## Financial Statements and Accounting Concepts/Principles

Financial statements are the product of the financial accounting process. They are the means of communicating economic information about the entity to individuals who want to make decisions and informed judgments about the entity's financial position, results of operations, and cash flows. Although each of the four principal financial statements has a unique purpose, they are interrelated, and all must be considered in order to get a complete financial picture of the reporting entity.

Users cannot make meaningful interpretations of financial statement data without understanding the concepts and principles that relate to the entire financial accounting process. It is also important for users to understand that these concepts and principles are broad in nature; they do not constitute an inflexible set of rules, but instead serve as guidelines for the development of sound financial reporting practices.

## LEARNING OBJECTIVES (LO)

After studying this chapter you should understand and be able to

LO 2-1 Explain what transactions are.

LO 2-2 Identify and explain the kind of information reported in each financial statement and describe how financial statements are related to each other.

LO 2-3 Explain the meaning and usefulness of the accounting equation.

LO 2-4 Explain the meaning of each of the captions on the financial statements illustrated in this chapter.

LO 2-5 Identify and explain the broad, generally accepted concepts and principles that apply to the accounting process.

LO 2-6 Discuss why investors must carefully consider cash flow information in conjunction with accrual accounting results.

LO 2-7 Identify and explain several limitations of financial statements.

LO 2-8 Describe what a corporation's annual report is and why it is issued.

## Financial Statements

## From Transactions to Financial Statements

An entity's financial statements are the end product of a process that starts with transactions between the entity and other organizations and individuals. Transactions are economic interchanges between entities: for example, a sale/purchase, or a receipt of cash by a borrower and the payment of cash by a lender. The flow from transactions to financial statements can be illustrated as follows:


1. What does it mean to say that there has been an accounting transaction between you and your school? Give an example of such a transaction.

Transactions are summarized in accounts, and accounts are further summarized in the financial statements. In this sense, transactions can be seen as the bricks that build the financial statements. By learning about the form, content, and relationships among financial statements in this chapter, you will better understand the process of building those results-bookkeeping and transaction analysis-described in Chapter 4 and subsequent chapters.

Current generally accepted accounting principles and auditing standards require that the financial statements of an entity show the following for the reporting period:

Financial position at the end of the period.
Earnings for the period.
Cash flows during the period.
Investments by and distributions to owners (i.e., stockholders) during the period. The financial statements that satisfy these requirements are, respectively, the:

Balance sheet (or statement of financial position).
Income statement (or statement of earnings, or profit and loss statement, or statement of operations).
Statement of cash flows.
Statement of changes in stockholders' equity (or statement of changes in capital stock and/or statement of changes in retained earnings).

In addition to the financial statements themselves, the annual report will probably include several accompanying notes (sometimes called the financial review) that include explanations of the accounting policies and detailed information about many of the amounts and captions shown on the financial statements. These notes are designed to assist the reader of the financial statements by disclosing as much relevant

LO 1
Explain what transactions are.

## What Does

 It Mean?Answer on page 56
supplementary information as the company and its auditors deem necessary and appropriate. For Campbell Soup Company, the notes to the 2011 financial statements are shown in the "Notes to Consolidated Financial Statements" section on pages 715-750 of the annual report in the appendix. One of this text's objectives is to enable you to read, interpret, and understand financial statement footnotes. Chapter 10 describes the notes to the financial statements in detail.


Business in Practice

## Organizing a Business

There are three principal forms of business organization: proprietorship, partnership, and corporation.

A proprietorship is an activity conducted by an individual. Operating as a proprietorship is the easiest way to get started in a business activity. Other than the possibility of needing a local license, there aren't any formal prerequisites to beginning operations. Besides being easy to start, a proprietorship has the advantage, according to many people, that the owner is his or her own boss. A principal disadvantage of the proprietorship is that the owner's liability for business debts is not limited by the assets of the business. For example, if the business fails, and if, after all available business assets have been used to pay business debts, the business creditors are still owed money, the owner's personal assets can be claimed by business creditors. Another disadvantage is that the individual proprietor may have difficulty raising the money needed to provide the capital base that will be required if the business is to grow substantially. Because of the ease of getting started, every year many business activities begin as proprietorships.

The partnership is essentially a group of proprietors who have banded together. The unlimited liability characteristic of the proprietorship still exists, but with several partners the ability of the firm to raise capital may be improved. Income earned from partnership activities is taxed at the individual partner level; the partnership itself is not a tax-paying entity. Accountants, attorneys, and other professionals frequently operate their firms as partnerships. In recent years, many large professional partnerships, including the Big 4 accounting firms, have been operating under limited liability partnership (LLP) rules, which shield individual partners from unlimited personal liability.

Most large businesses, and many new businesses, use the corporate form of organization. Note that "Inc." in the name of our example business, Main Street Stores, Inc., is an abbreviation for incorporated and means that the firm was legally organized as a corporation. The owners of the corporation are called stockholders (or shareholders). They have invested funds in the corporation and received shares of stock as evidence of their ownership. Stockholders' liability is limited to the amount invested; creditors cannot seek recovery of losses from the personal assets of stockholders. Large amounts of capital can frequently be raised by selling shares of stock to many individuals. It is also possible for all of the stock of a corporation to be owned by a single individual. A stockholder can usually sell his or her shares to other investors or buy more shares from other stockholders if a change in ownership interest is desired. A corporation is formed by having a charter and bylaws prepared and registered with the appropriate office in 1 of the 50 states. The cost of forming a corporation is usually greater than that of starting a proprietorship or forming a partnership. A major disadvantage of the corporate form of business is that corporations are taxpaying entities. Thus, any income distributed to stockholders has been taxed first as income of the corporation and then is taxed a second time as income of the individual stockholders.

A form of organization that has been approved in many states is the limited liability company (LLC). For accounting and legal purposes, this type of organization is treated as a corporation even though some of the formalities of the corporate form of organization are not present. Stockholders of small corporations may find that banks and major creditors usually require the personal guarantees of the principal stockholders as a condition for granting credit to the corporation. Therefore, the limited liability of the corporate form may be, in the case of small corporations, more theoretical than real.

## Fiscal Year

A firm's fiscal year is the annual period used for reporting to owners, the government, and others. Many firms select the calendar year as their fiscal year, but other 12-month periods can also be selected. Some firms select a reporting period ending on a date when inventories will be relatively low or business activity will be slow because this facilitates the process of preparing financial statements.

Many firms select fiscal periods that relate to the pace of their business activity. Food retailers, for example, have a weekly operating cycle, and many of these firms select a 52-week fiscal year (with a 53-week fiscal year every five or six years so their year-end remains near the same date every year). Campbell Soup Company has adopted this strategy; note, on page 715 in the appendix, that Campbell's fiscal year ends on the Sunday nearest July 31 each year. (The next 53-week year will end on August 3, 2014).

For internal reporting purposes, many firms use periods other than the month (e.g., 13 fourweek periods). Such firms wish to maintain the same number of operating days in each period so that comparisons between the same periods of different years can be made without having to consider differences in the number of operating days in the respective periods.


Business in Practice

## Gampotald

## Financial Statements Illustrated

To illustrate financial statements, we present an example of what they might look like for a simple retail business. Main Street Store, Inc., was organized as a corporation and began business during September 2013 (see Business in Practice-Organizing a Business). The company buys clothing and accessories from distributors and manufacturers and sells these items from a rented building. The financial statements of Main Street Store, Inc., at August 31, 2014, and for the fiscal year (see Business in Practice-Fiscal Year) ended on that date are presented in Exhibits 2-1 through 2-4.

As you look at these financial statements, you will probably have several questions concerning the nature of specific accounts and how the numbers are computed. For now, concentrate on the explanations and definitions that are appropriate and inescapable, and notice especially the characteristics of each financial statement. Many of your questions about specific accounts will be answered in subsequent chapters that explain the individual statements and their components in detail.

## Explanations and Definitions

Balance Sheet. The balance sheet is a listing of the organization's assets, liabilities, and stockholders' equity (often referred to simply as owners' equity) at a point in time. In this sense, the balance sheet is like a snapshot of the organization's financial position, frozen at a specific point in time. The balance sheet is sometimes called the statement of financial position because it summarizes the entity's resources (assets), obligations (liabilities), and owners' claims (stockholders' equity). The balance sheet for Main Street Store, Inc., at August 31, 2014, the end of the firm's first year of operations, is illustrated in Exhibit 2-1.

Notice the two principal sections of the balance sheet that are shown side by side: (1) assets and (2) liabilities and stockholders' equity. Observe that the dollar total of $\$ 320,000$ is the same for each side. This equality is sometimes referred to as the

## LO 2

Identify and explain the kind of information reported in each financial statement and describe how the statements are related to each other.

## LO 3

Explain the meaning and usefulness of the accounting equation.

Exhibit 2-1
Balance Sheet

accounting equation or the balance sheet equation. It is the equality, or balance, of these two amounts from which the term balance sheet is derived.

$$
\begin{aligned}
\text { Assets } & =\text { Liabilities }+ \text { Stockholders' equity } \\
\$ 320,000 & =\$ 117,000+\$ \$ 203,000
\end{aligned}
$$

Now we will provide some of those appropriate and inescapable definitions and explanations:
"Assets are probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events." ${ }^{1}$ In brief, assets represent the amount of resources controlled (which ordinarily means owned) by the entity. Assets are often tangible; they can be seen and handled (like cash, merchandise inventory, or equipment), or evidence of their existence can be observed (such as a customer's acknowledgment of receipt of merchandise and the implied promise to pay the amount due when agreed upon-an account receivable).
"Liabilities are probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events." ${ }^{2}$ In brief, liabilities are amounts owed to other entities. For example, the accounts payable arose because suppliers shipped merchandise to Main Street Store, Inc., and this merchandise will be paid for at some point in the future. In other words, the supplier has a "claim" against the merchandise until it is paid for and thus has become a creditor of the firm by supplying merchandise on account.

Stockholders' equity (often referred to as owners' equity) is the ownership right of the stockholder(s) of the entity in the assets that remain after deducting the liabilities. (A car or house owner refers to his or her equity as the market value of the car or house less the loan or mortgage balance.) Stockholders' equity is sometimes

[^0]referred to as net assets. This can be shown by rearranging the basic accounting equation:
\[

$$
\begin{aligned}
\text { Assets }- \text { Liabilities } & =\text { Stockholders' equity } \\
\text { Net assets } & =\text { Stockholders' equity }
\end{aligned}
$$
\]

Another term sometimes used when referring to stockholders' equity is net worth. However, this term is misleading because it implies that the net assets are "worth" the amount reported on the balance sheet as stockholders' equity. Financial statements prepared in accordance with generally accepted accounting principles do not purport to show the current market value of the entity's assets, except in a few restricted cases.
2. What does it mean to refer to a balance sheet for the year ended August 31, 2014?
3. What does it mean when a balance sheet has been prepared for an organization?

What Does It Mean?
Answers on
pages 56-57

Each of the individual assets and liabilities reported by Main Street Stores, Inc., warrants a brief explanation. Each account (caption in the financial statements) will be discussed in more detail in later chapters. Your task at this point is to achieve a broad understanding of each account and to make sense of its classification as an asset or liability.

Cash represents cash on hand and in the bank or banks used by Main Street Store, Inc. If the firm had made any temporary cash investments to earn interest, these marketable securities probably would be shown as a separate asset because these funds are not as readily available as cash.

Accounts receivable represent amounts due from customers who have purchased merchandise on credit and who have agreed to pay within a specified period or when billed by Main Street Store, Inc.

Merchandise inventory represents the cost to Main Street Store, Inc., of the merchandise that it has acquired but not yet sold.

Equipment represents the cost to Main Street Store, Inc., of the display cases, racks, shelving, and other store equipment purchased and installed in the rented building in which it operates. The building is not shown as an asset because Main Street Store, Inc., does not own it.

Accumulated depreciation represents the portion of the cost of the equipment that is estimated to have been used up in the process of operating the business. Note that one-tenth $(\$ 4,000 / \$ 40,000)$ of the cost of the equipment has been depreciated. From this relationship, one might assume that the equipment is estimated to have a useful life of 10 years because this is the balance sheet at the end of the firm's first year of operations. Depreciation in accounting is the process of spreading the cost of an asset over its useful life to the entity-it is not an attempt to recognize the economic loss in value of an asset because of its age or use.

Accounts payable represent amounts owed to suppliers of merchandise inventory that was purchased on credit and will be paid within a specific period of time.

Other accrued liabilities represent amounts owed to various creditors, including any wages owed to employees for services provided to Main Street Store, Inc., through August 31, 2014, the balance sheet date.

## LO 4

Explain the meaning of each of the captions on the financial statements illustrated in Exhibits 2-1 through 2-4.

Short-term debt represents amounts borrowed, probably from banks, that will be repaid within one year of the balance sheet date.

Long-term debt represents amounts borrowed from banks or others that will not be repaid within one year from the balance sheet date.

Stockholders' equity, shown as a single amount in Exhibit 2-1, is explained in more detail later in this chapter in the discussion of the statement of changes in stockholders' equity.

Notice that in Exhibit 2-1 some assets and liabilities are classified as "current." Current assets are cash and other assets that are likely to be converted into cash or used to benefit the entity within one year, and current liabilities are those liabilities that are likely to be paid with cash within one year of the balance sheet date. In this example, it is expected that the accounts receivable from the customers of Main Street Store, Inc., will be collected within a year and that the merchandise inventory will be sold within a year of the balance sheet date. This time-frame classification is important and, as will be explained later, is used in assessing the entity's ability to pay its obligations when they come due.

To summarize, the balance sheet is a listing of the entity's assets, liabilities, and stockholders' equity. A balance sheet can be prepared as of any date but is most frequently prepared as of the end of a fiscal reporting period (e.g., month-end or year-end). The balance sheet as of the end of one period is the balance sheet as of the beginning of the next period. This can be illustrated on a time line as follows:


On the time line, Fiscal 2014 refers to the 12 months during which the entity carried out its economic activities.

Income Statement. The principal purpose of the income statement, or statement of earnings, or profit and loss statement, or statement of operations, is to answer the question "Did the entity operate at a profit for the period of time under consideration?" The question is answered by first reporting revenues from the entity's operating activities (such as selling merchandise) and then subtracting the expenses incurred in generating those revenues and operating the entity. Gains and losses are also reported on the income statement. Gains and losses result from nonoperating activities, rather than from the day-to-day operating activities that generate revenues and expenses. The income statement reports results for a period of time, in contrast to the balance sheet focus on a single date. In this sense, the income statement is more like a movie than a snapshot; it depicts the results of activities that have occurred during a period of time.

The income statement for Main Street Store, Inc., for the year ended August 31, 2014, is presented in Exhibit 2-2. Notice that the statement starts with net sales (which are revenues) and that the various expenses are subtracted to arrive at net income in total and per share of common stock outstanding. Net income is the profit for the period; if expenses exceed net sales, a net loss results. The reasons for reporting earnings per share of common stock outstanding, and the calculation of this amount, will be explained in Chapter 9.

Now look at the individual captions on the income statement. Each warrants a brief explanation, which will be expanded in subsequent chapters. Your task at this point is to make sense of how each item influences the determination of net income.

Net sales represent the amount of sales of merchandise to customers, less the amount of sales originally recorded but canceled because the merchandise was

| MAIN STREET STORE, INC. Income Statement For the Year Ended August 31, 2014 |  |
| :---: | :---: |
| Net sales. | \$1,200,000 |
| Cost of goods sold. | 850,000 |
| Gross profit. | \$ 350,000 |
| Selling, general, and administrative expenses | 311,000 |
| Income from operations. | \$ 39,000 |
| Interest expense | 9,000 |
| Income before taxes | \$ 30,000 |
| Income taxes | 12,000 |
| Net income. | \$ 18,000 |
| Earnings per share of common stock outstanding | \$ 1.80 |

subsequently returned by customers for one reason or another (wrong size, spouse didn't want it, and so on). The sales amount is frequently called sales revenue, or just revenue. Revenue results from selling a product or service to a customer.

Cost of goods sold represents the total cost of merchandise removed from inventory and delivered to customers as a result of sales. This is shown as a separate expense because of its significance and because of the desire to show gross profit as a separate item. Frequently used synonyms are cost of sales and cost of products sold.

Gross profit is the difference between net sales and cost of goods sold and represents the seller's maximum amount of "cushion" from which all other expenses of operating the business must be met before it is possible to have net income. Gross profit (sometimes referred to as gross margin) is shown as a separate item because it is significant to both management and nonmanagement readers of the income statement. The uses made of this amount will be explained in subsequent chapters.

Selling, general, and administrative expenses represent the operating expenses of the entity. In some income statements, these expenses will not be lumped together as in Exhibit 2-2 but will be reported separately for each of several operating expense categories, such as wages, advertising, and depreciation.

Income from operations represents one of the most important measures of the firm's activities. Income from operations (or operating income or earnings from operations) can be related to the assets available to the firm to obtain a useful measure of management's performance. A method of doing this is explained in Chapter 3.

Interest expense represents the cost of using borrowed funds. This item is reported separately because it is a function of how assets are financed, not how assets are used.

Income taxes are shown after all of the other income statement items have been reported because income taxes (often captioned as income tax expense or provision for income taxes) are a function of the firm's income before taxes.

Earnings per share of common stock outstanding is reported as a separate item at the bottom of the income statement because of its significance in evaluating the market value of a share of common stock. This measure, which is often referred to simply as $E P S$, will be explained in more detail in Chapter 9.

To review, the income statement summarizes the entity's income- (or loss-) producing activities for a period of time. Transactions that affect the income statement will also affect the balance sheet. For example, a sale made for cash increases sales revenue on the income statement and increases cash, an asset on the balance sheet. Likewise, wages earned by employees during the last week of the current year to be paid early in the next year are an expense of the current year. These wages will

Exhibit 2-2
Income Statement
be deducted from revenues in the income statement and are considered a liability reported on the balance sheet at the end of the year. Thus, the income statement is a link between the balance sheets at the beginning and end of the year. How this link is made is explained in the next section, which describes the statement of changes in stockholders' equity. The time line presented earlier can be expanded as follows:

| $8 / 31 / 13$ | Fiscal 2014 | $8 / 31 / 14$ |
| :---: | :---: | :---: |
| Balance sheet | Income statement for the year <br> Revenues <br> - Expenses <br> Net income | Balance sheet |
| $\mathrm{A}=\mathrm{L}+\mathrm{SE}$ | $\mathrm{A}=\mathrm{L}+\mathrm{SE}$ |  |

Statement of Changes in Stockholders' Equity. The statement of changes in stockholders' equity (sometimes called the statement of changes in owners' equity), or statement of changes in capital stock, or statement of changes in retained earnings, like the income statement, has a period of time orientation. This statement shows the detail of stockholders' equity and explains the changes that occurred in the components of stockholders' equity during the year.

Exhibit 2-3 illustrates this statement for Main Street Store, Inc., for the year ended August 31, 2014. Remember that these are the results of Main Street Store's first year of operations, so the beginning-of-the-year balances are zero. On subsequent years' statements, the beginning-of-the-year amount is the ending balance from the prior year.

Notice in Exhibit 2-3 that stockholders' equity is made up of two principal components: paid-in capital and retained earnings. These items are briefly explained here and are discussed in more detail in Chapter 8.

Paid-in capital represents the total amount invested in the entity by the ownersin this case, the stockholders. When the stock issued to the owners has a par value (see Business in Practice-Par Value), there will usually be two categories of paid-in capital: common stock and additional paid-in capital.

Common stock reflects the number of shares authorized by the corporation's charter, the number of shares that have been issued to stockholders, and the number of shares

Exhibit 2-3
Statement of Changes in Stockholders' Equity

| main street store, inc. <br> Statement of Changes in Stockholders' Equity For the Year Ended August 31, 2014 |  |
| :---: | :---: |
| Paid-In Capital: |  |
| Beginning balance | \$ -0- |
| Common stock, par value, $\$ 10 ; 50,000$ shares authorized, 10,000 shares issued and outstanding. | 100,000 |
| Additional paid-in capital | 90,000 |
| Balance, August 31, 2014 | \$190,000 |
| Retained Earnings: |  |
| Beginning balance | \$ -0 |
| Net income for the year | 18,000 |
| Less: Cash dividends of \$.50 per share. | $(5,000)$ |
| Balance, August 31, 2014 | \$ 13,000 |
| Total stockholders' equity. | \$203,000 |

## Par Value

Par value is a relic from the past that has, for all practical purposes, lost its significance. The par value of common stock is an arbitrary value assigned when the corporation is organized. Par value bears no relationship to the fair market value of a share of stock (except that a corporation may not issue its stock for less than par value). Many firms issue stock with a par value of a nominal amount, such as $\$ 1$. Campbell Soup Company's capital stock has a par value of $\$ 0.0375$ per share. (See page 712 in the appendix.) Because of investor confusion about the significance of par value, most states now permit corporations to issue no-par-value stock. Some state laws permit a firm to assign a stated value to its no-par-value stock, in which case the stated value operates as a par value.


Business in Practice
that are held by the stockholders. When the common stock has a par value or stated value, the amount shown for common stock in the financial statements will always be the par value or stated value multiplied by the number of shares issued. If the common stock does not have a par value or stated value, the amount shown for common stock in the financial statements will be the total amount invested by the stockholders.

Additional paid-in capital is the difference between the total amount invested by the stockholders and the par value or stated value of the stock. (If no-par-value stock without a stated value is issued, there won't be any additional paid-in capital because the total amount paid in, or invested, by the stockholders will be shown as common stock.)

Retained earnings is the second principal category of stockholders' equity, and it represents the cumulative net income of the entity that has been retained for use in the business. Dividends are distributions of earnings that have been made to the stockholders, so these reduce retained earnings. If retained earnings has a negative balance because cumulative losses and dividends have exceeded cumulative net income, this part of stockholders' equity is referred to as an accumulated deficit, or simply deficit.

Note that in Exhibit 2-3 the net income for the year of \$18,000 added to retained earnings is the amount of net income reported in Exhibit 2-2. The retained earnings section of the statement of changes in stockholders' equity is where the link (known as articulation) between the balance sheet and income statement is made. The time-line model is thus expanded and modified as follows:


Notice that the total stockholders' equity reported in Exhibit 2-3 agrees with the stockholders' equity shown on the balance sheet in Exhibit 2-1. Most balance sheets include the amount of common stock, additional paid-in capital, and retained earnings within the stockholders' equity section. Changes that occur in these components of stockholders' equity are likely to be shown in a separate statement so that users of the financial statements can learn what caused these important balance sheet elements to change.
Statement of Cash Flows. The purpose of the statement of cash flows is to identify the sources and uses of cash during the year. This objective is accomplished by reporting the changes in all of the other balance sheet items. Because of the equality that exists between assets and liabilities plus stockholders' equity, the total of the changes in every other asset and each liability and element of stockholders' equity will equal the change in cash. The statement of cash flows is described in detail in Chapter 9. For now, make sense of the three principal activity groups that cause cash to change, and see how the amounts on this statement relate to the balance sheet in Exhibit 2-1.

The statement of cash flows for Main Street Store, Inc., for the year ended August 31, 2014, is illustrated in Exhibit 2-4. Notice that this statement, like the income statement and statement of changes in stockholders' equity, is for a period of time. Notice also the three activity categories: operating activities, investing activities, and financing activities.

Cash flows from operating activities are shown first, and net income is the starting point for this measure of cash flow. Using net income also directly relates the income statement (see Exhibit 2-2) to the statement of cash flows. Next, reconciling items are considered (i.e., items that must be added to or subtracted from net income to arrive at cash flows from operating activities).

Depreciation expense is added back to net income because, even though it was deducted as an expense in determining net income, depreciation expense did not

Exhibit 2-4
Statement of Cash Flows

require the use of cash. Remember-depreciation in accounting is the process of spreading the cost of an asset over its estimated useful life.

The increase in accounts receivable is deducted because this reflects sales revenues, included in net income, that have not yet been collected in cash.

The increase in merchandise inventory is deducted because cash was spent to acquire the increase in inventory.

The increase in current liabilities is added because cash has not yet been paid for this amount of products and services that have been received during the current fiscal period.

Cash flows from investing activities show the cash used to purchase long-lived assets. You should find the increase in equipment in the balance sheet (Exhibit 2-1), which shows the cost of the equipment owned at August 31, 2014. Because this is the first year of the firm's operations, the equipment purchase required the use of $\$ 40,000$ during the year.

Cash flows from financing activities include amounts raised from the sale of longterm debt and common stock, and dividends paid on common stock. You should find each of these financing amounts in the balance sheet (Exhibit 2-1) or the statement of changes in stockholders' equity (Exhibit 2-3). For example, the $\$ 190,000$ received from the sale of stock is shown on the statement of changes in stockholders' equity (Exhibit 2-3) as the increase in paid-in capital during the year.

The net increase in cash for the year of $\$ 34,000$ is the amount of cash in the August 31, 2014, balance sheet. Check this out. This should make sense because the firm started its business during September 2013, so it had no cash to begin with.

The statement of cash flows results in a further expansion and modification of the time-line model:


## What Does

It Mean?
Answers on
page 57
4. What does it mean when a stockholder says that she needs to look at her firm's set of four financial statements to fully understand its financial position and results of operations?
5. What does it mean when a company that has a high net income doesn't have enough cash to pay its bills?

## Comparative Statements in Subsequent Years

The financial statements presented on the previous pages for Main Street Store, Inc., show data as of August 31, 2014, and for the year then ended. Because this was the first year of the firm's operations, comparative financial statements are not possible. In subsequent years, however, comparative statements for the current year and the prior year should be presented so that users of the data can more easily spot changes in the firm's financial position and in its results of operations. Some companies present data for two prior years in their financial statements. Most companies will include selected data from their balance sheets and income statements for at least 5 years, and sometimes for up to 25 years, as supplementary information in their annual report to stockholders. Campbell Soup Company's five-year selected financial data, which appear on page 709 in the appendix, illustrate the firm's consistency and financial stability.

## Illustration of Financial Statement Relationships

Exhibit 2-5 uses the financial statements of Main Street Store, Inc., to illustrate the financial statement relationships just discussed. Note that in Exhibit 2-5, the August 31, 2013, balance sheet has no amounts because Main Street Store, Inc., started business in September 2013. As you study this exhibit, note especially that net income for the year was an increase in retained earnings and is one of the reasons retained earnings changed during the year.

In subsequent chapters, the relationship between the balance sheet and income statement will be presented using the following diagram:

| Balance sheet | Income Statement |
| :---: | :---: |
| Assets $=$ Liabilities + Stockholders' equity | $\leftarrow$ Net Income $=$ Revenues - Expenses |

The arrow from net income in the income statement to stockholders' equity in the balance sheet indicates that net income affects retained earnings, which is a component of stockholders' equity.

The following examples also illustrate the relationships within and between the principal financial statements. Using the August 31, 2014, Main Street Store, Inc., data for assets and liabilities in the balance sheet equation of $\mathrm{A}=\mathrm{L}+\mathrm{SE}$, stockholders' equity at August 31, 2014, can be calculated:

$$
\begin{aligned}
\mathrm{A} & =\mathrm{L}+\mathrm{SE} \\
\$ 320,000 & =\$ 117,000+\mathrm{SE} \\
\$ 203,000 & =\mathrm{SE}
\end{aligned}
$$

Remember, other terms for stockholders' equity are owners' equity and net assets. This is shown clearly in the previous calculation because stockholders' equity is the difference between assets and liabilities.
Exhibit 2-5 Financial Statement Relationships


Now suppose that during the year ended August 31, 2015, total assets increased $\$ 10,000$, and total liabilities decreased $\$ 3,000$. What was stockholders' equity at the end of the year? There are two ways of solving the problem. First, focus on the changes in the elements of the balance sheet equation:

$$
\begin{aligned}
\mathrm{A} & =\mathrm{L}+\mathrm{SE} \\
\text { Change: }+10,000 & =-3,000+?
\end{aligned}
$$

It is clear that for the equation to stay in balance, stockholders' equity must have increased by $\$ 13,000$. Because stockholders' equity was $\$ 203,000$ at the beginning of the year, it must have been $\$ 216,000$ at the end of the year.

The second approach to solving the problem is to calculate the amount of assets and liabilities at the end of the year and then solve for stockholders' equity at the end of the year, as follows:

| A | $=\mathrm{L}+\mathrm{SE}$ |
| ---: | :--- |
| Beginning: 320,000 | $=117,000+203,000$ |
| Change: $\quad \frac{+10,000}{330,000}$ | $=\frac{-3,000}{114,000}+\frac{?}{?}$ |
| End: $\quad$ |  |

The ending stockholders' equity or net assets is $\$ 330,000-\$ 114,000=\$ 216,000$. Because ending stockholders' equity is $\$ 216,000$, it increased $\$ 13,000$ during the year from August 31, 2014, to August 31, 2015.

Assume that during the year ended August 31, 2015, the stockholders invested an additional $\$ 8,000$ in the firm and that dividends of $\$ 6,000$ were declared. How much net income did the firm have for the year ended August 31, 2015? Recall that net income is one of the items that affects the retained earnings component of stockholders' equity. What else affects retained earnings? That's right-dividends. Because stockholders' equity increased from $\$ 203,000$ to $\$ 216,000$ during the year, and the items causing that change were net income, dividends, and the additional investment by the stockholders, the amount of net income can be calculated as follows:

| Stockholders' equity, beginning of year. | \$203,000 |
| :---: | :---: |
| Increase in paid-in capital from additional investment by stockholders. | 8,000 |
| Net income | $?$ |
| Dividends | -6,000 |
| Stockholders' equity, end of year | \$216,000 |

Solving for the unknown shows that net income was equal to $\$ 11,000$.
An alternative solution to determine net income for the year involves focusing on just the changes in stockholders' equity during the year, as follows:

| Increase in paid-in capital from additional investment by stockholders. | \$ 8,000 |
| :---: | :---: |
| Net income | ? |
| Dividends | -6,000 |
| Change in stockholders' equity for the yea | \$13,000 |

Again, solving for the unknown, we find that net income was equal to $\$ 11,000$.
The important points to remember here are:

- The balance sheet shows the amounts of assets, liabilities, and stockholders' equity at a point in time.
- The balance sheet equation must always be in balance.
- The income statement shows net income for a period of time.
- The retained earnings component of stockholders' equity changes over a period of time as a result of the firm's net income (or loss) and dividends for that period of time.

6. What does it mean to say that the balance sheet must be in balance after every transaction even though a lot of transactions affect the income statement?

## Accounting Concepts and Principles

To understand the kinds of decisions and informed judgments that can be made from the financial statements, it is appropriate to understand some of the broad concepts and principles of accounting that have become generally accepted for financial accounting and reporting purposes. The terms concepts and principles are used interchangeably here. Some of these ideas relate directly to the financial accounting concepts introduced in Chapter 1, and others relate to the broader notion of generally accepted accounting principles. Again, it is important to recognize that these concepts and principles are more like practices that have been generally agreed upon over time than hard-and-fast rules or basic laws such as those encountered in the physical sciences.

These concepts and principles can be related to the basic model of the flow of data from transactions to financial statements illustrated earlier and shown here:

## LO 5

Identify and explain the broad, generally accepted concepts and principles that apply to the accounting process.


## What Does

 It Mean?Answer on page 57


Study Suggestion

This chapter, titled "Financial Statements and Accounting Concepts/Principles," presents two sets of interrelated topics that are themselves related. As illustrated in Exhibit 2-5, individual financial statements are most meaningful when considered as part of an integrated set of financial statements presented by a firm. Likewise, the individual concepts and principles discussed in this section of the chapter are most meaningful when considered in relation to each other. The challenge that lies ahead (in the financial accounting part of this book) is for you to see logical connections between the end-product financial statements and the underlying concepts and principles upon which they are based. Our suggestion? Bookmark Exhibit 2-5 on page 45 and the concepts/principles model shown on page 47. Learn the terminology presented in each of these illustrations and refer back to these pages as you encounter difficulties in subsequent chapters. You will be surprised at how far this basic knowledge will carry you.


Business in Practice

## Parent and Subsidiary Corporations

It is not unusual for a corporation that wants to expand its operations to form a separate corporation to carry out its plans. In such a case, the original corporation owns all of the stock of the new corporation; it has become the "parent" of a "subsidiary." One parent may have several subsidiaries, and the subsidiaries themselves may be parents of subsidiaries. It is not necessary for the parent to own 100 percent of the stock of another corporation for the parent-subsidiary relationship to exist. If one corporation owns more than half of the stock of another, it is presumed that the majority owner can exercise enough control to create a parent-subsidiary relationship. When a subsidiary is not wholly owned, the other stockholders of the subsidiary are referred to as minority stockholders, and their ownership rights are referred to as the noncontrolling interest.

In most instances, the financial statements issued by the parent corporation will include the assets, liabilities, revenues, expenses, and gains and losses of the subsidiaries. Financial statements that reflect the financial position, results of operations, and cash flows of a parent and one or more subsidiaries are called consolidated financial statements.

The fact that one corporation is a subsidiary of another is frequently transparent to the general public. For example, Frito-Lay Company, Quaker Oats Company, and Tropicana Products, Inc., are all subsidiaries of PepsiCo Inc., but that relationship is usually irrelevant to consumers of each company's products.

## Concepts/Principles Related to the Entire Model

The basic accounting equation described earlier in this chapter is the mechanical key to the entire financial accounting process because the equation must be in balance after every transaction has been recorded in the accounting records. The method for recording transactions and maintaining this balance will be illustrated in Chapter 4.

Accounting entity refers to the entity for which the financial statements are being prepared. The entity can be a proprietorship, partnership, corporation, or even a group of corporations (see Business in Practice—Parent and Subsidiary Corporations). The entity for which the accounting is being done is defined by the accountant; even though the entities may be related (such as an individual and the business she owns), the accounting is done for the defined entity.

The going concern concept refers to the presumption that the entity will continue to operate in the future-that it is not being liquidated. This continuity assumption is necessary because the amounts shown on the balance sheet for various assets do not reflect the liquidation value of those assets.

## Concepts/Principles Related to Transactions

In the United States, the dollar is the unit of measurement for all transactions. No adjustment is made for changes in the purchasing power of the dollar. No attempt is made to reflect qualitative economic factors in the measurement of transactions.

The cost principle refers to the fact that transactions are recorded at their original (historical) cost to the entity as measured in dollars. For example, if a parcel of land were purchased by a firm for $\$ 8,600$ even though an appraisal showed the land to be worth $\$ 10,000$, the purchase transaction would be reflected in the accounting records and financial statements at its cost of $\$ 8,600$. If the land is still owned and being used 15 years later, even though its market value has increased to $\$ 80,000$, it continues to be reported in the balance sheet at its original cost of $\$ 8,600$.

Objectivity refers to accountants' desire to have a given transaction recorded the same way in all situations. This objective is facilitated by using the dollar as the unit of measurement and by applying the cost principle. As previously stressed, there are transactions for which the exercise of professional judgment could result in alternative recording results. These alternatives will be illustrated in subsequent chapters.

## Concepts/Principles Related to Bookkeeping Procedures and the Accounting Process

These concepts/principles relate to the accounting period-that is, the period of time selected for reporting results of operations and changes in financial position. Financial position will be reported at the end of this period (and the balance sheet at the beginning of the period will probably be included with the financial statements). For most entities, the accounting period will be one year in length.

Matching revenue and expense is necessary if the results of the firm's operations are to reflect accurately its economic activities during the period. The matching concept does not mean that revenues and expenses for a period are equal. Revenue is not earned without effort (businesses do not receive birthday gifts), and expenses are the measure of the economic efforts exerted to generate revenues. A fair presentation of the results of a firm's operations during a period of time requires that all expenses incurred in generating that period's revenues be deducted from the revenues earned. This results in an accurate measure of the net income or net loss for the period. This seems like common sense, but as we shall see, there are alternative methods of determining some of the expenses to be recognized in any given period. This concept of matching revenue and expense is very important and will be referred to again and again as accounting practices are discussed in the following chapters.

Revenue is recognized at the time of sale, which is when title to the product being sold passes from the seller to the buyer or when the services involved in the transaction have been performed. Passing of legal ownership (title) is the critical event, not the cash payment from buyer to seller.

Accrual accounting uses the accrual concept and results in recognizing revenue at the point of sale and recognizing expenses as they are incurred, even though the cash receipt or payment occurs at another time or in another accounting period. Thus, many activities of the firm will involve two transactions: one that recognizes the revenue or expense and the other that reflects the receipt or payment of cash. The use of accrual procedures accomplishes much of the matching of revenues and expenses because most transactions between business firms (and between many firms and individuals) involve purchase/sale at one point in time and cash payment/receipt at some other point.

## LO 6

Discuss why investors
must carefully consider cash flow information in conjunction with accrual accounting results.

The financial statement user relies on these concepts and principles related to the accounting period when making judgments and informed decisions about an entity's financial position and results of operations.

## What Does It Mean? <br> Answers on <br> page 57

7. What does matching of revenue and expense in the income statement mean?
8. What does the accrual concept mean?

## Concepts/Principles Related to Financial Statements

Consistency in financial reporting is essential if meaningful trend comparisons are to be made using an entity's financial statements for several years. It is inappropriate to change from one generally accepted alternative of accounting for a particular type of transaction to another generally accepted method, unless both the fact that the change has been made and the effect of the change on the financial statements are explicitly described in the financial statements or the accompanying notes to the financial statements.

Full disclosure means that the financial statements and notes should include all necessary information to prevent a reasonably astute user of the financial statements from being misled. This is a tall order-one that the Securities and Exchange Commission (SEC) has helped to define over the years. This requirement for full disclosure is one reason that the notes to the financial statements are usually considered an integral part of the financial statements.

Materiality means that absolute exactness, even if that idea could be defined, is not necessary in the amounts shown in the financial statements. Because of the numerous estimates involved in accounting, amounts reported in financial statements may be approximate, but they will not be "wrong" enough to be misleading. The financial statements of publicly owned corporations usually show amounts rounded to the nearest thousand, hundred thousand, or even million dollars. This rounding does not impair the informational content of the financial statements and probably makes them easier to read. A management concept related to materiality is the cost-benefit relationship. Just as a manager would not spend $\$ 500$ to get $\$ 300$ worth of information, the incremental benefit of increased accuracy in accounting estimates is frequently not worth the cost of achieving the increased accuracy.

Conservatism in accounting relates to making judgments and estimates that result in lower profits and asset valuation estimates rather than higher profits and asset valuation estimates. Accountants try to avoid wishful thinking or pie-in-the-sky estimates that could result in overstating profits for a current period. This is not to say that accountants always look at issues from a gloom-and-doom viewpoint; rather, they seek to be realistic but are conservative when in doubt.

Identify and explain several limitations of financial statements.

## Limitations of Financial Statements

Financial statements report quantitative economic information; they do not reflect qualitative economic variables. Thus, the value to the firm of a management team or of the morale of the workforce is not included as a balance sheet asset because it cannot
be objectively measured. Such qualitative attributes of the firm are frequently relevant to the decisions and informed judgments that the financial statement user is making, but they are not communicated in the financial statements. It's unfortunate that the accounting process does not capture these kinds of data because often a company's human resources and information resources are its most valuable assets. Many highly valued Internet and high-tech companies have little, if any, fixed assets or inventorysometimes the "product" they intend to offer comes in the form of a service that has not yet made it through the research, design, and testing phases. In fact, a common saying about such companies is that their assets "walk out the door every night." The accounting profession is not yet comfortable with the idea of trying to measure these kinds of intangible assets, even though fairly reliable appraisal techniques are available, such as those endorsed in the Uniform Standards of Professional Appraisal Practice (USPAP).

As already emphasized, the cost principle requires assets to be recorded at their original cost. The balance sheet does not generally show the current market value or the replacement cost of the assets. Some assets are reported at the lower of their cost or market value, and in some cases market value may be reported parenthetically, but asset values are not generally increased to reflect current value. For example, the trademark of a firm has virtually no cost; its value has developed over the years as the firm has successfully met customers' needs. Thus, trademarks usually are excluded from the balance sheet listing of assets even though they clearly have economic value to the firm.

Estimates are used in many areas of accounting; when the estimate is made, about the only fact known is that the estimate is probably not equal to the "true" amount. It is hoped that the estimate is near the true amount (the concept of materiality); it usually is. For example, recognizing depreciation expense involves estimating both the useful life to the entity of the asset being depreciated and the probable salvage value of the asset to the entity when it is disposed of. The original cost minus the salvage value is the amount to be depreciated or recognized as expense over the asset's life. Estimates also must be made to determine pension expense, warranty costs, and numerous other expense and revenue items to be reflected in the current year's income statement because they relate to the economic activity of the current year. These estimates also affect balance sheet accounts. So even though the balance sheet balances to the penny, do not be misled by this aura of exactness. Accountants do their best to make their estimates as accurate as possible, but estimates are still estimates.

The principle of consistency suggests that an entity should not change from one generally accepted method of accounting for a particular item to another generally accepted method of accounting for the same item, but it is possible that two firms operating in the same industry may follow different methods. This means that comparability between firms may not be appropriate, or if comparisons are made, the effects of any differences between the accounting methods followed by the firms must be understood.

Related to the use of the original cost principle is the fact that financial statements are not adjusted to show the impact of inflation. Land acquired by a firm 50 years ago is still reported at its original cost, even though it may have a significantly higher current value because of inflation. Likewise, depreciation expense and the cost of goods sold-both significant expense elements of the income statement of many firmsreflect original cost, not replacement cost. This weakness is not significant when the rate of inflation is low, but the usefulness of financial statements is seriously impaired when the inflation rate rises to double digits.

Financial statements do not reflect opportunity cost, which is an economic concept relating to income forgone because an opportunity to earn income was not pursued. For example, if an individual or organization maintains a non-interest-bearing checking account balance that is $\$ 300$ more than that required to avoid any service charges, the opportunity cost associated with that $\$ 300$ is the interest that could otherwise be earned on the money if it had been invested. Financial accounting does not give formal recognition to opportunity cost; however, financial managers should be aware of the concept as they plan the utilization of the firm's resources.

## What Does It Mean?

Answer on page 57
9. What does it mean when some investors state that a corporation's published financial statements don't tell the whole story about a firm's financial position and results of operations?

## The Corporation's Annual Report

LO 8
Describe what a corporation's annual report is and why it is issued.

The annual report is the document distributed (or made available electronically) to shareholders that contains the reporting firm's financial statements for the fiscal year, together with the report of the external auditor's examination of the financial statements. The annual report document can be as simple as a transmittal letter from the president or chairman of the board of directors along with the financial statements, or as fancy as a glossy, 100-page booklet that showcases the firm's products, services, and personnel, as well as its financial results.

In addition to the financial statements described here and the notes to the financial statements described more fully in Chapter 10, some other financial data are usually included in the annual report. Highlights for the year, including net revenues, diluted earnings per share, and return on average stockholders' equity, often appear inside the front cover or elsewhere toward the front of the report. Most firms also include a historical summary of certain financial data for at least the past five years. This summary usually is located near the back of the annual report.

The vast majority of U.S. publicly traded companies now include within their annual reports the entire $10-\mathrm{K}$ report that is filed with the SEC each year. As a result, the appendix material for Campbell Soup Company's 2011 annual report excludes certain disclosures that are not heavily referenced in this text, such as the Management's Discussion and Analysis section. To obtain a complete copy of Campbell's current annual report, please visit www.campbellsoup.com. Click on "Our Company" in the upper left corner of the home page and then click on "Investor Center," "Financial Information," and "Annual Reports" to reach the relevant Adobe Acrobat files that can be saved and/or printed. Many specific aspects of Campbell's annual report will be referred to in subsequent chapters.

## Demonstration Problem

Visit the text website at www.mhhe.com/marshall10e to view a demonstration problem for this chapter.

## Summary

Financial statements communicate economic information that helps individuals make decisions and informed judgments.

The bookkeeping and accounting processes result in an entity's numerous transactions with other entities being reflected in the financial statements. The financial statements presented by an entity are the balance sheet, income statement, statement of changes in stockholders' equity, and statement of cash flows.

The balance sheet is a listing of the entity's assets, liabilities, and stockholders' equity at a point in time. Assets are probable future economic benefits (things or claims against others) controlled by the entity. Liabilities are amounts owed by the entity. An entity's stockholders' equity is the difference between its assets and liabilities. This relationship is known as the accounting equation. Current assets are cash and those assets likely to be converted to cash or used to benefit the entity within one year of the balance sheet date, such as accounts receivable and inventories. Current liabilities are expected to be paid or otherwise satisfied within one year of the balance sheet date. The balance sheet as of the end of a fiscal period is also the balance sheet as of the beginning of the next fiscal period.

The income statement reports the results of an entity's operating activities for a period of time. Revenues are reported first, and expenses are subtracted to arrive at net income or net loss for the period.

The statement of changes in stockholders' equity describes changes in paid-in capital and retained earnings during the period. Retained earnings are increased by the amount of net income and decreased by dividends to stockholders (and by any net loss for the period). It is through retained earnings that the income statement is linked to the balance sheet.

The statement of cash flows summarizes the impact on cash of the entity's operating, investing, and financing activities during the period. The bottom line of this financial statement is the change in cash from the amount shown in the balance sheet at the beginning of the period (e.g., fiscal year) to that shown in the balance sheet at the end of the period.

Financial statements usually are presented on a comparative basis so users can easily spot significant changes in an entity's financial position (balance sheet) and results of operations (income statement).

The financial statements are interrelated. Net income for the period (from the income statement) is added to retained earnings, a part of stockholders' equity (in the balance sheet). The statement of changes in stockholders' equity explains the difference between the amounts of stockholders' equity at the beginning and the end of the fiscal period. The statement of cash flows explains the change in the amount of cash from the beginning to the end of the fiscal period.

Accounting concepts and principles reflect generally accepted practices that have evolved over time. They can be related to a schematic model of the flow of data from transactions to the financial statements. Pertaining to the entire model are the accounting entity concept, the accounting equation, and the going concern concept.

Transactions are recorded in currency units (e.g., the U.S. dollar) without regard to purchasing power changes. Thus transactions are recorded at an objectively determinable original cost amount.

The concepts and principles for the accounting period involve recognizing revenue when a sale of a product or service is made and then relating to that revenue all
of the expenses incurred in generating the revenue of the period. This matching of revenues and expenses is a crucial and fundamental concept to understand if accounting itself is to be understood. The accrual concept is used to implement the matching concept by recognizing revenues when earned and expenses when incurred, regardless of whether cash is received or paid in the same fiscal period.

The concepts of consistency, full disclosure, materiality, and conservatism relate primarily to financial statement presentation.

There are limitations to the information presented in financial statements. These limitations are related to the concepts and principles that have become generally accepted. Thus subjective qualitative factors, current values, the impact of inflation, and opportunity cost are not usually reflected in financial statements. In addition, many financial statement amounts involve the use of estimates. Permissible alternative accounting practices may mean that interfirm comparisons are not appropriate.

Corporations and other organizations include financial statements in an annual report made available to stockholders, employees, potential investors, and others interested in the entity. Refer to the financial statements on pages 711-714 of the Campbell Soup Company annual report in the appendix, as well as to the financial statements of other annual reports, to see how the material discussed in this chapter applies to real companies.

## Key Terms and Concepts

account (p. 33) A record in which transactions affecting individual assets, liabilities, stockholders' equity, revenues, and expenses are recorded.
accounting equation (p.36) Assets $=$ Liabilities + Stockholders' equity $(A=L+S E)$. The fundamental relationship represented by the balance sheet and the foundation of the bookkeeping process.
accounts payable (p. 37) A liability representing an amount payable to another entity, usually because of the purchase of merchandise or services on credit.
accounts receivable (p.37) An asset representing a claim against another entity, usually arising from selling goods or services on credit.
accrual accounting (p.49) Accounting that recognizes revenues and expenses as they occur, even though the cash receipt from the revenue or the cash disbursement related to the expense may occur before or after the event that causes revenue or expense recognition.
accrued liabilities (p. 37) Amounts that are owed by an entity on the balance sheet date.
accumulated depreciation (p.37) The sum of the depreciation expense that has been recognized over time. Accumulated depreciation is a contra asset-an amount that is subtracted from the cost of the related asset on the balance sheet.
additional paid-in capital (p.41) The excess of the amount received from the sale of stock over the par value of the shares sold.
assets (p. 36) Probable future economic benefits obtained or controlled by an entity as a result of past transactions or events.
balance sheet (p. 35) The financial statement that is a listing of the entity's assets, liabilities, and stockholders' equity at a point in time. Sometimes this statement is called the statement of financial position.
balance sheet equation (p. 36) Another term for accounting equation.
cash (p. 37) An asset on the balance sheet that represents the amount of cash on hand and balances in bank accounts maintained by the entity.
common stock (p.40) The class of stock that represents residual ownership of the corporation.
corporation (p.34) A form of organization in which ownership is evidenced by shares of stock owned by stockholders; its features, such as limited liability of the stockholders, make this the principal form of organization for most business activity.
cost of goods sold (p. 39) Cost of merchandise sold during the period; an expense deducted from net sales to arrive at gross profit. Frequently used synonyms are cost of sales and cost of products sold.
current assets (p. 38) Cash and those assets that are likely to be converted to cash or used to benefit the entity within one year of the balance sheet date.
current liabilities (p. 38) Those liabilities due to be paid within one year of the balance sheet date.
depreciation (p. 37) The accounting process of recognizing the cost of an asset that is used up over its useful life to the entity.
depreciation expense (p.42) The expense recognized in a fiscal period for the depreciation of an asset.
dividend (p.41) A distribution of earnings to the stockholders of a corporation.
earnings per share of common stock outstanding (p.39) Net income available to the common stockholders divided by the average number of shares of common stock outstanding during the period. Usually referred to simply as $E P S$.
equity (p. 36) The ownership right associated with an asset. See stockholders' equity.
expenses (p. 38) Outflows or other using up of assets or incurring a liability during a period from delivering or producing goods, rendering services, or carrying out other activities that constitute the entity's major operations.
fiscal year ( $\mathbf{p} .35$ ) The annual period used for reporting to owners.
gains (p. 38) Increases in net assets from incidental transactions that are not revenues or investments by owners.
going concern concept ( $\mathbf{p} .48$ ) A presumption that the entity will continue in existence for the indefinite future.
gross profit (p. 39) Net sales less cost of goods sold. Sometimes called gross margin.
income from operations (p. 39) The difference between gross profit and operating expenses. Also referred to as operating income.
income statement (p.38) The financial statement that summarizes the entity's revenues, expenses, gains, and losses for a period of time and thereby reports the entity's results of operations for that period of time.
liabilities (p. 36) Probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events.
losses (p. 38) Decreases in net assets from incidental transactions that are not expenses or distributions to owners.
matching concept ( $\mathbf{p}$. 49) The concept that expenses incurred in generating revenues should be deducted from revenues earned during the period for which results are being reported.
merchandise inventory (p.37) Items held by an entity for sale to customers in the normal course of business.
net assets (p.37) The difference between assets and liabilities; also referred to as stockholders' equity or owners' equity.
net income (p. 38) The excess of revenues and gains over expenses and losses for a fiscal period.
net sales (p. 38) Gross sales, less sales discounts and sales returns and allowances.
net worth (p. 37) Another term for net assets or stockholders' equity or owners' equity, but not as appropriate because the term worth may be misleading.
opportunity cost (p. 52) An economic concept relating to income forgone because an opportunity to earn income was not pursued.
owners' equity (p. 36) Another term for stockholders' equity. The owners' claim in the assets of the entity. Sometimes called net assets; the difference between assets and liabilities.
paid-in capital (p. 40) The amount invested in the entity by the stockholders.
par value (p. 40) An arbitrary value assigned to a share of stock when the corporation is organized. Sometimes used to refer to the stated value or face amount of a security.
partnership (p. 34) A form of organization indicating ownership by two or more individuals or corporations without the limited liability and other features of a corporation.
profit (p. 38) The excess of revenues and gains over expenses and losses for a fiscal period; another term for net income.
profit and loss statement (p.38) Another term for income statement.
proprietorship (p.34) A form of organization indicating individual ownership without the limited liability and other features of a corporation.
retained earnings (p.40) Cumulative net income that has not been distributed to the stockholders of a corporation as dividends.
revenues (p. 38) Inflows of cash or increases in other assets, or the settlement of liabilities during a period, from delivering or producing goods, rendering services, or performing other activities that constitute the entity's major operations.
statement of cash flows (p.42) The financial statement that explains why cash changed during a fiscal period. Cash flows from operating, investing, and financing activities are shown.
statement of changes in capital stock (p. 40) The financial statement that summarizes changes during a fiscal period in capital stock and additional paid-in capital. This information may be included in the statement of changes in stockholders' equity.
statement of changes in retained earnings (p. 40) The financial statement that summarizes the changes during a fiscal period in retained earnings. This information may be included in the statement of changes in stockholders' equity.
statement of changes in stockholders' equity (p.40) The financial statement that summarizes the changes during a fiscal period in capital stock, additional paid-in capital, retained earnings, and other elements of stockholders' equity.
statement of earnings (p. 38) Another term for income statement; it shows the revenues, expenses, gains, and losses for a period of time and thereby the entity's results of operations for that period of time.
statement of financial position (p.35) Another term for balance sheet; a listing of the entity's assets, liabilities, and stockholders' equity at a point in time.
statement of operations (p.38) Another term for income statement.
stock (p. 34) The evidence of ownership of a corporation.
stockholders (p. 34) The owners of a corporation's stock; sometimes called shareholders.
stockholders' equity (p. 36) The stockholders' claim in the assets of the entity. Sometimes called owners' equity or net assets; the difference between assets and liabilities.
subsidiary (p. 48) A corporation whose stock is more than 50 percent owned by another corporation.
transactions (p. 33) Economic interchanges between entities that are accounted for and reflected in financial statements.

ANSWERS TO What Does It Mean?

1. It means that there has been some sort of economic interchange; for example, you have agreed to pay tuition in exchange for classes.
2. It means the person doing this is really mixed up because the balance sheet presents data as of a point in time. It's a balance sheet as of August 31, 2014.
3. It means that the organization's financial position at a point in time has been determined and summarized.
4. It means that each individual financial statement provides unique information but focuses on only a part of the big picture, so all four statements need to be reviewed to achieve a full understanding of the firm's financial position and results of operations.
5. It means that revenues have been earned from selling products or providing services but that the accounts receivable from those revenues have not yet been collected-or if the receivables have been collected, the cash has been used for some purpose other than paying bills.
6. It means that transactions affecting the income statement also affect the stockholders' equity section of the balance sheet as well as the asset and/or liability sections of the balance sheet.
7. It means that all expenses incurred in generating revenue for the period are subtracted from those revenues to determine net income. Matching does not mean that revenues equal expenses.
8. It means that revenues and expenses are recognized in the accounting period in which they are earned or incurred, even though cash may be received or paid in a different accounting period.
9. It means that there may be both qualitative (for example, workforce morale) and quantitative (for example, opportunity cost) factors that are not reflected in the financial statements.

## Self-Study Material

Visit the text website at www.mhhe.com/marshall10e to take an online self-study quiz for this chapter.

Matching Following is a list of the key terms and concepts introduced in the chapter, along with a list of corresponding definitions. Match the appropriate letter for the key term or concept to each definition provided (items 1-15). Note that not all key terms and concepts will be used. Answers are provided at the end of this chapter.
a. Accumulated depreciation
b. Balance sheet
c. Accrued liabilities
d. Current assets
e. Current liabilities
f. Merchandise inventory
g. Revenues
h. Expenses
i. Gains
j. Losses
k. Net sales

1. Cost of goods sold
m. Gross profit
n. Income from operations
o. Net income
p. Earnings per share of common stock
q. Paid-in capital
r. Common stock
s. Additional paid-in capital
t. Retained earnings
u. Dividends
v. Par value
w. Going concern concept
x. Matching concept
y. Accrual concept
z. Opportunity cost
aa. Annual report
bb. Income statement
2. The difference between the total amount invested by the stockholders and the par value or stated value of the stock issued.
3. Outflows or using up of assets or incurrence of liabilities during a period from delivering or producing goods, rendering services, or carrying out other activities that constitute the entity's major operations.
4. The financial statement that is a list of the entity's assets, liabilities, and stockholders' equity at a point in time.
5. A document distributed to stockholders that contains the financial statements for the fiscal year of the reporting firm with the report of the external auditor's examination of the financial statements.
6. A distribution of earnings to the stockholders of a corporation.
$\qquad$ 6. An arbitrary value assigned to a share of stock when the corporation is organized.
7. Net income available to the common stockholders divided by the average number of shares of common stock outstanding during the period.
8. Items held by an entity for sale to potential customers in the normal course of business.
9. Inflows of cash or increases in other assets, or settlement of liabilities during a period from delivering or producing goods, rendering services, or other activities that constitute the entity's major operations.
10. Cash and those assets likely to be converted to cash or used to benefit the entity within one year of the balance sheet date.
11. Cumulative net income that has not been distributed to the stockholders of a corporation as dividends.
12. The difference between gross profit and operating expenses. Also referred to as operating income and earnings from operations.
13. Increases in net assets from incidental transactions and other events affecting an entity during a period except those that result from revenues or investments by owners.
14. A presumption that the entity will continue in existence for the indefinite future.
15. Net sales less cost of goods sold.

Multiple Choice For each of the following questions, circle the best response. Answers are provided at the end of this chapter.

1. Which of the following is not a correct expression of the accounting equation?
a. Assets - Liabilities $=$ Stockholders' equity
b. Net assets $=$ Liabilities + Stockholders' equity
c. Assets $=$ Liabilities + Stockholders' equity
d. Net assets = Stockholders' equity
2. Partnerships, as contrasted with corporations, can be characterized as being relatively
a. easier to form, less risky to be an owner of, and easier to raise large amounts of capital for.
b. easier to form, more risky to be an owner of, and harder to raise large amounts of capital for.
c. harder to form, more risky to be an owner of, and harder to raise large amounts of capital for.
d. harder to form, less risky to be an owner of, and easier to raise large amounts of capital for.
$e$. none of the above.
3. The stockholders' equity section of a balance sheet contains two major components:
a. Common Stock and Additional Paid-in Capital.
b. Paid-in Capital and Retained Earnings.
c. Common Stock and Retained Earnings.
d. Net Income and Dividends.
e. Additional Paid-in Capital and Net Income.
4. Which of the following accounts is not an asset?
a. Cash.
d. Equipment.
b. Inventory.
e. Land.
c. Accounts Payable.
5. Which of the following financial statement descriptions is inaccurate?
a. Balance Sheet-shows the organization's financial position for a period of time.
b. Income Statement-shows what the organization's earnings were for a period time.
c. Statement of Cash Flows-shows what the organization's receipts and disbursements were for a period of time.
d. Statement of Stockholders' Equity-shows the investments by and distributions to stockholders for a period of time.
$e$. All of the above descriptions are accurate.
6. If total assets were $\$ 21,000$ and total liabilities were $\$ 12,000$ at the beginning of the year, and if net income for the year was $\$ 5,000$, how much was total stockholders' equity at the end of the year?
a. \$4,000.
c. \$9,000.
b. $\$ 5,000$.
d. $\$ 14,000$.
7. At the beginning of the year, stockholders' equity totaled $\$ 119,000$. During the year, net income was $\$ 35,000$ and dividends of $\$ 29,000$ were declared and paid. How much was stockholders' equity at the end of the year?
a. \$113,000.
c. $\$ 148,000$.
b. $\$ 125,000$.
d. $\$ 154,000$.
8. The principle stating that all expenses incurred while earning revenues should be identified with the revenues when they are earned and reported for the same time period is the
$a$ cost principle. d. matching principle.
b. revenue principle.
$e$. timing principle.
c. expense principle.
9. Corporate annual reports do not ordinarily include a. a transmittal letter from the president or chairman of the board of directors.
b. financial statements for the most recent year.
c. explanatory notes and comments about the financial statements.
d. the internal auditor's report and opinion about the financial statements.
$e$. a historical summary of selected financial data for the past five years or more.
10. Which of these is not a limitation of financial statements?
a. Qualitative data are not reflected in financial statements.
b. Market values of assets are not generally reported.
c. Estimates are commonly used and are sometimes inaccurate.
d. It may be difficult to compare firms in the same industry because they often use different accounting methods.
$e$. All of the above are limitations of financial statements.

## connect Mini-Exercises

## All applicable Mini-Exercises are available with McGraw-Hill's Connect ${ }^{\text {TM }}$ Accounting.

Mini-Exercise Understanding financial statement relationships Total assets were \$48,000
2.1 and total liabilities were $\$ 27,000$ at the beginning of the year. Net income for the year LO 2, 3 was $\$ 8,000$, and dividends of $\$ 2,000$ were declared and paid during the year.

Required:
Calculate total stockholders' equity at the end of the year.
Mini-Exercise Understanding financial statement relationships Stockholders' equity totaled
$2.2 \$ 82,000$ at the beginning of the year. During the year, net income was $\$ 12,000$, dividends LO 2, 3 of $\$ 3,000$ were declared and paid, and $\$ 10,000$ of common stock was issued at par value.

Required:
Calculate total stockholders' equity at the end of the year.
Mini-Exercise Understanding income statement relationships During the year, net sales
2.3 were $\$ 125,000$; gross profit was $\$ 50,000$; net income was $\$ 20,000$; income tax exLO 2, 3 pense was $\$ 5,000$; and selling, general, and administrative expenses were $\$ 22,000$.

Required:
Calculate cost of goods sold, income from operations, income before taxes, and interest expense. (Hint: Exhibit 2-2 may be used as a solution model.)

## Mini-Exercise

2.4 Understanding income statement relationships During the year, cost of goods LO 2, 3 sold was $\$ 40,000$; income from operations was $\$ 38,000$; income tax expense was
$\$ 8,000$; interest expense was $\$ 6,000$; and selling, general, and administrative expenses were $\$ 22,000$.

## Required:

Calculate net sales, gross profit, income before taxes, and net income. (Hint: Exhibit 2-2 may be used as a solution model.)

Identify accounts by category Listed here are a number of accounts: Land, Common stock, Merchandise inventory, Equipment, Cost of goods sold, Accounts receivable, Interest expense, Supplies, Long-term debt, Cash, Sales, Accounts payable, Buildings, Retained earnings.

## Required:

Which of the accounts listed above are not assets? How would you categorize each of these nonasset accounts?

Identify accounts by statement Listed here are a number of accounts: Income tax expense, Accumulated depreciation, Notes payable, Land, Sales, Common stock, Cost of goods sold, Equipment, Accounts receivable, Rent expense, Supplies, Buildings, Service revenue, Cash.

## Required:

Which of the accounts listed above would appear on a company's income statement?

## Exercises

## All applicable Exercises are available with McGraw-Hill's Connect ${ }^{\text {TM }}$ Accounting. <br> Identify accounts by category and financial statement(s) Listed here are a number of financial statement captions. Indicate in the spaces to the right of each <br> can usually be found. Use the following abbreviations:

Mini-Exercise<br>2.5<br>LO 2, 4

## Mini-Exercise <br> 2.6

LO 2, 4

| Category |  | Financial Statement |  |
| :---: | :---: | :---: | :---: |
| Asset | A | Balance sheet | BS |
| Liability | L | Income statement | IS |
| Stockholders' equity | SE |  |  |
| Revenue | R |  |  |
| Expense | E |  |  |
| Gain | G |  |  |
| Loss | LS |  |  |
| Cash |  | $\square$ |  |
| Accounts payable |  |  |  |
| Common stock |  |  |  |
| Depreciation expense |  |  |  |
| Net sales |  |  |  |
| Income tax expense |  |  |  |
| Short-term investments |  |  |  |
| Gain on sale of land |  |  |  |
| Retained earnings |  |  |  |
| Dividends payable |  |  |  |
| Accounts receivable |  |  |  |
| Short-term debt |  |  |  |

Exercise 2.8 Identify accounts by category and financial statement(s) Listed here are a LO 2, 4 number of financial statement captions. Indicate in the spaces to the right of each caption the category of each item and the financial statement(s) on which the item can usually be found. Use the following abbreviations:

| Category |  | Financial Statement |  |
| :---: | :---: | :---: | :---: |
| Asset | A | Balance sheet | BS |
| Liability | L | Income statement | IS |
| Stockholders' equity | SE |  |  |
| Revenue | R |  |  |
| Expense | E |  |  |
| Gain | G |  |  |
| Loss | LS |  |  |
| Accumulated depreciation |  |  |  |
| Long-term debt |  |  |  |
| Equipment |  |  |  |
| Loss on sale of short-term investments |  |  |  |
| Net income |  |  |  |
| Merchandise inventory |  |  |  |
| Other accrued liabilities |  |  |  |
| Dividends paid |  |  |  |
| Cost of goods sold |  |  |  |
| Additional paid-in capital |  |  |  |
| Interest income |  |  |  |
| Selling expenses |  |  |  |

Exercise 2.9 Understanding financial statement relationships The information presented
LO 2, 3 here represents selected data from the December 31, 2013, balance sheets and income statements for the year then ended for three firms:

|  |  | Firm A | Firm B | Firm C |
| :--- | ---: | ---: | ---: | ---: |
| Total assets, $12 / 31 / 13 \ldots \ldots \ldots \ldots \ldots \ldots$ | $\$ 420,000$ | $\$ 540,000$ | $\$ 325,000$ |  |
| Total liabilities, $12 / 31 / 13 \ldots \ldots \ldots \ldots \ldots$ | 215,000 | 145,000 | $?$ |  |
| Paid-in capital, $12 / 31 / 13 \ldots \ldots \ldots \ldots \ldots$ | 75,000 | $?$ | 40,000 |  |
| Retained earnings, $12 / 31 / 13 \ldots \ldots \ldots \ldots$ | $? \ldots \ldots$ | 310,000 | $?$ |  |
| Net income for $2013 \ldots \ldots \ldots \ldots$ | $? \ldots$ | 83,000 | 113,000 |  |
| Dividends declared and paid during $2013 \ldots$ | 50,000 | 19,000 | 65,000 |  |
| Retained earnings, $1 / 1 / 13 \ldots \ldots \ldots \ldots \ldots$ | 78,000 | $?$ | 42,000 |  |

## Required:

Calculate the missing amounts for each firm.

Exercise 2.10 Understanding financial statement relationships The information presented LO 2,3 here represents selected data from the December 31, 2013, balance sheets and income statements for the year then ended for three firms:

|  |  | Firm A | Firm B | Firm C |
| :--- | ---: | ---: | ---: | ---: |
| Total assets, $12 / 31 / 13 \ldots \ldots \ldots \ldots \ldots$ | $? \ldots$ | $\$ 870,000$ | $\$ 310,000$ |  |
| Total liabilities, $12 / 31 / 13 \ldots \ldots \ldots \ldots$ | $\$ 160,000$ | $?$ | 150,000 |  |
| Paid-in capital, $12 / 31 / 13 \ldots \ldots \ldots \ldots$ | 110,000 | 118,000 | 90,000 |  |
| Retained earnings, $12 / 31 / 13 \ldots \ldots \ldots \ldots$ | $? \ldots$ | 372,000 | $?$ |  |
| Net income for $2013 \ldots \ldots \ldots \ldots \ldots$ | 136,000 | 220,000 | 51,000 |  |
| Dividends declared and paid during $2013 \ldots$ | 24,000 | $?$ | 33,000 |  |
| Retained earnings, $1 / 1 / 13 \ldots \ldots \ldots \ldots \ldots$ | 100,000 | 248,000 | $?$ |  |

## Required:

Calculate the missing amounts for each firm.

Calculate retained earnings From the following data, calculate the retained earnings balance as of December 31, 2013:

Exercise 2.11
LO 2, 3

| Retained earnings, December 31, 2012 | \$311,800 |
| :---: | :---: |
| Cost of equipment purchased during 2013. | 32,400 |
| Net loss for the year ended December 31, 2013. | 4,700 |
| Dividends declared and paid in 2013 | 18,500 |
| Decrease in cash balance from January 1, 2013, to December 31, 2013 | 13,600 |
| Decrease in long-term debt in 2013 | 14,800 |

Calculate retained earnings From the following data, calculate the retained earnings balance as of December 31, 2012:

| Retained earnings, December 31, 2013 | \$420,600 |
| :---: | :---: |
| Decrease in total liabilities during 2013 | 91,600 |
| Gain on the sale of buildings during 2013 | 32,200 |
| Dividends declared and paid in 2013 | 9,000 |
| Proceeds from sale of common stock in 2013 | 98,800 |
| Net income for the year ended December 31, 2013 | 45,200 |

Calculate dividends using the accounting equation At the beginning of its current fiscal year, Willie Corp.'s balance sheet showed assets of \$12,400 and liabilities of $\$ 7,000$. During the year, liabilities decreased by $\$ 1,200$. Net income for the year was $\$ 3,000$, and net assets at the end of the year were $\$ 6,000$. There were no changes in paid-in capital during the year.

## Required:

Calculate the dividends, if any, declared during the year.
(Hint: Set up an accounting equation for the beginning of the year, changes during the year, and at the end of the year. Enter known data and solve for the unknowns.)

Exercise 2.13
LO 2, 3

Here is a possible worksheet format:

|  |  |  |  | SE |
| :---: | :---: | :---: | :---: | :---: |
|  | A | = | L | PIC |
| Beginning: |  |  |  |  |
| Changes: |  |  |  |  |
| Ending: |  | = |  |  |

Exercise 2.14 Calculate net income (or loss) using the accounting equation At the beginning LO 2,3 of the current fiscal year, the balance sheet for Davis Co. showed liabilities of \$640,000. During the year liabilities decreased by $\$ 36,000$, assets increased by $\$ 130,000$, and paid-in capital increased from $\$ 60,000$ to $\$ 384,000$. Dividends declared and paid during the year were $\$ 50,000$. At the end of the year, stockholders' equity totaled $\$ 858,000$.
Required:
Calculate net income (or loss) for the year.
(Hint: Set up an accounting equation for the beginning of the year, changes during the year, and at the end of the year. Enter known data and solve for the unknowns. Remember, net income [or loss] may not be the only item affecting retained earnings.)

## connect Problems

## All applicable Problems are available with McGraw-Hill's Connect ${ }^{\text {TM }}$ Accounting.

Problem 2.15 Calculate cash available upon liquidation of business Circle-Square, Ltd., is LO 2, 3, 6 in the process of liquidating and going out of business. The firm's balance sheet shows $\$ 22,800$ in cash, accounts receivable of $\$ 114,200$, inventory totaling $\$ 61,400$, plant and equipment of $\$ 265,000$, and total liabilities of $\$ 305,600$. It is estimated that the inventory can be disposed of in a liquidation sale for 80 percent of its cost, all but 5 percent of the accounts receivable can be collected, and plant and equipment can be sold for $\$ 190,000$.

## Required:

Calculate the amount of cash that would be available to the owners if the accounts receivable are collected, the other assets are sold as described, and the liabilities are paid off in full.

Problem 2.16 Calculate cash available upon liquidation of business Kimber Co. is in the LO 2, 3, 6 process of liquidating and going out of business. The firm's accountant has provided the following balance sheet and additional information:

| Assets |  |  |
| :---: | :---: | :---: |
| Cash | \$ 36,800 |  |
| Accounts receivable | 125,200 |  |
| Merchandise inventory. | 229,400 |  |
| Total current assets |  | \$391,400 |
| Land | \$ 102,000 |  |
| Buildings \& equipment. | 686,000 |  |
| Less: Accumulated depreciation | $(390,000)$ |  |
| Total land, buildings, \& equipment |  | 398,000 |
| Total assets |  | \$789,400 |
|  |  | (continued) |


| Liabilities and Stockholders' Equity |  |  |
| :---: | :---: | :---: |
| Accounts payable | \$ 93,400 |  |
| Notes payable | 117,000 |  |
| Total current liabilities |  | \$210,400 |
| Long-term debt . |  | 129,600 |
| Total liabilities. |  | \$340,000 |
| Stockholders' Equity |  |  |
| Common stock, no par | \$220,000 |  |
| Retained earnings | 229,400 |  |
| Total stockholders' equity. |  | 449,400 |
| Total liabilities and stockholders' equity |  | \$789,400 |

It is estimated that all but 12 percent of the accounts receivable can be collected, and that the merchandise inventory can be disposed of in a liquidation sale for 85 percent of its cost. Buildings and equipment can be sold at $\$ 80,000$ above book value (the difference between original cost and accumulated depreciation shown on the balance sheet), and the land can be sold at its current appraisal value of $\$ 130,000$. In addition to the liabilities included in the balance sheet, $\$ 4,800$ is owed to employees for their work since the last pay period, and interest of $\$ 10,500$ has accrued on notes payable and long-term debt.

## Required:

a. Calculate the amount of cash that will be available to the stockholders if the accounts receivable are collected, the other assets are sold as described, and all liabilities and other claims are paid in full.
b. Briefly explain why the amount of cash available to stockholders (computed in part $a$ ) is different from the amount of total stockholders' equity shown in the balance sheet.

## Understanding and analyzing financial statement relationships-sales/ service organization Pope's Garage had the following accounts and amounts in

Problem 2.17
LO 2, 3, 4

| Accounts receivable | \$ 33,000 |
| :---: | :---: |
| Depreciation expense | 12,000 |
| Land | 27,000 |
| Cost of goods sold | 90,000 |
| Retained earnings | 59,000 |
| Cash | 9,000 |
| Equipment. | 71,000 |
| Supplies | 6,000 |
| Accounts payable | 23,000 |
| Service revenue. | 20,000 |
| Interest expense | 4,000 |
| Common stock. | 10,000 |
| Income tax expense | 12,000 |
| Accumulated depreciation. | 45,000 |
| Long-term debt. | 40,000 |
| Supplies expense | 14,000 |
| Merchandise inventory | 31,000 |
| Sales revenue | 140,000 |

## Required:

a. Calculate the total current assets at December 31, 2013.
b. Calculate the total liabilities and stockholders' equity at December 31, 2013.
c. Calculate the earnings from operations (operating income) for the year ended December 31, 2013.
d. Calculate the net income (or loss) for the year ended December 31, 2013.
e. What was the average income tax rate for Pope's Garage for 2013?
f. If $\$ 16,000$ of dividends had been declared and paid during the year, what was the January 1, 2013, balance of retained earnings?

Problem 2.18 Understanding and analyzing financial statement relationshipsLO 2, 3, 4 merchandising organization Gary's TV had the following accounts and amounts in its financial statements on December 31, 2013. Assume that all balance sheet items reflect account balances at December 31, 2013, and that all income statement items reflect activities that occurred during the year then ended.

| Interest expense | \$ 18,000 |
| :---: | :---: |
| Paid-in capital | 40,000 |
| Accumulated depreciation. | 12,000 |
| Notes payable (long-term) . | 140,000 |
| Rent expense | 36,000 |
| Merchandise inventory | 420,000 |
| Accounts receivable | 96,000 |
| Depreciation expense | 6,000 |
| Land | 64,000 |
| Retained earnings | 450,000 |
| Cash | 72,000 |
| Cost of goods sold | 880,000 |
| Equipment. | 36,000 |
| Income tax expense | 120,000 |
| Accounts payable | 46,000 |
| Sales revenue | 1,240,000 |

## Required:

a. Calculate the difference between current assets and current liabilities for Gary's TV at December 31, 2013.
b. Calculate the total assets at December 31, 2013.
c. Calculate the earnings from operations (operating income) for the year ended December 31, 2013.
d. Calculate the net income (or loss) for the year ended December 31, 2013.
e. What was the average income tax rate for Gary's TV for 2013?
f. If $\$ 128,000$ of dividends had been declared and paid during the year, what was the January 1, 2013, balance of retained earnings?

Problem 2.19 Prepare an income statement, balance sheet, and statement of changes LO 2, 3, 4 in stockholders' equity; analyze results The information on the following page was obtained from the records of Breanna, Inc.:

| Accounts receivable | \$ 10,000 |
| :---: | :---: |
| Accumulated depreciation. | 52,000 |
| Cost of goods sold | 128,000 |
| Income tax expense | 8,000 |
| Cash . | 65,000 |
| Sales. | 200,000 |
| Equipment. | 120,000 |
| Selling, general, and administrative expenses | 34,000 |
| Common stock (9,000 shares) | 90,000 |
| Accounts payable | 15,000 |
| Retained earnings, 1/1/13. | 23,000 |
| Interest expense | 6,000 |
| Merchandise inventory | 37,000 |
| Long-term debt. | 40,000 |
| Dividends declared and paid during 2013 | 12,000 |

Except as otherwise indicated, assume that all balance sheet items reflect account balances at December 31, 2013, and that all income statement items reflect activities that occurred during the year ended December 31, 2013. There were no changes in paid-in capital during the year.

## Required:

a. Prepare an income statement and statement of changes in stockholders' equity for the year ended December 31, 2013, and a balance sheet at December 31, 2013, for Breanna, Inc.

Based on the financial statements that you have prepared for part a, answer the questions in parts $\mathbf{b}-\mathbf{e}$. Provide brief explanations for each of your answers and state any assumptions you believe are necessary to ensure that your answers are correct.
b. What is the company's average income tax rate?
c. What interest rate is charged on long-term debt?
d. What is the par value per share of common stock?
e. What is the company's dividend policy (i.e., what proportion of the company's earnings are used for dividends)?

Prepare an income statement, balance sheet, and statement of changes
in stockholders' equity; analyze results The following information was ob-
tained from the records of Shae, Inc.:

| Merchandise inventory | \$132,000 |
| :---: | :---: |
| Notes payable (long-term) | 150,000 |
| Sales . | 450,000 |
| Buildings and equipment. | 252,000 |
| Selling, general, and administrative expenses | 36,000 |
| Accounts receivable | 60,000 |
| Common stock (21,000 shares) | 105,000 |
| Income tax expense | 42,000 |
| Cash . | 96,000 |
| Retained earnings, 1/1/13 | 64,500 |
| Accrued liabilities. | 9,000 |
| Cost of goods sold | 270,000 |
|  | (continued) |

Problem 2.20
LO 2, 3, 4

| Accumulated depreciation. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 45,000 |
| :--- | :--- | ---: |
| Interest expense . . . . . . . . . . . . | 19,500 |

Except as otherwise indicated, assume that all balance sheet items reflect account balances at December 31, 2013, and that all income statement items reflect activities that occurred during the year ended December 31, 2013. There were no changes in paid-in capital during the year.

## Required:

a. Prepare an income statement and statement of changes in stockholders' equity for the year ended December 31, 2013, and a balance sheet at December 31, 2013, for Shae, Inc.

Based on the financial statements that you have prepared for part a, answer the questions in parts b-e. Provide brief explanations for each of your answers and state any assumptions you believe are necessary to ensure that your answers are correct.
b. What is the company's average income tax rate?
c. What interest rate is charged on long-term debt?
d. What is the par value per share of common stock?
e. What is the company's dividend policy (i.e., what proportion of the company's earnings is used for dividends)?

Problem 2.21 Transaction analysis—nonquantitative Indicate the effect of each of the followLO 2, 3 ing transactions on total assets, total liabilities, and total stockholders' equity. Use + for increase, - for decrease, and (NE) for no effect. The first transaction is provided as an illustration.

|  | Assets | Liabilities | Stockholders' Equity |
| :---: | :---: | :---: | :---: |
| a. Borrowed cash on a bank loan. | + | + | NE |
| b. Paid an account payable |  |  |  |
| c. Sold common stock |  |  |  |
| d. Purchased merchandise inventory on account. |  |  |  |
| e. Declared and paid dividends. |  |  |  |
| f. Collected an account receivable . |  |  |  |
| g. Sold merchandise inventory on account at a profit |  |  |  |
| h. Paid operating expenses in cash |  |  |  |
| i. Repaid principal and interest on a bank loan |  |  |  |

Problem 2.22 Transaction analysis—quantitative; analyze results Stacy-Ann Kelly owns and operates Kelly's Furniture Emporium, Inc. The balance sheet totals for assets, liabilities, and stockholder's equity at August 1, 2013, are as indicated. Described here are several transactions entered into by the company throughout the month of August.

## Required:

a. Indicate the amount and effect $(+$ or -$)$ of each transaction on total assets, total liabilities, and total stockholder's equity, and then compute the new totals for each category. The first transaction is provided as an illustration.

|  | Stockholder's |  |  |
| :---: | :---: | :---: | :---: |
|  | Assets = | Liabilities + | Equity |
| August 1, 2013, totals | \$350,000 | \$275,000 | \$75,000 |
| August 3, borrowed \$12,000 in cash from the bank. | + 12,000 | + 12,000 |  |
| New totals | \$362,000 | \$287,000 | \$75,000 |
| August 7, bought merchandise inventory valued at \$19,000 on account. |  |  |  |
| New totals |  |  |  |
| August 10, paid \$7,000 cash for operating expenses |  |  |  |
| New totals . . . . . . . . . . . . . . . . . . . . |  |  |  |
| August 14, received $\$ 50,000$ in cash from sales of merchandise that had cost $\$ 33,000$. . . . . . |  |  |  |
| New totals . . . . . . . . . . . . . . . . . |  |  |  |
| August 17, paid \$14,000 owed on accounts payable |  |  |  |
| New totals |  |  |  |
| August 21, collected \$17,000 of accounts receivable |  |  |  |
| New totals . . . . |  |  |  |
| August 24, repaid $\$ 10,000$ to the bank plus $\$ 200$ interest. |  |  |  |
| New totals |  |  |  |
| August 29, paid Stacy-Ann Kelly a cash dividend of \$5,000 |  |  |  |
| New totals |  |  |  |

b. What was the amount of net income (or loss) during August? How much were total revenues and total expenses during August?
c. What were the net changes during the month of August in total assets, total liabilities, and total stockholder's equity?
d. Explain to Stacy-Ann Kelly which transactions caused the net change in her stockholder's equity during August.
e. Explain why dividend payments are not an expense, but interest is an expense.
f. Explain why the money borrowed from the bank increased assets but did not increase net income.
g. Explain why paying off accounts payable and collecting accounts receivable do not affect net income.

Complete the balance sheet A partially completed balance sheet for Blue Co., Inc., as of October 31, 2013, is presented on the following page. Where amounts are


## Required:

Using the following data, complete the balance sheet.
a. Blue Co.'s records show that current and former customers owe the firm a total of $\$ 4,000 ; \$ 600$ of this amount has been due for more than a year from two customers who are now bankrupt.
b. The automobile, which is still being used in the business, cost $\$ 18,000$ new; a used car dealer's Blue Book shows that it is now worth $\$ 10,000$. Management estimates that the car has been used for one-third of its total potential use.
c. The land cost Blue Co. $\$ 11,000$; it was recently assessed for real estate tax purposes at a value of $\$ 15,000$.
d. Blue Co.'s president isn't sure of the amount of the note payable, but he does know that he signed a note.
e. Since Blue Co. was formed, net income has totaled $\$ 33,000$, and dividends to stockholders have totaled $\$ 19,500$.

Problem 2.24 Complete the balance sheet using cash flow data Following is a partially LO 2, 3, 5, 6 completed balance sheet for Epsico, Inc., at December 31, 2013, together with comparative data for the year ended December 31, 2012. From the statement of cash flows for the year ended December 31, 2013, you determine the following:

Net income for the year ended December 31, 2013, was $\$ 78$.
Dividends paid during the year ended December 31, 2013, were $\$ 24$.
Cash increased $\$ 24$ during the year ended December 31, 2013.
The cost of new equipment acquired during 2013 was $\$ 45$; no equipment was disposed of.
There were no transactions affecting the land account during 2013, but it is estimated that the fair market value of the land at December 31, 2013, is $\$ 126$.

## Required:

Complete the balance sheet at December 31, 2013.
$\left.\begin{array}{lllllll} & & \begin{array}{c}\text { EPSICO, INC. } \\ \text { Balance Sheets }\end{array} \\ & \text { December 31, 2013 and 2012 }\end{array}\right]$

Understanding income statement relationships-Levi Strauss \& Co.
Problem 2.25
The following selected data are adapted from the November 27, 2011, and November 28, 2010, consolidated balance sheets and income statements for the years then ended for Levi Strauss \& Co. and Subsidiaries. All amounts are reported in thousands.

|  | 2011 | 2010 |
| :---: | :---: | :---: |
| Net revenues. | \$4,761,566 | \$ ? |
| Cost of goods sold | ? | 2,187,726 |
| Gross profit . | 2,292,239 | 2,222,923 |
| Selling, general, and administrative expenses | ? | 1,841,562 |
| Operating income | ? | ? |
| Interest expense and other expenses, net | 133,566 | 145,763 |
| Income before income taxes . | 202,827 | $?$ |
| Income tax expense | $?$ | 86,152 |
| Net income | \$ 135,112 | \$ 149,446 |
| As at November 27 and 28, respectively: |  |  |
| Total assets . | \$3,279,555 | \$ ? |
| Total liabilities. | 3,429,384 | 3,335,077 |
| Total stockholders' deficit | ? | $(199,828)$ |

## Required:

Calculate the missing amounts for each year.

Problem 2.26 Understanding income statement relationships-Apple Inc. Selected data
LO 2, 4 from the September 24, 2011, and September 25, 2010, consolidated balance sheets and income statements for the years then ended for Apple Inc. follow. All amounts are reported in millions.

|  | 2011 | 2010 |
| :---: | :---: | :---: |
| Net sales. | \$108,249 | \$65,225 |
| Cost of sales. | 64,431 | 39,541 |
| Research and development expenses. | 2,429 | 1,782 |
| Selling, general, and administrative expenses | 7,599 | 5,517 |
| Operating income. | ? | ? |
| Other income, net . | ? | 155 |
| Provision for income taxes. | 8,283 | ? |
| Net income . | \$ 25,922 | \$14,013 |

## Required:

a. Calculate the amount of Apple's gross profit for each year. Has gross profit as a percentage of sales changed significantly during the past year?
b. Calculate the amount of Apple's operating income for each year. Has operating income as a percentage of sales changed significantly during the past year?
c. After completing parts $\mathbf{a}$ and $\mathbf{b}$, calculate the other missing amounts for each year.

## connect <br> ACcounting

## All applicable Cases are available with McGraw-Hill's Connect ${ }^{\text {TM }}$ Accounting.

Case 2.27 Prepare a personal balance sheet and projected income statement; LO 2, 4, 6, 7 explain financial statement relationships.

## Required:

a. Prepare a personal balance sheet for yourself as of today. Work at identifying your assets and liabilities; use rough estimates for amounts.
b. Prepare a projected income statement for yourself for the current semester. Work at identifying your revenues and expenses, again using rough estimates for amounts.
c. Explain how your projected income statement for the semester is likely to impact your financial position (i.e., balance sheet) at the end of the semester. (Note: You are not required to prepare a projected balance sheet.)
d. Identify the major sources (and uses) of cash that you are expecting to receive (and spend) this semester. (Note: You are not required to prepare a projected statement of cash flows.)
e. Give three possible explanations why a full-time college student might incur a substantial net loss during the fall semester of her junior year, yet have more cash at the end of the semester than she had at the beginning.

## Answers to Self-Study Material

Matching: 1. s, 2. h, 3. b, 4. aa, 5. u, 6. v, 7. p, 8. f, 9. g, 10. d, 11. t, 12. n, 13. i, 14. w, 15. m

Multiple choice 1. b, 2. b, 3. b, 4. c, 5. a, 6. d, 7. b, 8. d, 9. d, 10. e


[^0]:    ${ }^{1}$ FASB, Statement of Financial Accounting Concepts No. 6, "Elements of Financial Statements" (Stamford, CT, 1985), para. 25. Copyright © by the Financial Accounting Standards Board, High Ridge Park, Stamford, CT 06905, U.S.A. Quoted with permission. Copies of the complete document are available from the FASB.
    ${ }^{2}$ Ibid., para. 35.

