## Appendix

C

## Basic Accounting for Transactions

## A Look at This Appendix

This appendix focuses on the accounting process. We describe transactions and source documents, and we explain the analysis and recording of transactions. The accounting equation, T-account, general ledger, trial balance, and debits and credits are key tools in the accounting process.

## Learning Objectives

## CONCEPTUAL

C1
Explain the steps in processing transactions and the role of source documents. (p. C-2)

Describe an account and its use in recording transactions. (p. C-3)

Describe a ledger and a chart of accounts. (p. C-6) Define debits and credits and explain double-entry accounting. (p. C-7)


## ANALYTICAL

A1
Analyze the impact of transactions on accounts and financial statements. (p. C-11)

Compute the debt ratio and describe its use in analyzing financial condition. (p. C-21)


LP-C

## PROCEDURAL

P1
Record transactions in a journal and post entries to a ledger. (p. C-8) Prepare and explain the use of a trial balance. (p. C-17)

Prepare financial statements from business transactions. (p. C-18)


## Decision Insight

## Sole Sisters

"Every way we can cut costs, we do!"
—susie levitt (on right)

NEW YORK-"High heels were killing our feet, but we didn't want to give them up because we aren't the tallest people out there," insists Susie Levitt, who stands no taller than $5^{\prime} 2^{\prime \prime}$. "So we came up with the idea of emergency footwear." Susie, along with Katie Shea, designed a stylish, foldable slip-on ballet flat with a pouch that is readily tucked into a handbag and pulled out when their feet cry for mercy. The empty pouch then expands into a tote bag to hold their "killer" heels for carrying home. Launched from their college apartment, Susie and Katie invested "less than $\$ 10,000$ " for the cost of their first order of 1,000 pairs, including Website design, to launch CitySlips (www.cityslips.com).

To pursue their business ambitions, Susie and Katie took business courses, including accounting. They learned and applied recordkeeping processes, transaction analysis, inventory accounting, and financial statement reporting. We were careful to get a handle on our financial situation, says Katie. Today, the two are running a profitable business and have a reliable accounting system to help them make good business decisions.

We had to account for product costs, design expenses, supplier payments, patent fees, and other expenses, says Susie. At the same time, the two have grown sales and expanded their product line. "It was all done online," says Susie. "We became nocturnal!"

The two insist that it is crucial to track and account for all revenues and expenses, and what is invested in the business. They maintain that success requires proper accounting for and analysis of the financial side. Susie also suggests that young entrepreneurs "network with your professors and other staff members. They have years of experience and can often help you, or introduce you to people who can help you, with your business."

The bigger message of our company, says Susie, is promoting comfort and confidence for women. Adds Katie, "Regardless of what your business is, the story of starting while in college, differentiates you from the beginning!"
[Sources: CitySlips Website, January 2011; Entrepreneur, December 2009; Examiner.com, December 2009; CNN.com, August 2009; Daily News, May 2009]

## Appendix Preview

Financial statements report on the financial performance and condition of an organization. Knowledge of their preparation, organization, and analysis is important. A main goal of this appendix is to illustrate how transactions are recorded, how
they are reflected in financial statements, and how they impact analysis of financial statements. Debits and credits are introduced and identified as a tool in helping analyze and process transactions.


## ANAIYZING AND RECORDING PROCESS

## EXHIBIT C. 1

The Analyzing and Recording Process

Analyze each transaction and event from source documents

The accounting process identifies business transactions and events, analyzes and records their effects, and summarizes and presents information in reports and financial statements. These reports and statements are used for making investing, lending, and other business decisions. The steps in the accounting process that focus on analyzing and recording transactions and events are shown in Exhibit C.1.


Explain the steps in processing transactions and the role of source documents.

Business transactions and events are the starting points. Relying on source documents, the transactions and events are analyzed using the accounting equation to understand how they affect company performance and financial position. These effects are recorded in accounting records, informally referred to as the accounting books, or simply the books. Additional steps such as posting and then preparing a trial balance help summarize and classify the effects of transactions and events. Ultimately, the accounting process provides information in useful reports or financial statements to decision makers.

## Source Documents

Source documents identify and describe transactions and events entering the accounting process. They are the sources of accounting information and can be in either hard copy or electronic form. Examples are sales tickets, checks, purchase orders, bills from suppliers, employee
earnings records, and bank statements. To illustrate, when an item is purchased on credit, the seller usually prepares at least two copies of a sales invoice. One copy is given to the buyer. Another copy, often sent electronically, results in an entry in the seller's information system to record the sale. Sellers use invoices for recording sales and for control; buyers use them for recording purchases and for monitoring purchasing activity. Many cash registers record information for each sale on a tape or electronic file locked inside the register. This record can be used as a source document for recording sales in the accounting records. Source documents, especially if obtained from outside the organization, provide objective and reliable evidence about transactions and events and their amounts.

## Decision Ethics

Answer - p. C-26
Cashier Your manager requires that you, as cashier, immediately enter each sale. Recently, lunch hour traffic has increased and the assistant manager asks you to avoid delays by taking customers' cash and making change without entering sales. The assistant manager says she will add up cash and enter sales after lunch. She says that, in this way, the register will always match the cash amount when the manager arrives at three o'clock. What do you do?

## The Account and Its Analysis

An account is a record of increases and decreases in a specific asset, liability, equity, revenue, or expense item. Information from an account is analyzed, summarized, and presented in reports and financial statements. The general ledger, or simply ledger, is a record containing all accounts used by a company. The ledger is often in electronic form. While most companies' ledgers contain similar accounts, a company often uses one or more unique accounts because of its type of operations. As shown in Exhibit C.2, accounts are classified into three general categories based on the accounting equation: asset, liability, or equity.


Asset Accounts Assets are resources owned or controlled by a company, and those resources have expected future benefits. Most accounting systems include (at a minimum) separate accounts for the assets described here.

A Cash account reflects a company's cash balance. All increases and decreases in cash are recorded in the Cash account. It includes money and any medium of exchange that a bank accepts for deposit (coins, checks, money orders, and checking account balances).

Accounts receivable are held by a seller and refer to promises of payment from customers to sellers. These transactions are often called credit sales or sales on account (or on credit). Accounts receivable are increased by credit sales and are decreased by customer payments. A company needs a separate record for each customer, but for now, we use the simpler practice of recording all increases and decreases in receivables in a single account called Accounts Receivable.

A note receivable, or promissory note, is a written promise of another entity to pay a definite sum of money on a specified future date to the holder of the note. A company holding a promissory note signed by another entity has an asset that is recorded in a Note (or Notes) Receivable account.

Prepaid accounts (also called prepaid expenses) are assets that represent prepayments of future expenses (not current expenses). When the expenses are later incurred, the amounts in prepaid accounts are transferred to expense accounts. Common examples of prepaid accounts include prepaid insurance, prepaid rent, and prepaid services (such as club memberships). Prepaid accounts expire with the passage of time (such as with rent) or through use (such as with prepaid meal tickets). When financial statements are prepared, prepaid accounts are adjusted so that (1) all expired and used prepaid accounts are recorded as regular expenses and (2) all unexpired and unused prepaid accounts are recorded as assets (reflecting future use in

Point: To ensure that all sales are rung up on the register, most sellers require customers to have their receipts to exchange or return purchased items.

EXHIBIT C. 2<br>Accounts Organized by the Accounting Equation

Point: Customers and others who owe a company are called its debtors.

Point: A college parking fee is a prepaid account from the student's standpoint. At the beginning of the term, it represents an asset that entitles a student to park on or near campus. The benefits of the parking fee expire as the term progresses. At term-end, prepaid parking (asset) equals zero as it has been entirely recorded as parking expense.

Point: Prepaid accounts that apply to current and future periods are assets. These assets are adjusted at the end of each period to reflect only those amounts that have not yet expired, and to record as expenses those amounts that have expired.

Point: Some assets are described as intangible because they do not have physical existence or their benefits are highly uncertain. A recent balance sheet for Coca-Cola Company shows nearly $\$$ I billion in intangible assets.

## Point: Accounts payable are also called trade payables.

future periods). To illustrate, when an insurance fee, called a premium, is paid in advance, the cost is typically recorded in the asset account Prepaid Insurance. Over time, the expiring portion of the insurance cost is removed from this asset account and reported in expenses on the income statement. Any unexpired portion remains in Prepaid Insurance and is reported on the balance sheet as an asset. (An exception exists for prepaid accounts that will expire or be used before the end of the current accounting period when financial statements are prepared. In this case, the prepayments can be recorded immediately as expenses.)

Supplies are assets until they are used. When they are used up, their costs are reported as expenses. The costs of unused supplies are recorded in a Supplies asset account. Supplies are often grouped by purpose-for example, office supplies and store supplies. Office supplies include stationery, paper, toner, and pens. Store supplies include packaging materials, plastic and paper bags, gift boxes and cartons, and cleaning materials. The costs of these unused supplies can be recorded in an Office Supplies or a Store Supplies asset account. When supplies are used, their costs are transferred from the asset accounts to expense accounts.

Equipment is an asset. When equipment is used and gets worn down, its cost is gradually reported as an expense (called depreciation). Equipment is often grouped by its purpose-for example, office equipment and store equipment. Office equipment includes computers, printers, desks, chairs, and shelves. Costs incurred for these items are recorded in an Office Equipment asset account. The Store Equipment account includes the costs of assets used in a store, such as counters, showcases, ladders, hoists, and cash registers.

Buildings such as stores, offices, warehouses, and factories are assets because they provide expected future benefits to those who control or own them. Their costs are recorded in a Buildings asset account. When several buildings are owned, separate accounts are sometimes kept for each of them.

The cost of land owned by a business is recorded in a Land account. The cost of buildings located on the land is separately recorded in one or more building accounts.

## Decision Insight

Women Entrepreneurs The Center for Women's Business Research reports that women-owned businesses, such as CitySlips, are growing and that they:

- Total approximately 11 million and employ nearly 20 million workers.
- Generate $\$ 2.5$ trillion in annual sales and tend to embrace technology.
- Are philanthropic-70\% of owners volunteer at least once per month.
- Are more likely funded by individual investors (73\%) than venture firms (15\%).


Liability Accounts Liabilities are claims (by creditors) against assets, which means they are obligations to transfer assets or provide products or services to others. Creditors are individuals and organizations that have rights to receive payments from a company. If a company fails to pay its obligations, the law gives creditors a right to force the sale of that company's assets to obtain the money to meet creditors' claims. When assets are sold under these conditions, creditors are paid first, but only up to the amount of their claims. Any remaining money, the residual, goes to the owners of the company. Creditors often use a balance sheet to help decide whether to loan money to a company. A loan is less risky if the borrower's liabilities are small in comparison to assets because this means there are more resources than claims on resources. Common liability accounts are described here.

Accounts payable refer to oral or implied promises to pay later, which usually arise from purchases of merchandise. Payables can also arise from purchases of supplies, equipment, and services. Accounting systems keep separate records about each creditor.

A note payable refers to a formal promise, usually denoted by the signing of a promissory note, to pay a future amount. It is recorded in either a short-term Note Payable account or a long-term Note Payable account, depending on when it must be repaid.

Unearned revenue refers to a liability that is settled in the future when a company delivers its products or services. When customers pay in advance for products or services (before revenue is earned), the revenue recognition principle requires that the seller consider this payment as
unearned revenue. Examples of unearned revenue include magazine subscriptions collected in advance by a publisher, sales of gift certificates by stores, and season ticket sales by sports teams. The seller would record these in liability accounts such as Unearned Subscriptions, Unearned Store Sales, and Unearned Ticket Revenue. When products and services are later delivered, the earned portion of the unearned revenue is transferred to revenue accounts such as Subscription Fees, Store Sales, and Ticket Sales. ${ }^{1}$

Accrued liabilities are amounts owed that are not yet paid. Examples are wages payable, taxes payable, and interest payable. These are often recorded in separate liability accounts by the same title. If they are not large in amount, one or more ledger accounts can be added and reported as a single amount on the balance sheet. (Financial statements often have amounts reported that are a summation of several ledger accounts.)

## Decision Insight

Revenue Spread The New Orleans Saints have Unearned Revenues of about $\$ 60$ million in advance ticket sales. When the team plays its home games, it settles this liability to its ticket holders and then transfers the amount earned to Ticket Revenues.


Equity Accounts The owner's claim on a company's assets is called equity, or stockholders' equity, or shareholders' equity. Equity is the owners' residual interest in the assets of a business after deducting liabilities. Equity is impacted by four types of accounts: common stock, dividends, revenues, and expenses. We show this visually in Exhibit C. 3 by expanding the accounting equation. (The accounts for dividends, revenues, and expenses are reflected in the retained earnings account, and that account is reported in the balance sheet.)


When an owner invests in a company in exchange for common stock, the invested amount is recorded in an account titled Common Stock. Any further owner investments are recorded in this account. When the company pays any cash dividends, it decreases both the company's assets and its total equity. Dividends are not expenses of the business. They are simply the opposite of owner investments. A Dividends account is used in recording asset distributions to stockholders (owners).

Revenues and expenses also impact equity. Examples of revenue accounts are Sales, Commissions Earned, Professional Fees Earned, Rent Revenue, and Interest Revenue. Revenues increase equity and result from products and services provided to customers. Examples of expense accounts are Advertising Expense, Store Supplies Expense, Office Salaries Expense, Office Supplies Expense, Rent Expense, Utilities Expense, and Insurance Expense. Expenses decrease equity and result from assets and services used in a company's operations. The variety of revenues and expenses can be seen by looking at the chart of accounts that follows the index at the

[^0]Point: If a subscription is canceled, the publisher is expected to refund the unused portion to the subscriber.

Point: Equity is also called net assets.

## EXHIBIT C. 3

Expanded Accounting Equation

Point: The Dividends account is sometimes referred to as a contra equity account because it reduces the normal balance of equity.

Point: The withdrawal of assets by the owners of a corporation is called a dividend.
back of this book. (Different companies sometimes use different account titles than those in this book's chart of accounts. For example, some might use Interest Revenue instead of Interest Earned, or Rental Expense instead of Rent Expense. It is important only that an account title describe the item it represents.)

## Decision Insight

Sporting Accounts The Los Angeles Lakers and the other NBA teams have the following major revenue and expense accounts:

Revenues
Basketball ticket sales TV \& radio broadcast fees Advertising revenues Basketball playoff receipts

## Expenses

Team salaries
Game costs
NBA franchise costs
Promotional costs


## ANALYZING AND PROCESSING TRANSACTIONS

 chart of accounts.
## EXHIBIT C. 4

Partial Chart of Accounts for FastForward

This section explains several tools and processes that comprise an accounting system. These include a ledger, T -account, debits and credits, double-entry accounting, journalizing, and posting.

## Ledger and Chart of Accounts

The collection of all accounts and their balances for an information system is called a ledger (or general ledger). If accounts are in files on a hard drive, the sum of those files is the ledger. If the accounts are pages in a file, that file is the ledger. A company's size and diversity of operations affect the number of accounts needed. A small company can get by with as few as 20 or 30 accounts; a large company can require several thousand. The chart of accounts is a list of all ledger accounts and includes an identification number assigned to each account. A small business might use the following numbering system for its accounts:


These numbers provide a three-digit code that is useful in recordkeeping. In this case, the first digit assigned to asset accounts is a 1, the first digit assigned to liability accounts is a 2 , and so on. The second and third digits relate to the accounts' subcategories. Exhibit C. 4 shows a partial chart of accounts for FastForward. (Please review the more complete chart of accounts that follows the index at the back of this book.)

| Acct. No. | Account Name |
| :---: | :--- |
| 101 | Cash |
| 106 | Accounts receivable |
| 126 | Supplies |
| 128 | Prepaid insurance |
| 167 | Equipment |
| 201 | Accounts payable |


| Acct. No. | Account Name |
| :---: | :--- |
| 236 | Unearned consulting <br> revenue |
| 307 | Common stock |
| 318 | Retained earnings |
| 319 | Dividends |
| 403 | Consulting revenue |


| Acct. No. | Account Name |
| :---: | :--- |
| 406 | Rental revenue |
| 622 | Salaries expense |
| 637 | Insurance expense |
| 640 | Rent expense |
| 652 | Supplies expense |
| 690 | Utilities expense |

## Debits and Credits

A T-account represents a ledger account and is a tool used to understand the effects of one or more transactions. Its name comes from its shape like the letter T . The layout of a T-account, shown in Exhibit C.5, is (1) the account title on top, (2) a left, or debit side, and (3) a right, or credit, side.

The left side of an account is called the debit side, often abbreviated Dr . The right side is called the credit side, abbreviated $C r .^{2}$ To enter amounts on the left side of an account is

| Account Title |  |
| :---: | :---: |
| (Left side) | (Right side) |
| Debit | Credit | to debit the account. To enter amounts on the right side is to credit the account. Do not make the error of thinking that the terms debit and credit mean increase or decrease. Whether a debit or a credit is an increase or decrease depends on the account. For an account where a debit is an increase, the credit is a decrease; for an account where a debit is a decrease, the credit is an increase. The difference between total debits and total credits for an account, including any beginning balance, is the account balance. When the sum of debits exceeds the sum of credits, the account has a debit balance. It has a credit balance when the sum of credits exceeds the sum of debits. When the sum of debits equals the sum of credits, the account has a zero balance.

## Double-Entry Accounting

Double-entry accounting requires that for each transaction:

- At least two accounts are involved, with at least one debit and one credit.
- The total amount debited must equal the total amount credited.
- The accounting equation must not be violated.

This means the sum of the debits for all entries must equal the sum of the credits for all entries, and the sum of debit account balances in the ledger must equal the sum of credit account balances.

The system for recording debits and credits follows from the usual accounting equation-see Exhibit C.6. Two points are important here. First, like any simple mathematical relation, net increases or decreases on one side have equal net effects on the other side. For example, a net increase in assets must be accompanied by an identical net increase on the liabilities and equity

side. Recall that some transactions affect only one side of the equation, meaning that two or more accounts on one side are affected, but their net effect on this one side is zero. Second, the left side is the normal balance side for assets, and the right side is the normal balance side for liabilities and equity. This matches their layout in the accounting equation where assets are on the left side of this equation, and liabilities and equity are on the right.

Recall that equity increases from revenues and stock issuances, and it decreases from expenses and dividends. These important equity relations are conveyed by expanding the accounting equation to include debits and credits in double-entry form as shown in Exhibit C.7.

Increases (credits) to common stock and revenues increase equity; increases (debits) to dividends and expenses decrease equity. The normal balance of each account (asset, liability, common stock, dividends, revenue, or expense) refers to the left or right (debit or credit) side where

[^1]Define debits and credits and explain double-entry accounting.

## EXHIBIT C. 5

The T-Account

Point: Think of debit and credit as accounting directions for left and right.


## EXHIBIT C. 6

Debits and Credits in the Accounting Equation

Point: Debits and credits do not mean favorable or unfavorable. A debit to an asset increases it, as does a debit to an expense. A credit to a liability increases it, as does a credit to a revenue.

## EXHIBIT C. 7

Debit and Credit Effects for Component Accounts

increases are recorded. Understanding these diagrams and rules is required to prepare, analyze, and interpret financial statements.

The T-account for FastForward's Cash account reflecting its first 11 transactions (described later in this Appendix), is shown in Exhibit C.8. The total increases in its Cash account are $\$ 36,100$, the total decreases are $\$ 31,300$, and the account's debit balance is $\$ 4,800$.

| Cash |  |  |  |
| :--- | ---: | :--- | ---: |
| Receive investment by owner for stock | 30,000 | Purchase of supplies | 2,500 |
| Consulting services revenue earned | 4,200 | Purchase of equipment | 26,000 |
| Collection of account receivable | 1,900 | Payment of rent | 1,000 |
|  |  | Payment of salary | 700 |
|  |  | Payment of account payable | 900 |
|  |  | Payment of cash dividend | 200 |
| Balance | $\mathbf{4 , 8 0 0}$ |  |  |
|  |  |  |  |

## Quick Check

Answers - p. C-27

1. Identify examples of accounting source documents.
2. Explain the importance of source documents.
3. Identify each of the following as either an asset, a liability, or equity: (a) Prepaid Rent, (b) Unearned Fees, (c) Building, (d) Wages Payable, and (e) Office Supplies.
4. What is an account? What is a ledger?
5. What determines the number and types of accounts a company uses?
6. Does debit always mean increase and credit always mean decrease?
7. Describe a chart of accounts.

## Journalizing and Posting Transactions

Processing transactions is a crucial part of accounting. The four usual steps of this process are depicted in Exhibit C.9. Steps 1 and 2-involving transaction analysis and the accounting equation-were introduced in prior sections. This section extends that discussion and focuses on steps 3 and 4 of the accounting process. Step 3 is to record each transaction chronologically in a journal. A journal gives a complete record of each transaction in one place. It also shows debits and credits for each transaction. The process of recording transactions in a journal is called journalizing. Step 4 is to transfer (or post) entries from the journal to the ledger. The process of transferring journal entry information to the ledger is called posting.

Journalizing Transactions The process of journalizing transactions requires an understanding of a journal. While companies can use various journals, every company uses a general journal. It can be used to record any transaction and includes the following information about each transaction: (a) date of transaction, (b) titles of affected accounts, (c) dollar amount of each

Step 1: Identify transactions and source documents.


Step 2: Analyze transactions using the accounting equation.


## EXHIBIT C. 9

Steps in Processing Transactions


Step 4: Post entry to ledger.

debit and credit, and (d) explanation of the transaction. Exhibit C. 10 shows how the first two transactions of FastForward are recorded in a general journal. This process is similar for manual and computerized systems. Computerized journals are often designed to look like a manual journal page, and also include error-checking routines that ensure debits equal credits for each entry. Shortcuts allow recordkeepers to select account names and numbers from pull-down menus.


To record entries in a general journal, apply these steps; refer to the entries in Exhibit C. 10 when reviewing these steps. (1) Date the transaction: Enter the year at the top of the first column and the month and day on the first line of each journal entry. (2) Enter titles of accounts debited and then enter amounts in the Debit column on the same line. Account titles are taken from the chart of accounts and are aligned with the left margin of the Account Titles and Explanation column. (3) Enter titles of accounts credited and then enter amounts in the Credit column on the same line. Account titles are from the chart of accounts and are indented from the left margin of the Account Titles and Explanation column to distinguish them from debited accounts. (4) Enter a brief explanation of the transaction on the line below the entry (it often references a source document). This explanation is indented about half as far as the credited account titles to avoid confusing it with accounts, and it is italicized.

## IFRS

IFRS requires that companies report the following four basic financial statements with explanatory notes:

- Balance sheet
- Statement of changes in equity (or statement of recognized revenue and expense)
- Income statement
- Statement of cash flows

IFRS does not prescribe specific formats; and comparative information is required for the preceding period only.

EXHIBIT C. 10
Partial General Journal for FastForward

Point: There are no exact rules for writing journal entry explanations. An explanation should be short yet describe why an entry is made.

## EXHIBIT C. 11

Cash Account in Balance Column Format

Point: Explanations are typically included in ledger accounts only for unusual transactions or events.

A blank line is left between each journal entry for clarity. When a transaction is first recorded, the posting reference (PR) column is left blank (in a manual system). Later, when posting entries to the ledger, the identification numbers of the individual ledger accounts are entered in the PR column.

Balance Column Account T -accounts are simple and direct means to show how the accounting process works. However, actual accounting systems need more structure and therefore use balance column accounts, such as that in Exhibit C.11.

| Cash |  |  | Account No. 101 |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Date | Explanation | PR | Debit | Credit | Balance |
| 2011 |  |  |  |  |  |
| Dec. 1 |  | $G 1$ | 30,000 |  | 30,000 |
| Dec. 2 |  | $G 1$ |  | 2,500 | 27,500 |
| Dec. 3 |  | $G 1$ |  | 26,000 | 1,500 |
| Dec. 10 |  | $G 1$ | 4,200 |  | 5,700 |

The balance column account format is similar to a T-account in having columns for debits and credits. It is different in including transaction date and explanation columns. It also has a column with the balance of the account after each entry is recorded. To illustrate, FastForward's Cash account in Exhibit C. 11 is debited on December 1 for the $\$ 30,000$ owner investment, yielding a $\$ 30,000$ debit balance. The account is credited on December 2 for $\$ 2,500$, yielding a $\$ 27,500$ debit balance. On December 3, it is credited again, this time for $\$ 26,000$, and its debit balance is reduced to $\$ 1,500$. The Cash account is debited for $\$ 4,200$ on December 10, and its debit balance increases to $\$ 5,700$; and so on.

The heading of the Balance column does not show whether it is a debit or credit balance. Instead, an account is assumed to have a normal balance. Unusual events can sometimes temporarily

Key: (1) Identify debit account in Ledger: enter date, journal page, amount, and balance.


[^2]Point: The fundamental concepts of a manual (pencil-and-paper) system are identical to those of a computerized information system.
give an account an abnormal balance. An abnormal balance refers to a balance on the side where decreases are recorded. For example, a customer might mistakenly overpay a bill. This gives that customer's account receivable an abnormal (credit) balance. An abnormal balance is often identified by circling it or by entering it in red or some other unusual color. A zero balance for an account is usually shown by writing zeros or a dash in the Balance column to avoid confusion between a zero balance and one omitted in error.

Posting Journal Entries Step 4 of processing transactions is to post journal entries to ledger accounts (see Exhibit C.9). To ensure that the ledger is up-to-date, entries are posted as soon as possible. This might be daily, weekly, or when time permits. All entries must be posted to the ledger before financial statements are prepared to ensure that account balances are up-todate. When entries are posted to the ledger, the debits in journal entries are transferred into ledger accounts as debits, and credits are transferred into ledger accounts as credits. Exhibit C. 12 shows the four steps to post a journal entry. First, identify the ledger account that is debited in the entry; then, in the ledger, enter the entry date, the journal and page in its PR column, the debit amount, and the new balance of the ledger account. (The letter $G$ shows it came from the General Journal.) Second, enter the ledger account number in the PR column of the journal. Steps 3 and 4 repeat the first two steps for credit entries and amounts. The posting process creates a link between the ledger and the journal entry. This link is a useful crossreference for tracing an amount from one record to another.

## Analyzing Transactions - An Illustration

We return to the activities of FastForward to show how double-entry accounting is useful in analyzing and processing transactions. Analysis of each transaction follows the four steps of Exhibit C.9.
Step 1 Identify the transaction and any source documents.
Step 2 Analyze the transaction using the accounting equation.
Step 3 Record the transaction in journal entry form applying double-entry accounting.
Step 4 Post the entry (for simplicity, we use T-accounts to represent ledger accounts).
Study each transaction thoroughly before proceeding to the next. The first 16 transactions of FastForward are the focus of this section.

## I. Receive Investment by Owner



## 2. Purchase Supplies for Cash

1 Identify FastForward pays \$2,500 cash for supplies.
2 Analyze

| Assets | $=$ Liabilities + Equity |  |
| :---: | :---: | :---: | :---: |
| Cash | Supplies <br> $-2,500$ <br> $+2,500$ | $=0+0$ |

Changes the composition of assets but not the total.
3 RECORD

Point: Computerized systems often provide a code beside a balance such as dr. or cr. to identify its balance. Posting is automatic and immediate with accounting software.

Point: A journal is often referred to as the book of original entry. The ledger is referred to as the book of final entry because financial statements are prepared from it. transactions on accounts and financial statements.

FASकrward

## 3. Purchase Equipment for Cash

1 Identify
2 Analyze

| Assets |
| :---: |$=$ Liabilities + Equity

Changes the composition of assets but not the total.
3 ReCord
(3) Equipment

Cash


4 Post


## 4. Purchase Supplies on Credit

1 Identify
FastForward purchases $\$ 7,100$ of supplies on credit from a supplier.
2 Analyze

| Assets | Liabilities + Equity |
| :--- | :--- |
| Supplies | Accounts |
|  |  |
| $+7,100$ | Payable |
| $+7,100+0$ |  |

3 Record


| (4) | $\begin{array}{l}\text { Supplies } \\ \text { Accounts Payable }\end{array}$ | $\begin{array}{l}126 \\ 201\end{array}$ | 7,100 |  |
| :--- | :--- | :--- | :--- | :--- |
| 100 |  |  |  |  |

## 5. Provide Services for Cash

Point: Salary usually refers to compensation for an employee who receives a fixed amount for a given time period, whereas wages usually refers to compensation based on time worked.

1 Identify
FastForward provides consulting services and immediately collects $\$ 4,200$ cash.

2 ANALYZE

| Assets | $=$ Liabilities + Equity |
| :--- | :--- |
| Cash |  |
| $+4,200$ | $=\quad 0$ | | Consulting |
| :---: |
| Revenue |
| $+4,200$ |

3 Record

6. Payment of Expense in Cash

1 IDENTIFY
FastForward pays \$1,000 cash for December rent.
2 ANALYZE

| Assets | $=$ Liabilities + Equity |
| :--- | :--- |
| Cash | Rent <br> Expense |
| $-1,000$ | $=0$ |

3 Record

4 Post


## 7. Payment of Expense in Cash

1 Identify FastForward pays \$700 cash for employee salary.
2 Analyze


4 Post

|  | Salaries Expense |  | 622 |
| :---: | :---: | :---: | :---: |
| (7) | 700 |  |  |
|  | Cash |  | 101 |
| (1) | 30,000 | (2) | 2,500 |
| (5) | 4,200 | (3) | 26,000 |
|  |  | (6) | 1,000 |
|  |  | (7) | 700 |

8. Provide Consulting and Rental Services on Credit

1
1 Identify FastForward provides consulting services of $\$ 1,600$ and rents its test facilities for $\$ 300$. The customer is billed $\$ 1,900$ for these services.

| 2 Analyze | Assets | $=$ | Liabilities | $+$ | Equity |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Accounts |  |  |  | Consulting | Rental |
|  | Receivable |  |  |  | Revenue | Revenue |
|  | +1,900 | $=$ | 0 |  | +1,600 | +300 |

3 Record


Point: Transaction 8 is a compound journal entry, which affects three or more accounts.

## 9. Receipt of Cash on Account

1 Identify FastForward receives $\$ 1,900$ cash from the client billed in transaction 8.

2
ANALYZE

3 RECORD


I 0. Partial Payment of Accounts Payable
1 Identify FastForward pays CalTech Supply $\$ 900$ cash toward the payable of transaction 4.

2 AnAlyze

| Assets | $=$ | Liabilities | + | Equity |
| :--- | :--- | :--- | :--- | :--- |
| Cash |  | Accounts Payable |  |  |
| -900 | $=$ | -900 | + | 0 |

3 RECORD

| 4 Post |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Accounts Payable |  | 201 |
| $\rightarrow(10)$ | 900 | (4) | 7,100 |
|  | Cash |  | 101 |
| (1) | 30,000 | (2) | 2,500 |
| (5) | 4,200 | (3) | 26,000 |
| (9) | 1,900 | (6) | 1,000 |
|  |  | (7) | 700 |
|  |  | (10) | 900 |

## II. Payment of Cash Dividend



Point: The revenue recognition principle requires revenue to be recognized when earned, which is when the company provides products and services to a customer. This is not necessarily the same time that the customer pays. A customer can pay before or after products or services are provided.

Point: Luca Pacioli, a I5th-century monk, is considered a pioneer in accounting and the first to devise double-entry accounting.

## I 2. Receipt of Cash for Future Services

Identify FastForward receives $\$ 3,000$ cash in advance of providing consulting services to a customer.2 ANALYZE

| Assets | $=$ | Liabilities | + |
| :--- | :---: | :---: | :---: |
| Equity |  |  |  |
| Cash | Unearned |  |  |
| $+3,000$ | $=$Consulting Revenue <br> $+3,000$ | + | 0 |

Accepting \$3,000 cash obligates FastForward to perform future services and is a liability. No revenue is earned until services are provided.

3 Record

| 4 Post |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Cash |  | 101 |
| (1) | 30,000 | (2) | 2,500 |
| (5) | 4,200 | (3) | 26,000 |
| (9) | 1,900 | (6) | 1,000 |
| $\rightarrow$ (12) | 3,000 | (7) | 700 |
|  |  | (10) | 900 |
|  |  | (II) | 200 |



## I3. Pay Cash for Future Insurance Coverage

1 Identify FastForward pays $\$ 2,400$ cash (insurance premium) for a 24 -month insurance policy. Coverage begins on December 1 .

2 ANALYZE
Assets

| Prepaid |
| :---: |
| CashInsurance <br> Ciabilities |
| $-2,400+2,400$ |$+0$ Equity

Changes the composition of assets from cash to prepaid insurance. Expense is incurred as insurance coverage expires.

3 Record

4 Post

| 4 Post |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Prepaid Insurance |  |  |  | $\mathbf{1 2 8}$ |
| $(13)$ 2,400   <br> Cash    <br> (1) 30,000 $(2)$ 2,500 <br> $(5)$ 4,200 $(3)$ 26,000 <br> $(9)$ 1,900 $(6)$ 1,000 <br> $(12)$ 3,000 $(7)$ 700 <br>   $(10)$ 900 <br>   $(11)$ 200 <br>   $(13)$ 2,400 |  |  |  |  |

## 14. Purchase Supplies for Cash

1 Identify FastForward pays $\$ 120$ cash for supplies.
2 Analyze

| Assets | $=$ | Liabilities | + | Equity |
| :---: | :---: | :---: | :---: | :---: |
| Cash | Supplies |  |  |  |
| -120 | +120 | $=$ | 0 | + |

4 Post

|  | Supplies |  | 126 |
| :---: | :---: | :---: | :---: |
| (2) | 2,500 |  |  |
| (4) | 7,100 |  |  |
| $\rightarrow(14)$ | 120 |  |  |
|  | Cash |  | 101 |
| (1) | 30,000 | (2) | 2,500 |
| (5) | 4,200 | (3) | 26,000 |
| (9) | 1,900 | (6) | 1,000 |
| (12) | 3,000 | (7) | 700 |
|  |  | (10) | 900 |
|  |  | (11) | 200 |
|  |  | (13) | 2,400 |
|  |  | (14) | 120 |

## 15. Payment of Expense in Cash



## 16. Payment of Expense in Cash

1 Identify FastForward pays $\$ 700$ cash in employee salary for work performed in the latter part of December.

2 ANALYZE


| 4 Post |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Salaries Expense |  | 622 |
| (7) | 700 |  |  |
| $\longrightarrow(16)$ | 700 |  |  |
|  | Cash |  | 101 |
| (1) | 30,000 | (2) | 2,500 |
| (5) | 4,200 | (3) | 26,000 |
| (9) | 1,900 | (6) | 1,000 |
| (12) | 3,000 | (7) | 700 |
|  |  | (10) | 900 |
|  |  | (11) | 200 |
|  |  | (13) | 2,400 |
|  |  | (14) | 120 |
|  |  | (15) | 230 |
|  |  | (16) | $\begin{gathered} 700 \\ A \end{gathered}$ |

## Accounting Equation Analysis

Exhibit C. 13 shows the ledger accounts (in T-account form) of FastForward after all 16 transactions are recorded and posted and the balances computed. The accounts are grouped into three major columns corresponding to the accounting equation: assets, liabilities, and equity. Note several important points. First, as with each transaction, the totals for the three columns must obey the accounting equation. Specifically, assets equal $\$ 42,470(\$ 4,350+\$ 0+\$ 9,720+$ $\$ 2,400+\$ 26,000)$; liabilities equal $\$ 9,200(\$ 6,200+\$ 3,000)$; and equity equals $\$ 33,270$ $(\$ 30,000-\$ 200+\$ 5,800+\$ 300-\$ 1,400-\$ 1,000-\$ 230)$. These numbers prove the accounting equation: Assets of $\$ 42,470=$ Liabilities of $\$ 9,200+$ Equity of $\$ 33,270$. Second, the common stock, dividends, revenue, and expense accounts reflect the transactions that change equity. The latter three account categories underlie the statement of retained earnings. Third, the revenue and expense account balances will be summarized and reported in the income statement. Fourth, increases and decreases in the cash account make up the elements reported in the statement of cash flows.

| Debit and Credit Rules |  |  |
| :--- | :--- | :--- |
| Accounts | Increase <br> (normal bal.) | Decrease |
| Asset $\ldots \ldots \ldots \ldots$ | Debit | Credit |
| Liability $\ldots \ldots \ldots$ | Credit | Debit |
| Common stock $\ldots \ldots$ | Credit | Debit |
| Dividends $\ldots \ldots \ldots$ | Debit | Credit |
| Revenue $\ldots \ldots \ldots$ | Credit | Debit |
| Expense $\ldots \ldots \ldots$. | Debit | Credit |

Point: Technology does not provide the judgment required to analyze most business transactions. Analysis requires the expertise of skilled and ethical professionals.

EXHIBIT C. 13
Ledger for FastForward (in T-Account Form)


Quick Check
Answers - p. C-27
8. What types of transactions increase equity? What types decrease equity?
9. Why are accounting systems called double-entry?
10. For each transaction, double-entry accounting requires which of the following? (a) Debits to asset accounts must create credits to liability or equity accounts, (b) a debit to a liability account must create a credit to an asset account, or (c) total debits must equal total credits.
11. An owner invests $\$ 15,000$ cash along with equipment having a market value of $\$ 23,000$ in a company in exchange for common stock. Prepare the necessary journal entry.
12. Explain what a compound journal entry is.
13. Why are posting reference numbers entered in the journal when entries are posted to ledger accounts?

## TRIAL BALANCE

Double-entry accounting requires the sum of debit account balances to equal the sum of credit account balances. A trial balance is used to confirm this. A trial balance is a list of accounts and their balances at a point in time. Account balances are reported in their appropriate debit or credit columns of a trial balance. A trial balance can be used to confirm this and to follow up on any abnormal or unusual balances. Exhibit C. 14 shows the trial balance for FastForward after its 16 entries have been posted to the ledger. (This is an unadjusted trial balance.)


## Preparing a Trial Balance

Preparing a trial balance involves three steps:

1. List each account title and its amount (from ledger) in the trial balance. If an account has a zero balance, list it with a zero in its normal balance column (or omit it entirely).
2. Compute the total of debit balances and the total of credit balances.
3. Verify (prove) total debit balances equal total credit balances.

The total of debit balances equals the total of credit balances for the trial balance in Exhibit C.14. Equality of these two totals does not guarantee that no errors were made. For example, the column totals still will be equal when a debit or credit of a correct amount is made to a wrong account. Another error that does not cause unequal column totals occurs when equal debits and credits of an incorrect amount are entered.

Searching for and Correcting Errors If the trial balance does not balance (when its columns are not equal), the error (or errors) must be found and corrected. An efficient

EXHIBIT C. 14
Trial Balance (Unadjusted)

Point: The ordering of accounts in a trial balance typically follows their identification number from the chart of accounts. use of a trial balance.

Point: A trial balance is not a financial statement but a mechanism for checking equality of debits and credits in the ledger. Financial statements do not have debit and credit columns.

Example: If a credit to Unearned Revenue was incorrectly posted from the journal as a credit to the Revenue ledger account, would the ledger still balance? Would the financial statements be correct? Answers: The ledger would balance, but liabilities would be understated, equity would be overstated, and income would be overstated (all because of overstated revenues).

Point: The IRS requires companies to keep records that can be audited. statements from business transactions.

## EXHIBIT C. 15

Links between Financial Statements across Time
way to search for an error is to check the journalizing, posting, and trial balance preparation in reverse order. Step 1 is to verify that the trial balance columns are correctly added. If step 1 fails to find the error, step 2 is to verify that account balances are accurately entered from the ledger. Step 3 is to see whether a debit (or credit) balance is mistakenly listed in the trial balance as a credit (or debit). A clue to this error is when the difference between total debits and total credits equals twice the amount of the incorrect account balance. If the error is still undiscovered, Step 4 is to recompute each account balance in the ledger. Step 5 is to verify that each journal entry is properly posted. Step 6 is to verify that the original journal entry has equal debits and credits. At this point, the errors should be uncovered. ${ }^{3}$

If an error in a journal entry is discovered before the error is posted, it can be corrected in a manual system by drawing a line through the incorrect information. The correct information is written above it to create a record of change for the auditor. Many computerized systems allow the operator to replace the incorrect information directly.

If an error in a journal entry is not discovered until after it is posted, we do not strike through both erroneous entries in the journal and ledger. Instead, we correct this error by creating a correcting entry that removes the amount from the wrong account and records it to the correct account. As an example, suppose a $\$ 100$ purchase of supplies is journalized with an incorrect debit to Equipment, and then this incorrect entry is posted to the ledger. The Supplies ledger account balance is understated by $\$ 100$, and the Equipment ledger account balance is overstated by $\$ 100$. The correcting entry is: debit Supplies and credit Equipment (both for \$100).

## Using a Trial Balance to Prepare Financial Statements

This section shows how to prepare financial statements from the trial balance in Exhibit C. 14 and from information on the December transactions of FastForward. These statements are more precisely called unadjusted statements because we need to make some further accounting adjustments.


How financial statements are linked in time is illustrated in Exhibit C.15. A balance sheet reports on an organization's financial position at a point in time. The income statement, statement of retained earnings, and statement of cash flows report on financial performance over a period of time. The three statements in the middle column of Exhibit C. 15 link balance sheets from the beginning to the end of a reporting period. They explain how financial position changes from one point to another.

Preparers and users (including regulatory agencies) determine the length of the reporting period. A one-year, or

[^3]annual, reporting period is common, as are semiannual, quarterly, and monthly periods. The one-year reporting period is known as the accounting, or fiscal, year. Businesses whose accounting year begins on January 1 and ends on December 31 are known as calendar-year companies. Many companies choose a fiscal year ending on a date other than December 31. Research In Motion is a noncalendar-year company as reflected in the headings of its February 27 year-end financial statements in Appendix A near the end of the book.

Income Statement An income statement reports the revenues earned less the expenses incurred by a business over a period of time. FastForward's income statement for December is shown at the top of Exhibit C.16. Information about revenues and expenses is conveniently taken from the trial balance in Exhibit C.14. Net income of $\$ 3,470$ is reported at the bottom of the statement. Owner investments and dividends are not part of income.

Statement of Retained Earnings The statement of retained earnings reports information about how retained earnings changes over the reporting period. FastForward's statement of retained earnings is the second report in Exhibit C.16. It shows the $\$ 3,470$ of net income, the $\$ 200$ dividend, and the $\$ 3,270$ end-of-period balance. (The beginning balance in the statement of


Point: A statement's heading lists the 3 W's: Who-name of organization, What-name of statement, Whenstatement's point in time or period of time.

## EXHIBIT C. 16

Financial Statements and Their Links

Point: Arrow lines show how the statements are linked.

Point: To foot a column of numbers is to add them.

Point: An income statement is also called an earnings statement, a statement of operations, or a P\&L (profit and loss) statement. A balance sheet is also called a statement of financial position.

Point: While revenues increase equity, and expenses decrease equity, the amounts are not reported in detail in the statement of retained earnings. Instead, their effects are reflected through net income.

Point: Knowing how financial statements are prepared improves our analysis of them.
off the mark com bymathors
 ThanGs For ONS MOMENT? I CANTKESPUP!
retained earnings is rarely zero; an exception is for the first period of operations. The beginning retained earnings balance in January 2012 is $\$ 3,270$, which is December's ending balance.)

Balance Sheet The balance sheet reports the financial position of a company at a point in time, usually at the end of a month, quarter, or year. FastForward's balance sheet is the third report in Exhibit C.16. This statement refers to financial condition at the close of business on December 31. The left side of the balance sheet lists its assets: cash, supplies, prepaid insurance, and equipment. The upper right side of the balance sheet shows that it owes $\$ 6,200$ to creditors and $\$ 3,000$ in services to customers who paid in advance. The equity section shows an ending balance of $\$ 33,270$. Note the link between the ending balance of the statement of retained earnings and the retained earnings balance. (Recall that this presentation of the balance sheet is called the account form: assets on the left and liabilities and equity on the right. Another presentation is the report form: assets on top, followed by liabilities and then equity. Either presentation is acceptable.)

## Decision Maker

Entrepreneur You open a wholesale business selling entertainment equipment to retail outlets. You find that most of your customers demand to buy on credit. How can you use the balance sheets of these customers to decide which ones to extend credit to?

Presentation Issues Dollar signs are not used in journals and ledgers. They do appear in financial statements and other reports such as trial balances. The usual practice is to put dollar signs beside only the first and last numbers in a column. Research In Motion's financial statements in Appendix A show this. When amounts are entered in a journal, ledger, or trial balance, commas are optional to indicate thousands, millions, and so forth. However, commas are always used in financial statements. Companies also commonly round amounts in reports to the nearest dollar, or even to a higher level. Research In Motion is typical of many companies in that it rounds its financial statement amounts to the nearest thousand or million. This decision is based on the perceived impact of rounding for users' business decisions.

## Ouick Check

Answers - p. C-27
14. Where are dollar signs typically entered in financial statements?
15. If a $\$ 4,000$ debit to Equipment in a journal entry is incorrectly posted to the ledger as a $\$ 4,000$ credit, and the ledger account has a resulting debit balance of $\$ 20,000$, what is the effect of this error on the Trial Balance column totals?
16. Describe the link between the income statement and the statement of retained earnings.
17. Explain the link between the balance sheet and the statement of retained earnings.
18. Define and describe revenues and expenses.
19. Define and describe assets, liabilities, and equity.

Financial accounting according to U.S. GAAP is similar, but not identical, to IFRS. This section discusses differences in analyzing and recording transactions, and with the preparation of financial statements.

Analyzing and Recording Transactions Both U.S. GAAP and IFRS include broad and similar guidance for financial accounting. As the FASB and IASB work toward a common conceptual framework over the next few years, even those differences will fade. Further, both U.S. GAAP and IFRS apply transaction
analysis and recording as shown in this appendix-using the same debit and credit system and accrual accounting. Although some variations exist in revenue and expense recognition and other accounting principles, all of the transactions in this appendix are accounted for identically under these two systems.

Financial Statements Both U.S. GAAP and IFRS prepare the same four basic financial statements. A few differences within each statement do exist and we will discuss those throughout the book. For example, both U.S. GAAP and IFRS require balance sheets to separate current items from noncurrent items. However, while U.S. GAAP balance sheets report current items first, IFRS balance sheets normally (but are not required to) present noncurrent items first, and equity before liabilities. To illustrate, a condensed version of Nokia's balance sheet follows (numbers using euros in millions).

## NOKIA

|  | NOKIA <br> Balance Sheet (in EUR millions) <br> December 3I, 2009 |  |  |
| :---: | :---: | :---: | :---: |
| Assets |  | Equity and Liab |  |
| Noncurrent assets | 12,125 | Total equity | 14,749 |
| Current assets | 23,613 | Noncurrent liabilities | 5,801 |
|  |  | Current liabilities | 15,188 |
| Total assets | 35,738 | Total equity and liabilities | 35,738 |

Accounting Controls and Assurance Accounting systems depend on control procedures that assure the proper principles were applied in processing accounting information. The passage of SOX legislation strengthened U.S. control procedures in recent years. However, global standards for control are diverse and so are enforcement activities. Consequently, while global accounting standards are converging, their application in different countries can yield different outcomes depending on the quality of their auditing standards and enforcement.

## Decision Insight

Accounting Control Recording valid transactions, and not recording fraudulent transactions, enhances the quality of financial statements. The graph here shows the percentage of employees in information technology that report observing specific types of misconduct within the past year.
[Source: KPMG 2009]

An important business objective is gathering information to help assess a company's risk of failing to pay its debts. Companies finance their assets with either liabilities or equity. A company that finances a relatively large portion of its assets with liabilities is said to have a high degree of financial leverage. Higher financial leverage involves greater risk because liabilities must be repaid and often require regular interest payments (equity financing does not). The risk that a company might not be able to meet such required payments is higher if it has more liabilities (is more highly leveraged). One way to assess the risk associated with a company's use of liabilities is to compute the debt ratio as in Exhibit C.17.

$$
\text { Debt ratio }=\frac{\text { Total liabilities }}{\text { Total assets }}
$$ and describe its use in analyzing financial condition.

Point: Compare the equity amount to the liability amount to assess the extent of owner versus nonowner financing.

EXHIBIT C. 18
Computation and Analysis of Debt Ratio

To see how to apply the debt ratio, let's look at Skechers's liabilities and assets. The company designs, markets, and sells footwear for men, women, and children under the Skechers brand. Exhibit C. 18 computes and reports its debt ratio at the end of each year from 2005 to 2009.

| $\$$ in millions | 2009 | 2008 | 2007 | 2006 | 2005 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Total liabilities $\ldots \ldots \ldots \ldots$ | $\$ 246$ | $\$ 204$ | $\$ 201$ | $\$ 288$ | $\$ 238$ |
| Total assets $\ldots \ldots \ldots \ldots$. | $\$ 996$ | $\$ . \ldots 76$ | $\$ 828$ | $\$ 737$ | $\$ 582$ |
| Debt ratio $\ldots \ldots \ldots \ldots$. | 0.25 | 0.23 | 0.24 | 0.39 | 0.41 |
| Industry debt ratio $\ldots \ldots \ldots$ | 0.5 I | 0.50 | 0.46 | 0.48 | 0.47 |



Skechers's debt ratio ranges from a low of 0.23 to a high of 0.41 -also, see graph in margin. Its ratio is lower, and has been generally declining, compared with the industry ratio. This analysis implies a low risk from its financial leverage. Is financial leverage good or bad for Skechers? To answer that question we need to compare the company's return on the borrowed money to the rate it is paying creditors. If the company's return is higher, it is successfully borrowing money to make more money. A company's success with making money from borrowed money can quickly turn unprofitable if its own return drops below the rate it is paying creditors.

## Decision Maker

Answer - p. C-26
Investor You consider buying stock in Converse. As part of your analysis, you compute its debt ratio for 2009, 2010, and 2011 as: $0.35,0.74$, and 0.94 , respectively. Based on the debt ratio, is Converse a lowrisk investment? Has the risk of buying Converse stock changed over this period? (The industry debt ratio averages 0.40.)

## DEMONSTRATION PROBLEM

After several months of planning, Jasmine Worthy started a haircutting business called Expressions. The following events occurred during its first month.
a. On August 1, Worthy invested $\$ 3,000$ cash and $\$ 15,000$ of equipment in Expressions in exchange for common stock.
b. On August 2, Expressions paid $\$ 600$ cash for furniture for the shop.
c. On August 3, Expressions paid $\$ 500$ cash to rent space in a strip mall for August.
d. On August 4, it purchased $\$ 1,200$ of equipment on credit for the shop (using a long-term note payable).
e. On August 5, Expressions opened for business. Cash received from haircutting services in the first week and a half of business (ended August 15) was $\$ 825$.
f. On August 15 , it provided $\$ 100$ of haircutting services on account.
g. On August 17, it received a $\$ 100$ check for services previously rendered on account.
h. On August 17, it paid $\$ 125$ to an assistant for hours worked during the grand opening.
i. Cash received from services provided during the second half of August was $\$ 930$.
j. On August 31, it paid a $\$ 400$ installment toward principal on the note payable entered into on August 4.
k. On August 31, it paid $\$ 900$ cash for dividends.

## Required

1. Open the following ledger accounts in balance column format (account numbers are in parentheses): Cash (101); Accounts Receivable (102); Furniture (161); Store Equipment (165); Note Payable (240); Common Stock (307); Dividends (319); Haircutting Services Revenue (403); Wages Expense (623); and Rent Expense (640). Prepare general journal entries for the transactions.
2. Post the journal entries from (1) to the ledger accounts.
3. Prepare a trial balance as of August 31.
4. Prepare an income statement for August.
5. Prepare a statement of retained earnings for August.
6. Prepare a balance sheet as of August 31 .
7. Determine the debt ratio as of August 31.

## Extended Analysis

8. In the coming months, Expressions will experience a greater variety of business transactions. Identify which accounts are debited and which are credited for the following transactions. (Hint: We must use some accounts not opened in part 1.)
a. Purchase supplies with cash.
b. Pay cash for future insurance coverage.
c. Receive cash for services to be provided in the future.
d. Purchase supplies on account.

## PLANNING THE SOLUTION

- Analyze each transaction and use the debit and credit rules to prepare a journal entry for each.
- Post each debit and each credit from journal entries to their ledger accounts and cross-reference each amount in the posting reference (PR) columns of the journal and ledger.
- Calculate each account balance and list the accounts with their balances on a trial balance.
- Verify that total debits in the trial balance equal total credits.
- To prepare the income statement, identify revenues and expenses. List those items on the statement, compute the difference, and label the result as net income or net loss.
- Use information in the ledger to prepare the statement of retained earnings.
- Use information in the ledger to prepare the balance sheet.
- Calculate the debt ratio by dividing total liabilities by total assets.
- Analyze the future transactions to identify the accounts affected and apply debit and credit rules.


## SOLUTION TO DEMONSTRATION PROBLEM

1. General journal entries:

| 6 General Journal Entry |  | $\square \square$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Date | Account Titles and Explanation | PR | Debit | Credit |
| Aug. 1 | Cash | 101 | 3,000 |  |
|  | Store Equipment | 165 | 15,000 |  |
|  | Common Stock | 307 |  | 18,000 |
|  | Owner's investment for stock. |  |  |  |
| 2 | Furniture | 161 | 600 |  |
|  | Cash | 101 |  | 600 |
| 3 | Purchased furniture for cash. |  |  |  |
|  | Rent Expense | 640 | 500 |  |
|  | Cash | 101 |  | 500 |
| 4 | Paid rent for August. |  |  |  |
|  | Store Equipment | 165 | 1,200 |  |
|  | Note Payable | 240 |  | 1,200 |
| 15 | Purchased additional equipment on credit. |  |  |  |
|  | Cash | 101 | 825 |  |
|  | Haircutting Services Revenue | 403 |  | 825 |
|  | Cash receipts from first half of August. |  |  |  |

[^4][continued from previous page]

| 15 | Accounts Receivable | 102 | 100 | 100 |
| :---: | :---: | :---: | :---: | :---: |
|  | Haircutting Services Revenue | 403 |  |  |
|  | To record revenue for services provided on account. |  |  |  |
| 17 | Cash | 101 | 100 |  |
|  | Accounts Receivable | 102 |  | 100 |
|  | To record cash received as payment on account. |  |  |  |
| 17 | Wages Expense | 623 | 125 |  |
|  | Cash | 101 |  | 125 |
|  | Paid wages to assistant. |  |  |  |
| 31 | Cash | 101 | 930 |  |
|  | Haircutting Services Revenue | 403 |  | 930 |
|  | Cash receipts from second half of August. |  |  |  |
| 31 | Note Payable | 240 | 400 |  |
|  | Cash | 101 |  | 400 |
|  | Paid an installment on the note payable. |  |  |  |
| 31 | Dividends | 319 | 900 |  |
|  | Cash | 101 |  | 900 |
|  | Paid cash dividend. |  |  |  |

2. Post journal entries from part 1 to the ledger accounts:

| General Ledger |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash |  |  | Account No. 101 |  | Note Payable |  |  | Account No. 240 |  |
| Date | PR | Debit | Credit | Balance | Date | PR | Debit | Credit | Balance |
| Aug. | GI GI GI | 3,000 | $\begin{aligned} & 600 \\ & 500 \end{aligned}$ | $\begin{aligned} & 3,000 \\ & 2,400 \end{aligned}$ | Aug. 4 | GI GI | 400 | 1,200 | $\begin{array}{r} 1,200 \\ 800 \end{array}$ |
|  | GI | 825 | $500$ | $\begin{aligned} & 1,900 \\ & 2,725 \end{aligned}$ | Date |  | Debit | Account No. 307 |  |
|  | GI | 100 | 125 | 2,825 |  | PR |  | Credit | Balance |
|  | GI |  |  | 2,700 | Aug. I | GI |  | 18,000 | 18,000 |
|  | GI | 930 |  | 3,630 |  |  |  |  |  |
|  | GI |  | 400 | $\begin{aligned} & 3,230 \\ & 2,330 \end{aligned}$ | Dividends |  |  | Account No. 319 |  |
|  | GI |  | 900 |  | Date | PR | Debit | Credit | Balance |
| Accounts Receivable Account No. 102 |  |  |  |  | Aug. 31 | GI | 900 |  | 900 |
| Date | PR | Debit | Credit | Balance | Haircutting Services Revenue Account No. 403 |  |  |  |  |
| Aug. 15 | $\begin{aligned} & \mathrm{GI} \\ & \mathrm{GI} \end{aligned}$ | 100 | 100  <br> 100 0 |  | Date | PR | Debit | Credit | Balance |
| Furniture Account No. 161 |  |  |  |  | $\begin{array}{r} \text { Aug. } 15 \\ 15 \\ 31 \end{array}$ | $\begin{aligned} & \mathrm{GI} \\ & \mathrm{GI} \\ & \mathrm{GI} \end{aligned}$ |  | $\begin{aligned} & 825 \\ & 100 \\ & 930 \end{aligned}$ | $\begin{array}{r} 825 \\ 925 \\ \mathrm{I}, 855 \end{array}$ |
| Date | PR | Debit | Credit | Balance |  |  |  |  |  |
| Aug. 2 | GI | 600 |  | 600 | Wages Expense |  |  | Account No. 623 |  |
| Store Equipment Account No. 165 |  |  |  |  | Date | PR | Debit | Credit | Balance |
| Date | PR | Debit | Credit | Balance | Aug. 17 | GI | 125 |  | 125 |
| Aug. $\begin{aligned} & \text { I } \\ & 4\end{aligned}$ | GI | $\begin{array}{r} 15,000 \\ 1,200 \end{array}$ |  | $\begin{aligned} & 15,000 \\ & 16,200 \end{aligned}$ | Rent Expense |  |  | Account No. 640 |  |
|  |  |  |  |  | Date | PR | Debit | Credit | Balance |
|  |  |  |  |  | Aug. 3 | GI | 500 |  | 500 |

3. Prepare a trial balance from the ledger:

4. 

| EXPRESSIONS Income Statement For Month Ended August 31 |  |
| :---: | :---: |
| Revenues |  |
| Haircutting services revenue | \$1,855 |
| Operating expenses |  |
| Rent expense | \$500 |
| Wages expense . . . . . . | 125 |
| Total operating expenses | 625 |
| Net income | \$1,230 |

5. 

$\left.\begin{array}{|c|cr|}\hline \text { EXPRESSIONS } \\ \text { Statement of Retained Earnings } \\ \text { For Month Ended August 31 }\end{array}\right]$
6.

|  | EXPRESSIONS Balance Sheet August 31 |  |  |
| :---: | :---: | :---: | :---: |
| Assets |  | Liabilities |  |
| Cash | \$ 2,330 | Note payable | \$ 800 |
| Furniture | 600 | Equity |  |
| Store equipment | 16,200 | Common stock. . . . | 18,000 |
|  |  | Retained earnings | 330 |
|  |  | Total equity . | 18,330 |
| Total assets | \$19,130 | Total liabilities and equity | \$19,130 |

# 7. Debt ratio $=\frac{\text { Total liabilities }}{\text { Total assets }}=\frac{\$ 800}{\$ 19,130}=\underline{\underline{\mathbf{4 . 1 8} \%}}$ <br> 8a. Supplies debited <br> Cash credited <br> 8b. Prepaid Insurance debited <br> Cash credited <br> 8c. Cash debited <br> Unearned Services Revenue credited <br> 8d. Supplies debited <br> Accounts Payable credited 

## Summary

C1Explain the steps in processing transactions and the role of source documents. The accounting process identifies business transactions and events, analyzes and records their effects, and summarizes and prepares information useful in making decisions. Transactions and events are the starting points in the accounting process. Source documents identify and describe transactions and events. Examples are sales tickets, checks, purchase orders, bills, and bank statements. Source documents provide objective and reliable evidence, making information more useful. The effects of transactions and events are recorded in journals. Posting along with a trial balance helps summarize and classify these effects.

## C2 Describe an account and its use in recording transactions.

An account is a detailed record of increases and decreases in a specific asset, liability, equity, revenue, or expense. Information from accounts is analyzed, summarized, and presented in reports and financial statements for decision makers.
C3 Describe a ledger and a chart of accounts. The ledger (or general ledger) is a record containing all accounts used by a company and their balances. It is referred to as the books. The chart of accounts is a list of all accounts and usually includes an identification number assigned to each account.

## C4

 Define debits and credits and explain double-entry accounting. Debit refers to left, and credit refers to right. Debits increase assets, expenses, and dividends while credits decrease them. Credits increase liabilities, common stock, and revenues; debits decrease them. Double-entry accounting means each transaction affects at least two accounts and has at least one debit and one credit. The system for recording debits and credits follows from the accounting equation. The left side of an account is the normalbalance for assets, dividends, and expenses, and the right side is the normal balance for liabilities, common stock, and revenues.

## A1

Analyze the impact of transactions on accounts and financial statements. We analyze transactions using concepts of double-entry accounting. This analysis is performed by determining a transaction's effects on accounts. These effects are recorded in journals and posted to ledgers.
A2 Compute the debt ratio and describe its use in analyzing financial condition. A company's debt ratio is computed as total liabilities divided by total assets. It reveals how much of the assets are financed by creditor (nonowner) financing. The higher this ratio, the more risk a company faces because liabilities must be repaid at specific dates.
P1 Record transactions in a journal and post entries to a ledger. Transactions are recorded in a journal. Each entry in a journal is posted to the accounts in the ledger. This provides information that is used to produce financial statements. Balance column accounts are widely used and include columns for debits, credits, and the account balance.

P2 Prepare and explain the use of a trial balance. A trial balance is a list of accounts from the ledger showing their debit or credit balances in separate columns. The trial balance is a summary of the ledger's contents and is useful in preparing financial statements and in revealing recordkeeping errors.
P3 Prepare financial statements from business transactions. The balance sheet, the statement of retained earnings, the income statement, and the statement of cash flows use data from the trial balance (and other financial statements) for their preparation.

Guidance Answers to Decision Maker and Decision Ethics

Cashier The advantages to the process proposed by the assistant manager include improved customer service, fewer delays, and less work for you. However, you should have serious concerns about internal control and the potential for fraud. In particular, the assistant manager could steal cash and simply enter fewer sales to match the remaining cash. You should reject her suggestion without the manager's approval. Moreover, you should have an ethical concern about the assistant manager's suggestion to ignore store policy.

Entrepreneur We can use the accounting equation (Assets $=$ Liabilities + Equity) to help us identify risky customers to whom we
would likely not want to extend credit. A balance sheet provides amounts for each of these key components. The lower a customer's equity is relative to liabilities, the less likely you would extend credit. A low equity means the business has little value that does not already have creditor claims to it.

Investor The debt ratio suggests the stock of Converse is of higher risk than normal and that this risk is rising. The average industry ratio of 0.40 further supports this conclusion. The 2011 debt ratio for Converse is twice the industry norm. Also, a debt ratio approaching 1.0 indicates little to no equity.

## Guidance Answers to Quick Checks

1. Examples of source documents are sales tickets, checks, purchase orders, charges to customers, bills from suppliers, employee earnings records, and bank statements.
2. Source documents serve many purposes, including recordkeeping and internal control. Source documents, especially if obtained from outside the organization, provide objective and reliable evidence about transactions and their amounts.
3. $\frac{\text { Assets }}{\mathrm{a}, \mathrm{c}, \mathrm{e}} \quad \frac{\text { Liabilities }}{\mathrm{b}, \mathrm{d}} \quad \frac{\text { Equity }}{-}$
4. An account is a record in an accounting system that records and stores the increases and decreases in a specific asset, liability, equity, revenue, or expense. The ledger is a collection of all the accounts of a company.
5. A company's size and diversity affect the number of accounts in its accounting system. The types of accounts depend on information the company needs to both effectively operate and report its activities in financial statements.
6. No. Debit and credit both can mean increase or decrease. The particular meaning in a circumstance depends on the type of account. For example, a debit increases the balance of asset, dividends, and expense accounts, but it decreases the balance of liability, common stock, and revenue accounts.
7. A chart of accounts is a list of all of a company's accounts and their identification numbers.
8. Equity is increased by revenues and by owner investments. Equity is decreased by expenses and dividends.
9. The name double-entry is used because all transactions affect at least two accounts. There must be at least one debit in one account and at least one credit in another account.
10. The answer is (c).
11. 

| Cash | 15,000 | 38,000 |
| :---: | :---: | :---: |
| Equipment | 23,000 |  |
| Common Stock |  |  |
| Investment by owner of cash and equipment. |  |  |

12. A compound journal entry affects three or more accounts.
13. Posting reference numbers are entered in the journal when posting to the ledger as a cross-reference that allows the recordkeeper or auditor to trace debits and credits from one record to another.
14. At a minimum, dollar signs are placed beside the first and last numbers in a column. It is also common to place dollar signs beside any amount that appears after a ruled line to indicate that an addition or subtraction has occurred.
15. The Equipment account balance is incorrectly reported at $\$ 20,000-$ it should be $\$ 28,000$. The effect of this error understates the trial balance's Debit column total by $\$ 8,000$. This results in an $\$ 8,000$ difference between the column totals.
16. An income statement reports a company's revenues and expenses along with the resulting net income or loss. A statement of retained earnings reports changes in retained earnings, including that from net income or loss. Both statements report transactions occurring over a period of time.
17. The balance sheet describes a company's financial position (assets, liabilities, and equity) at a point in time. The retained earnings amount in the balance sheet is obtained from the statement of retained earnings.
18. Revenues are inflows of assets in exchange for products or services provided to customers as part of the main operations of a business. Expenses are outflows or the using up of assets that result from providing products or services to customers.
19. Assets are the resources a business owns or controls that carry expected future benefits. Liabilities are the obligations of a business, representing the claims of others against the assets of a business. Equity reflects the owner's claims on the assets of the business after deducting liabilities.

## Key Terms

Account (p. C-3)
Account balance (p. C-7)
Balance column account (p. C-10)
Chart of accounts (p. C-6)
Common stock (p. C-5)
Credit (p. C-7)
Creditors (p. C-4)
Debit (p. C-7)

Debtors (p. C-3)
Debt ratio (p. C-21)
Dividends (p. C-5)
Double-entry accounting (p. C-7)
General journal (p. C-8)
General ledger (p. C-3)
Journal (p. C-8)
Journalizing (p. C-8)

Ledger (p. C-3)
Posting (p. C-8)
Posting reference (PR) column (p. C-10)
Source documents (p. C-2)
T-account (p. C-7)
Trial balance (p. C-17)
Unearned revenue (p. C-4)

1. Amalia Company received its utility bill for the current period of $\$ 700$ and immediately paid it. Its journal entry to record this transaction includes a
a. Credit to Utility Expense for $\$ 700$.
b. Debit to Utility Expense for $\$ 700$.
c. Debit to Accounts Payable for $\$ 700$.
d. Debit to Cash for $\$ 700$.
e. Credit to Common Stock for $\$ 700$.
2. On May 1, Mattingly Lawn Service collected $\$ 2,500$ cash from a customer in advance of five months of lawn service. Mattingly's journal entry to record this transaction includes a
a. Credit to Unearned Lawn Service Fees for $\$ 2,500$.
b. Debit to Lawn Service Fees Earned for $\$ 2,500$.
c. Credit to Cash for $\$ 2,500$.
d. Debit to Unearned Lawn Service Fees for $\$ 2,500$.
e. Credit to Common Stock for $\$ 2,500$.
3. Liang Shue contributed $\$ 250,000$ cash and land worth $\$ 500,000$ to open his new business, Shue Consulting Corporation. Which of the following journal entries does Shue Consulting make to record this transaction?

d. Common Stock
750,000
Cash . . . . . . . . . . . . . . . 250,000
Land. 500,000
4. A trial balance prepared at year-end shows total credits exceed total debits by $\$ 765$. This discrepancy could have been caused by
a. An error in the general journal where a $\$ 765$ increase in Accounts Payable was recorded as a $\$ 765$ decrease in Accounts Payable.
b. The ledger balance for Accounts Payable of $\$ 7,650$ being entered in the trial balance as $\$ 765$.
c. A general journal error where a $\$ 765$ increase in Accounts Receivable was recorded as a $\$ 765$ increase in Cash.
d. The ledger balance of $\$ 850$ in Accounts Receivable was entered in the trial balance as $\$ 85$.
e. An error in recording a $\$ 765$ increase in Cash as a credit.
5. Bonaventure Company has total assets of $\$ 1,000,000$, liabilities of $\$ 400,000$, and equity of $\$ 600,000$. What is its debt ratio (rounded to a whole percent)?
a. $250 \%$
b. $167 \%$
c. $67 \%$
d. $150 \%$
e. $40 \%$

Icon denotes assignments that involve decision making.

## Discussion Ouestions

1. Provide the names of two (a) asset accounts, (b) liability accounts, and (c) equity accounts.
2. What is the difference between a note payable and an account payable?
3. Discuss the steps in processing business transactions.
4. What kinds of transactions can be recorded in a general journal?
5. Are debits or credits typically listed first in general journal entries? Are the debits or the credits indented?
6. If assets are valuable resources and asset accounts have debit balances, why do expense accounts also have debit balances?
7. Should a transaction be recorded first in a journal or the ledger? Why?
8. Why does the recordkeeper prepare a trial balance?
9. If an incorrect amount is journalized and posted to the accounts, how should the error be corrected?
10. Identify the four financial statements of a business.
11. What information is reported in an income statement?
12. Why does the user of an income statement need to know the time period that it covers?
13. What information is reported in a balance sheet?
14. Define (a) assets, (b) liabilities, (c) equity, and (d) net assets.
15. Which financial statement is sometimes called the statement of financial position?
16. Review the Research In Motion balance sheet in Appendix A. Identify three accounts on its balance

RIM sheet that carry debit balances and three accounts on its balance sheet that carry credit balances.
17. Review the Apple balance sheet in Appendix A. Iden- Apple tify an asset with the word receivable in its account title and a liability with the word payable in its account title.
18. Locate Palm's income statement in Appendix A. Palm What is the title of its revenue account?
19. Refer to Nokia's balance sheet in Appendix A. What does Nokia title its current asset referring to merchandise available for sale?

## : connect

Identify the financial statement(s) where each of the following items appears. Use I for income statement, E for statement of retained earnings, and $B$ for balance sheet.
a. Accounts payable
d. Office supplies
g. Office equipment
b. Cash
e. Prepaid insurance
f. Revenue
h. Cash dividends
c. Rent expense

## QUICK STUDY

OS C-1
Identifying financial statement items
C2 P3

Identify the items from the following list that are likely to serve as source documents.
a. Bank statement
d. Trial balance
g. Company revenue account
b. Sales ticket
e. Telephone bill
f. Invoice from supplier
h. Balance sheet
c. Income statement
i. Prepaid rent

OS C-2
Identifying source documents C1

Identify whether a debit or credit yields the indicated change for each of the following accounts.
a. To increase Store Equipment
f. To decrease Unearned Revenue
b. To increase Land
g. To decrease Prepaid Insurance
c. To decrease Cash
d. To increase Utilities Expense
h. To increase Notes Payable
e. To increase Fees Earned
i. To decrease Accounts Receivable
j. To increase Common Stock

## OS C-3

Analyzing debit or credit by account


Identify the normal balance (debit or credit) for each of the following accounts.
a. Equipment
d. Office Supplies
g. Prepaid Insurance
b. Wages Expense
e. Dividends
h. Wages Payable
f. Accounts Receivable
i. Common Stock

## OS C-4

Identifying normal balance C4

Indicate whether a debit or credit decreases the normal balance of each of the following accounts.
a. Land
e. Salaries Expense
i. Interest Revenue
b. Service Revenue
f. Common Stock
j. Dividends
c. Interest Payable
g. Prepaid Insurance
k. Unearned Revenue
d. Accounts Receivable
h. Buildings
I. Accounts Payable

## OS C-5

Linking debit or credit with normal balance C4

Prepare journal entries for each of the following selected transactions.
a. On January 15, Kolby Anderson opens a remodeling company called Fancy Kitchens by investing $\$ 75,000$ cash along with equipment having a $\$ 30,000$ value in exchange for common stock.
b. On January 21, Fancy Kitchens purchases office supplies on credit for $\$ 650$.
c. On January 25, Fancy Kitchens receives $\$ 8,700$ cash for performing remodeling services.
d. On January 30, Fancy Kitchens receives $\$ 4,000$ cash in advance of providing remodeling services to a customer.

## OS C-6

Preparing journal entries
P1

A trial balance has total debits of $\$ 20,000$ and total credits of $\$ 24,500$. Which one of the following errors would create this imbalance? Explain.
a. A $\$ 2,250$ debit posting to Accounts Receivable was posted mistakenly to Cash.
b. A $\$ 4,500$ debit posting to Equipment was posted mistakenly to Supplies.
c. An entry debiting Cash and crediting Accounts Payable for $\$ 4,500$ was mistakenly not posted.
d. A $\$ 2,250$ credit to Revenue in a journal entry is incorrectly posted to the ledger as a $\$ 2,250$ debit, leaving the Revenue account with a $\$ 6,300$ credit balance.
e. A $\$ 4,500$ debit to Rent Expense in a journal entry is incorrectly posted to the ledger as a $\$ 4,500$ credit, leaving the Rent Expense account with a $\$ 750$ debit balance.
f. A $\$ 2,250$ debit to Utilities Expense in a journal entry is incorrectly posted to the ledger as a $\$ 2,250$ credit, leaving the Utilities Expense account with a $\$ 3,000$ debit balance.

## OS C-7

Identifying a posting error
P2

## OS C-8

Classifying accounts in financial statements P3

## OS C-9

International accounting standards
C4


Indicate the financial statement on which each of the following items appears. Use I for income statement, E for statement of retained earnings, and B for balance sheet.
a. Buildings
e. Rental Revenue
i. Accounts Receivable
b. Interest Expense
f. Insurance Expense
j. Salaries Expense
c. Dividends
g. Services Revenue
k. Equipment
d. Office Supplies
h. Interest Payable
I. Prepaid Insurance

Answer each of the following questions related to international accounting standards.
a. What type of entry system is applied when accounting follows IFRS?
b. Identify the number and usual titles of the financial statements prepared under IFRS.
c. How do differences in accounting controls and enforcement impact accounting reports prepared across different countries?

## EXERCISES

Exercise C-1
Steps in analyzing and recording transactions C1

Order the following steps in the accounting process that focus on analyzing and recording transactions.
a. Record relevant transactions in a journal.
b. Prepare and analyze the trial balance.
c. Analyze each transaction from source documents.
d. Post journal information to ledger accounts.

## Exercise C-2

Identifying and classifying accounts

C2

Enter the number for the item that best completes each of the descriptions below.

1. Account
2. Asset
3. Equity
4. Three
5. Liability
a. Common stock and dividends are examples of $\qquad$ accounts.
b. Accounts payable, unearned revenue, and note payable are examples of $\qquad$ accounts.
c. Accounts receivable, prepaid accounts, supplies, and land are examples of $\qquad$ accounts.
d. Accounts are arranged into $\qquad$ general categories
e. An $\qquad$ is a record of increases and decreases in a specific asset, liability, equity, revenue, or expense item.

## Exercise C-3

Identifying a ledger and chart of accounts
C3

Enter the number for the item that best completes each of the descriptions below.

1. General ledger 2. Chart
a. The ___ is a record containing all accounts used by a company.
b. A ___ of accounts is a list of all accounts a company uses.

## Exercise C-4

Identifying type and normal balances of accounts C4

For each of the following (1) identify the type of account as an asset, liability, equity, revenue, or expense, (2) identify the normal balance of the account, and (3) enter debit (Dr.) or credit (Cr.) to identify the kind of entry that would increase the account balance.
a. Fees Earned
e. Cash
i. Accounts Receivable
b. Equipment
f. Legal Expense
j. Dividends
c. Notes Payable
g. Prepaid Insurance
k. License Fee Revenue
d. Common Stock
h. Land
l. Unearned Revenue

## Exercise C-5

Analyzing effects of transactions on accounts


Taylor Co. bills a client $\$ 48,000$ for services provided and agrees to accept the following three items in full payment: (1) $\$ 7,500$ cash, (2) computer equipment worth $\$ 75,000$, and (3) to assume responsibility for a $\$ 34,500$ note payable related to the computer equipment. The entry Taylor makes to record this transaction includes which one or more of the following?
a. $\$ 34,500$ increase in a liability account
b. $\$ 7,500$ increase in the Cash account
c. $\$ 7,500$ increase in a revenue account
d. $\$ 48,000$ increase in an asset account
e. $\$ 48,000$ increase in a revenue account
f. $\$ 34,500$ increase in an equity account

Use the information in each of the following separate cases to calculate the unknown amount.
a. During October, Shandra Company had $\$ 97,500$ of cash receipts and $\$ 101,250$ of cash disbursements. The October 31 Cash balance was $\$ 16,800$. Determine how much cash the company had at the close of business on September 30 .
b. On September 30, Mordish Co. had a $\$ 97,500$ balance in Accounts Receivable. During October, the company collected $\$ 88,950$ from its credit customers. The October 31 balance in Accounts Receivable was $\$ 100,500$. Determine the amount of sales on account that occurred in October.
c. Nasser Co. had $\$ 147,000$ of accounts payable on September 30 and $\$ 136,500$ on October 31. Total purchases on account during October were $\$ 270,000$. Determine how much cash was paid on accounts payable during October.

Prepare general journal entries for the following transactions of a new company called Pose for Pics.
Aug. 1 Kasey Madison, the owner, invested $\$ 7,500$ cash and $\$ 32,500$ of photography equipment in the company in exchange for common stock.
2 The company paid $\$ 3,000$ cash for an insurance policy covering the next 24 months.
5 The company purchased office supplies for $\$ 1,400$ cash.
20 The company received $\$ 2,650$ cash in photography fees earned.
31 The company paid $\$ 875$ cash for August utilities.

## Exercise C-6

Analyzing account entries and balances


## Exercise C-7

Preparing general journal entries
P1

Use the information in Exercise C-7 to prepare an August 31 trial balance for Pose for Pics. Begin by opening these T-accounts: Cash; Office Supplies; Prepaid Insurance; Photography Equipment; Common Stock; Photography Fees Earned; and Utilities Expense. Then, post the general journal entries to these T-accounts (which will serve as the ledger), and prepare the trial balance.

## Exercise C-8

PreparingT-accounts (ledger) and a trial balance P2

Prepare general journal entries to record the transactions below for Dexter Company by using the following accounts: Cash; Accounts Receivable; Office Supplies; Office Equipment; Accounts Payable; Common Stock; Dividends; Fees Earned; and Rent Expense. Use the letters beside each transaction to identify entries. After recording the transactions, post them to T-accounts, which serves as the general ledger for this assignment. Determine the ending balance of each T-account.
a. Macy Dexter, owner, invested $\$ 12,750$ cash in the company in exchange for common stock.
b. The company purchased office supplies for $\$ 375$ cash.
c. The company purchased $\$ 7,050$ of office equipment on credit.
d. The company received $\$ 1,500$ cash as fees for services provided to a customer.
e. The company paid $\$ 7,050$ cash to settle the payable for the office equipment purchased in transaction $c$.
f. The company billed a customer $\$ 2,700$ as fees for services provided.
g. The company paid $\$ 525$ cash for the monthly rent.
h. The company collected $\$ 1,125$ cash as partial payment for the account receivable created in transaction $f$.
i. The company paid $\$ 1,000$ cash for dividends.

After recording the transactions of Exercise C-9 in T-accounts and calculating the balance of each account, prepare a trial balance. Use May 31, 2011, as its report date.

## Exercise C-9

Recording effects of transactions in T -accounts
A1

Check Cash ending balance, $\$ 6,425$

## Exercise C-10

Preparing a trial balance P2

Examine the following transactions and identify those that create revenues for Jade Services, a company owned by Mia Jade. Prepare general journal entries to record those revenue transactions and explain why the other transactions did not create revenues.
a. Mia Jade invests $\$ 38,250$ cash in the company in exchange for common stock.
b. The company provided $\$ 1,350$ of services on credit.
c. The company provided services to a client and immediately received $\$ 1,575$ cash.
d. The company received $\$ 9,150$ cash from a client in payment for services to be provided next year.
e. The company received $\$ 4,500$ cash from a client in partial payment of an account receivable.
f. The company borrowed $\$ 150,000$ cash from the bank by signing a promissory note.

## Exercise C-11

Analyzing and journalizing revenue transactions


## Exercise C-12

Analyzing and journalizing expense transactions


Examine the following transactions and identify those that create expenses for Jade Services. Prepare general journal entries to record those expense transactions and explain why the other transactions did not create expenses.
a. The company paid $\$ 14,100$ cash for payment on a 14 -month old liability for office supplies.
b. The company paid $\$ 1,125$ cash for the just completed two-week salary of the receptionist.
c. The company paid $\$ 45,000$ cash for equipment purchased.
d. The company paid $\$ 930$ cash for this month's utilities.
e. The company paid $\$ 5,000$ cash for dividends.

## Exercise C-13

Preparing an income statement
C3 P3

Check Net income, $\$ 3,610$

Exercise C-14
Preparing a statement of retained earnings P3
Check End. Ret. Earn., \$610

Dominick Lopez operates a consulting firm called Tech Today, which began operations on August 1. On August 31, the company's records show the following accounts and amounts for the month of August. Use this information to prepare an August income statement for the business.

| Cash . | \$ 8,360 | Dividends | \$ 3,000 |
| :---: | :---: | :---: | :---: |
| Accounts receivable | 17,000 | Consulting fees earned. | 17,000 |
| Office supplies | 3,250 | Rent expense | 4,550 |
| Land | 46,000 | Salaries expense | 8,000 |
| Office equipment | 18,000 | Telephone expense. | 560 |
| Accounts payable | 8,000 | Miscellaneous expenses | 280 |
| Common Stock | 84,000 |  |  |

## Exercise C-15

Preparing a balance sheet P3

Use the information in Exercise C-13 to prepare an August statement of retained earnings for Tech Today. (The owner invested $\$ 84,000$ cash in the company in exchange for common stock on August 1.)

## Exercise C-16

Computing net income


Use the information in Exercise C-13 (if completed, you can also use your solution to Exercise C-14) to prepare an August 31 balance sheet for Tech Today.

A corporation had the following assets and liabilities at the beginning and end of this year.

|  | Assets | Liabilities |
| :--- | ---: | ---: | ---: |
| Beginning of the year $\ldots \ldots \ldots$ | $\$ 70,000$ | $\$ 30,000$ |
| End of the year ................... | II5,000 | 46,000 |

Determine the net income earned or net loss incurred by the business during the year for each of the following separate cases:
a. Owner made no investments in the business and no dividends were paid during the year.
b. Owner made no investments in the business, but dividends were $\$ 1,250$ cash per month.
c. No dividends were paid during the year, but the owner did invest an additional $\$ 45,000$ cash in exchange for common stock.
d. Dividends were $\$ 1,250$ cash per month and the owner invested an additional $\$ 25,000$ cash in exchange for common stock.

## Exercise C-17

Analyzing changes in a company's equity P3

Compute the missing amount for each of the following separate companies $a$ through $d$.


Assume the following T-accounts reflect Joy Co.'s general ledger and that seven transactions $a$ through $g$ are posted to them. Provide a short description of each transaction. Include the amounts in your descriptions.



| Gas and Oil Expense |  |  |
| :--- | :--- | :---: |
| $(\mathrm{g})$ | 700 |  |

Use information from the T-accounts in Exercise C-18 to prepare general journal entries for each of the seven transactions $a$ through $g$.

## Exercise C-18

Interpreting and describing transactions from T-accounts A1

## Exercise C-19

Preparing general journal entries P1

Posting errors are identified in the following table. In column (1), enter the amount of the difference between the two trial balance columns (debit and credit) due to the error. In column (2), identify the trial balance column (debit or credit) with the larger amount if they are not equal. In column (3), identify the account(s) affected by the error. In column (4), indicate the amount by which the account(s) in column (3) is under- or overstated. Item (a) is completed as an example.

## Exercise C-20

Identifying effects of posting errors on the trial balance
A1 P2

|  | Description of Posting Error | (I) <br> Difference between Debit and Credit Columns | (2) <br> Column with the Larger Total | (3) <br> Identify Account(s) Incorrectly Stated | (4) <br> Amount that Account(s) Is Over- or Understated |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. | \$2,400 debit to Rent Expense is posted as a \$1,590 debit. | \$810 | Credit | Rent Expense | Rent Expense understated $\$ 810$ |
| b. | $\$ 4,050$ credit to Cash is posted twice as two credits to Cash. |  |  |  |  |
| c. | $\$ 9,900$ debit to the Dividends account is debited to Common Stock. |  |  |  |  |
| d. | \$2,250 debit to Prepaid Insurance is posted as a debit to Insurance Expense. |  |  |  |  |
| e. | $\$ 42,000$ debit to Machinery is posted as a debit to Accounts Payable. |  |  |  |  |
| f. | $\$ 4,950$ credit to Services Revenue is posted as a $\$ 495$ credit. |  |  |  |  |
| $g$. | $\$ \mathrm{I}, 440$ debit to Store Supplies is not posted. |  |  |  |  |

You are told the column totals in a trial balance are not equal. After careful analysis, you discover only one error. Specifically, a correctly journalized credit purchase of a computer for $\$ 16,950$ is posted from the journal to the ledger with a $\$ 16,950$ debit to Office Equipment and another $\$ 16,950$ debit to Accounts Payable. The Office Equipment account has a debit balance of $\$ 40,100$ on the trial balance. Answer each of the following questions and compute the dollar amount of any misstatement.

## Exercise C-21

Analyzing a trial balance error
A1 P2

## Exercise C-22

Interpreting the debt ratio and return on assets

A2


## Exercise C-23

Preparing a balance sheet following IFRS


## PROBLEM SET A

Problem C-1A
Preparing and posting journal entries; preparing a trial balance
C3 C4 A1 P1 P2

mhe.com/wildMA3e
a. Is the debit column total of the trial balance overstated, understated, or correctly stated?
b. Is the credit column total of the trial balance overstated, understated, or correctly stated?
c. Is the Office Equipment account balance overstated, understated, or correctly stated in the trial balance?
d. Is the Accounts Payable account balance overstated, understated, or correctly stated in the trial balance?
e. If the debit column total of the trial balance is $\$ 360,000$ before correcting the error, what is the total of the credit column before correction?
a. Calculate the debt ratio and the return on assets using the year-end information for each of the following six separate companies (\$ thousands).

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  | a $\mathrm{C}_{\text {a }}^{\text {\% }}$ | 4 ¢ 4 ¢ 11 | ¢ 4 3 100* - $)^{2}$ | * 35 . | \# 5 \% \# |
| t | Case | Assets | Liabilities | Average Assets | Net Income |
| 2 | Company 1 | \$147,000 | \$56,000 | \$200,000 | \$21,000 |
| 1 | Company 2 | 104,500 | 51,500 | 70,000 | 12,000 |
| 4 | Company 3 | 90,500 | 12,000 | 100,000 | 20,000 |
| 5 | Company 4 | 92,000 | 31,000 | 40,000 | 7,500 |
| 8 | Company 5 | 64,000 | 47,000 | 40,000 | 3,800 |
| $\pm$ | Company 6 | 32,500 | 26,500 | 50,000 | 660 |
|  |  |  | 14 |  | 1 |
|  |  |  |  |  |  |  |  |

b. Of the six companies, which business relies most heavily on creditor financing?
c. Of the six companies, which business relies most heavily on equity financing?
d. Which two companies indicate the greatest risk?
e. Which two companies earn the highest return on assets?
f. Which one company would investors likely prefer based on the risk-return relation?

BMW reports the following balance sheet accounts for the year ended December 31, 2009 (euro in millions). Prepare the balance sheet for this company as of December 31, 2009, following the usual IFRS formats.

| Current liabilities | € 8,350 | Noncurrent liabilities | € 10,943 |
| :---: | :---: | :---: | :---: |
| Current assets | 17,663 | Noncurrent assets | 6,984 |
| Total equity | 5,354 |  |  |

Gary Bauer opens a computer consulting business called Technology Consultants and completes the following transactions in April.

April 1 Bauer invested $\$ 100,000$ cash along with $\$ 24,000$ in office equipment in the company in exchange for common stock.
2 The company prepaid $\$ 7,200$ cash for twelve months' rent for an office. (Hint: Debit Prepaid Rent for $\$ 7,200$.)
3 The company made credit purchases of office equipment for $\$ 12,000$ and office supplies for $\$ 2,400$. Payment is due within 10 days.
6 The company completed services for a client and immediately received \$2,000 cash.
9 The company completed an $\$ 8,000$ project for a client, who must pay within 30 days.
13 The company paid $\$ 14,400$ cash to settle the account payable created on April 3.
19 The company paid $\$ 6,000$ cash for the premium on a 12 -month insurance policy. (Hint: Debit Prepaid Insurance for $\$ 6,000$.)
22 The company received $\$ 6,400$ cash as partial payment for the work completed on April 9 .
25 The company completed work for another client for $\$ 2,640$ on credit.
28 The company paid $\$ 6,200$ cash for dividends.
29 The company purchased $\$ 800$ of additional office supplies on credit.
30 The company paid $\$ 700$ cash for this month's utility bill.

## Required

1. Prepare general journal entries to record these transactions (use the account titles listed in part 2).
2. Open the following ledger accounts-their account numbers are in parentheses (use the balance column format): Cash (101); Accounts Receivable (106); Office Supplies (124); Prepaid Insurance (128);

Prepaid Rent (131); Office Equipment (163); Accounts Payable (201); Common Stock (307); Dividends (319); Services Revenue (403); and Utilities Expense (690). Post the journal entries from part 1 to the ledger accounts and enter the balance after each posting.
3. Prepare a trial balance as of the end of April.

Shelton Engineering completed the following transactions in the month of June.
a. Shana Shelton, the owner, invested $\$ 105,000$ cash, office equipment with a value of $\$ 6,000$, and $\$ 45,000$ of drafting equipment to launch the company in exchange for common stock.
b. The company purchased land worth $\$ 54,000$ for an office by paying $\$ 5,400$ cash and signing a longterm note payable for $\$ 48,600$.
c. The company purchased a portable building with $\$ 75,000$ cash and moved it onto the land acquired in $b$.
d. The company paid $\$ 6,000$ cash for the premium on an 18 -month insurance policy.
e. The company completed and delivered a set of plans for a client and collected $\$ 5,700$ cash.
f. The company purchased $\$ 22,500$ of additional drafting equipment by paying $\$ 10,500$ cash and signing a long-term note payable for $\$ 12,000$.
g. The company completed $\$ 12,000$ of engineering services for a client. This amount is to be received in 30 days.
h. The company purchased $\$ 2,250$ of additional office equipment on credit.
i. The company completed engineering services for $\$ 18,000$ on credit.
j. The company received a bill for rent of equipment that was used on a recently completed job. The $\$ 1,200$ rent cost must be paid within 30 days.
k. The company collected $\$ 7,200$ cash in partial payment from the client described in transaction $g$.
l. The company paid $\$ 1,500$ cash for wages to a drafting assistant.
m. The company paid $\$ 2,250$ cash to settle the account payable created in transaction $h$.
n. The company paid $\$ 675$ cash for minor maintenance of its drafting equipment.
o. The company paid $\$ 9,360$ cash for dividends.
p. The company paid $\$ 1,500$ cash for wages to a drafting assistant.
q. The company paid $\$ 3,000$ cash for advertisements in the local newspaper during June.

## Required

1. Prepare general journal entries to record these transactions (use the account titles listed in part 2).
2. Open the following ledger accounts - their account numbers are in parentheses (use the balance column format): Cash (101); Accounts Receivable (106); Prepaid Insurance (108); Office Equipment (163); Drafting Equipment (164); Building (170); Land (172); Accounts Payable (201); Notes Payable (250); Common Stock (307); Dividends (319); Engineering Fees Earned (402); Wages Expense (601); Equipment Rental Expense (602); Advertising Expense (603); and Repairs Expense (604). Post the journal entries from part 1 to the accounts and enter the balance after each posting.
3. Prepare a trial balance as of the end of June.

The accounting records of Fabiano Distribution show the following assets and liabilities as of December 31, 2010 and 2011.

| December 31 | 2010 | 2011 |
| :---: | :---: | :---: |
| Cash | \$ 52,500 | \$ 18,750 |
| Accounts receivable | 28,500 | 22,350 |
| Office supplies | 4,500 | 3,300 |
| Office equipment | 138,000 | 147,000 |
| Trucks | 54,000 | 54,000 |
| Building | 0 | 180,000 |
| Land | 0 | 45,000 |
| Accounts payable | 7,500 | 37,500 |
| Note payable | 0 | 105,000 |

Late in December 2011, the business purchased a small office building and land for $\$ 225,000$. It paid $\$ 120,000$ cash toward the purchase and a $\$ 105,000$ note payable was signed for the balance. Mr. Fabiano had to invest $\$ 35,000$ cash in the business (in exchange for stock) to enable it to pay the $\$ 120,000$ cash. The business also pays $\$ 3,000$ cash per month for dividends.

Check (2) Ending balances: Cash, \$73,900; Accounts Receivable, \$4,240; Accounts Payable, \$800
(3) Total debits, $\$ 137,440$

Problem C-2A
Preparing and posting journal entries; preparing a trial balance C3 C4 A1 P1 P2

Check (2) Ending balances: Cash, \$2,715; Accounts Receivable, \$22,800; Accounts Payable, \$1,200
(3) Trial balance totals, $\$ 253,500$

Problem C-3A
Computing net income from equity analysis, preparing a balance sheet, and computing the debt ratio


Check (2) Net income, \$58,900
(3) Debt ratio, 30.29\%

## Problem C-4A

Preparing and posting journal entries; preparing a trial balance C3 C4 A1 P1 P2

Check (2) Ending balances: Cash, \$137,000; Accounts Receivable, \$7,820; Accounts Payable, \$600
(3) Total debits, $\$ 187,920$

## Required

1. Prepare balance sheets for the business as of December 31, 2010 and 2011. (Hint: Report only total equity on the balance sheet and remember that total equity equals the difference between assets and liabilities.)
2. By comparing equity amounts from the balance sheets and using the additional information presented in this problem, prepare a calculation to show how much net income was earned by the business during 2011.
3. Compute the 2011 year-end debt ratio for the business.

Santo Birch opens a Web consulting business called Show-Me-the-Money and completes the following transactions in its first month of operations.
March 1 Birch invests $\$ 150,000$ cash along with office equipment valued at $\$ 22,000$ in the company in exchange for common stock.
2 The company prepaid $\$ 6,000$ cash for twelve months' rent for office space. (Hint: Debit Prepaid Rent for $\$ 6,000$.)
3 The company made credit purchases for $\$ 3,000$ in office equipment and $\$ 1,200$ in office supplies. Payment is due within 10 days.
6 The company completed services for a client and immediately received $\$ 4,000$ cash.
9 The company completed a $\$ 7,500$ project for a client, who must pay within 30 days.
13 The company paid $\$ 4,200$ cash to settle the account payable created on March 3.
19 The company paid \$5,000 cash for the premium on a 12 -month insurance policy. (Hint: Debit Prepaid Insurance for $\$ 5,000$.)
22 The company received $\$ 3,500$ cash as partial payment for the work completed on March 9 .
25 The company completed work for another client for $\$ 3,820$ on credit.
29 The company paid $\$ 5,100$ cash for dividends.
30 The company purchased $\$ 600$ of additional office supplies on credit.
31 The company paid $\$ 200$ cash for this month's utility bill.

## Required

1. Prepare general journal entries to record these transactions (use account titles listed in part 2).
2. Open the following ledger accounts-their account numbers are in parentheses (use the balance column format): Cash (101); Accounts Receivable (106); Office Supplies (124); Prepaid Insurance (128); Prepaid Rent (131); Office Equipment (163); Accounts Payable (201); Common Stock (307); Dividends (319); Services Revenue (403); and Utilities Expense (690). Post journal entries from part 1 to the ledger accounts and enter the balance after each posting.
3. Prepare a trial balance as of March 31.

Problem C-5A
Recording transactions; posting to ledger; preparing a trial balance
C3 A1 P1 P2

Business transactions completed by Eric Pense during the month of September are as follows.
a. Pense invested $\$ 23,000$ cash along with office equipment valued at $\$ 12,000$ in exchange for common stock of a new company named EP Consulting.
b. The company purchased land valued at $\$ 8,000$ and a building valued at $\$ 33,000$. The purchase is paid with $\$ 15,000$ cash and a long-term note payable for $\$ 26,000$.
c. The company purchased $\$ 600$ of office supplies on credit.
d. Pense invested his personal automobile in the company in exchange for more common stock. The automobile has a value of $\$ 7,000$ and is to be used exclusively in the business.
e. The company purchased $\$ 1,100$ of additional office equipment on credit.
f. The company paid $\$ 800$ cash salary to an assistant.
g. The company provided services to a client and collected $\$ 2,700$ cash.
h. The company paid $\$ 430$ cash for this month's utilities.
i. The company paid $\$ 600$ cash to settle the account payable created in transaction $c$.
j. The company purchased $\$ 4,000$ of new office equipment by paying $\$ 4,000$ cash.
k. The company completed $\$ 2,400$ of services for a client, who must pay within 30 days.
I. The company paid $\$ 800$ cash salary to an assistant.
m. The company received $\$ 1,000$ cash in partial payment on the receivable created in transaction $k$.
n. The company paid $\$ 1,050$ cash for dividends.

## Required

1. Prepare general journal entries to record these transactions (use account titles listed in part 2).
2. Open the following ledger accounts-their account numbers are in parentheses (use the balance column format): Cash (101); Accounts Receivable (106); Office Supplies (108); Office Equipment (163); Automobiles (164); Building (170); Land (172); Accounts Payable (201); Notes Payable (250); Common Stock (307); Dividends (319); Fees Earned (402); Salaries Expense (601); and Utilities Expense (602). Post the journal entries from part 1 to the ledger accounts and enter the balance after each posting.

Check (2) Ending balances: Cash, \$4,020; Office Equipment, \$17,100
3. Prepare a trial balance as of the end of September.

Carlos Beltran started an engineering firm called Beltran Engineering. He began operations and completed seven transactions in May, which included his initial investment of \$17,000 cash. After those seven transactions, the ledger included the following accounts with normal balances.

| Cash | \$26,660 |
| :---: | :---: |
| Office supplies | 660 |
| Prepaid insurance | 3,200 |
| Office equipment | 16,500 |
| Accounts payable | 16,500 |
| Common Stock | 17,000 |
| Dividends | 3,740 |
| Engineering fees earned | 24,000 |
| Rent expense | 6,740 |

## Required

1. Prepare a trial balance for this business as of the end of May.

## Analysis Components

2. Analyze the accounts and their balances and prepare a list that describes each of the seven most likely transactions and their amounts.
3. Prepare a report of cash received and cash paid showing how the seven transactions in part 2 yield the \$26,660 ending Cash balance.

Problem C-6A
Analyzing account balances and reconstructing transactions
C1 C3 A1 P2

Nov. 1 Kita Shaw, the owner, invested $\$ 30,000$ cash along with $\$ 15,000$ of office equipment in the company in exchange for common stock.
2 The company prepaid $\$ 4,500$ cash for six months' rent for an office. (Hint: Debit Prepaid Rent for $\$ 4,500$.)
4 The company made credit purchases of office equipment for $\$ 2,500$ and of office supplies for $\$ 600$. Payment is due within 10 days.
8 The company completed work for a client and immediately received \$3,400 cash.
12 The company completed a $\$ 10,200$ project for a client, who must pay within 30 days.
13 The company paid $\$ 3,100$ cash to settle the payable created on November 4.
19 The company paid $\$ 1,800$ cash for the premium on a 24 -month insurance policy.
22 The company received $\$ 5,200$ cash as partial payment for the work completed on November 12.
24 The company completed work for another client for $\$ 1,750$ on credit.
28 The company paid $\$ 5,300$ cash for dividends.
29 The company purchased $\$ 249$ of additional office supplies on credit.
30 The company paid $\$ 531$ cash for this month's utility bill.

## Required

1. Prepare general journal entries to record these transactions (use account titles listed in part 2).
2. Open the following ledger accounts-their account numbers are in parentheses (use the balance column format): Cash (101); Accounts Receivable (106); Office Supplies (124); Prepaid Insurance (128); Prepaid Rent (131); Office Equipment (163); Accounts Payable (201); Common Stock (307); Dividends (319); Services Revenue (403); and Utilities Expense (690). Post the journal entries from part 1 to the ledger accounts and enter the balance after each posting.
3. Prepare a trial balance as of the end of November.

## Check (2) Ending balances:

 Cash, \$23,369; Accounts Receivable, \$6,750; Accounts Payable, \$249
## Problem C-2B

Preparing and posting journal entries; preparing a trial balance C3 C4 A1 P1 P2

Check (2) Ending balances: Cash, \$10,650; Accounts Receivable, \$8,350; Accounts Payable, \$320
(3) Trial balance totals, \$115,970

At the beginning of April, Brooke Gable launched a custom computer solutions company called Softways. The company had the following transactions during April.
a. Brooke Gable invested $\$ 45,000$ cash, office equipment with a value of $\$ 4,500$, and $\$ 28,000$ of computer equipment in the company in exchange for common stock.
b. The company purchased land worth $\$ 24,000$ for an office by paying $\$ 4,800$ cash and signing a long-term note payable for $\$ 19,200$.
c. The company purchased a portable building with $\$ 21,000$ cash and moved it onto the land acquired in $b$.
d. The company paid $\$ 6,600$ cash for the premium on a two-year insurance policy.
e. The company provided services to a client and immediately collected $\$ 3,200$ cash.
f. The company purchased $\$ 3,500$ of additional computer equipment by paying $\$ 700$ cash and signing a long-term note payable for $\$ 2,800$.
g. The company completed $\$ 3,750$ of services for a client. This amount is to be received within 30 days.
h. The company purchased $\$ 750$ of additional office equipment on credit.
i. The company completed client services for $\$ 9,200$ on credit.
j. The company received a bill for rent of a computer testing device that was used on a recently completed job. The $\$ 320$ rent cost must be paid within 30 days.
k. The company collected $\$ 4,600$ cash in partial payment from the client described in transaction $i$.
I. The company paid $\$ 1,600$ cash for wages to an assistant.
m. The company paid $\$ 750$ cash to settle the payable created in transaction $h$.
n. The company paid $\$ 425$ cash for minor maintenance of the company's computer equipment.
0. The company paid $\$ 3,875$ cash for dividends.
p. The company paid $\$ 1,600$ cash for wages to an assistant.
q. The company paid $\$ 800$ cash for advertisements in the local newspaper during April.

## Required

1. Prepare general journal entries to record these transactions (use account titles listed in part 2).
2. Open the following ledger accounts-their account numbers are in parentheses (use the balance column format): Cash (101); Accounts Receivable (106); Prepaid Insurance (108); Office Equipment (163); Computer Equipment (164); Building (170); Land (172); Accounts Payable (201); Notes Payable (250); Common Stock (307); Dividends (319); Fees Earned (402); Wages Expense (601); Computer Rental Expense (602); Advertising Expense (603); and Repairs Expense (604). Post the journal entries from part 1 to the accounts and enter the balance after each posting.
3. Prepare a trial balance as of the end of April.

The accounting records of Schmit Co. show the following assets and liabilities as of December 31, 2010 and 2011.

| December 31 | 2010 | 2011 |
| :---: | :---: | :---: |
| Cash | \$14,000 | \$ 10,000 |
| Accounts receivable | 25,000 | 30,000 |
| Office supplies | 10,000 | 12,500 |
| Office equipment | 60,000 | 60,000 |
| Machinery | 30,500 | 30,500 |
| Building | 0 | 260,000 |
| Land | 0 | 65,000 |
| Accounts payable | 5,000 | 15,000 |
| Note payable | 0 | 260,000 |

Late in December 2011, the business purchased a small office building and land for $\$ 325,000$. It paid $\$ 65,000$ cash toward the purchase and a $\$ 260,000$ note payable was signed for the balance. Janet Schmit, the owner, had to invest an additional $\$ 25,000$ cash (in exchange for common stock) to enable it to pay the $\$ 65,000$ cash toward the purchase. The company also pays $\$ 1,000$ cash per month for dividends.

## Required

1. Prepare balance sheets for the business as of December 31, 2010 and 2011. (Hint: Report only total equity on the balance sheet and remember that total equity equals the difference between assets and liabilities.)
2. By comparing equity amounts from the balance sheets and using the additional information presented in the problem, prepare a calculation to show how much net income was earned by the business during 2011.
3. Calculate the December 31, 2011, debt ratio for the business.

Lummus Management Services opens for business and completes these transactions in September.
Sept. 1 Rhonda Lummus, the owner, invests $\$ 28,000$ cash along with office equipment valued at $\$ 25,000$ in the company in exchange for common stock.
2 The company prepaid $\$ 10,500$ cash for 12 months' rent for office space. (Hint: Debit Prepaid Rent for $\$ 10,500$.)
4 The company made credit purchases for $\$ 9,000$ in office equipment and $\$ 1,200$ in office supplies. Payment is due within 10 days.
8 The company completed work for a client and immediately received $\$ 2,600$ cash.
12 The company completed a $\$ 13,400$ project for a client, who must pay within 30 days.
13 The company paid $\$ 10,200$ cash to settle the payable created on September 4.
19 The company paid $\$ 5,200$ cash for the premium on an 18-month insurance policy. (Hint: Debit Prepaid Insurance for $\$ 5,200$.)
22 The company received $\$ 7,800$ cash as partial payment for the work completed on September 12.
24 The company completed work for another client for $\$ 1,900$ on credit.
28 The company paid $\$ 5,300$ cash for dividends.
29 The company purchased $\$ 1,700$ of additional office supplies on credit.
30 The company paid $\$ 460$ cash for this month's utility bill.

## Required

1. Prepare general journal entries to record these transactions (use account titles listed in part 2).
2. Open the following ledger accounts-their account numbers are in parentheses (use the balance column format): Cash (101); Accounts Receivable (106); Office Supplies (124); Prepaid Insurance (128); Prepaid Rent (131); Office Equipment (163); Accounts Payable (201); Common Stock (307); Dividends (319); Service Fees Earned (401); and Utilities Expense (690). Post journal entries from part 1 to the ledger accounts and enter the balance after each posting.
3. Prepare a trial balance as of the end of September.

Cooke Consulting completed the following transactions during June.
a. Chris Cooke, the owner, invested $\$ 80,000$ cash along with office equipment valued at $\$ 30,000$ in the new company in exchange for common stock.
b. The company purchased land valued at $\$ 30,000$ and a building valued at $\$ 170,000$. The purchase is paid with $\$ 40,000$ cash and a long-term note payable for $\$ 160,000$.
c. The company purchased $\$ 2,400$ of office supplies on credit.
d. C. Cooke invested his personal automobile in the company in exchange for more common stock. The automobile has a value of $\$ 18,000$ and is to be used exclusively in the business.
e. The company purchased $\$ 6,000$ of additional office equipment on credit.
f. The company paid $\$ 1,500$ cash salary to an assistant.
g. The company provided services to a client and collected $\$ 6,000$ cash.
h. The company paid $\$ 800$ cash for this month's utilities.
i. The company paid $\$ 2,400$ cash to settle the payable created in transaction $c$.
j. The company purchased $\$ 20,000$ of new office equipment by paying $\$ 20,000$ cash.
k. The company completed $\$ 5,200$ of services for a client, who must pay within 30 days.
I. The company paid $\$ 1,500$ cash salary to an assistant.
m. The company received $\$ 3,800$ cash in partial payment on the receivable created in transaction $k$.
n. The company paid $\$ 6,400$ cash for dividends.

## Required

1. Prepare general journal entries to record these transactions (use account titles listed in part 2).
2. Open the following ledger accounts-their account numbers are in parentheses (use the balance column format): Cash (101); Accounts Receivable (106); Office Supplies (108); Office Equipment (163); Automobiles (164); Building (170); Land (172); Accounts Payable (201); Notes Payable (250); Common Stock (307); Dividends (319); Fees Earned (402); Salaries Expense (601); and Utilities Expense (602). Post the journal entries from part 1 to the ledger accounts and enter the balance after each posting.
3. Prepare a trial balance as of the end of June.

Check (2) Net income, $\$ 45,500$
(3) Debt ratio, $58.76 \%$

## Problem C-4B

Preparing and posting journal entries; preparing a trial balance C3 C4 A1 P1 P2

Check (2) Ending balances: Cash, \$6,740; Accounts Receivable, \$7,500; Accounts Payable, \$1,700
(3) Total debits, $\$ 72,600$

## Problem C-5B

Recording transactions; posting to ledger; preparing a trial balance
C3 A1 P1 P2

Check (2) Ending balances: Cash, \$17,200; Office Equipment, \$56,000
(3) Trial balance totals, \$305,200

## Problem C-6B

Analyzing account balances and reconstructing
transactions
C1 C3 A1 P2


Check (1) Trial balance total, $\$ 37,850$
(3) Cash paid, \$13,915

## Required

1. Prepare a trial balance for this business as of the end of April.

## Analysis Component

2. Analyze the accounts and their balances and prepare a list that describes each of the seven most likely transactions and their amounts.
3. Prepare a report of cash received and cash paid showing how the seven transactions in part 2 yield the $\$ 12,485$ ending Cash balance.
Michael Gould started a Web consulting firm called Gould Solutions. He began operations and completed seven transactions in April that resulted in the following accounts, which all have normal balances.

| Cash | \$12,485 |
| :---: | :---: |
| Office supplies | 560 |
| Prepaid rent | 1,500 |
| Office equipment | 11,450 |
| Accounts payable | 11,450 |
| Common Stock | 10,000 |
| Dividends | 6,200 |
| Consulting fees earned | 16,400 |
| Operating expenses | 5,655 |

## Beyond the Numbers

## REPORTING IN ACTION

RIM


BTN C-1 Refer to Research In Motion's financial statements in Appendix A for the following questions.

## Required

1. What amount of total liabilities does it report for each of the fiscal years ended February 28, 2009, and February 27, 2010?
2. What amount of total assets does it report for each of the fiscal years ended February 28, 2009, and February 27, 2010?
3. Compute its debt ratio for each of the fiscal years ended February 28, 2009, and February 27, 2010.
4. In which fiscal year did it employ more financial leverage (February 28, 2009, or February 27, 2010)? Explain.

## Fast Forward

5. Access its financial statements (10-K report) for a fiscal year ending after February 27, 2010, from its Website (RIM.com) or the SEC's EDGAR database (www.SEC.gov). Recompute its debt ratio for any subsequent year's data and compare it with the debt ratio for 2009 and 2010.

## COMPARATIVE ANALYSIS

A1 A2 $\square$

## RIM

Apple

BTN C-2 Key comparative figures for Research In Motion and Apple follow.

| (\$ millions) | Research In Motion |  | Apple |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Current Year | Prior <br> Year | Current Year | Prior Year |
| Total liabilities | \$ 2,602 | \$ 2,227 | \$15,861 | \$13,874 |
| Total assets | 10,204 | 8,101 | 47,501 | 36,171 |

1. What is the debt ratio for Research In Motion in the current year and for the prior year?
2. What is the debt ratio for Apple in the current year and for the prior year?
3. Which of the two companies has the higher degree of financial leverage? What does this imply?

BTN C-3 Review the Decision Ethics case from the first part of this appendix involving the cashier. The guidance answer suggests that you should not comply with the assistant manager's request.

## Required

Propose and evaluate two other courses of action you might consider, and explain why.

BTN C-4 Mora Stanley is an aspiring entrepreneur and your friend. She is having difficulty understanding the purposes of financial statements and how they fit together across time.

## Required

Write a one-page memorandum to Stanley explaining the purposes of the four financial statements and how they are linked across time.

BTN C-5 Access EDGAR online (www.SEC.gov) and locate the 2009 year 10-K report of Amazon.com (ticker AMZN) filed on January 29, 2010. Review its financial statements reported for years ended 2009, 2008, and 2007 to answer the following questions.

## Required

1. What are the amounts of its net income or net loss reported for each of these three years?
2. Does Amazon's operating activities provide cash or use cash for each of these three years?
3. If Amazon has a 2009 net income of more than $\$ 900$ million and 2009 operating cash flows of more than $\$ 3,000$ million, how is it possible that its cash balance at December 31, 2009, increases by less than $\$ 700$ million relative to its balance at December 31, 2008?

BTN C-6 The expanded accounting equation consists of assets, liabilities, common stock, dividends, revenues, and expenses. It can be used to reveal insights into changes in a company's financial position.

## Required

1. Form learning teams of six (or more) members. Each team member must select one of the six components and each team must have at least one expert on each component: (a) assets, (b) liabilities, $(c)$ common stock, $(d)$ dividends, $(e)$ revenues, and $(f)$ expenses.
2. Form expert teams of individuals who selected the same component in part 1. Expert teams are to draft a report that each expert will present to his or her learning team addressing the following:
a. Identify for its component the (i) increase and decrease side of the account and (ii) normal balance side of the account.
b. Describe a transaction, with amounts, that increases its component.
c. Using the transaction and amounts in (b), verify the equality of the accounting equation and then explain any effects on the income statement and statement of cash flows.
d. Describe a transaction, with amounts, that decreases its component.
e. Using the transaction and amounts in (d), verify the equality of the accounting equation and then explain any effects on the income statement and statement of cash flows.
3. Each expert should return to his/her learning team. In rotation, each member presents his/her expert team's report to the learning team. Team discussion is encouraged.

BTN C-7 Assume Susie Levitt and Katie Shea of CitySlips plan on expanding their business to accommodate more product lines. They are considering financing their expansion in one of two ways: (1) contributing more of their own funds to the business or (2) borrowing the funds from a bank.

## Required

Identify at least two issues that Susie and Katie should consider when trying to decide on the method for financing their expansion.

## ETHICS CHALLENGE ${ }^{41} 1$

<br>

## COMMUNICATING IN PRACTICE <br> C1 C2 A1 P3

## TAKING IT TO THE NET <br> A1 <br> 

## TEAMWORK IN ACTION <br> C1 C2 C4 A1

## ENTREPRENEURIAL DECISION

## ENTREPRENEURIAL DECISION

A1 A2 P3 ( )

BTN C-8 Lisa Langely is a young entrepreneur who operates Langely Music Services, offering singing lessons and instruction on musical instruments. Langely wishes to expand but needs a $\$ 15,000$ loan. The bank requests Langely to prepare a balance sheet and key financial ratios. Langely has not kept formal records but is able to provide the following accounts and their amounts as of December 31, 2011.

| Cash. | \$ 1,800 | Accounts Receivable | \$4,800 | Prepaid Insurance | \$ 750 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Prepaid Rent | 4,700 | Store Supplies | 3,300 | Equipment | 25,000 |
| Accounts Payable | 1,100 | Unearned Lesson Fees . | 7,800 | Total Equity* | 31,450 |
| Annual net income | 20,000 |  |  |  |  |

* The total equity amount reflects all owner investments, dividends, revenues, and expenses as of December 31, 2011.


## Required

1. Prepare a balance sheet as of December 31, 2011, for Langely Music Services. (Report only the total equity amount on the balance sheet.)
2. Compute Langely's debt ratio and its return on assets (defined as: Net income divided by Average total assets). Assume average assets equal its ending balance.
3. Do you believe the prospects of a $\$ 15,000$ bank loan are good? Why or why not?

## HITTING THE ROAD C1

BTN C-9 Obtain a recent copy of the most prominent newspaper distributed in your area. Research the classified section and prepare a report answering the following questions (attach relevant classified clippings to your report). Alternatively, you may want to search the Web for the required information. One suitable Website is CareerOneStop (www.CareerOneStop.org). For documentation, you should print copies of Websites accessed.

1. Identify the number of listings for accounting positions and the various accounting job titles.
2. Identify the number of listings for other job titles, with examples, that require or prefer accounting knowledge/experience but are not specifically accounting positions.
3. Specify the salary range for the accounting and accounting-related positions if provided.
4. Indicate the job that appeals to you, the reason for its appeal, and its requirements.

GLOBAL DECISION
A2


NDKIA
RIM
Apple

BTN C-10 Nokia (www.Nokia.com) is a leading global manufacturer of mobile devices and services, and it competes to some extent with both Research In Motion and Apple. Key financial ratios for the current fiscal year follow.

| Key Figure | Nokia | Research In Motion | Apple |
| :--- | ---: | :---: | :---: |
| Return on assets $\ldots \ldots \ldots$ | $0.7 \%$ | $26.8 \%$ | $19.7 \%$ |
| Debt ratio $\ldots \ldots \ldots \ldots$ | $58.7 \%$ | $25.5 \%$ | $33.4 \%$ |

## Required

1. Which company is most profitable according to its return on assets?
2. Which company is most risky according to the debt ratio?
3. Which company deserves increased investment based on a joint analysis of return on assets and the debt ratio? Explain.

## ANSWERS TO MULTIPLE CHOICE QUIZ

1. b; debit Utility Expense for $\$ 700$, and credit Cash for $\$ 700$.
2. a; debit Cash for $\$ 2,500$, and credit Unearned Lawn Service Fees for \$2,500.
3. c; debit Cash for $\$ 250,000$, debit Land for $\$ 500,000$, and credit Common Stock for $\$ 750,000$.
4. d
5. $\mathrm{e} ;$ Debt ratio $=\$ 400,000 / \$ 1,000,000=\underline{\underline{40 \%}}$

[^0]:    ${ }^{1}$ In practice, account titles vary. As one example, Subscription Fees is sometimes called Subscription Fees Revenue, Subscription Fees Earned, or Earned Subscription Fees. As another example, Rent Earned is sometimes called Rent Revenue, Rental Revenue, or Earned Rent Revenue. We must use good judgment when reading financial statements because titles can differ even within the same industry. For example, product sales are called revenue at Research In Motion, but net sales at Apple. Generally, the term revenues or fees is more commonly used with service businesses, and net sales or sales with product businesses.

[^1]:    ${ }^{2}$ These abbreviations are remnants of 18 th-century English recordkeeping practices where the terms debitor and creditor were used instead of debit and credit. The abbreviations use the first and last letters of these terms, just as we still do for Saint (St.) and Doctor (Dr.).

[^2]:    (2) Enter the debit account number from the Ledger in the PR column of the journal.
    (3) Identify credit account in Ledger: enter date, journal page, amount, and balance.
    (4) Enter the credit account number from the Ledger in the PR column of the journal.

[^3]:    ${ }^{3}$ Transposition occurs when two digits are switched, or transposed, within a number. If transposition is the only error, it yields a difference between the two trial balance totals that is evenly divisible by 9 . For example, assume that a $\$ 691$ debit in an entry is incorrectly posted to the ledger as $\$ 619$. Total credits in the trial balance are then larger than total debits by $\$ 72(\$ 691-\$ 619)$. The $\$ 72$ error is evenly divisible by $9(72 / 9=8)$. The first digit of the quotient (in our example it is 8 ) equals the difference between the digits of the two transposed numbers (the 9 and the 1 ). The number of digits in the quotient also tells the location of the transposition, starting from the right. The quotient in our example had only one digit (8), so it tells us the transposition is in the first digit. Consider another example where a transposition error involves posting $\$ 961$ instead of the correct $\$ 691$. The difference in these numbers is $\$ 270$, and its quotient is $30(270 / 9)$. The quotient has two digits, so it tells us to check the second digit from the right for a transposition of two numbers that have a difference of 3 .

[^4]:    [continued on next page]

