Credit to decrease (−) | | Debit to decrease (−) | Credit to increase (+) | | Debit to decrease (−) | Credit to increase (+) |

This system is often called **double-entry accounting.** The phrase *double-entry* refers to the need for both *debit entries* and *credit entries,* equal in dollar amount, to record every transaction. Virtually every business organization uses the double-entry system regardless of whether the company's accounting records are maintained manually or by computer. Later in this chapter, we will see that the double-entry system allows us to measure net income at the same time we record the effects of transactions on the balance sheet accounts.

# The Journal

LO3-5

**LEARNING OBJECTIVE**
Explain the purpose of a journal and its relationship to the ledger.

In the preceding discussion we illustrated how the debit and credit rules of double-entry accounting are applied in the recording of economic events. Using T accounts, we stressed the effects that business transactions have on individual asset, liability, and owners' equity accounts that comprise a company's general ledger. It is important to realize, however, that transactions are rarely recorded *directly* in general ledger accounts. In an actual accounting system, the information about each business transaction is *initially* recorded in an accounting record called the **journal.** This information is *later* transferred to the appropriate accounts in the general ledger.

The journal is a chronological (day-by-day) record of business transactions. At convenient intervals, the debit and credit amounts recorded in the journal are transferred (posted) to the accounts in the ledger. The updated ledger accounts, in turn, serve as the basis for preparing the company's financial statements.

To illustrate the most basic type of journal, called a **general journal,** let us examine the very first business transaction of Overnight Auto Service. Recall that on January 20, 2015, the McBryan family invested $80,000 in exchange for capital stock. Thus, the asset Cash increased by $80,000, and the owners' equity account Capital Stock increased by the same amount.

Applying the debit and credit rules discussed previously, we know that increases in assets are recorded by debits, whereas increases in owners' equity are recorded by credits. As such, this event requires a *debit* to Cash and a *credit* to Capital Stock in the amount of $80,000. The transaction is recorded in the company's general journal as illustrated in Exhibit 3–1. Note the basic characteristics of this general journal entry:

1. The name of the account debited (Cash) is written first, and the dollar amount to be debited appears in the left-hand money column.
2. The name of the account credited (Capital Stock) appears below the account debited and is indented to the right. The dollar amount appears in the right-hand money column.
3. A brief description of the transaction appears immediately below the journal entry.

Accounting software packages automate and streamline the way in which transactions are recorded. However, recording transactions manually—without a computer—is an effective way to conceptualize the manner in which economic events are captured by accounting systems and subsequently reported in a company's financial statements.

**EXHIBIT 3–1**

Recording a Transaction in the General Journal

**GENERAL JOURNAL**

| Date | Account Titles and Explanation | Debit | Credit |
|---|---|---|---|
| 2015 | | | |
| Jan. 20 | Cash . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 80,000 | |
| | Capital Stock . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | | 80,000 |
| | Owners invest cash in the business. | | |

A familiarity with the general journal form of describing transactions is just as essential to the study of accounting as a familiarity with plus and minus signs is to the study of mathematics. The journal entry is a *tool* for *analyzing* and *describing* the impact of various transactions on a business entity. The ability to describe a transaction in journal entry form requires an understanding of the nature of the transaction and its effect on the financial position of the business.

## POSTING JOURNAL ENTRIES TO THE LEDGER ACCOUNTS (AND HOW TO "READ" A JOURNAL ENTRY)

We have made the point that transactions are recorded *first* in the journal. Ledger accounts are updated *later,* through a process called **posting.** (In a computerized system, postings often occur instantaneously, rather than later.)

Posting simply means *updating the ledger accounts* for the effects of the transactions recorded in the journal. Viewed as a mechanical task, posting basically amounts to performing the steps you describe when you "read" a journal entry aloud.

Consider the first entry appearing in Overnight's general journal. If you were to read this entry aloud, you would say: "Debit Cash, $80,000; credit Capital Stock, $80,000." That's precisely what a person posting this entry should do: Debit the Cash account for $80,000, and credit the Capital Stock account for $80,000.

The posting of Overnight's first journal entry is illustrated in Exhibit 3–2. Notice that no new information is recorded during the posting process. Posting involves copying into the ledger accounts information that *already has been recorded in the journal.* In manual accounting systems, this can be a tedious and time-consuming process, but in computer-based systems, it is done instantly and automatically. In addition, computerized posting greatly reduces the risk of errors.

**EXHIBIT 3–2**

Posting a Transaction From the Journal to Ledger Accounts

**GENERAL JOURNAL**

| Date | Account Titles and Explanation | Debit | Credit |
|---|---|---|---|
| 2015 | | | |
| Jan. 20 | Cash . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 80,000 | |
| | Capital Stock . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | | 80,000 |
| | Owners invest cash in the business. | | |

**GENERAL LEDGER**

| Cash | | Capital Stock | |
|---|---|---|---|
| 1/20 80,000 | | | 1/20 80,000 |

# Recording Balance Sheet Transactions: An Illustration

To illustrate how to use debits and credits for recording transactions in accounts, we return to the January transactions of Overnight Auto Service. At this point, we discuss only those transactions related to changes in the company's financial position and reported directly in its balance sheet. The revenue and expense transactions that took place on January 31 will be addressed later in the chapter.

Each transaction from January 20 through January 27 is analyzed first in terms of increases in assets, liabilities, and owners' equity. Second, we follow the debit and credit rules for entering these increases and decreases in specific accounts. Asset ledger accounts are shown on the left side of the analysis; liability and owners' equity ledger accounts are shown on the right side. For convenience in the following transactions, both the debit and credit figures for the transaction under discussion are shown in *red*. Figures relating to earlier transactions appear in *black*.

**Jan. 20** Michael McBryan and family invested $80,000 cash in exchange for capital stock.

| | |
|---|---|
| ANALYSIS | The asset Cash is increased by $80,000, and owners' equity (Capital Stock) is increased by the same amount. |
| DEBIT–CREDIT RULES | Increases in assets are recorded by debits; debit Cash $80,000.<br>Increases in owners' equity are recorded by credits; credit Capital Stock $80,000. |
| JOURNAL ENTRY | Jan. 20 Cash . . . . . . . . . . 80,000<br>Capital Stock . . . . . . . . . . 80,000 |
| ENTRIES IN LEDGER ACCOUNTS | Cash: 1/20 80,000 (debit) \| Capital Stock: 1/20 80,000 (credit) |

**Owners invest cash in the business**

| Assets | = Liabilities + | Owners' Equity |
|---|---|---|
| +$80,000 | | +$80,000 |

**Jan. 21** Representing Overnight, McBryan negotiated with both the City of Santa Teresa and Metropolitan Transit Authority (MTA) to purchase an abandoned bus garage. (The city owned the land, but the MTA owned the building.) On January 21, Overnight Auto Service purchased the land from the city for $52,000 cash.

| | |
|---|---|
| ANALYSIS | The asset Land is increased $52,000, and the asset Cash is decreased $52,000. |
| DEBIT–CREDIT RULES | Increases in assets are recorded by debits; debit Land $52,000.<br>Decreases in assets are recorded by credits; credit Cash $52,000. |
| JOURNAL ENTRY | Jan. 21 Land. . . . . . . . . . 52,000<br>Cash . . . . . . . . . . 52,000 |
| ENTRIES IN LEDGER ACCOUNTS | Land: 1/21 52,000 (debit) \| Cash: 1/20 80,000 (debit); 1/21 52,000 (credit) |

**Purchase of an asset for cash**

| Assets | = Liabilities + | Owners' Equity |
|---|---|---|
| +$52,000 | | |
| −$52,000 | | |

**Jan. 22** Overnight completed the acquisition of its business location by purchasing the abandoned building from the MTA. The purchase price was $36,000; Overnight made a $6,000 cash down payment and issued a 90-day, non-interest-bearing note payable for the remaining $30,000.

**Purchase of an asset, making a small down payment**

| Assets | = Liabilities + | Owners' Equity |
|---|---|---|
| +$36,000 | +$30,000 | |
| −$ 6,000 | | |

**ANALYSIS**

A new asset Building is acquired at a total cost of $36,000. The asset Cash is decreased $6,000, and a liability Notes Payable of $30,000 is incurred.

**DEBIT–CREDIT RULES**

Increases in assets are recorded by debits; debit Building $36,000.

Decreases in assets are recorded by credits; credit Cash $6,000.

Increases in liabilities are recorded by credits; credit Notes Payable $30,000.

**JOURNAL ENTRY**

| | | | |
|---|---|---|---|
| Jan. 22 | Building . . . . . . . . . . . . . . . . . . . | 36,000 | |
| | Cash . . . . . . . . . . . . . . . . . . . . . . . . . | | 6,000 |
| | Notes Payable . . . . . . . . . . . . . . . . . . | | 30,000 |

**ENTRIES IN LEDGER ACCOUNTS**

| Building | |
|---|---|
| 1/22 36,000 | |

| Cash | |
|---|---|
| 1/20 80,000 | 1/21 52,000 |
| | 1/22 6,000 |

| Notes Payable | |
|---|---|
| | 1/22 30,000 |

**Jan. 23** Overnight purchased tools and equipment on account from Snappy Tools. The purchase price was $13,800, due in 60 days.

**Credit purchase of an asset**

| Assets | = Liabilities + | Owners' Equity |
|---|---|---|
| +$13,800 | +$13,800 | |

**ANALYSIS**

A new asset Tools and Equipment is acquired at a cost of $13,800, and a liability Accounts Payable of $13,800 is incurred.

**DEBIT–CREDIT RULES**

Increases in assets are recorded by debits; debit Tools and Equipment $13,800.

Increases in liabilities are recorded by credits; credit Accounts Payable $13,800.

**JOURNAL ENTRY**

| | | | |
|---|---|---|---|
| Jan. 23 | Tools and Equipment. . . . . . . . . | 13,800 | |
| | Accounts Payable . . . . . . . . . . . . . . . | | 13,800 |

**ENTRIES IN LEDGER ACCOUNTS**

| Tools and Equipment | |
|---|---|
| 1/23 13,800 | |

| Accounts Payable | |
|---|---|
| | 1/23 13,800 |

**Jan. 24** Overnight found that it had purchased more tools than it needed. On January 24, it sold the excess tools on account to Ace Towing at a price of $1,800. The tools were sold at a price equal to their cost, so there was no gain or loss on this transaction.

| | |
|---|---|
| ANALYSIS | Since the tools are sold at cost, there is no gain or loss on this transaction. An asset Accounts Receivable is acquired in the amount of $1,800; the asset Tools and Equipment is decreased $1,800. |
| DEBIT–CREDIT RULES | Increases in assets are recorded by debits; debit Accounts Receivable $1,800.<br>Decreases in assets are recorded by credits; credit Tools and Equipment $1,800. |
| JOURNAL ENTRY | Jan. 24 Accounts Receivable . . . . . . . . . . . 1,800<br>Tools and Equipment . . . . . . . . . . . . . . 1,800 |

ENTRIES IN LEDGER ACCOUNTS

| Accounts Receivable | |
|---|---|
| 1/24 1,800 | |

| Tools and Equipment | |
|---|---|
| 1/23 13,800 | 1/24 1,800 |

**Credit sale of an asset (with no gain or loss)**

| Assets | = Liabilities | + Owners' Equity |
|---|---|---|
| +$1,800<br>−$1,800 | | |

**Jan. 26** Overnight received $600 in partial collection of the account receivable from Ace Towing.

| | |
|---|---|
| ANALYSIS | The asset Cash is increased $600, and the asset Accounts Receivable is decreased $600. |
| DEBIT–CREDIT RULES | Increases in assets are recorded by debits; debit Cash $600.<br>Decreases in assets are recorded by credits; credit Accounts Receivable $600. |
| JOURNAL ENTRY | Jan. 26 Cash. . . . . . . . . . . . . . . . . . . . . . . . . . 600<br>Accounts Receivable . . . . . . . . . . . . . . . 600 |

ENTRIES IN LEDGER ACCOUNTS

| Cash | |
|---|---|
| 1/20 80,000<br>1/26 600 | 1/21 52,000<br>1/22 6,000 |

| Accounts Receivable | |
|---|---|
| 1/24 1,800 | 1/26 600 |

**Collection of an account receivable**

| Assets | = Liabilities | + Owners' Equity |
|---|---|---|
| +$600<br>−$600 | | |

**Jan. 27** Overnight made a $6,800 partial payment of its account payable to Snappy Tools.

| | |
|---|---|
| ANALYSIS | The liability Accounts Payable is decreased $6,800, and the asset Cash is decreased $6,800. |
| DEBIT–CREDIT RULES | Decreases in liabilities are recorded by debits; debit Accounts Payable $6,800.<br>Decreases in assets are recorded by credits; credit Cash $6,800. |
| JOURNAL ENTRY | Jan. 27 Accounts Payable . . . . . . . . . . . . . 6,800<br>Cash . . . . . . . . . . . . . . . . . . . . . . . . . . . 6,800 |

ENTRIES IN LEDGER ACCOUNTS

| Accounts Payable | |
|---|---|
| 1/27 6,800 | 1/23 13,800 |

| Cash | |
|---|---|
| 1/20 80,000<br>1/26 600 | 1/21 52,000<br>1/22 6,000<br>1/27 6,800 |

**Payment of an account payable**

| Assets | = Liabilities | + Owners' Equity |
|---|---|---|
| −$6,800 | −$6,800 | |

## Ledger Accounts after Posting

The seven journal entries made by Overnight Auto Service from January 20 through January 27 are summarized in Exhibit 3–3.

**EXHIBIT 3–3**
General Journal Entries: January 20 Through 27

**OVERNIGHT AUTO SERVICE**
**GENERAL JOURNAL**
**JANUARY 20–27, 2015**

| Date | Account Titles and Explanation | Debit | Credit |
|---|---|---|---|
| 2015 | | | |
| Jan. 20 | Cash | 80,000 | |
| | Capital Stock | | 80,000 |
| | Owners invest cash in the business. | | |
| 21 | Land | 52,000 | |
| | Cash | | 52,000 |
| | Purchased land for business site. | | |
| 22 | Building | 36,000 | |
| | Cash | | 6,000 |
| | Notes Payable | | 30,000 |
| | Purchased building from the MTA. Paid part cash; balance payable within 90 days. | | |
| 23 | Tools and Equipment | 13,800 | |
| | Accounts Payable | | 13,800 |
| | Purchased tools and equipment on credit from Snappy Tools. Due in 60 days. | | |
| 24 | Accounts Receivable | 1,800 | |
| | Tools and Equipment | | 1,800 |
| | Sold unused tools and equipment at cost to Ace Towing. | | |
| 26 | Cash | 600 | |
| | Accounts Receivable | | 600 |
| | Collected part of account receivable from Ace Towing. | | |
| 27 | Accounts Payable | 6,800 | |
| | Cash | | 6,800 |
| | Made partial payment of the liability to Snappy Tools. | | |

After all of the journal entries in Exhibit 3–3 have been posted, Overnight's ledger accounts appear as shown in Exhibit 3–4. The accounts are arranged in the same order as in the balance sheet—that is, assets first, followed by liabilities and owners' equity accounts. Each ledger account is presented in what is referred to as a *running balance* format (as opposed to simple T accounts). You will notice that the running balance format does not indicate specifically whether a particular account has a debit or credit balance. This causes no difficulty, however, because we know that asset accounts normally have debit balances, and liability and owners' equity accounts normally have credit balances.

In the ledger accounts in Exhibit 3–4, we have not yet included any of Overnight's revenue and expense transactions discussed in Chapter 2. All of the company's revenue and expense transactions took place on January 31. Before we can discuss the debit and credit rules for revenue and expense accounts, a more in-depth discussion of *net income* is warranted.

**EXHIBIT 3–4**
Ledger Showing Transactions

### CASH

| Date | Debit | Credit | Balance |
|---|---|---|---|
| 2015 | | | |
| Jan. 20 | 80,000 | | 80,000 |
| 21 | | 52,000 | 28,000 |
| 22 | | 6,000 | 22,000 |
| 26 | 600 | | 22,600 |
| 27 | | 6,800 | 15,800 |

### ACCOUNTS RECEIVABLE

| Date | Debit | Credit | Balance |
|---|---|---|---|
| 2015 | | | |
| Jan. 24 | 1,800 | | 1,800 |
| 26 | | 600 | 1,200 |

### TOOLS AND EQUIPMENT

| Date | Debit | Credit | Balance |
|---|---|---|---|
| 2015 | | | |
| Jan. 23 | 13,800 | | 13,800 |
| 24 | | 1,800 | 12,000 |

### BUILDING

| Date | Debit | Credit | Balance |
|---|---|---|---|
| 2015 | | | |
| Jan. 22 | 36,000 | | 36,000 |

### LAND

| Date | Debit | Credit | Balance |
|---|---|---|---|
| 2015 | | | |
| Jan. 21 | 52,000 | | 52,000 |

### NOTES PAYABLE

| Date | Debit | Credit | Balance |
|---|---|---|---|
| 2015 | | | |
| Jan. 22 | | 30,000 | 30,000 |

### ACCOUNTS PAYABLE

| Date | Debit | Credit | Balance |
|---|---|---|---|
| 2015 | | | |
| Jan. 23 | | 13,800 | 13,800 |
| 27 | 6,800 | | 7,000 |

### CAPITAL STOCK

| Date | Debit | Credit | Balance |
|---|---|---|---|
| 2015 | | | |
| Jan. 20 | | 80,000 | 80,000 |

# What Is Net Income?

LO3-6

**LEARNING OBJECTIVE**
Explain the nature of *net income, revenue,* and *expenses.*

Net income is not an asset—it's an *increase in owners' equity*

As previously noted, **net income** is *an increase in owners' equity resulting from the profitable operation of the business.* Net income does not consist of any cash or any other specific assets. Rather, net income is a *computation* of the overall effects of many business transactions on *owners' equity.* The effects of net income on the basic accounting equation are illustrated as follows:

| | Assets | = | Liabilities | + | Owners' Equity |
|---|---|---|---|---|---|
| | Increase | | | | Increase |
| OR . . . | | | Decrease | | Increase |

**As income is earned, either an asset is *increased* or a liability is *decreased.***

**Net income *always* results in the *increase* of Owners' Equity.**

Our point is that net income represents an *increase in owners' equity* and has no direct relationship to the types or amounts of assets on hand. Even a business operating at a profit may run short of cash.

In the balance sheet, the changes in owners' equity resulting from profitable or unprofitable operations are reflected in the balance of the stockholders' equity account, *Retained Earnings.* The assets and liabilities of the business that change as a result of income-related activities appear in their respective sections of the balance sheet.

## RETAINED EARNINGS

As illustrated in Chapter 2, the Retained Earnings account appears in the stockholders' equity section of the balance sheet. Earning net income causes the balance in the Retained Earnings account to increase. However, many corporations follow a policy of distributing to their stockholders some of the resources generated by profitable operations. Distributions of this nature are termed **dividends,** and they reduce both total assets and stockholders' equity. The reduction in stockholders' equity is reflected by decreasing the balance of the Retained Earnings account.

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The balance in the **Retained Earnings** account represents the total net income of the corporation over the *entire lifetime* of the business, less all of the dividends to its stockholders. In short, retained earnings represent the earnings that have been *retained* by the corporation to finance growth. Some of the largest corporations have become large by consistently retaining in the business most of the resources generated by profitable operations. For instance, a recent annual report of **Walmart Stores, Inc.**, shows total stockholders' equity of $76 billion. Of this amount, retained earnings of nearly $69 billion account for over 90 percent of the company's total equity.

## THE INCOME STATEMENT: A PREVIEW

An **income statement** is a financial statement that summarizes the profitability of a business entity for a specified period of time. In this statement, net income is determined by comparing *sales prices* of goods or services sold during the period with the *costs* incurred by the business in delivering these goods or services. The technical accounting terms for these components of net income are **revenue** and **expenses.** Therefore, accountants say that net income is equal to *revenue minus expenses.* Should expenses exceed revenue, a **net loss** results.

A sample income statement for Overnight Auto Service for the year ended December 31, 2015, is shown in Exhibit 3–5. In Chapter 5, we show exactly how this income statement was developed from the company's accounting records. For now, however, the illustration will assist us in discussing some of the basic concepts involved in measuring net income.

**EXHIBIT 3–5**
A Preview of Overnight's Income Statement

**OVERNIGHT AUTO SERVICE**
**INCOME STATEMENT**
**FOR THE YEAR ENDED DECEMBER 31, 2015**

| | | |
|---|---|---|
| **Revenue:** | | |
| Repair service revenue | | $172,000 |
| Rent revenue earned | | 3,000 |
| Total revenue | | $175,000 |
| **Expenses:** | | |
| Advertising | $ 3,900 | |
| Salaries and wages | 58,750 | |
| Supplies | 7,500 | |
| Depreciation: building | 1,650 | |
| Depreciation: tools and equipment | 2,200 | |
| Utilities | 19,400 | |
| Insurance | 15,000 | |
| Interest | 30 | 108,430 |
| Income before income taxes | | $ 66,570 |
| Income taxes | | 26,628 |
| Net income | | $ 39,942 |

**Income Must Be Related to a Specified Period of Time** Notice that our sample income statement covers a *period of time*—namely, the year 2015. A balance sheet shows the financial position of a business at a *particular date.* We cannot evaluate net income unless it is associated with a specific time period. For example, if an executive says, "My business earns a net income of $10,000," the profitability of the business is unclear. Does it earn $10,000 per week, per month, or per year?

**CASE IN POINT**

The late J. Paul Getty, one of the world's first billionaires, was once interviewed by a group of business students. One of the students asked Getty to estimate the amount of his income. As the student had not specified a time period, Getty decided to have some fun with his audience and responded, "About $11,000." He paused long enough to allow the group to express surprise over this seemingly low amount, and then completed his sentence, "an hour."

**Accounting Periods** The period of time covered by an income statement is termed the company's **accounting period.** To provide the users of financial statements with timely information, net income is measured for relatively short accounting periods of equal length. This concept, called the **time period principle,** is one of the underlying accounting principles that guide the interpretation of financial events and the preparation of financial statements.

The length of a company's accounting period depends on how frequently managers, investors, and other interested people require information about the company's performance.

Every business prepares annual income statements, and most businesses prepare quarterly and monthly income statements as well. (Quarterly statements cover a three-month period and are prepared by all large corporations for distribution to their stockholders.)

The 12-month accounting period used by an entity is called its **fiscal year.** The fiscal year used by most companies coincides with the calendar year and ends on December 31. Some businesses, however, elect to use a fiscal year that ends on some other date.

For example, **The Walt Disney Company** ends its fiscal year on September 30. Why? For one reason, September and October are relatively slow months at the company's theme parks. Furthermore, September financial statements provide timely information about the preceding summer, which is the company's busiest season. Most large retailers, such as **Walmart** and **JCPenney**, end their fiscal years at the end of January, after the rush of the holiday season. Many choose the last Saturday of January as their cutoff, which results in an exact 52-week reporting period approximately five out of every six years.

Let us now explore the meaning of the accounting terms *revenue* and *expenses* in more detail.

## REVENUE

Revenue always causes an *increase* in owners' equity

*Revenue is the price of goods sold and services rendered during a given accounting period.* Earning revenue causes owners' equity to increase. When a business renders services or sells merchandise to its customers, it usually receives cash or acquires an account receivable from the customer. The inflow of cash and receivables from customers increases the total assets of the company; on the other side of the accounting equation, owners' equity increases to match the increase in total assets. Thus, revenue is the gross *increase in owners' equity* resulting from operation of the business.

Various account titles are used to describe different types of revenue. For example, a business that sells merchandise rather than services, such as **Walmart** or **General Motors**, uses the term *Sales* to describe its revenue. In the professional practices of physicians, CPAs, and attorneys, revenue usually is called *Fees Earned.* A real estate office, however, might call its revenue *Commissions Earned.*

Overnight Auto Service's income statement reveals that the company records its revenue in two separate accounts: (1) *Repair Service Revenue* and (2) *Rent Revenue Earned.* A professional sports team might also have separate revenue accounts for *Ticket Sales, Concessions Revenue,* and *Revenue from Television Contracts.* Another type of revenue common to many businesses is *Interest Revenue* (or Interest Earned), stemming from the interest earned on bank deposits, notes receivable, and interest-bearing investments.

LO3-7

**LEARNING OBJECTIVE**

Apply the *realization* and *matching* principles in recording revenue and expenses.

**The Realization Principle: When to Record Revenue** When should revenue be recognized? In most cases, the **realization principle** indicates that revenue should be recognized *at the time goods are sold or services are rendered.* At this point, the business has essentially completed the earnings process, and the sales value of the goods or services can be measured objectively. At any time prior to the sale, the ultimate value of the goods or services sold can only be estimated. After the sale, the only step that remains is to collect from the customer, usually a relatively certain event.

To illustrate, assume that on July 25 a radio station contracts with a car dealership to air a series of one-minute advertisements during August. If all of the agreed-upon ads are aired in August, but payment for the ads is not received until September, in which month should the station recognize the advertising revenue? The answer is August, the month in which it *rendered the services* that earned the advertising revenue. In other words, revenue is recognized when it is *earned,* without regard to when a contract is signed or when cash payment for providing goods or services is received.

## EXPENSES

*Expenses are the costs of the goods and services used up in the process of earning revenue.* Examples include the cost of employees' salaries, advertising, rent, utilities, and the depreciation of buildings, automobiles, and office equipment. All these costs are necessary to attract and serve customers and thereby earn revenue. Expenses are often called the "costs of doing business," that is, the cost of the various activities necessary to carry on a business.

An expense always causes a *decrease in owners' equity.* The related changes in the accounting equation can be either (1) a decrease in assets or (2) an increase in liabilities. An expense reduces assets if payment occurs at the time that the expense is incurred. If the expense will not be paid until later, as, for example, the purchase of advertising services on account, the recording of the expense will be accompanied by an increase in liabilities.

**Expenses always cause a *decrease* in owners' equity**

**The Matching Principle: When to Record Expenses** A significant relationship exists between revenue and expenses. Expenses are incurred for the *purpose of producing revenue.* In the measurement of net income for a period, revenue should be offset by *all the expenses incurred in producing that revenue.* This concept of offsetting expenses against revenue on a basis of cause and effect is called the **matching principle.**

Timing is an important factor in matching (offsetting) revenue with the related expenses. For example, in the preparation of monthly income statements, it is important to offset this month's expenses against this month's revenue. We should not offset this month's expenses against last month's revenue because there is no cause and effect relationship between the two.

Assume that the salaries earned by a company's marketing team for serving customers in July are not paid until early August. In which month should these salaries be regarded as expenses—July or August? The answer is July, because July is the month in which the marketing team's services *helped to produce revenue.* Just as revenue and cash receipts are not one and the same, expenses and cash payments are not identical. In fact, the cash payment of an expense may occur before, after, or in the same period that revenue is earned. In deciding when to report an expense in the income statement, the critical question is, "In what period does the cash expenditure help to produce revenue?"—*not,* "When does the payment of cash occur?"

**Expenditures Benefiting More Than One Accounting Period** Many expenditures made by a business benefit two or more accounting periods. Fire insurance policies, for example, usually cover a period of 12 months. If a company prepares monthly income statements, a portion of the cost of such a policy should be allocated to insurance expense each month that the policy is in force. In this case, apportionment of the cost of the policy by months is an easy matter. If the 12-month policy costs $2,400, for example, the insurance expense for each month amounts to $200 ($2,400 cost ÷ 12 months).

Not all transactions can be divided so precisely by accounting periods. The purchase of a building, furniture and fixtures, machinery, a computer, or an automobile provides benefits to the business over all the years in which such an asset is used. No one can determine in advance exactly how many years of service will be received from such long-lived assets. Nevertheless, in measuring the net income of a business for a period of one year or less, accountants must *estimate* what portion of the cost of the building and other long-lived assets is applicable to the current year. Since the allocations of these costs are estimates rather than precise measurements, it follows that income statements should be regarded as useful *approximations* of net income rather than as absolutely correct measurements.

For some expenditures, such as those for employee training programs, it is not possible to estimate objectively the number of accounting periods over which revenue is likely to be produced. In such cases, generally accepted accounting principles require that the expenditure be charged *immediately to expense.* This treatment is based upon the accounting principle of **objectivity** and the concept of **conservatism.** Accountants require *objective evidence* that an expenditure will produce revenue in future periods before they will view the expenditure as creating an asset. When this objective evidence does not exist, they follow the conservative practice of recording the expenditure as an expense. *Conservatism,* in this context, means applying the accounting treatment that results in the *lowest* (most conservative) estimate of net income for the current period.

## INTERNATIONAL CASE IN POINT

International financial reporting standards (IFRSs) differ significantly from U.S. GAAP with respect to costs that are expensed immediately and costs that are capitalized. For example, IFRS 38 allows development costs to be capitalized if certain criteria are met, but under U.S. GAAP these same costs would need to be expensed in the period in which they occur. Alternatively, idle capacity and spoilage costs need to be expensed immediately under IFRS 2, but U.S. GAAP allows these costs to be capitalized in inventory. The FASB and the IASB have made an agreement to work toward eliminating differences between international accounting standards and GAAP over the next several years.

## THE ACCRUAL BASIS OF ACCOUNTING

The policy of recognizing revenue in the accounting records when it is *earned* and recognizing expenses when the related goods or services are *used* is called the **accrual basis of accounting.** The purpose of accrual accounting is to measure the profitability of the *economic activities conducted* during the accounting period.

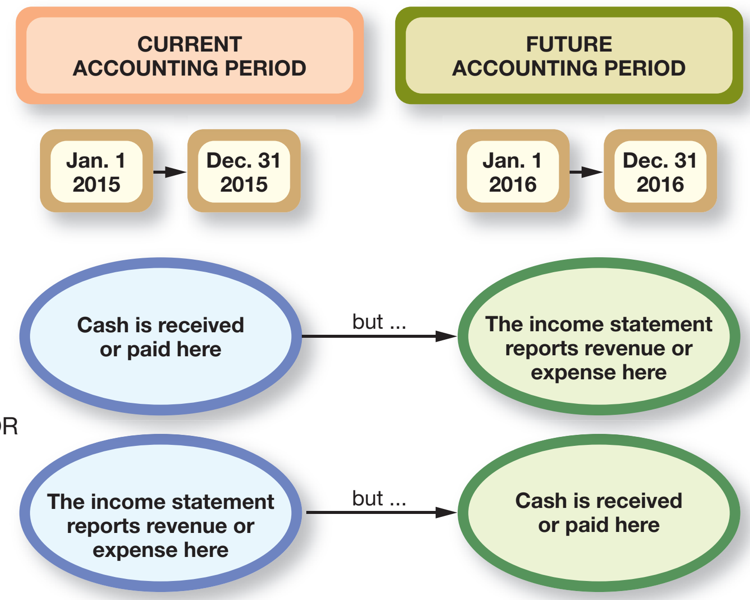
The most important concept involved in accrual accounting is the *matching principle.* Revenue is offset with all of the expenses incurred in generating that revenue, thus providing a measure of the overall profitability of the economic activity.

An alternative to the accrual basis is called *cash basis accounting.* Under cash basis accounting, revenue is recognized when cash is collected from the customer, rather than when the company sells goods or renders services. Expenses are recognized when payment is made, rather than when the related goods or services are used in business operations. The cash basis of accounting measures the amounts of cash received and paid out during the period, but it does *not* provide a good measure of the *profitability of activities* undertaken during the period.

Exhibit 3–6 illustrates that, under the accrual basis of accounting, cash receipts or disbursements may occur *prior to* or *after* revenue is earned or an expense is incurred.

**EXHIBIT 3–6**

Cash Flow Versus Income Statement Recognition




## DEBIT AND CREDIT RULES FOR REVENUE AND EXPENSES

We have stressed that revenue increases owners' equity and that expenses decrease owners' equity. The debit and credit rules for recording revenue and expenses in the ledger accounts are a natural extension of the rules for recording changes in owners' equity. The rules previously stated for recording increases and decreases in owners' equity are as follows:

- *Increases* in owners' equity are recorded by *credits.*
- *Decreases* in owners' equity are recorded by *debits.*

This rule is now extended to cover revenue and expense accounts:

- *Revenue* increases owners' equity; therefore, revenue is recorded by *credits.*
- *Expenses* decrease owners' equity; therefore, expenses are recorded by *debits.*

## Dividends

A dividend is a distribution of assets (usually cash) by a corporation to its stockholders. In some respects, dividends are similar to expenses—they reduce both the assets and the owners' equity in the business. However, *dividends are not an expense, and they are not deducted from revenue in the income statement.* The reason why dividends are not viewed as an expense is that these payments do not serve to generate revenue. Rather, they are a *distribution of profits* to the owners of the business.

Since the declaration of a dividend reduces stockholders' equity, the dividend could be recorded by debiting the Retained Earnings account. However, a clearer record is created if a separate Dividends account is debited for all dividends to stockholders. The reporting of dividends in the financial statements will be illustrated in Chapter 5.

The debit–credit rules for revenue, expenses, and dividends are summarized below:

**Debit–credit rules related to effect on owners' equity**

| Owners' Equity | |
|---|---|
| **Decreases recorded by Debits** | **Increases recorded by Credits** |
| Expenses decrease owners' equity | Revenue increases owners' equity |
| Expenses are recorded by Debits | Revenue is recorded by Credits |
| Dividends reduce owners' equity | |
| Dividends are recorded by Debits | |

## Recording Income Statement Transactions: An Illustration

**LO3-8**

**LEARNING OBJECTIVE**
Understand how revenue and expense transactions are recorded in an accounting system.

In Chapter 2, we introduced Overnight Auto Service, a small auto repair shop formed on January 20, 2015. Early in this chapter, we journalized and posted all of Overnight's balance sheet transactions through January 27. At this point we will illustrate the manner in which Overnight's January income statement transactions were handled and continue into February with additional transactions.

Three transactions involving revenue and expenses were recorded by Overnight on January 31, 2015. The following illustrations provide an analysis of each transaction.

**Jan. 31** Recorded revenue of $2,200, all of which was received in cash.

**Revenue earned and collected**

| Assets | = | Liabilities | + | Owners' Equity |
|---|---|---|---|---|
| +$2,200 | | | | +$2,200 |

**ANALYSIS**
The asset Cash is increased.
Revenue has been earned.

**DEBIT–CREDIT RULES**
Increases in assets are recorded by debits; debit Cash $2,200.
Revenue increases owners' equity and is recorded by a credit; credit Repair Service Revenue $2,200.

**JOURNAL ENTRY**

| | | | |
|---|---|---|---|
| Jan. 31 | Cash . . . . . . . . . . . . . . . . . . . . . . . | 2,200 | |
| | Repair Service Revenue. . . . . . . . . . . . | | 2,200 |

**ENTRIES IN LEDGER ACCOUNTS**

| Cash | |
|---|---|
| 1/27 Bal. 15,800 | |
| 1/31 2,200 | |

| Repair Service Revenue | |
|---|---|
| | 1/31 2,200 |

**Jan. 31** Paid employees' wages earned in January, $1,200.

**Incurred an expense, paying cash**

| Assets | = | Liabilities | + | Owners' Equity |
|---|---|---|---|---|
| −$1,200 | | | | −$1,200 |

ANALYSIS

Wages to employees are an expense.

The asset Cash is decreased.

DEBIT–CREDIT RULES

Expenses decrease owners' equity and are recorded by debits; debit Wages Expense $1,200.

Decreases in assets are recorded by credits; credit Cash $1,200.

JOURNAL ENTRY

| | | | |
|---|---|---|---|
| Jan. 31 | Wages Expense . . . . . . . . . . . . . . . | 1,200 | |
| | Cash . . . . . . . . . . . . . . . . . . . . . . . . . . . | | 1,200 |

ENTRIES IN LEDGER ACCOUNTS

**Wages Expense**

| Debit | Credit |
|---|---|
| 1/31 1,200 | |

**Cash**

| Debit | Credit |
|---|---|
| 1/27 Bal. 15,800 | 1/31 1,200 |
| 1/31 2,200 | |

**Jan. 31** Paid for utilities used in January, $200.

**Incurred an expense, paying cash**

| Assets | = | Liabilities | + | Owners' Equity |
|---|---|---|---|---|
| −$200 | | | | −$200 |

ANALYSIS

The cost of utilities is an expense.

The asset Cash is decreased.

DEBIT–CREDIT RULES

Expenses decrease owners' equity and are recorded by debits; debit Utilities Expense $200.

Decreases in assets are recorded by credits; credit Cash $200.

JOURNAL ENTRY

| | | | |
|---|---|---|---|
| Jan. 31 | Utilities Expense . . . . . . . . . . . . . . . . . | 200 | |
| | Cash . . . . . . . . . . . . . . . . . . . . . . . . . . . | | 200 |

ENTRIES IN LEDGER ACCOUNTS

**Utilities Expense**

| Debit | Credit |
|---|---|
| 1/31 200 | |

**Cash**

| Debit | Credit |
|---|---|
| 1/27 Bal. 15,800 | 1/31 1,200 |
| 1/31 2,200 | 1/31 200 |

Having analyzed and recorded all of Overnight's January transactions, next we focus upon the company's February activities. Overnight's February transactions are described, analyzed, and recorded as follows:

**Feb. 1** Paid *Daily Tribune* $360 cash for newspaper advertising to be run during February.

**Incurred an expense, paying cash**

| Assets | = | Liabilities | + | Owners' Equity |
|---|---|---|---|---|
| −$360 | | | | −$360 |

ANALYSIS

The cost of advertising is an expense.

The asset Cash is decreased.

DEBIT–CREDIT RULES

Expenses decrease owners' equity and are recorded by debits; debit Advertising Expense $360.

Decreases in assets are recorded by credits; credit Cash $360.

JOURNAL ENTRY

| | | | |
|---|---|---|---|
| Feb. 1 | Advertising Expense . . . . . . . . . . . . . . . | 360 | |
| | Cash . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | | 360 |

ENTRIES IN LEDGER ACCOUNTS

**Advertising Expense**

| Debit | Credit |
|---|---|
| 2/1 360 | |

**Cash**

| Debit | Credit |
|---|---|
| 1/31 Bal. 16,600 | 2/1 360 |

**Feb. 2** Purchased radio advertising from KRAM to be aired in February. The cost was $470, payable within 30 days.

**Incurred an expense to be paid later**

| Assets | = | Liabilities | + | Owners' Equity |
|---|---|---|---|---|
| | | +$470 | | −$470 |

ANALYSIS

The cost of advertising is an expense.
The liability Accounts Payable is incurred.

DEBIT–CREDIT RULES

Expenses decrease owners' equity and are recorded by debits; debit Advertising Expense $470.

Increases in liabilities are recorded by credits; credit Accounts Payable $470.

JOURNAL ENTRY

| | | | |
|---|---|---|---|
| Feb. 2 | Advertising Expense . . . . . . . . . . . . . . . | 470 | |
| | Accounts Payable . . . . . . . . . . . . . . . . . . . | | 470 |

ENTRIES IN LEDGER ACCOUNTS

**Advertising Expense**

| | | |
|---|---|---|
| 2/1 | 360 | |
| 2/2 | 470 | |

**Accounts Payable**

| | | |
|---|---|---|
| | 1/31 Bal. | 7,000 |
| | 2/2 | 470 |

**Feb. 4** Purchased various shop supplies (such as grease, solvents, nuts, and bolts) from CAPA Auto Parts; the cost was $1,400, due in 30 days. These supplies are expected to meet Overnight's needs for *three or four months.*

**When a purchase clearly benefits future accounting periods, it's an asset, not an expense**

| Assets | = | Liabilities | + | Owners' Equity |
|---|---|---|---|---|
| +$1,400 | | +$1,400 | | |

ANALYSIS

As these supplies will last for several accounting periods, they are an asset, not an expense of February.[1]

A liability is incurred.

DEBIT–CREDIT RULES

Increases in assets are recorded by debits; debit Shop Supplies $1,400.

Increases in liabilities are recorded by credits; credit Accounts Payable $1,400.

JOURNAL ENTRY

| | | | |
|---|---|---|---|
| Feb. 4 | Shop Supplies . . . . . . . . . . . . . . . . . . | 1,400 | |
| | Accounts Payable. . . . . . . . . . . . . . . . . . | | 1,400 |

ENTRIES IN LEDGER ACCOUNTS

**Shop Supplies**

| | | |
|---|---|---|
| 2/4 | 1,400 | |

**Accounts Payable**

| | | |
|---|---|---|
| | 1/31 Bal. | 7,000 |
| | 2/2 | 470 |
| | 2/4 | 1,400 |

[1] If the supplies are expected to be used within the *current* accounting period, their cost may be debited directly to the Supplies Expense account, rather than to an asset account.

**Feb. 15** Collected $4,980 cash for repairs made to vehicles of Airport Shuttle Service.

**Revenue earned and collected**

| Assets | = Liabilities + | Owners' Equity |
|---|---|---|
| +$4,980 | | +$4,980 |

**ANALYSIS**

The asset Cash is increased.

Revenue has been earned.

**DEBIT–CREDIT RULES**

Increases in assets are recorded by debits; debit Cash $4,980.

Revenue increases owners' equity and is recorded by a credit; credit Repair Service Revenue $4,980.

**JOURNAL ENTRY**

| | | | |
|---|---|---|---|
| Feb. 15 | Cash . . . . . . . . . . . . . . . . . . . . . . . . | 4,980 | |
| | Repair Service Revenue. . . . . . . . . . . . | | 4,980 |

**ENTRIES IN LEDGER ACCOUNTS**

**Cash**

| Debit | | Credit | |
|---|---|---|---|
| 1/31 Bal. | 16,600 | 2/1 | 360 |
| 2/15 | 4,980 | | |

**Repair Service Revenue**

| Debit | Credit | |
|---|---|---|
| | 1/31 Bal. | 2,200 |
| | 2/15 | 4,980 |

**Feb. 28** Billed Harbor Cab Co. $5,400 for maintenance and repair services Overnight provided in February. The agreement with Harbor Cab calls for payment to be received by March 10.

**Revenue earned but not yet collected**

| Assets | = Liabilities + | Owners' Equity |
|---|---|---|
| +$5,400 | | +$5,400 |

**ANALYSIS**

An asset Accounts Receivable is established.

Revenue has been earned.

**DEBIT–CREDIT RULES**

Increases in assets are recorded by debits; debit Accounts Receivable $5,400.

Revenue increases owners' equity and is recorded by a credit; credit Repair Service Revenue $5,400.

**JOURNAL ENTRY**

| | | | |
|---|---|---|---|
| Feb. 28 | Accounts Receivable. . . . . . . . . . . | 5,400 | |
| | Repair Service Revenue . . . . . . . . . . . . | | 5,400 |

**ENTRIES IN LEDGER ACCOUNTS**

**Accounts Receivable**

| Debit | | Credit |
|---|---|---|
| 1/31 Bal. | 1,200 | |
| 2/28 | 5,400 | |

**Repair Service Revenue**

| Debit | Credit | |
|---|---|---|
| | 1/31 Bal. | 2,200 |
| | 2/15 | 4,980 |
| | 2/28 | 5,400 |

**Feb. 28** Paid employees' wages earned in February, $4,900.

**Incurred an expense, paying cash**

| Assets | = | Liabilities | + | Owners' Equity |
|---|---|---|---|---|
| −$4,900 | | | | −$4,900 |

**ANALYSIS**

Wages to employees are an expense.

The asset Cash is decreased.

**DEBIT–CREDIT RULES**

Expenses decrease owners' equity and are recorded by debits; debit Wages Expense $4,900.

Decreases in assets are recorded by credits; credit Cash $4,900.

**JOURNAL ENTRY**

| | | | |
|---|---|---|---|
| Feb. 28 | Wages Expense . . . . . . . . . . . . . . | 4,900 | |
| | Cash . . . . . . . . . . . . . . . . . . . . . . . . . . | | 4,900 |

**ENTRIES IN LEDGER ACCOUNTS**

Wages Expense

| | | | |
|---|---|---|---|
| 1/31 | Bal. 1,200 | | |
| 2/28 | 4,900 | | |

Cash

| | | | |
|---|---|---|---|
| 1/31 | Bal. 16,600 | 2/1 | 360 |
| 2/15 | 4,980 | 2/28 | 4,900 |

## YOUR TURN

### You as Overnight Auto Service's Accountant

Your good friend, Fred Jonas, is the manager of Harbor Cab Co. Your family and Fred's family meet frequently outside of your respective workplaces for fun. At a recent barbecue, Fred asked you about the amount of repair services rendered by Overnight Auto to Airport Shuttle Services in February. Airport Shuttle Services competes with Harbor Cab Co. for fares to and from the airport. What should you say to Fred?

(See our comments on the Online Learning Center website.)

**Feb. 28** Recorded $1,600 utility bill for February. The entire amount is due March 15.

**Incurred an expense to be paid later**

| Assets | = | Liabilities | + | Owners' Equity |
|---|---|---|---|---|
| | | +$1,600 | | −$1,600 |

**ANALYSIS**

The cost of utilities is an expense.

The liability Accounts Payable is incurred.

**DEBIT–CREDIT RULES**

Expenses decrease owners' equity and are recorded by debits; debit Utilities Expense $1,600.

Increases in liabilities are recorded by credits; credit Accounts Payable $1,600.

**JOURNAL ENTRY**

| | | | |
|---|---|---|---|
| Feb. 28 | Utilities Expense . . . . . . . . . . . . . . . | 1,600 | |
| | Accounts Payable . . . . . . . . . . . . . . . . . | | 1,600 |

**ENTRIES IN LEDGER ACCOUNTS**

**Utilities Expense**

| Debit | Credit |
|---|---|
| 1/31 Bal. 200 | |
| 2/28 1,600 | |

**Accounts Payable**

| Debit | Credit |
|---|---|
| | 1/31 Bal. 7,000 |
| | 2/2 470 |
| | 2/4 1,400 |
| | 2/28 1,600 |

**Feb. 28** Overnight Auto Services declares and pays a dividend of 40 cents per share to the owners of its 8,000 shares of capital stock—a total of $3,200.[2]

**A Dividends account signifies a reduction in owners' equity—but it is not an expense**

| Assets | = | Liabilities | + | Owners' Equity |
|---|---|---|---|---|
| −$3,200 | | | | −$3,200 |

**ANALYSIS**

The declaration of a dividend reduces owners' equity.

The asset Cash is decreased.

**DEBIT–CREDIT RULES**

Decreases in owners' equity are recorded by debits; debit Dividends $3,200.

Decreases in assets are recorded by credits; credit Cash $3,200.

**JOURNAL ENTRY**

| | | | |
|---|---|---|---|
| Feb. 28 | Dividends . . . . . . . . . . . . . . . . . . . . | 3,200 | |
| | Cash . . . . . . . . . . . . . . . . . . . . . . . . . | | 3,200 |

**ENTRIES IN LEDGER ACCOUNTS**

**Dividends**

| Debit | Credit |
|---|---|
| 2/28 3,200 | |

**Cash**

| Debit | Credit |
|---|---|
| 1/31 Bal. 16,600 | 2/1 360 |
| 2/15 4,980 | 2/28 4,900 |
| | 2/28 3,200 |

[2] As explained earlier, dividends are not an expense. In Chapter 5, we will show how the balance in the Dividends account eventually reduces the amount of Retained Earnings reported in the owners' equity section of the balance sheet.

## THE JOURNAL

In our illustration, journal entries were shown in a very abbreviated form. The actual entries made in Overnight's journal appear in Exhibit 3–7. Notice that these formal journal entries include short *explanations* of the transactions, which include such details as the terms of credit transactions and the names of customers and creditors.

**EXHIBIT 3–7**
General Journal Entries: January 31 Through February 28

**OVERNIGHT AUTO SERVICE**
**GENERAL JOURNAL**
**JANUARY 31–FEBRUARY 28, 2015**

| Date | Account Titles and Explanation | Debit | Credit |
|---|---|---|---|
| 2015 | | | |
| Jan. 31 | Cash | 2,200 | |
| | Repair Service Revenue | | 2,200 |
| | Repair services rendered to various customers. | | |
| 31 | Wages Expense | 1,200 | |
| | Cash | | 1,200 |
| | Paid all wages for January. | | |
| 31 | Utilities Expense | 200 | |
| | Cash | | 200 |
| | Paid all utilities for January. | | |
| Feb. 1 | Advertising Expense | 360 | |
| | Cash | | 360 |
| | Purchased newspaper advertising from *Daily Tribune* to run in February. | | |
| 2 | Advertising Expense | 470 | |
| | Accounts Payable | | 470 |
| | Purchased radio advertising on account from KRAM; payment due in 30 days. | | |
| 4 | Shop Supplies | 1,400 | |
| | Accounts Payable | | 1,400 |
| | Purchased shop supplies on account from CAPA; payment due in 30 days. | | |
| 15 | Cash | 4,980 | |
| | Repair Service Revenue | | 4,980 |
| | Repair services rendered to Airport Shuttle Service. | | |
| 28 | Accounts Receivable | 5,400 | |
| | Repair Service Revenue | | 5,400 |
| | Billed Harbor Cab for services rendered in February. | | |
| 28 | Wages Expense | 4,900 | |
| | Cash | | 4,900 |
| | Paid all wages for February. | | |
| 28 | Utilities Expense | 1,600 | |
| | Accounts Payable | | 1,600 |
| | Recorded utility bill for February. | | |
| 28 | Dividends | 3,200 | |
| | Cash | | 3,200 |
| | Paid cash dividend of 40 cents per share on 8,000 shares of capital stock owned by the McBryan family. | | |

**Journal entries contain more information than just dollar amounts**

# February's Ledger Balances

After posting all of the January and February transactions, Overnight's ledger accounts appear as shown in Exhibit 3–8. To conserve space, we have illustrated the ledger in T account form and have carried forward each account's summary balance from January 31. For convenience,

**EXHIBIT 3–8** Overnight Auto Service's Ledger Accounts

## OVERNIGHT AUTO SERVICE
## THE LEDGER

### Asset Accounts

**Cash**

| Balance | Debit | | Credit | |
|---|---|---|---|---|
| | 1/31 Bal. | 16,600 | 2/1 | 360 |
| | 2/15 | 4,980 | 2/28 | 4,900 |
| Bal. $13,120 | | | 2/28 | 3,200 |

**Accounts Receivable**

| Balance | Debit | | Credit | |
|---|---|---|---|---|
| | 1/31 Bal. | 1,200 | | |
| Bal. $6,600 | 2/28 | 5,400 | | |

**Shop Supplies**

| Balance | Debit | | Credit | |
|---|---|---|---|---|
| | 1/31 Bal. | 0 | | |
| Bal. $1,400 | 2/4 | 1,400 | | |

**Tools and Equipment**

| Balance | Debit | | Credit | |
|---|---|---|---|---|
| Bal. $12,000 | 1/31 Bal. | 12,000 | | |

**Building**

| Balance | Debit | | Credit | |
|---|---|---|---|---|
| Bal. $36,000 | 1/31 Bal. | 36,000 | | |

**Land**

| Balance | Debit | | Credit | |
|---|---|---|---|---|
| Bal. $52,000 | 1/31 Bal. | 52,000 | | |

### Liability and Owners' Equity Accounts

**Notes Payable**

| Balance | Debit | | Credit | | Balance |
|---|---|---|---|---|---|
| | | | 1/31 Bal. | 30,000 | Bal. $30,000 |

**Accounts Payable**

| Balance | Debit | | Credit | | Balance |
|---|---|---|---|---|---|
| | | | 1/31 Bal. | 7,000 | |
| | | | 2/2 | 470 | |
| | | | 2/4 | 1,400 | |
| | | | 2/28 | 1,600 | Bal. $10,470 |

**Capital Stock**

| Balance | Debit | | Credit | | Balance |
|---|---|---|---|---|---|
| | | | 1/31 Bal. | 80,000 | Bal. $80,000 |

**Dividends**

| Balance | Debit | | Credit | | Balance |
|---|---|---|---|---|---|
| | 1/31 Bal. | 0 | | | |
| Bal. $3,200 | 2/28 | 3,200 | | | |

**Repair Service Revenue**

| Balance | Debit | | Credit | | Balance |
|---|---|---|---|---|---|
| | | | 1/31 Bal. | 2,200 | |
| | | | 2/15 | 4,980 | |
| | | | 2/28 | 5,400 | Bal. $12,580 |

**Advertising Expense**

| Balance | Debit | | Credit | | Balance |
|---|---|---|---|---|---|
| | 2/1 | 360 | | | |
| Bal. $830 | 2/2 | 470 | | | |

**Wages Expense**

| Balance | Debit | | Credit | | Balance |
|---|---|---|---|---|---|
| | 1/31 Bal. | 1,200 | | | |
| Bal. $6,100 | 2/28 | 4,900 | | | |

**Utilities Expense**

| Balance | Debit | | Credit | | Balance |
|---|---|---|---|---|---|
| | 1/31 Bal. | 200 | | | |
| Bal. $1,800 | 2/28 | 1,600 | | | |

we show in *red* the *February 28 balance* of each account (debit balances appear to the left of the account; credit balances appear to the right).

The accounts in this illustration appear in *financial statement order*—that is, balance sheet accounts first (assets, liabilities, and owners' equity), followed by the income statement accounts (revenue and expenses).

## The Trial Balance

LO3-9

**LEARNING OBJECTIVE**
Prepare a trial balance and explain its uses and limitations.

Since equal dollar amounts of debits and credits are entered in the accounts for every transaction recorded, the sum of all the debits in the ledger must be equal to the sum of all the credits. If the computation of account balances has been accurate, it follows that the total of the accounts with debit balances must be equal to the total of the accounts with credit balances.

Before using the account balances to prepare a balance sheet, it is desirable to *prove* that the total of accounts with debit balances is in fact equal to the total of accounts with credit balances. This proof of the equality of debit and credit balances is called a **trial balance.** A trial balance is a two-column schedule listing the names and balances of all the accounts *in the order in which they appear in the ledger;* the debit balances are listed in the left-hand column and the credit balances in the right-hand column. The totals of the two columns should agree. A trial balance taken from Overnight Auto's ledger accounts on page 110 is shown in Exhibit 3–9.

**EXHIBIT 3–9**
Overnight Auto Service's Trial Balance

**OVERNIGHT AUTO SERVICE**
**TRIAL BALANCE**
**FEBRUARY 28, 2015**

| | | |
|---|---|---|
| Cash | $ 13,120 | |
| Accounts receivable | 6,600 | |
| Shop supplies | 1,400 | |
| Tools and equipment | 12,000 | |
| Building | 36,000 | |
| Land | 52,000 | |
| Notes payable | | $ 30,000 |
| Accounts payable | | 10,470 |
| Capital stock | | 80,000 |
| Retained earnings | | 0 |
| Dividends | 3,200 | |
| Repair service revenue | | 12,580 |
| Advertising expense | 830 | |
| Wages expense | 6,100 | |
| Utilities expense | 1,800 | |
| | $133,050 | $133,050 |

**A trial balance proves the equality of debits and credits—but it also gives you a feel for how the business stands; but wait—there's more to consider**

This trial balance proves the equality of the debit and credit entries in the company's accounting system. Notice that the trial balance contains both balance sheet and income statement accounts. Note also that the Retained Earnings balance is *zero.* It is zero because *no debit or credit entries were made to the Retained Earnings account in January or February.* Overnight, like most companies, updates its Retained Earnings balance only *once each year.* In Chapter 5, we will show how the Retained Earnings account is updated to its proper balance at year-end on December 31.[3]

[3] The balance of $0 in the Retained Earnings account is a highly unusual situation. Because the company is still in its first year of operations, no entries have ever been made to update the account's balance. In any trial balance prepared after the first year of business activity, the Retained Earnings account may be expected to have a balance other than $0.

## USES AND LIMITATIONS OF THE TRIAL BALANCE

The trial balance provides proof that the ledger is in balance. The agreement of the debit and credit totals of the trial balance gives assurance that:

1. Equal debits and credits have been recorded for all transactions.
2. The addition of the account balances in the trial balance has been performed correctly.

Suppose that the debit and credit totals of the trial balance do not agree. This situation indicates that one or more errors have been made. Typical of such errors are (1) the posting of a debit as a credit, or vice versa; (2) arithmetic mistakes in determining account balances; (3) clerical errors in copying account balances into the trial balance; (4) listing a debit balance in the credit column of the trial balance, or vice versa; and (5) errors in addition of the trial balance.

The preparation of a trial balance does *not* prove that transactions have been correctly analyzed and recorded in the proper accounts. If, for example, a receipt of cash were erroneously recorded by debiting the Land account instead of the Cash account, the trial balance would still balance. Also, if a transaction were completely omitted from the ledger, the error would not be disclosed by the trial balance. In brief, *the trial balance proves only one aspect of the ledger, and that is the equality of debits and credits.*

# Concluding Remarks

## THE ACCOUNTING CYCLE IN PERSPECTIVE

L03-10

**LEARNING OBJECTIVE**
Distinguish between accounting cycle procedures and the *knowledge* of accounting.

We view the accounting cycle as an efficient means of introducing basic accounting terms, concepts, processes, and reports. This is why we introduce it early in the course. As we conclude the accounting cycle in Chapters 4 and 5, please don't confuse your familiarity with this sequence of procedures with a knowledge of *accounting.* The accounting cycle is but one accounting process—and a relatively simple one at that.

Computers now free accountants to focus upon the more *analytical* aspects of their discipline. These include, for example:

- Determining the information needs of decision makers.
- Designing systems to provide the information quickly and efficiently.
- Evaluating the efficiency of operations throughout the organization.
- Assisting decision makers in interpreting accounting information.
- Auditing (confirming the reliability of accounting information).
- Forecasting the probable results of future operations.
- Tax planning.

We will emphasize such topics in later chapters of this text. But let us first repeat a very basic point from Chapter 1: The need for some familiarity with accounting concepts and processes is not limited to individuals planning careers in accounting. Today, an understanding of accounting information and of the business world go hand in hand. You cannot know much about one without understanding quite a bit about the other.

## Ethics, Fraud, & Corporate Governance

As discussed in Chapter 2, the Sarbanes-Oxley Act (SOX) potentially increases the civil and criminal penalties associated with securities fraud, including fraudulent financial reporting. The increased Penalties—which can be substantial—are intended to reduce illegal behaviors. For example, in 2006, Jeffery Skilling, former Chief executive officer of **Enron**, was convicted of several fraud-related criminal charges for which he was sentenced to a prison term exceeding 24 years.

Businesspeople are sometimes told by their superiors to commit actions that are unethical and in some instances even illegal. The clear message of management is "participate in this behavior or find a job elsewhere." Management pressure and intimidation can make it difficult to resist demands to engage in unethical behavior. Employees sometimes believe that they are insulated from responsibility and liability because "they were just following orders."

As you encounter ethical dilemmas during your business career, remember that obeying orders from your superiors that are unethical, and certainly those that are illegal, may expose you to serious consequences, including criminal prosecution and incarceration.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# END-OF-CHAPTER REVIEW

## SUMMARY OF LEARNING OBJECTIVES

**LO3-1 Identify the steps in the accounting cycle and discuss the role of accounting records in an organization.** The accounting cycle generally consists of eight specific steps: (1) journalizing (recording) transactions, (2) posting each journal entry to the appropriate ledger accounts, (3) preparing a trial balance, (4) making end-of-period adjustments, (5) preparing an adjusted trial balance, (6) preparing financial statements, (7) journalizing and posting closing entries, and (8) preparing an after-closing trial balance.

Accounting records provide the information that is summarized in financial statements, income tax returns, and other accounting reports. In addition, these records are used by the company's management and employees for such purposes as:

- Establishing accountability for assets and transactions.
- Keeping track of routine business activities.
- Obtaining details about specific transactions.
- Evaluating the performance of units within the business.
- Maintaining a documentary record of the business's activities. (Such a record is required by tax laws and is useful for many purposes, including audits.)

**LO3-2 Describe a ledger account and a ledger.** A ledger account is a device for recording the increases or decreases in one financial statement item, such as a particular asset, a type of liability, or owners' equity. The general ledger is an accounting record that includes all the ledger accounts—that is, a separate account for each item included in the company's financial statements.

**LO3-3 Understand how balance sheet accounts are increased or decreased.** Increases in assets are recorded by debits and decreases are recorded by credits. Increases in liabilities and in owners' equity are recorded by credits and decreases are recorded by debits. Notice that the debit and credit rules are related to an account's *location in the balance sheet.* If the account appears on the *left side* of the balance sheet (asset accounts), increases in the account balance are recorded by *left-side entries* (debits). If the account appears on the *right side* of the balance sheet (liability and owners' equity accounts), increases are recorded by *right-side entries* (credits).

**LO3-4 Explain the double-entry system of accounting.** The double-entry system of accounting takes its name from the fact that every business transaction is recorded by *two types of entries:* (1) debit entries to one or more accounts and (2) credit entries to one or more accounts. In recording any transaction, the total dollar amount of the debit entries must equal the total dollar amount of the credit entries.

**LO3-5 Explain the purpose of a journal and its relationship to the ledger.** The journal is the accounting record in which business transactions are initially recorded. The entry in the journal shows which ledger accounts have increased as a result of the transaction and which have decreased. After the effects of the transaction have been recorded in the journal, the changes in the individual ledger accounts are then posted to the ledger.

**LO3-6 Explain the nature of *net income, revenue,* and *expenses.*** Net income is an increase in owners' equity that results from the profitable operation of a business during an accounting period. Net income also may be defined as revenue minus expenses. Revenue is the price of goods sold and services rendered to customers during the period, and expenses are the costs of the goods and services used up in the process of earning revenue.

**LO3-7 Apply the *realization* and *matching* principles in recording revenue and expenses.** The realization principle indicates that revenue should be recorded in the accounting records when it is *earned*—that is, when goods are sold or services are rendered to customers. The matching principle indicates that expenses should be offset against revenue on the basis of *cause and effect.* Thus, an expense should be recorded in the period in which the related good or service is consumed in the process of earning revenue.

**LO3-8 Understand how revenue and expense transactions are recorded in an accounting system.** The debit and credit rules for recording revenue and expenses are based on the rules for recording *changes in owners' equity.* Earning revenue *increases* owners' equity; therefore, revenue is recorded with a credit entry. Expenses *reduce* owners' equity and are recorded with debit entries.

**LO3-9 Prepare a trial balance and explain its uses and limitations.** In a trial balance, separate debit and credit columns are used to list the balances of the individual ledger accounts. The two columns are then totaled to prove the equality of the debit and credit balances. This process provides assurance that (1) the total of the debits posted to the ledger was equal to the total of the credits and (2) the balances of the individual ledger accounts were correctly computed. While a trial balance proves the equality of debit and credit entries in the ledger, it does *not* detect such errors as failure to record a business transaction, improper analysis of the accounts affected by the transaction, or the posting of debit or credit entries to the wrong accounts.

**LO3-10 Distinguish between accounting cycle procedures and the *knowledge* of accounting.** Accounting procedures involve the steps and processes necessary to *prepare* accounting information. A knowledge of the discipline enables one to *use* accounting information in evaluating performance, forecasting operations, and making complex business decisions.

## Key Terms Introduced or Emphasized in Chapter 3

**account** (p. 88) A record used to summarize all increases and decreases in a particular asset, such as cash, or any other type of asset, liability, owners' equity, revenue, or expense.

**accountability** (p. 88) The condition of being held responsible for one's actions by the existence of an independent record of those actions. Establishing accountability is a major goal of accounting records and of internal control procedures.

**accounting cycle** (p. 88) The sequence of accounting procedures used to record, classify, and summarize accounting information. The cycle begins with the initial recording of business transactions and concludes with the preparation of formal financial statements.

**accounting period** (p. 99) The span of time covered by an income statement. One year is the accounting period for much financial reporting, but financial statements are also prepared by companies for each quarter of the year and for each month.

**accrual basis of accounting** (p. 102) Calls for recording revenue in the period in which it is earned and recording expenses in the period in which they are incurred. The effect of events on the business is recognized as services are rendered or consumed rather than when cash is received or paid.

**conservatism** (p. 101) The traditional accounting practice of resolving uncertainty by choosing the solution that leads to the lower (more conservative) amount of income being recognized in the current accounting period. This concept is designed to avoid overstatement of financial strength or earnings.

**credit** (p. 89) An amount entered on the right side of a ledger account. A credit is used to record a decrease in an asset or an increase in a liability or in owners' equity.

**debit** (p. 89) An amount entered on the left side of a ledger account. A debit is used to record an increase in an asset or a decrease in a liability or in owners' equity.

**dividends** (p. 98) A distribution of resources by a corporation to its stockholders. The resource most often distributed is cash.

**double-entry accounting** (p. 91) A system of recording every business transaction with equal dollar amounts of both debit and credit entries. As a result of this system, the accounting equation always remains in balance; in addition, the system makes possible the measurement of net income and also the use of error-detecting devices such as a trial balance.

**expenses** (p. 98) The costs of the goods and services used up in the process of obtaining revenue.

**fiscal year** (p. 100) Any 12-month accounting period adopted by a business.

**general journal** (p. 91) The simplest type of journal, it has only two money columns—one for credits and one for debits. This journal may be used for all types of transactions, which are later posted to the appropriate ledger accounts.

**income statement** (p. 98) A financial statement summarizing the results of operations of a business by matching its revenue and related expenses for a particular accounting period. Shows the net income or net loss.

**journal** (p. 91) A chronological record of transactions, showing for each transaction the debits and credits to be entered in specific ledger accounts. The simplest type of journal is called a general journal.

**ledger** (p. 88) An accounting system includes a separate record for each item that appears in the financial statements. Collectively, these records are referred to as a company's ledger. Individually, these records are often referred to as ledger accounts.

**matching principle** (p. 101) The generally accepted accounting principle that determines when expenses should be recorded in the accounting records. The revenue earned during an accounting period is matched (offset) with the expenses incurred in generating that revenue.

**net income** (p. 98) An increase in owners' equity resulting from profitable operations. Also, the excess of revenue earned over the related expenses for a given period.

**net loss** (p. 98) A decrease in owners' equity resulting from unprofitable operations.

**objectivity** (p. 101) Accountants' preference for using dollar amounts that are relatively factual—as opposed to merely matters of personal opinion. Objective measurements can be verified.

**posting** (p. 92) The process of transferring information from the journal to individual accounts in the ledger.

**realization principle** (p. 100) The generally accepted accounting principle that determines when revenue should be recorded in the accounting records. Revenue is realized when services are rendered to customers or when goods sold are delivered to customers.

**retained earnings** (p. 98) That portion of stockholders' (owners') equity resulting from profits earned and retained in the business.

**revenue** (p. 98) The price of goods and services charged to customers for goods and services rendered by a business.

**time period principle** (p. 99) To provide the users of financial statements with timely information, net income is measured for relatively short accounting periods of equal length. The period of time covered by an income statement is termed the company's accounting period.

**trial balance** (p. 111) A two-column schedule listing the names and the debit or credit balances of all accounts in the ledger.

# Demonstration Problem

Epler Consulting Services, Inc., opened for business on January 25, 2015. The company maintains the following ledger accounts:

| | |
|---|---|
| Cash | Capital Stock |
| Accounts Receivable | Retained Earnings |
| Office Supplies | Consulting Revenue |
| Office Equipment | Rent Expense |
| Accounts Payable | Utilities Expense |

The company engaged in the following business activity in January:

**Jan. 20** Issued 5,000 shares of capital stock for $50,000.

**Jan. 20** Paid $400 office rent for the remainder of January.

**Jan. 21** Purchased office supplies for $200. The supplies will last for several months, and payment is not due until February 15.

**Jan. 22** Purchased office equipment for $15,000 cash.

**Jan. 26** Performed consulting services and billed clients $2,000. The entire amount will not be collected until February.

**Jan. 31** Recorded $100 utilities expense. Payment is not due until February 20.

### Instructions

**a.** Record each of the above transactions in general journal form.

**b.** Post each entry to the appropriate ledger accounts.

**c.** Prepare a trial balance dated January 31, 2015.

**d.** Explain why the Retained Earnings account has a zero balance in the trial balance.

## Solution to the Demonstration Problem

**a.**

**EPLER CONSULTING SERVICES, INC.**
**GENERAL JOURNAL**

| Date | Account Titles and Explanation | Debit | Credit |
|---|---|---|---|
| 2015 | | | |
| Jan. 20 | Cash | 50,000 | |
| | Capital Stock | | 50,000 |
| | To record the issue of 5,000 shares of capital stock at $10 per share. | | |
| 20 | Rent Expense | 400 | |
| | Cash | | 400 |
| | To record payment of January rent expense. | | |
| 21 | Office Supplies | 200 | |
| | Accounts Payable | | 200 |
| | To record purchase of office supplies on account. | | |
| 22 | Office Equipment | 15,000 | |
| | Cash | | 15,000 |
| | To record the purchase of office equipment. | | |
| 26 | Accounts Receivable | 2,000 | |
| | Consulting Revenue | | 2,000 |
| | Billed clients for consulting services rendered. | | |
| 31 | Utilities Expense | 100 | |
| | Accounts Payable | | 100 |
| | To record January utilities expense due in February. | | |

b.

**EPLER CONSULTING SERVICES, INC.**
**THE LEDGER**
**JANUARY 20–31, 2015**

**Asset Accounts**

**Cash**

| | | | | |
|---|---|---|---|---|
| | 1/20 | 50,000 | 1/20 | 400 |
| Bal. $34,600 | | | 1/22 | 15,000 |

**Accounts Receivable**

| | | | | |
|---|---|---|---|---|
| Bal. $2,000 | 1/26 | 2,000 | | |

**Office Supplies**

| | | | | |
|---|---|---|---|---|
| Bal. $200 | 1/21 | 200 | | |

**Office Equipment**

| | | | | |
|---|---|---|---|---|
| Bal. $15,000 | 1/22 | 15,000 | | |

**Liability and Owners' Equity Accounts**

**Accounts Payable**

| | | | | |
|---|---|---|---|---|
| | | 1/21 | 200 | |
| | | 1/31 | 100 | Bal. $300 |

**Capital Stock**

| | | | | |
|---|---|---|---|---|
| | | 1/20 | 50,000 | Bal. $50,000 |

**Retained Earnings**

| | | | | |
|---|---|---|---|---|
| | | | | Bal. $0 |

**Consulting Revenue**

| | | | | |
|---|---|---|---|---|
| | | 1/26 | 2,000 | Bal. $2,000 |

**Rent Expense**

| | | | | |
|---|---|---|---|---|
| Bal. $400 | 1/20 | 400 | | |

**Utilities Expense**

| | | | | |
|---|---|---|---|---|
| Bal. $100 | 1/31 | 100 | | |

**c.**

| EPLER CONSULTING SERVICES, INC.<br>TRIAL BALANCE<br>JANUARY 31, 2015 | | |
|---|---|---|
| Cash | $34,600 | |
| Accounts receivable | 2,000 | |
| Office supplies | 200 | |
| Office equipment | 15,000 | |
| Accounts payable | | $ 300 |
| Capital stock | | 50,000 |
| Retained earnings | | 0 |
| Consulting revenue | | 2,000 |
| Rent expense | 400 | |
| Utilities expense | 100 | |
| | $52,300 | $52,300 |

**d.** Epler's Retained Earnings account balance is zero because the company has been in business for only one week and has not yet updated the Retained Earnings account for *any* revenue or expense activities. The periodic adjustment needed to update the Retained Earnings account is discussed in Chapter 5.

## Self-Test Questions

*The answers to these questions appear on page 139.*

**1.** According to the rules of debit and credit for balance sheet accounts:

- **a.** Increases in asset, liability, and owners' equity accounts are recorded by debits.
- **b.** Decreases in asset and liability accounts are recorded by credits.
- **c.** Increases in asset and owners' equity accounts are recorded by debits.
- **d.** Decreases in liability and owners' equity accounts are recorded by debits.

**2.** Sunset Tours has a $3,500 account receivable from the Del Mar Rotary. On January 20, the Rotary makes a partial payment of $2,100 to Sunset Tours. The journal entry made on January 20 by Sunset Tours to record this transaction includes:

- **a.** A debit to the Cash Received account of $2,100.
- **b.** A credit to the Accounts Receivable account of $2,100.
- **c.** A debit to the Cash account of $1,400.
- **d.** A debit to the Accounts Receivable account of $1,400.

**3.** Indicate all of the following statements that correctly describe net income. Net income:

- **a.** Is equal to revenue minus expenses.
- **b.** Is equal to revenue minus the sum of expenses and dividends.
- **c.** Increases owners' equity.
- **d.** Is reported by a company for a specific period of time.

**4.** Which of the following is provided by a trial balance in which total debits equal total credits?

- **a.** Proof that no transaction was completely omitted from the ledger during the posting process.
- **b.** Proof that the correct debit or credit balance has been computed for each account.
- **c.** Proof that the ledger is in balance.
- **d.** Proof that transactions have been correctly analyzed and recorded in the proper accounts.

**5.** Which of the following explains the debit and credit rules relating to the recording of revenue and expenses?

- **a.** Expenses appear on the left side of the balance sheet and are recorded by debits; revenue appears on the right side of the balance sheet and is recorded by credits.
- **b.** Expenses appear on the left side of the income statement and are recorded by debits; revenue appears on the right side of the income statement and is recorded by credits.
- **c.** The effects of revenue and expenses on owners' equity.
- **d.** The realization principle and the matching principle.

**6.** Which of the following is *not* considered an analytical aspect of the accounting profession?

- **a.** Evaluating an organization's operational efficiency.
- **b.** Forecasting the probable results of future operations.
- **c.** Designing systems that provide information to decision makers.
- **d.** Journalizing and posting business transactions.

7. Indicate all correct answers. In the accounting cycle:
   **a.** Transactions are posted before they are journalized.
   **b.** A trial balance is prepared after journal entries have been posted.
   **c.** The Retained Earnings account is not shown as an up-to-date figure in the trial balance.
   **d.** Journal entries are posted to appropriate ledger accounts.

8. Indicate all correct answers. Dividends:
   **a.** Decrease owners' equity.
   **b.** Decrease net income.
   **c.** Are recorded by debiting the Dividend account.
   **d.** Are a business expense.

## ASSIGNMENT MATERIAL Discussion Questions

1. Baker Construction is a small corporation owned and managed by Tom Baker. The corporation has 21 employees, few creditors, and no investor other than Tom Baker. Thus, like many small businesses, it has no obligation to issue financial statements to creditors or investors. Under these circumstances, is there any reason for this corporation to maintain accounting records?
2. What relationship exists between the position of an account in the balance sheet equation and the rules for recording increases in that account?
3. State briefly the rules of debit and credit as applied to asset accounts and as applied to liability and owners' equity accounts.
4. Does the term *debit* mean increase and the term *credit* mean decrease? Explain.
5. What requirement is imposed by the double-entry system in the recording of any business transaction?
6. Explain the effect of operating profitably on the balance sheet of a business entity.
7. Does net income represent a supply of cash that could be distributed to stockholders in the form of dividends? Explain.
8. What is the meaning of the term *revenue?* Does the receipt of cash by a business indicate that revenue has been earned? Explain.
9. What is the meaning of the term *expenses?* Does the payment of cash by a business indicate that an expense has been incurred? Explain.
10. When do accountants consider revenue to be realized? What basic question about recording revenue in accounting records is answered by the *realization principle?*
11. In what accounting period does the *matching principle* indicate that an expense should be recognized?
12. Explain the rules of debit and credit with respect to transactions recorded in revenue and expense accounts.
13. What are some of the limitations of a trial balance?
14. How do dividends affect owners' equity? Are they treated as a business expense? Explain.
15. List some of the more *analytical* functions performed by professional accountants.

## Brief Exercises

connect ACCOUNTING

**LO3-1, LO3-2, LO3-5, LO3-9, LO3-10**

### BRIEF EXERCISE 3.1

The Accounting Cycle

Listed below in *random order* are the eight steps comprising a complete accounting cycle:

Prepare a trial balance.
Journalize and post the closing entries.
Prepare financial statements.
Post transaction data to the ledger.
Prepare an adjusted trial balance.
Make end-of-period adjustments.
Journalize transactions.
Prepare an after-closing trial balance.

**a.** List these steps in the sequence in which they would normally be performed. (A detailed understanding of these eight steps is not required until Chapters 4 and 5.)

**b.** Describe ways in which the information produced through the accounting cycle is used by a company's management and employees.

**LO3-3 through LO3-5**

### BRIEF EXERCISE 3.2

Recording Transactions in a Journal

Record the following selected transactions in general journal form for Quantum Clinic, Inc. Include a brief explanation of the transaction as part of each journal entry.

**Oct. 1** The clinic issued 5,000 additional shares of capital stock to Doctor Soges at $60 per share.

**Oct. 4** The clinic purchased diagnostic equipment. The equipment cost $250,000, of which $100,000 was paid in cash; a note payable was issued for the balance.

**Oct. 12** Issued a check for $6,000 in full payment of an account payable to Zeller Laboratories.

**Oct. 19** Purchased surgical supplies for $4,000. Payment is not due until November 28.

**Oct. 25** Collected a $80,000 account receivable from Health One Insurance Company.

**Oct. 30** Declared and paid a $500,000 cash dividend to stockholders.

**LO3-7, LO3-8**

**BRIEF EXERCISE 3.3**

Recording Transactions

Wagner Excavating organized as a corporation on January 18 and engaged in the following transactions during its first two weeks of operation:

**Jan. 18** Issued capital stock in exchange for $400,000 cash.

**Jan. 22** Borrowed $100,000 from its bank by issuing a note payable.

**Jan. 23** Paid $200 for a radio advertisement aired on January 24.

**Jan. 25** Provided $5,000 of services to clients for cash.

**Jan. 26** Provided $18,000 of services to clients on account.

**Jan. 31** Collected $4,200 cash from clients for the services provided on January 26.

**a.** Record each of these transactions.

**b.** Determine the balance in the Cash account on January 31. Be certain to state whether the balance is debit or credit.

**LO3-3, LO3-8**

**BRIEF EXERCISE 3.4**

Debit and Credit Rules

Five account classifications are shown as column headings in the table below. For each account classification, indicate the manner in which increases and decreases are recorded (i.e., by debits or by credits).

| | Revenue | Expenses | Assets | Liabilities | Owners' Equity |
|---|---|---|---|---|---|
| **Increases recorded by:** | | | | | |
| **Decreases recorded by:** | | | | | |

**LO3-3, LO3-6**

**BRIEF EXERCISE 3.5**

Changes in Retained Earnings

Hewitt Corporation's Retained Earnings account balance was $90,000 on January 1. During January, the company recorded revenue of $500,000, expenses of $260,000, and dividends of $15,000. The company also paid a $35,000 account payable during the period.

Determine the company's Retained Earnings account balance on January 31.

**LO3-6, LO3-7**

**BRIEF EXERCISE 3.6**

Realization and Matching Principles

On May 26, Breeze Camp Ground paid KPRM Radio $500 cash for ten 30-second advertisements. Three of the ads were aired in May, five in June, and two in July.

**a.** Apply the realization principle to determine how much advertising revenue KPRM Radio earned from Breeze Camp Ground in May, June, and July.

**b.** Apply the matching principle to determine how much advertising expense Breeze Camp Ground incurred in May, June, and July.

**LO3-6, LO3-7**

**BRIEF EXERCISE 3.7**

When Is Revenue Realized?

The following transactions were carried out during the month of May by Hagen and Associates, a firm of design architects. For each of the five transactions, you are to state whether the transaction represented revenue to the firm during the month of May. Give reasons for your decision in each case.

**a.** The firm received $300,000 cash by issuing additional shares of capital stock.

**b.** Collected cash of $25,000 from an account receivable. The receivable originated in April from services rendered to a client.

**c.** Borrowed $60,000 from Century Bank to be repaid in three months.

**d.** Earned $250 interest on a company savings account during the month of May. No withdrawals were made from this account in May.

**e.** Completed plans for guesthouse, pool, and spa for a client. The $7,000 fee for this project was billed to the client in May, but will not be collected until June 25.

**LO3-6, LO3-7**
**BRIEF EXERCISE 3.8**
When Are Expenses Incurred?

During March, the activities of Evergreen Landscaping included the following transactions and events, among others. Which of these items represented expenses in March? Explain.

**a.** Purchased a copying machine for $2,750 cash.

**b.** Paid $192 for gasoline purchases for a delivery truck during March.

**c.** Paid $2,280 salary to an employee for time worked during March.

**d.** Paid an attorney $560 for legal services rendered in January.

**e.** Declared and paid an $1,800 dividend to shareholders.

**LO3-6, LO3-7**
**BRIEF EXERCISE 3.9**
Realization Principle

Sky Bound Airlines has provided the following information regarding cash received for ticket sales in September and October:

| | |
|---|---|
| Cash received in September for October flights | $1,700,000 |
| Cash received in October for October flights | 1,300,000 |
| Cash received in October for November flights | 1,800,000 |

Apply the realization principle to determine how much revenue Sky Bound Airlines should report in its October income statement.

**LO3-6, LO3-7**
**BRIEF EXERCISE 3.10**
Matching Principle

Harley Consulting has provided the following information regarding cash payments to its employees in May and June:

| | |
|---|---|
| Salary payments in May for work performed by employees in April | $25,000 |
| Salary payments in May for work performed by employees in May | 30,000 |
| Salary payments in June for work performed by employees in May | 10,000 |

Apply the matching principle to determine how much salary expense Harley Consulting should report in its May income statement.

# Exercises

connect ACCOUNTING

**LO3-1 through LO3-10**
**EXERCISE 3.1**
Accounting Terminology

Listed below are eight technical accounting terms introduced in this chapter:

| | |
|---|---|
| Realization principle | Credit |
| Time period principle | Accounting period |
| Matching principle | Expenses |
| Net income | Accounting cycle |

Each of the following statements may (or may not) describe one of these technical terms. For each statement, indicate the term described, or answer "None" if the statement does not correctly describe any of the terms.

**a.** The span of time covered by an income statement.

**b.** The sequence of accounting procedures used to record, classify, and summarize accounting information.

**c.** The traditional accounting practice of resolving uncertainty by choosing the solution that leads to the lowest amount of income being recognized.

**d.** An increase in owners' equity resulting from profitable operations.

**e.** The underlying accounting principle that determines when revenue should be recorded in the accounting records.

**f.** The type of entry used to decrease an asset or increase a liability or owners' equity account.

**g.** The underlying accounting principle of offsetting revenue earned during an accounting period with the expenses incurred in generating that revenue.

**h.** The costs of the goods and services used up in the process of generating revenue.

**LO3-6, LO3-7**
**EXERCISE 3.2**
The Matching Principle: You as a Driver

The purpose of this exercise is to demonstrate the *matching principle* in a familiar setting. Assume that you own a car that you drive about 15,000 miles each year.

**a.** List the various costs to you associated with owning and operating this car. Make an estimate of the total annual cost of owning and operating the car, as well as the average cost-per-mile that you drive.

**b.** Assume also that you have a part-time job. You usually do not use your car in this job, but today your employer asks you to drive 100 miles (round-trip) to deliver some important documents. Your employer offers to "reimburse you for your driving expenses."

You already have a full tank of gas, so you are able to drive the whole 100 miles without stopping and you don't actually spend any money during the trip. Does this mean that you have incurred no "expenses" for which you should be reimbursed? Explain.

**LO3-2 through LO3-5**

**EXERCISE 3.3**

Relationship between Journal and Ledger Accounts

Transactions are *first* journalized and *then* posted to ledger accounts. In this exercise, however, your understanding of the relationship between the journal and the ledger is tested by asking you to study some ledger accounts and determine the journal entries that probably were made to produce these ledger entries. The following accounts show the first six transactions of Avenson Insurance Company. Prepare a journal entry (including a written explanation) for each transaction.

**Cash**

| | | | |
|---|---|---|---|
| Nov. 1 | 120,000 | Nov. 8 | 33,600 |
| | | Nov. 25 | 12,000 |
| | | Nov. 30 | 1,400 |

**Vehicles**

| | | | |
|---|---|---|---|
| Nov. 30 | 9,400 | | |

**Land**

| | | | |
|---|---|---|---|
| Nov. 8 | 70,000 | | |

**Notes Payable**

| | | | |
|---|---|---|---|
| Nov. 25 | 12,000 | Nov. 8 | 95,000 |
| | | Nov. 30 | 8,000 |

**Building**

| | | | |
|---|---|---|---|
| Nov. 8 | 58,600 | | |

**Accounts Payable**

| | | | |
|---|---|---|---|
| Nov. 21 | 480 | Nov. 15 | 3,200 |

**Office Equipment**

| | | | |
|---|---|---|---|
| Nov. 15 | 3,200 | Nov. 21 | 480 |

**Capital Stock**

| | | | |
|---|---|---|---|
| | | Nov. 1 | 120,000 |

**LO3-9**

**EXERCISE 3.4**

Preparing a Trial Balance

Using the information in the ledger accounts presented in Exercise 3.3, prepare a trial balance for Avenson Insurance Company dated November 30.

**LO3-6, LO3-8**

**EXERCISE 3.5**

Relationship between Net Income and Equity

The following information came from a recent balance sheet of **Apple Computer, Inc.**:

| | End of Year | Beginning of Year |
|---|---|---|
| Assets. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | $176.0 billion | $116.4 billion |
| Liabilities. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | $ 57.9 billion | ? |
| Owners' Equity . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | ? | $ 76.6 billion |

**a.** Determine the amount of total liabilities reported in **Apple Computer**'s balance sheet at the beginning of the year.

**b.** Determine the amount of total owners' equity reported in **Apple Computer**'s balance sheet at the end of the year.

**c.** Retained earnings was reported in **Apple Computer**'s year-end balance sheet at $101.3 billion. If retained earnings was $62.8 billion at the beginning of the year, determine net income for the year if a $2.5 billion dividend was declared during the year.

**LO3-2 through LO3-6**

**EXERCISE 3.6**

Effects of Transactions on the Accounting Equation

Satka Fishing Expeditions, Inc., recorded the following transactions in July:

1. Provided an ocean fishing expedition for a credit customer; payment is due August 10.
2. Paid Marine Service Center for repairs to boats performed in June. (In June, Satka Fishing Expeditions, Inc., had received and properly recorded the invoice for these repairs.)

3. Collected the full amount due from a credit customer for a fishing expedition provided in June.
4. Received a bill from Baldy's Bait Shop for bait purchased and used in July. Payment is due August 3.
5. Purchased a new fishing boat on July 28, paying part cash and issuing a note payable for the balance. The new boat is first scheduled for use on August 5.
6. Declared and paid a cash dividend on July 31.

Indicate the effects that each of these transactions will have upon the following six *total amounts* in the company's financial statements for the month of July. Organize your answer in tabular form, using the column headings shown, and use the code letters **I** for increase, **D** for decrease, and **NE** for no effect. The answer to transaction **1** is provided as an example.

| | Income Statement | | | Balance Sheet | | |
|---|---|---|---|---|---|---|
| Transaction | Revenue − | Expenses = | Net Income | Assets = | Liabilities + | Owners' Equity |
| 1 | I | NE | I | I | NE | I |

**LO3-2 through LO3-6**

**EXERCISE 3.7**

Effect of Transactions on the Accounting Equation

A number of transactions of Claypool Construction are described below in terms of accounts debited and credited:

1. Debit Wages Expense; credit Wages Payable.
2. Debit Accounts Receivable; credit Construction Revenue.
3. Debit Dividends; credit Cash.
4. Debit Office Supplies; credit Accounts Payable.
5. Debit Repairs Expense; credit Cash.
6. Debit Cash; credit Accounts Receivable.
7. Debit Tools and Equipment; credit Cash and Notes Payable.
8. Debit Accounts Payable; credit Cash.

**a.** Indicate the effects of each transaction upon the elements of the income statement and the balance sheet. Use the code letters **I** for increase, **D** for decrease, and **NE** for no effect. Organize your answer in tabular form using the column headings shown below. The answer for transaction **1** is provided as an example.

| | Income Statement | | | Balance Sheet | | |
|---|---|---|---|---|---|---|
| Transaction | Revenue − | Expenses = | Net Income | Assets = | Liabilities + | Owners' Equity |
| 1 | NE | I | D | NE | I | D |

**b.** Write a one-sentence description of each transaction.

**LO3-4, LO3-6 through LO3-8**

**EXERCISE 3.8**

Preparing Journal Entries for Revenue, Expenses, and Dividends

Shown below are selected transactions of the architectural firm of Baxter, Claxter, and Stone, Inc.

**April 5** Prepared building plans for Spangler Construction Company. Sent Spangler an invoice for $11,000 requesting payment within 30 days. (The appropriate revenue account is entitled Drafting Fees Earned.)

**May 17** Declared a cash dividend of $2,000. The dividend will not be paid until June 25.

**May 29** Received a $4,500 bill from Bob Needham, CPA, for accounting services performed during May. Payment is due by June 10. (The appropriate expense account is entitled Professional Expenses.)

**June 4** Received full payment from Spangler Construction Company for the invoice sent on April 5.

**June 10** Paid Bob Needham, CPA, for the bill received on May 29.

**June 25** Paid the cash dividend declared on May 17.

**a.** Prepare journal entries to record the transactions in the firm's accounting records.

**b.** Identify any of the above transactions that *will not* result in a change in the company's net income.

**LO3-3, LO3-6, LO3-7**

### EXERCISE 3.9

Effects of Transactions on the Financial Statements

Listed below are eight transactions the Foster Corporation made during November:

**a.** Issued stock in exchange for cash.

**b.** Purchased land. Made partial payment with cash and issued a note payable for the remaining balance.

**c.** Recorded utilities expense for November. Payment is due in mid-December.

**d.** Purchased office supplies with cash.

**e.** Paid outstanding salaries payable owed to employees for wages earned in October.

**f.** Declared a cash dividend that will not be paid until late December.

**g.** Sold land for cash at an amount equal to the land's historical cost.

**h.** Collected cash on account from customers for services provided in September and October.

Indicate the *effects of the above transactions* on each of the financial statement elements shown in the column headings below. Use the following symbols: **I** = Increase, **D** = Decrease, and **NE** = no effect.

| Transaction | Net Income | Assets | Liabilities | Equity |
|---|---|---|---|---|
| a. | | | | |
| b. | | | | |
| c. | | | | |
| d. | | | | |
| e. | | | | |
| f. | | | | |
| g. | | | | |
| h. | | | | |

**LO3-3, LO3-5, LO3-8, LO3-9**

### EXERCISE 3.10

Journalizing, Posting, and Preparing a Trial Balance

Janet Enterprises incorporated on May 3, 2015. The company engaged in the following transactions during its first month of operations:

**May 3** Issued capital stock in exchange for $950,000 cash.

**May 4** Paid May office rent expense of $1,800.

**May 5** Purchased office supplies for $600 cash. The supplies will last for several months.

**May 15** Purchased office equipment for $12,400 on account. The entire amount is due June 15.

**May 18** Purchased a company car for $45,000. Paid $15,000 cash and issued a note payable for the remaining amount owed.

**May 20** Billed clients $120,000 on account.

**May 26** Declared a $8,000 dividend. The entire amount will be distributed to shareholders on June 26.

**May 29** Paid May utilities of $500.

**May 30** Received $90,000 from clients billed on May 20.

**May 31** Recorded and paid salary expense of $32,000.

A partial list of the account titles used by the company includes:

| | |
|---|---|
| Cash | Dividends Payable |
| Accounts Receivable | Dividends |
| Office Supplies | Capital Stock |
| Office Equipment | Client Revenue |
| Vehicles | Office Rent Expense |
| Notes Payable | Salary Expense |
| Accounts Payable | Utilities Expense |

**a.** Prepare journal entries, including explanations, for the above transactions.

**b.** Post each entry to the appropriate ledger accounts (use the T account format illustrated in Exhibit 3–8 on page 110).

**c.** Prepare a trial balance dated May 31, 2015. Assume accounts with zero balances are not included in the trial balance.

**LO3-3, LO3-5, LO3-8, LO3-9**

**EXERCISE 3.11**

Journalizing, Posting, and Preparing a Trial Balance

Georgia Corporation incorporated on September 2, 2015. The company engaged in the following transactions during its first month of operations:

| | |
|---|---|
| **Sept. 2** | Issued capital stock in exchange for $975,000 cash. |
| **Sept. 4** | Purchased land and a building for $900,000. The value of the land was $200,000, and the value of the building was $700,000. The company paid $100,000 cash and issued a note payable for the balance. |
| **Sept. 12** | Purchased office supplies for $500 on account. The supplies will last for several months. |
| **Sept. 19** | Billed clients $180,000 on account. |
| **Sept. 29** | Recorded and paid salary expense of $60,000. |
| **Sept. 30** | Received $110,000 from clients billed on September 19. |

A partial list of the account titles used by the company includes:

| | |
|---|---|
| Cash | Notes Payable |
| Accounts Receivable | Accounts Payable |
| Office Supplies | Capital Stock |
| Land | Client Revenue |
| Building | Salary Expense |

**a.** Prepare journal entries, including explanations, for the above transactions.

**b.** Post each entry to the appropriate ledger accounts (use the T account format illustrated in Exhibit 3–8 on page 110).

**c.** Prepare a trial balance dated September 30, 2015. Assume accounts with zero balances are not included in the trial balance.

**LO3-3, LO3-5, LO3-8, LO3-9**

**EXERCISE 3.12**

Journalizing, Posting, and Preparing a Trial Balance

Elaine Consulting incorporated on February 1, 2015. The company engaged in the following transactions during its first month of operations:

| | |
|---|---|
| **Feb. 1** | Issued capital stock in exchange for $800,000 cash. |
| **Feb. 5** | Borrowed $100,000 from the bank by issuing a note payable. |
| **Feb. 8** | Purchased land, building, and office equipment for $750,000. The value of the land was $150,000, the value of the building was $540,000, and the value of the office equipment was $60,000. The company paid $200,000 cash and issued a note payable for the balance. |
| **Feb. 11** | Purchased office supplies for $800 on account. The supplies will last for several months. |
| **Feb. 14** | Paid the local newspaper $500 for a full-page advertisement. The ad will appear in print on February 18. |
| **Feb. 20** | Several of the inkjet printer cartridges that Herrold purchased on February 11 were defective. The cartridges were returned and the office supply store reduced Herrold's outstanding balance by $200. |
| **Feb. 22** | Performed consulting services for $14,000 cash. |
| **Feb. 24** | Billed clients $16,000. |
| **Feb. 25** | Paid salaries of $12,000. |
| **Feb. 28** | Paid the entire outstanding balance owed for office supplies purchased on February 11. |

A partial list of the account titles used by the company includes:

| | |
|---|---|
| Cash | Notes Payable |
| Accounts Receivable | Accounts Payable |
| Office Supplies | Capital Stock |
| Land | Client Service Revenue |
| Building | Advertising Expense |
| Office Equipment | Salaries Expense |

**a.** Prepare journal entries, including explanations, for the above transactions.

**b.** Post each entry to the appropriate ledger accounts (use the T account format as illustrated in Exhibit 3–8 on page 110).

**c.** Prepare a trial balance dated February 28, 2015. Assume accounts with zero balances are not included in the trial balance.

**LO3-3, LO3-6, LO3-8**

**EXERCISE 3.13**

Analyzing Transactions

Listed below are descriptions of six transactions, followed by a table listing six unique combinations of financial statement effects (**I** is for increase, **D** is for decrease, and **NE** is for no effect). In the blank space to the left of each transaction description, place the appropriate letter from the table that indicates the effects of that transaction on the various elements of the financial statements.

**1.** _____ Purchased machinery for $5,000, paying $1,000 cash and issuing a $4,000 note payable for the balance.

**2.** _____ Billed clients $16,000 on account.

**3.** _____ Recorded a $500 maintenance expense of which $100 was paid in cash and the remaining amount was due in 30 days.

**4.** _____ Paid an outstanding account payable of $400.

**5.** _____ Recorded monthly utilities costs of $300. The entire amount is due in 20 days.

**6.** _____ Declared a $40,000 dividend to be distributed in 60 days.

| Transaction | Revenue | Expenses | Assets | Liabilities | Owners' Equity |
|---|---|---|---|---|---|
| a. | NE | NE | D | D | NE |
| b. | NE | I | D | I | D |
| c. | NE | NE | NE | I | D |
| d. | NE | I | NE | I | D |
| e. | NE | NE | I | I | N |
| f. | I | NE | I | NE | I |

**LO3-3, LO3-6, LO3-8**

**EXERCISE 3.14**

Analyzing Transactions

Listed below are descriptions of six transactions, followed by a table listing six unique combinations of financial statement effects (**I** is for increase, **D** is for decrease, and **NE** is for no effect). In the blank space to the left of each transaction description, place the appropriate letter from the table that indicates the effects of that transaction on the various elements of the financial statements.

**1.** _____ Issued capital stock in exchange for $50,000 cash.

**2.** _____ Billed clients $20,000 on account.

**3.** _____ Placed a $300 advertisement in the local newspaper. The entire amount is due in 30 days.

**4.** _____ Collected $100 on account from clients.

**5.** _____ Recorded and paid a $12,000 dividend.

**6.** _____ Recorded and paid salaries of $15,000.

| Transaction | Revenue | Expenses | Assets | Liabilities | Owners' Equity |
|---|---|---|---|---|---|
| a. | NE | I | NE | I | D |
| b. | NE | I | D | NE | D |
| c. | NE | NE | D | NE | D |
| d. | NE | NE | I | NE | I |
| e. | I | NE | I | NE | I |
| f. | NE | NE | NE | NE | NE |

**LO3-1 through LO3-3, LO3-7, LO3-10**

**EXERCISE 3.15**

Using the Financial Statements of **Home Depot, Inc.**

Throughout this text, we have many assignments based on the financial statements of **Home Depot, Inc.**, in Appendix A. Refer to the financial statements to respond to the following items:

**a.** Does the company's fiscal year end on December 31? How can you tell?

**b.** State the company's most recent balance sheet in terms of A = L + E.

**c.** Did the company post more debits to the Cash account during the year than credits? How can you tell?

# Problem Set A

**LO3-3 through LO3-5**

**PROBLEM 3.1A**

Journalizing Transactions

Glenn Grimes is the founder and president of Heartland Construction, a real estate development venture. The business transactions during February while the company was being organized are listed below.

**Feb. 1** Grimes and several others invested $500,000 cash in the business in exchange for 25,000 shares of capital stock.

**Feb. 10** The company purchased office facilities for $300,000, of which $100,000 was applicable to the land and $200,000 to the building. A cash payment of $60,000 was made and a note payable was issued for the balance of the purchase price.

**Feb. 16** Computer equipment was purchased from PCWorld for $12,000 cash.

**Feb. 18** Office furnishings were purchased from Hi-Way Furnishings at a cost of $9,000. A $1,000 cash payment was made at the time of purchase, and an agreement was made to pay the remaining balance in two equal installments due March 1 and April 1. Hi-Way Furnishings did not require that Heartland sign a promissory note.

**Feb. 22** Office supplies were purchased from Office World for $300 cash.

**Feb. 23** Heartland discovered that it paid too much for a computer printer purchased on February 16. The unit should have cost only $359, but Heartland was charged $395. PCWorld promised to refund the difference within seven days.

**Feb. 27** Mailed Hi-Way Furnishings the first installment due on the account payable for office furnishings purchased on February 18.

**Feb. 28** Received $36 from PCWorld in full settlement of the account receivable created on February 23.

**Instructions**

**a.** Prepare journal entries to record the above transactions. Select the appropriate account titles from the following chart of accounts:

| | |
|---|---|
| Cash | Land |
| Accounts Receivable | Office Building |
| Office Supplies | Notes Payable |
| Office Furnishings | Accounts Payable |
| Computer Systems | Capital Stock |

**b.** Indicate the effects of each transaction on the company's assets, liabilities, and owners' equity for the month of February. Organize your analysis in tabular form as shown for the February 1

| Transaction | Assets | = | Liabilities | + | Owners' Equity |
|---|---|---|---|---|---|
| Feb. 1 | +$500,000 (Cash) | | $0 | | +$500,000 (Capital Stock) |

**LO3-3 through LO3-8**

**PROBLEM 3.2A**

**Analyzing and Journalizing Transactions**

Environmental Services, Inc., performs various tests on wells and septic systems. A few of the company's business transactions occurring during August are described below:

1. On August 1, the company billed customers $2,500 on account for services rendered. Customers are required to make full payment within 30 days. (Environmental Services uses an account entitled Testing Service Revenue when billing customers.)
2. On August 3, the company purchased testing supplies costing $3,800, paying $800 cash and charging the remainder on the company's 30-day account at Penn Chemicals. The testing supplies are expected to last several months.
3. On August 5, the company returned to Penn Chemicals $100 of testing supplies that were not needed. The return of these supplies reduced by $100 the amount owed to Penn Chemicals.
4. On August 17, the company issued an additional 2,500 shares of capital stock at $8 per share. The cash raised will be used to purchase new testing equipment in September.
5. On August 22, the company received $600 cash from customers it had billed on August 1.
6. On August 29, the company paid its outstanding account payable to Penn Chemicals.
7. On August 30, a cash dividend totaling $6,800 was declared and paid to the company's stockholders.

### Instructions

**a.** Prepare an analysis of each of the above transactions. Transaction 1 serves as an example of the form of analysis to be used.

**1.** **(a)** The asset Accounts Receivable was increased. Increases in assets are recorded by debits. Debit Accounts Receivable $2,500.

**(b)** Revenue has been earned. Revenue increases owners' equity. Increases in owners' equity are recorded by credits. Credit Testing Service Revenue $2,500.

**b.** Prepare journal entries, including explanations, for the above transactions.

**c.** How does the *realization principle* influence the manner in which the August 1 billing to customers is recorded in the accounting records?

**d.** How does the *matching principle* influence the manner in which the August 3 purchase of testing supplies is recorded in the accounting records?

**LO3-3 through LO3-8**

**PROBLEM 3.3A**

**Analyzing and Journalizing Transactions**

Weida Surveying, Inc., provides land surveying services. During September, its transactions included the following:

| | |
|---|---|
| **Sept. 1** | Paid rent for the month of September, $4,400. |
| **Sept. 3** | Billed Fine Line Homes $5,620 for surveying services. The entire amount is due on or before September 28. (Weida uses an account entitled Surveying Revenue when billing clients.) |
| **Sept. 9** | Provided surveying services to Sunset Ridge Developments for $2,830. The entire amount was collected on this date. |
| **Sept. 14** | Placed a newspaper advertisement in the *Daily Item* to be published in the September 20 issue. The cost of the advertisement was $165. Payment is due in 30 days. |
| **Sept. 25** | Received a check for $5,620 from Fine Line Homes for the amount billed on September 3. |
| **Sept. 26** | Provided surveying services to Thompson Excavating Company for $1,890. Weida collected $400 cash, with the balance due in 30 days. |
| **Sept. 29** | Sent a check to the *Daily Item* in full payment of the liability incurred on September 14. |
| **Sept. 30** | Declared and paid a $7,600 cash dividend to the company's stockholders. |

### Instructions

**a.** Analyze the effects that each of these transactions will have on the following six components of the company's financial statements for the month of September. Organize your answer in tabular form, using the column headings shown. Use **I** for increase, **D** for decrease, and **NE** for no effect. The September 1 transaction is provided for you:

| | Income Statement | | | Balance Sheet | | |
|---|---|---|---|---|---|---|
| Transaction | Revenue − | Expenses = | Net Income | Assets = | Liabilities + | Owners' Equity |
| **Sept. 1** | **NE** | **I** | **D** | **D** | **NE** | **D** |

**b.** Prepare a journal entry (including explanation) for each of the above transactions.

**c.** Three of September's transactions involve cash payments, yet only one of these transactions is recorded as an expense. Describe three situations in which a cash payment would *not* involve recognition of an expense.

**LO3-1 through LO3-10**

**PROBLEM 3.4A**

The Accounting Cycle: Journalizing, Posting, and Preparing a Trial Balance

In June 2015, Wendy Winger organized a corporation to provide aerial photography services. The company, called Aerial Views, began operations immediately. Transactions during the month of June were as follows:

**June 1** The corporation issued 60,000 shares of capital stock to Wendy Winger in exchange for $60,000 cash.

**June 2** Purchased a plane from Utility Aircraft for $220,000. Made a $40,000 cash down payment and issued a note payable for the remaining balance.

**June 4** Paid Woodrow Airport $2,500 to rent office and hangar space for the month.

**June 15** Billed customers $8,320 for aerial photographs taken during the first half of June.

**June 15** Paid $5,880 in salaries earned by employees during the first half of June.

**June 18** Paid Hannigan's Hangar $1,890 for maintenance and repair services on the company plane.

**June 25** Collected $4,910 of the amounts billed to customers on June 15.

**June 30** Billed customers $16,450 for aerial photographs taken during the second half of the month.

**June 30** Paid $6,000 in salaries earned by employees during the second half of the month.

**June 30** Received a $2,510 bill from Peatree Petroleum for aircraft fuel purchased in June. The entire amount is due July 10.

**June 30** Declared a $2,000 dividend payable on July 15.

The account titles used by Aerial Views are:

| | |
|---|---|
| Cash | Retained Earnings |
| Accounts Receivable | Dividends |
| Aircraft | Aerial Photography Revenue |
| Notes Payable | Maintenance Expense |
| Accounts Payable | Fuel Expense |
| Dividends Payable | Salaries Expense |
| Capital Stock | Rent Expense |

### Instructions

**a.** Analyze the effects that each of these transactions will have on the following six components of the company's financial statements for the month of June. Organize your answer in tabular form, using the column headings shown. Use **I** for increase, **D** for decrease, and **NE** for no effect. The June 1 transaction is provided for you:

| | Income Statement | | | Balance Sheet | | |
|---|---|---|---|---|---|---|
| Transaction | Revenue − | Expenses = | Net Income | Assets = | Liabilities + | Owners' Equity |
| **June 1** | **NE** | **NE** | **NE** | **I** | **NE** | **I** |

**b.** Prepare journal entries (including explanations) for each transaction.

**c.** Post each transaction to the appropriate ledger accounts (use a running balance format as illustrated in Exhibit 3–4 on page 97).

**d.** Prepare a trial balance dated June 30, 2015.

**e.** Using figures from the trial balance prepared in part **d,** compute total assets, total liabilities, and owners' equity. Are these the figures that the company will report in its June 30 balance sheet? Explain your answer briefly.

**LO3-1 through LO3-10**

**PROBLEM 3.5A**

The Accounting Cycle: Journalizing, Posting, and Preparing a Trial Balance

Dr. Schekter, DVM, opened a veterinary clinic on May 1, 2015. The business transactions for May are shown below:

**May 1** Dr. Schekter invested $400,000 cash in the business in exchange for 5,000 shares of capital stock.

**May 4** Land and a building were purchased for $250,000. Of this amount, $70,000 applied to the land, and $180,000 to the building. A cash payment of $100,000 was made at the time of the purchase, and a note payable was issued for the remaining balance.

**May 9** Medical instruments were purchased for $130,000 cash.

**May 16** Office fixtures and equipment were purchased for $50,000. Dr. Schekter paid $20,000 at the time of purchase and agreed to pay the entire remaining balance in 15 days.

**May 21** Office supplies expected to last several months were purchased for $5,000 cash.

**May 24** Dr. Schekter billed clients $2,200 for services rendered. Of this amount, $1,900 was received in cash, and $300 was billed on account (due in 30 days).

**May 27** A $400 invoice was received for several radio advertisements aired in May. The entire amount is due on June 5.

**May 28** Received a $100 payment on the $300 account receivable recorded May 24.

**May 31** Paid employees $2,800 for salaries earned in May.

A partial list of account titles used by Dr. Schekter includes:

| | |
|---|---|
| Cash | Notes Payable |
| Accounts Receivable | Accounts Payable |
| Office Supplies | Capital Stock |
| Medical Instruments | Veterinary Service Revenue |
| Office Fixtures and Equipment | Advertising Expense |
| Land | Salary Expense |
| Building | |

### Instructions

**a.** Analyze the effects that each of these transactions will have on the following six components of the company's financial statements for the month of May. Organize your answer in tabular form, using the column headings shown below. Use **I** for increase, **D** for decrease, and **NE** for no effect. The May 1 transaction is provided for you:

| | Income Statement | | | Balance Sheet | | |
|---|---|---|---|---|---|---|
| Transaction | Revenue − | Expenses = | Net Income | Assets = | Liabilities + | Owners' Equity |
| **May 1** | **NE** | **NE** | **NE** | **I** | **NE** | **I** |

**b.** Prepare journal entries (including explanations) for each transaction.

**c.** Post each transaction to the appropriate ledger accounts (use the T account format illustrated in Exhibit 3–8 on page 110).

**d.** Prepare a trial balance dated May 31, 2015.

**e.** Using figures from the trial balance prepared in part **d,** compute total assets, total liabilities, and owners' equity. Did May appear to be a profitable month?

**LO3-7 through LO3-9**

**PROBLEM 3.6A**

Short Comprehensive Problem

Donegan's Lawn Care Service began operations in July 2015. The company uses the following general ledger accounts:

| | |
|---|---|
| Cash | Capital Stock |
| Accounts Receivable | Retained Earnings |
| Office Supplies | Mowing Revenue |
| Mowing Equipment | Salaries Expense |
| Accounts Payable | Fuel Expense |
| Notes Payable | |

The company engaged in the following transactions during its first month of operations:

**July 18** Issued 500 shares of capital stock to Patrick Donegan for $1,500.

**July 22** Purchased office supplies on account for $100.

**July 23** Purchased mowing equipment for $2,000, paying $400 cash and issuing a 60-day note payable for the remaining balance.

**July 24** Paid $25 cash for gasoline. All of this fuel will be used in July.

**July 25** Billed Lost Creek Cemetery $150 for mowing services. The entire amount is due July 30.

**July 26** Billed Golf View Condominiums $200 for mowing services. The entire amount is due August 1.

**July 30** Collected $150 from Lost Creek Cemetery for mowing services provided on July 25.

**July 31** Paid $80 salary to employee Teddy Grimm for work performed in July.

**a.** Record each of the above transactions in general journal form. Include a brief explanation of the transaction as part of each journal entry.

**b.** Post each entry to the appropriate ledger accounts (use the T account format illustrated in Exhibit 3–8 on page 110).

**c.** Prepare a trial balance dated July 31, 2015.

**d.** Explain why the Retained Earnings account has a zero balance in the trial balance.

**LO3-3 through LO3-9**

**PROBLEM 3.7A**

Short Comprehensive Problem

Sanlucas, Inc., provides home inspection services to its clients. The company's trial balance dated *June 1, 2015,* is shown below:

**SANLUCAS, INC.**
**TRIAL BALANCE**
**JUNE 1, 2015**

| | | |
|---|---|---|
| Cash | $ 5,100 | |
| Accounts receivable | 2,600 | |
| Inspection supplies | 800 | |
| Accounts payable | | $ 850 |
| Notes payable | | 2,000 |
| Dividends | 600 | |
| Capital stock | | 3,000 |
| Retained earnings | | 1,800 |
| Inspection revenue | | 8,350 |
| Salaries expense | 4,900 | |
| Advertising expense | 300 | |
| Testing expense | 1,700 | |
| | $16,000 | $16,000 |

Sanlucas engaged in the following transactions in June:

**June 4** Borrowed cash from Community Bank by issuing a $1,500 note payable.

**June 9** Collected a $1,600 account receivable from Nina Lesher.

**June 10** Purchased $150 of inspection supplies on account.

**June 17** Billed home owners $1,650 for inspection services. The entire amount is due on July 17.

**June 25** Paid WLIR Radio $200 for ads to be aired on June 27.

**June 28** Recorded and paid $1,300 for testing expenses incurred in June.

**June 30** Recorded and paid June salaries of $1,100.

### Instructions

**a.** Record the company's June transactions in general journal form. Include a brief explanation of the transaction as part of each journal entry.

**b.** Post each entry to the appropriate ledger accounts (use the T account format illustrated in Exhibit 3–8 on page 110).

**c.** Prepare a trial balance dated June 30, 2015. (Hint: Retained Earnings will be reported at the same amount as on June 1. Accounting for changes in the Retained Earnings account resulting from revenue, expense, and dividend activities is discussed in Chapter 5.)

**d.** Has the company paid all of the dividends that it has declared? Explain.

**LO3-3, LO3-8**

**PROBLEM 3.8A**

Analyzing the Effects of Accounting Errors

Home Team Corporation recently hired Steve Willits as its bookkeeper. Mr. Willits is somewhat inexperienced and has made numerous errors recording daily business transactions.

Indicate the *effects of the errors* described below on each of the financial statement elements shown in the column headings. Use the following symbols: **O** for overstated; **U** for understated, and **NE** for no effect.

| Error | Net Income | Total Assets | Total Liabilities | Owners' Equity |
|---|---|---|---|---|
| Recorded the issuance of capital stock by debiting Capital Stock and crediting Cash. | | | | |
| Recorded the declaration and payment of a dividend by debiting Interest Expense and crediting Cash. | | | | |
| Recorded the payment of an account payable by debiting Cash and crediting Service Revenue. | | | | |
| Recorded the collection of an outstanding account receivable by debiting Cash and crediting Accounts Payable. | | | | |
| Recorded client billings on account by debiting Service Revenue and crediting Cash. | | | | |
| Recorded the cash purchase of land by debiting Cash and crediting Land. | | | | |
| Recorded the purchase of a building on account by debiting Rent Expense and crediting Capital Stock. | | | | |

## Problem Set B

connect ACCOUNTING

**LO3-3 through LO3-5**

**PROBLEM 3.1B**

Journalizing Transactions

Chris North is the founder and president of North Enterprises, a real estate development venture. The business transactions during April while the company was being organized are listed below.

**Apr. 1** North and several others invested $650,000 cash in the business in exchange for 10,000 shares of capital stock.

**Apr. 6** The company purchased office facilities for $300,000, of which $60,000 was applicable to the land and $240,000 to the building. A cash payment of $100,000 was made and a note payable was issued for the balance of the purchase price.

**Apr. 10** Computer equipment was purchased from Comp Central for $6,000 cash.

**Apr. 12** Office furnishings were purchased from Sam's Furniture at a cost of $12,000. A $1,000 cash payment was made at the time of purchase, and an agreement was made to pay the remaining balance in two equal installments due May 1 and June 1. Sam's Furniture did not require that North sign a promissory note.

**Apr. 20** Office supplies were purchased from Office Space for $750 cash.

**Apr. 25** North discovered that it paid too much for a computer printer purchased on April 10. The unit should have cost only $600, but North was charged $800. Comp Central promised to refund the difference within seven days.

**Apr. 28** Mailed Sam's Furniture the first installment due on the account payable for office furnishings purchased on April 12.

**Apr. 29** Received $200 from Comp Central in settlement of the account receivable created on April 25.

### Instructions

**a.** Prepare journal entries to record the above transactions. Select the appropriate account titles from the following chart of accounts:

| | |
|---|---|
| Cash | Land |
| Accounts Receivable | Office Building |
| Office Supplies | Notes Payable |
| Office Furnishings | Accounts Payable |
| Computer Systems | Capital Stock |

**b.** Indicate the effects of each transaction on the company's assets, liabilities, and owners' equity for the month of April. Organize your analysis in tabular form as shown below for the April 1 transaction:

| Transaction | Assets | = | Liabilities | + | Owners' Equity |
|---|---|---|---|---|---|
| Apr. 1 | +$650,000 (Cash) | = | $0 | | +$650,000 (Capital Stock) |

**LO3-3 through LO3-8**

## PROBLEM 3.2B

**Analyzing and Journalizing Transactions**

Lyons, Inc., provides consulting services. A few of the company's business transactions occurring during June are described below:

1. On June 1, the company billed customers $5,000 on account for consulting services rendered. Customers are required to make full payment within 30 days. (Lyons, Inc., uses an account entitled Consulting Revenue when billing customers.)
2. On June 3, the company purchased office supplies costing $3,200, paying $800 cash and charging the remainder on the company's 30-day account at Office Warehouse. The supplies are expected to last several months.
3. On June 5, the company returned to Office Warehouse $100 of supplies that were not needed. The return of these supplies reduced by $100 the amount owed to Office Warehouse.
4. On June 17, the company issued an additional 1,000 shares of capital stock at $5 per share. The cash raised will be used to purchase new equipment in September.
5. On June 22, the company received $1,200 cash from customers it had billed on June 1.
6. On June 29, the company paid its outstanding account payable to Office Warehouse.
7. On June 30, a cash dividend totaling $1,800 was declared and paid to the company's stockholders.

### Instructions

**a.** Prepare an analysis of each of the above transactions. Transaction 1 serves as an example of the form of analysis to be used.

1. **(a)** The asset Accounts Receivable was increased. Increases in assets are recorded by debits. Debit Accounts Receivable $5,000.

   **(b)** Revenue has been earned. Revenue increases owners' equity. Increases in owners' equity are recorded by credits. Credit Consulting Revenue $5,000.

**b.** Prepare journal entries, including explanations, for the above transactions.

**c.** How does the *realization principle* influence the manner in which the June 1 billings to customers are recorded in the accounting records?

**d.** How does the *matching principle* influence the manner in which the June 3 purchase of supplies is recorded in the accounting records?

**LO3-3 through LO3-8**

**PROBLEM 3.3B**

Analyzing and Journalizing Transactions

Dana, Inc., provides civil engineering services. During October, its transactions included the following:

**Oct. 1** Paid rent for the month of October, $4,000.

**Oct. 4** Billed Milton Hotels $8,500 for services. The entire amount is due on or before October 28. (Dana uses an account entitled Service Revenue when billing clients.)

**Oct. 8** Provided services to Dirt Valley Development for $4,700. The entire amount was collected on this date.

**Oct. 12** Placed a newspaper advertisement in the *Daily Reporter* to be published in the October 25 issue. The cost of the advertisement was $320. Payment is due in 30 days.

**Oct. 20** Received a check for $8,500 from Milton Hotels for the amount billed on October 4.

**Oct. 24** Provided services to Dudley Company for $3,600. Dana collected $300 cash, with the balance due in 30 days.

**Oct. 25** Sent a check to the *Daily Reporter* in full payment of the liability incurred on October 12.

**Oct. 29** Declared and paid a $2,600 cash dividend to the company's stockholders.

### Instructions

**a.** Analyze the effects that each of these transactions will have on the following six components of the company's financial statements for the month of October. Organize your answer in tabular form, using the column headings shown below. Use **I** for increase, **D** for decrease, and **NE** for no effect. The October 1 transaction is provided for you:

| | Income Statement | | | Balance Sheet | | |
|---|---|---|---|---|---|---|
| Transaction | Revenue − | Expenses = | Net Income | Assets = | Liabilities + | Owners' Equity |
| Oct. 1 | **NE** | **I** | **D** | **D** | **NE** | **D** |

**b.** Prepare a journal entry (including explanation) for each of the above transactions.

**c.** Three of October's transactions involve cash payments, yet only one of these transactions is recorded as an expense. Describe three situations in which a cash payment would *not* involve recognition of an expense.

**LO3-1 through LO3-10**

**PROBLEM 3.4B**

The Accounting Cycle: Journalizing, Posting, and Preparing a Trial Balance

In March 2015, Mary Tone organized a corporation to provide package delivery services. The company, called Tone Deliveries, Inc., began operations immediately. Transactions during the month of March were as follows:

**Mar. 2** The corporation issued 40,000 shares of capital stock to Mary Tone in exchange for $80,000 cash.

**Mar. 4** Purchased a truck for $45,000. Made a $15,000 cash down payment and issued a note payable for the remaining balance.

**Mar. 5** Paid Sloan Properties $2,500 to rent office space for the month.

**Mar. 9** Billed customers $11,300 for services for the first half of March.

**Mar. 15** Paid $7,100 in salaries earned by employees during the first half of March.

**Mar. 19** Paid Bill's Auto $900 for maintenance and repair services on the company truck.

**Mar. 20** Collected $3,800 of the amounts billed to customers on March 9.

**Mar. 28** Billed customers $14,400 for services performed during the second half of the month.

**Mar. 30** Paid $7,500 in salaries earned by employees during the second half of the month.

**Mar. 30** Received an $830 bill from SY Petroleum for fuel purchased in March. The entire amount is due by April 15.

**Mar. 30** Declared a $1,200 dividend payable on April 30.

The account titles used by Tone Deliveries are:

| | |
|---|---|
| Cash | Retained Earnings |
| Accounts Receivable | Dividends |
| Truck | Service Revenue |
| Notes Payable | Maintenance Expense |
| Accounts Payable | Fuel Expense |
| Dividends Payable | Salaries Expense |
| Capital Stock | Rent Expense |

### Instructions

**a.** Analyze the effects that each of these transactions will have on the following six components of the company's financial statements for the month of March. Organize your answer in tabular form, using the column headings shown below. Use **I** for increase, **D** for decrease, and **NE** for no effect. The March 2 transaction is provided for you:

| | Income Statement | | | Balance Sheet | | |
|---|---|---|---|---|---|---|
| Transaction | Revenue − | Expenses = | Net Income | Assets = | Liabilities + | Owners' Equity |
| Mar. 2 | **NE** | **NE** | **NE** | **I** | **NE** | **I** |

**b.** Prepare journal entries (including explanations) for each transaction.

**c.** Post each transaction to the appropriate ledger accounts (use a running balance format as shown in Exhibit 3–4, page 97).

**d.** Prepare a trial balance dated March 31, 2015.

**e.** Using figures from the trial balance prepared in part **d,** compute total assets, total liabilities, and owners' equity. Are these the figures that the company will report in its March 31 balance sheet? Explain your answer briefly.

**LO3-1 through LO3-10**

**PROBLEM 3.5B**

The Accounting Cycle: Journalizing, Posting, and Preparing a Trial Balance

Dr. Cravati, DMD., opened a dental clinic on August 1, 2015. The business transactions for August are shown below:

**Aug. 1** Dr. Cravati invested $280,000 cash in the business in exchange for 1,000 shares of capital stock.

**Aug. 4** Land and a building were purchased for $400,000. Of this amount, $60,000 applied to the land and $340,000 to the building. A cash payment of $80,000 was made at the time of the purchase, and a note payable was issued for the remaining balance.

**Aug. 9** Medical instruments were purchased for $75,000 cash.

**Aug. 16** Office fixtures and equipment were purchased for $25,000. Dr. Cravati paid $10,000 at the time of purchase and agreed to pay the entire remaining balance in 15 days.

**Aug. 21** Office supplies expected to last several months were purchased for $4,200 cash.

**Aug. 24** Dr. Cravati billed patients $13,000 for services rendered. Of this amount, $1,000 was received in cash, and $12,000 was billed on account (due in 30 days).

**Aug. 27** A $450 invoice was received for several newspaper advertisements placed in August. The entire amount is due on September 8.

**Aug. 28** Received a $500 payment on the $12,000 account receivable recorded August 24.

**Aug. 31** Paid employees $2,200 for salaries earned in August.

A partial list of account titles used by Dr. Cravati includes:

| | |
|---|---|
| Cash | Office Fixtures and Equipment |
| Accounts Receivable | Land |
| Office Supplies | Building |
| Notes Payable | Service Revenue |
| Accounts Payable | Advertising Expense |
| Capital Stock | Salary Expense |
| Medical Instruments | |

### Instructions

**a.** Analyze the effects that each of these transactions will have on the following six components of the company's financial statements for the month of August. Organize your answer in tabular form, using the column headings shown below. Use **I** for increase, **D** for decrease, and **NE** for no effect. The August 1 transaction is provided for you:

| | Income Statement | | | Balance Sheet | | |
|---|---|---|---|---|---|---|
| Transaction | Revenue − | Expenses = | Net Income | Assets = | Liabilities + | Owners' Equity |
| Aug. 1 | **NE** | **NE** | **NE** | **I** | **NE** | **I** |

**b.** Prepare journal entries (including explanations) for each transaction.

**c.** Post each transaction to the appropriate ledger accounts (use the T account format as illustrated in Exhibit 3–8 on page 110).

**d.** Prepare a trial balance dated August 31, 2015.

**e.** Using figures from the trial balance prepared in part d, compute total assets, total liabilities, and owners' equity. Did August appear to be a profitable month?

**LO3-7 through LO3-9**
**PROBLEM 3.6B**
Short Comprehensive Problem

Clown Around, Inc., provides party entertainment for children of all ages. The company's trial balance dated *February 1, 2015,* is shown below.

**CLOWN AROUND, INC.**
**TRIAL BALANCE**
**FEBRUARY 1, 2015**

| | | |
|---|---|---|
| Cash | $2,850 | |
| Accounts receivable | 900 | |
| Accounts payable | | $ 800 |
| Capital stock | | 2,000 |
| Retained earnings | | 750 |
| Dividends | — | |
| Party revenue | | 1,350 |
| Salaries expense | 830 | |
| Party food expense | 240 | |
| Travel expense | 80 | |
| | $4,900 | $4,900 |

Clown Around engaged in the following transactions in February:

**Feb. 2** Paid $750 in partial settlement of the outstanding account payable reported in the trial balance dated February 1.

**Feb. 6** Collected $900 in full settlement of the outstanding accounts receivable reported in the trial balance dated February 1.

**Feb. 18** Billed Sunflower Child Care $175 for clown services. The entire amount is due March 15.

**Feb. 26** Billed and collected $480 for performing at several birthday parties.

**Feb. 28** Paid clown salaries of $260 for work done in February.

**Feb. 28** Recorded and paid $40 for travel expenses incurred in February.

**Feb. 28** Declared and paid a $100 dividend to Ralph Jaschob, the company's only shareholder.

**a.** Record the company's February transactions in general journal form. Include a brief explanation of the transaction as part of each journal entry.

**b.** Post each entry to the appropriate ledger accounts (use the T account format as illustrated in Exhibit 3–8 on page 110).

c. Prepare a trial balance dated February 28, 2015. (Hint: Retained Earnings will be reported at the same amount as it was on February 1. Accounting for changes in the Retained Earnings account resulting from revenue, expense, and dividend activities is discussed in Chapter 5.)

d. Will the $100 dividend paid on February 28 decrease the company's income? Explain.

**LO3-3 through LO3-9**

**PROBLEM 3.7B**

Short Comprehensive Problem

Ahuna, Inc., provides in-home cooking lessons to its clients. The company's trial balance dated *March 1, 2015,* is shown below:

**AHUNA, INC.**
**TRIAL BALANCE**
**MARCH 1, 2015**

| | | |
|---|---|---|
| Cash | $ 5,700 | |
| Accounts receivable | 1,800 | |
| Cooking supplies | 800 | |
| Accounts payable | | $ 300 |
| Dividends payable | | 500 |
| Dividends | 500 | |
| Capital stock | | 6,000 |
| Retained earnings | | 1,400 |
| Client revenue | | 5,800 |
| Salaries expense | 3,100 | |
| Travel expense | 1,500 | |
| Printing expense | 600 | |
| | $14,000 | $14,000 |

Ahuna engaged in the following transactions in March:

**Mar. 3** Collected a $1,200 account receivable from Kim Mitchell.
**Mar. 11** Purchased cooking supplies for $700 cash.
**Mar. 15** Paid $200 of outstanding accounts payable.
**Mar. 20** Issued additional shares of capital stock for $4,000 cash.
**Mar. 24** Recorded $6,200 of client revenue on account.
**Mar. 27** Paid March salaries of $900.
**Mar. 30** Recorded and paid March travel expenses of $400.
**Mar. 31** Recorded $300 in printing expenses for recipe books. Payment is due April 12.

### Instructions

a. Record the company's March transactions in general journal form. Include a brief explanation of the transaction as part of each journal entry.

b. Post each entry to the appropriate ledger accounts (use the T account format illustrated in Exhibit 3–8 on page 110).

c. Prepare a trial balance dated March 31, 2015. (Hint: Retained Earnings will be reported at the same amount as it was on March 1. Accounting for changes in the Retained Earnings account resulting from revenue, expense, and dividend activities is discussed in Chapter 5.)

d. Has the company paid all of the dividends that it has declared? Explain.

**LO3-3, LO3-8**

**PROBLEM 3.8B**

Analyzing the Effects of Accounting Errors

Blind River, Inc., recently hired Neil Young as its bookkeeper. Mr. Young is somewhat inexperienced and has made numerous errors recording daily business transactions.

Indicate the *effects of the errors* described below on each of the financial statement elements shown in the column headings. Use the following symbols: **O** for overstated; **U** for understated; and **NE** for no effect.

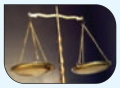
| Error | Net Income | Total Assets | Total Liabilities | Owners' Equity |
|---|---|---|---|---|
| Recorded the issuance of capital stock by debiting Capital Stock and crediting Cash. | | | | |
| Recorded the payment of an account payable by debiting Cash and crediting Accounts Payable. | | | | |
| Recorded the collection of an outstanding account receivable by debiting Service Revenue and crediting Accounts Receivable. | | | | |
| Recorded client billings on account by debiting Service Revenue and crediting Accounts Payable. | | | | |
| Recorded the payment of an outstanding Accounts Payable by debiting Cash and crediting Service Revenue. | | | | |
| Recorded the payment of salaries payable by debiting Salaries Expense and crediting Cash. | | | | |
| Recorded the purchase of office supplies on account by debiting Accounts Receivable and crediting Office Supplies. | | | | |

# Critical Thinking Cases

**LO3-7, LO3-10**

**CASE 3.1**

**Revenue Recognition**



The realization principle determines when a business should recognize revenue. Listed next are three common business situations involving revenue. After each situation, we give two alternatives as to the accounting period (or periods) in which the business might recognize this revenue. Select the appropriate alternative by applying the realization principle, and explain your reasoning.

**a.** Airline ticket revenue: Most airlines sell tickets well before the scheduled date of the flight. (Period ticket sold; period of flight)

**b.** Sales on account: In June 2015, a San Diego–based furniture store had a big sale, featuring "No payments until 2016." (Period furniture sold; periods that payments are received from customers)

**c.** Magazine subscriptions revenue: Most magazine publishers sell subscriptions for future delivery of the magazine. (Period subscription sold; periods that magazines are mailed to customers)

**LO3-6, LO3-7, LO3-10**

**CASE 3.2**

**Measuring Income Fairly**

Kim Morris purchased Print Shop, Inc., a printing business, from Chris Stanley. Morris made a cash down payment and agreed to make annual payments equal to 40 percent of the company's net income in each of the next three years. (Such "earn-outs" are a common means of financing the purchase of a small business.) Stanley was disappointed, however, when Morris reported a first year's net income far below Stanley's expectations.

The agreement between Morris and Stanley did not state precisely how "net income" was to be measured. Neither Morris nor Stanley was familiar with accounting concepts. Their agreement stated only that the net income of the corporation should be measured in a "fair and reasonable manner."

In measuring net income, Morris applied the following policies:

1. Revenue was recognized when cash was received from customers. Most customers paid in cash, but a few were allowed 30-day credit terms.
2. Expenditures for ink and paper, which are purchased weekly, were charged directly to Supplies Expense, as were the Morris family's weekly grocery and dry cleaning bills.
3. Morris set her annual salary at $60,000, which Stanley had agreed was reasonable. She also paid salaries of $30,000 per year to her husband and to each of her two teenage children. These family members did not work in the business on a regular basis, but they did help out when things got busy.
4. Income taxes expense included the amount paid by the corporation (which was computed correctly), as well as the personal income taxes paid by various members of the Morris family on the salaries they earned working for the business.

5. The business had state-of-the-art printing equipment valued at $150,000 at the time Morris purchased it. The first-year income statement included a $150,000 equipment expense related to these assets.

**Instructions**

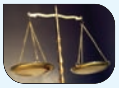
a. Discuss the fairness and reasonableness of these income-measurement policies. (Remember, these policies do *not* have to conform to generally accepted accounting principles. But they should be *fair* and *reasonable.*)

b. Do you think that the net *cash flow* generated by this business (cash receipts less cash outlays) is higher or lower than the net income as measured by Morris? Explain.

**LO3-6, LO3-7, LO3-10**

**CASE 3.3**

Whistle-Blowing



Happy Trails, Inc., is a popular family resort just outside Yellowstone National Park. Summer is the resort's busy season, but guests typically pay a deposit at least six months in advance to guarantee their reservations.

The resort is currently seeking new investment capital in order to expand operations. The more profitable Happy Trails appears to be, the more interest it will generate from potential investors. Ed Grimm, an accountant employed by the resort, has been asked by his boss to include $2 million of unearned guest deposits in the computation of income for the current year. Ed explained to his boss that because these deposits had not yet been earned they should be reported in the balance sheet as liabilities, not in the income statement as revenue. Ed argued that reporting guest deposits as revenue would inflate the current year's income and may mislead investors.

Ed's boss then *demanded* that he include $2 million of unearned guest deposits in the computation of income or be fired. He then told Ed in an assuring tone, "Ed, you will never be held responsible for misleading potential investors because you are just following my orders."

**Instructions**

Should Ed Grimm be forced to knowingly overstate the resort's income in order to retain his job? Is Ed's boss correct in saying that Ed cannot be held responsible for misleading potential investors? Discuss.

**LO3-6**

**INTERNET CASE 3.4**

Revenue from Various Sources


Visit the home page of **PC Connection** at the following Internet location: **www.pcconnection.com**.

Follow the "Investor Relations" link at the bottom of the company's home page and access its most recent 10-K by following the link to "SEC Filings."

Locate the company's most recent annual report. What percent of the company's total revenue is generated by sales to public sector customers (e.g., governmental agencies, educational institutions, etc.)? Have sales to public sector customers increased or decreased during the past three years? What are the company's other business segments?

*Internet sites are time and date sensitive. It is the purpose of these exercises to have you explore the Internet. You may need to use the Yahoo! search engine* **www.yahoo.com** *(or another favorite search engine) to find a company's current web address.*

## Answers to Self-Test Questions

**1.** d **2.** b **3.** a, c, and d **4.** c **5.** c **6.** d **7.** b, c, and d

**8.** a and c