

CHAPTER 1

Introduction to Accounting

—*What Accounting is*

What is accounting? Is accounting important to you? Yes, accounting is important in your personal life as well as your career, even though you may not become an accountant. For example, when you decided to attend college, you considered the costs (the tuition, textbooks, and so on). Most likely, you also considered the benefits (the ability to obtain a higher-paying job or a more desirable job).

Our primary objective in this book is to illustrate basic accounting concepts and accounting methods that will help you to make good personal and business decisions. We begin by discussing what accounting is, how it operates accounting information, and the role that accounting plays.

1.1 What is Accounting

Accounting is the language of business. Its purpose is to provide useful information to a variety of users so that they can make informed decisions. These users of accounting information may include owners, managers, creditors, government agencies, customers, labor unions, and competitors.

1.1.1 Accounting: the Language of Business

Accounting is often called the “language of business”. A language is a means of social communication and involves a flow of information from one person to one or more other persons. To be effective, the receiver of the information must understand the message that

the sender intends to convey. Accounting uses its own special words and symbols to communicate financial information that is intended to be useful for economic decision making by managers, shareholders, creditors and many others. As you study accounting, you must learn the meanings of these words and symbols if you want to understand the messages contained in financial reports. Everyone involved in business, from the beginning employee to the top manager, eventually uses accounting information in decision-making process.

Business people often call accounting the “language of business” because they use accounting data in communicating about a firm’s activities. Information provided by accountants helps managers and other executives understand the results of business transactions and interpret the financial status of their organization. With this knowledge, manager can make decisions about such matters as production, marketing, financing.

In addition, charities, churches, colleges, government agencies, and nonprofit organization also use accounting to keep track of their financial situation.

1.1.2 Accounting: an Information System

Accounting is an information system necessitated by the great complexity of modern business.

Basic Functions of an Accounting System:

In developing information about the activities of a business, every accounting system performs the following basic functions:

- (1) Interpret and record the effects of business transactions.
- (2) Classify the effects of similar transactions in a manner that permits determination of the various totals and subtotals useful to management and used in accounting reports.
- (3) Summarize and communicate the information contained in the system to decision makers.

Accounting systems are designed to provide information that managers and outsiders can use in decision making. They also serve other purposes: to produce operating documents, to protect the company’s assets, to provide data for company tax returns, and, in some cases, to provide the basis for reimbursement of costs by clients or customers. The accounting organization also must prepare documents that serve what might be called private

information purposes, such as the employees' own records of their salaries and wages. Many of these documents aim serve other accounting purposes, but they would have to be prepared even if no information reports were necessary. Measured by the number of people involved and the amount of time required, document preparation is one of accounting's biggest jobs.

Accounting is a system of gathering, summarizing, and communicating financial information for a business firm, government, or other organization. Accounting, also called accountancy, enables decision makers to interpret financial information and, use results in planning for the future. For example, such data tell executives which products or departments are doing well and which poorly.

1.1.3 Accounting: the Basis for Decision Making

Accounting is the basis for decision making. Its purpose is to provide useful information to a variety of users so they can make informed decisions.

Accounting and accounting information are used more than commonly realized. The following sections discuss the range of people and group who use accounting information and decisions they make.

1.2 The Role of Accounting

It has been said that accounting is the language of business. Every part of business is affected by accounting. Management of a business depends on financial information in making sound operational decisions. Stockholders must have financial information in order to measure management's performance and to evaluate their own holdings. Potential investors need financial data in order to compare prospective investments. Creditors must consider the financial strength of a business before permitting it to borrow funds. Also, many laws require that extensive financial information be reported to the various governmental agencies at least annually.

Decision Makers Who Use Accounting Information

Decision makers need information. The more important the decision, the greater the

need. All businesses and most individuals keep accounting records to aid in making decisions. If managers in a business made in designing a slogan to expand the company. The result might be the company's income statement. Let's look at some decision makers who use accounting information as follows.

Individuals:

Individual often keeps accounting records to aid decision-making. People often use accounting information to manage their bank accounts, to evaluate job prospects, and to decide whether to rent an apartment or buy a house.

Businesses:

Managers of businesses use accounting information to set goals, to evaluate progress toward those goals, and to take corrective action if necessary. Decisions based on accounting information may include where to locate a store, how many goods to keep on hand, and how much cash to borrow.

Investors and Creditors:

Investors and creditors provide the money a business needs to get started. When a company opened its first store, the company had no track record. To decide whether to help start a new venture, potential investors evaluate what income they can expect on their investment. This means analyzing the financial statements of the business. Before deciding to invest in a company, for example, you may examine the company's financial statements. Before making a loan to the company, banks evaluate the company's ability to meet scheduled payments.

Government Regulatory Agencies:

Most organizations face government regulation. For example, the Securities and Exchange Commission (SEC), a federal agency, requires businesses to report certain financial information to the investing public. The other companies publish annual reports.

Taxing Authorities:

Local, state, and federal governments levy taxes on individuals and businesses. A company pays property tax on its assets and income tax on its profits. The company also collects sales tax from customers and forwards the money to the government. Individuals pay income tax on their earnings. All of these taxes are based on accounting data.

Nonprofit Organizations:

Nonprofit organizations—such as churches, hospitals, and government agencies, which operate for purposes other than profit—use accounting information as profit-oriented businesses do. Both for profit organizations and nonprofit organizations deal with payrolls, rent payments, and the like information from the accounting system.

Other Users:

Employees and labor unions demand wages that come from the employer's reported income. And newspapers report "improved profit pictures" of companies. Such news, which depends on accounting, reports information that affects our standard of living.

Decision makers who use accounting information can be illustrated as below (Figure 1-1).

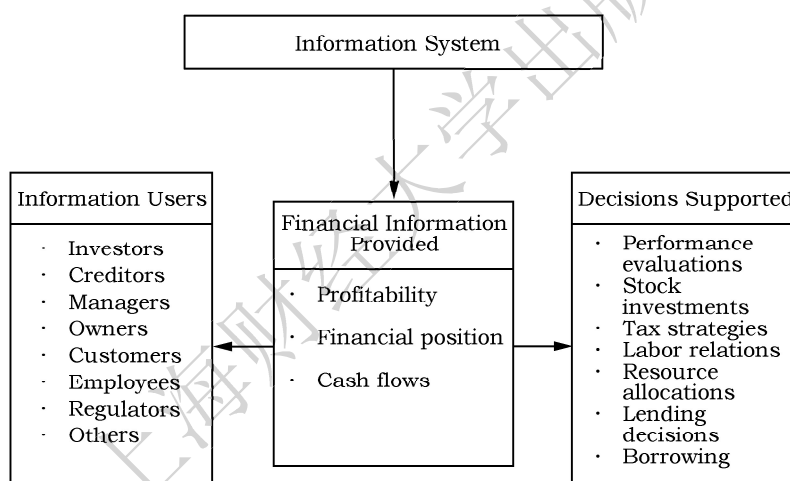


Figure 1-1 Decision Makers Who Use Accounting Information

1.3 Accounting and Bookkeeping

Persons with little knowledge of accounting may fail to understand the difference between accounting and bookkeeping. Bookkeeping means the recording of transactions, the Record-making phase of accounting. The recording tends to be mechanical and repetitive, it is only a small part of the field of accounting and probably the simplest part. At the com-

puter times, people are using computers to do detailed bookkeeping.

However, accounting includes not only the maintenance of accounting records, but also the design of efficient accounting systems, the performance of audits, the development of forecasts, the planning of income tax, and the interpretation of accounting information. Because the work of interpreting accounting information is such an important part of the accountant's function, accounting has usually been described as an art. A person might become a reasonably proficient bookkeeper in a few weeks or months however, to be a qualified professional accountant or a certified public accountant requires several years of study and experience.

The Difference between Accounting and Bookkeeping

Accountant:

An accountant is a professional with the education and experience to design an accounting system, prepare reports, and interpret their results. Some people think that the work of professional accountants consists primarily of bookkeeping. Actually, it doesn't. In fact, many professional accountants do little or no bookkeeping.

Professional accountants are involved more with the interpretation and use of accounting information than with its actual preparation. Their work includes evaluating the efficiency of operations, resolving complex financial reporting issues, forecasting the results of future operations, auditing, tax planning, and designing efficient accounting systems. There is very little that is "routine" about the work of a professional accountant.

Bookkeeper:

Bookkeeping is the clerical side of accounting—the recording of routine transactions and day-to-day record keeping. A person who solely records accounting information is referred to as a bookkeeper. Today such tasks are performed primarily by computers and skilled clerical personnel, not by accountants.

It is important to clarify the relationship of accounting to bookkeeping and the computer to avoid certain misunderstandings about accounting.

1.4 The Accounting Process

Accounting is the process of (1) analyzing, (2) recording, (3) classifying, (4) sum-

marizing, (5) reporting, and (6) interpreting. These six major phases of the accounting process are described below.

Analyzing is the first phase of the accounting process. The accountant must look at a transaction or event and determine its importance to the business.

Recording these transactions is the second phase. Traditionally this meant writing something by hand. Even today, much of the record keeping in accounting is done manually. However, some major changes in the business world have been caused by the introduction of computers. Even though the method of entering or recording accounting information has changed, the concept behind the process has not.

Classifying, phase three of the process, relates to the grouping of like transactions together rather than keeping a narrative record of many transactions. Like items are grouped in separate accounts.

Summarizing is the process of bringing together various items of information to determine or explain a result.

Reporting involves communicating results. In accounting it is common to use tables of numbers rather than narrative-type reports. Sometimes, however, a combination of tables and narratives is used.

Interpreting the reported results is the final phase of the process. At this time, attention is directed to the significance of various matters and relationships. Percentage analyses and ratios are often used to help explain the difference among accounting periods. Footnotes and special captions also may be valuable in the interpreting phase of accounting.

1.5 Accounting Today

Accounting is one of the fastest growing fields in the modern business world. Every new store, school, restaurant, or filling station indeed, any new enterprise of any kind increases the demand for accountants. Consequently, the demand for accountants is generally much greater than the supply. Government officials often have a legal background; similarly, the men and women in management often have a background in accounting. They are usually familiar with the methodology of finance and fundamentals of fiscal and business ad-

ministration.

Today's accountants are as diverse as their job assignments. Accountants may be male or female, outgoing or conservative, but they are all analytical. They may have backgrounds in art history or computer programming. They come from every ethnic and cultural background.

An accounting background can open doors in most lines of business. In short, accounting deals with all facets of an organization—purchasing, manufacturing, marketing, and distribution. This is why accounting provides such an excellent basis for business experience.

Making Decisions Using Accounting Information

Applying Your Knowledge

Assume that you have a friend who wants to start a business and needs some help getting the money required to rent space and acquire the needed assets to operate the business (for example, delivery truck, display fixtures) and pay employees for their work before the doors open and customers begin paying for the products the company plans to sell. You are in a financially strong position and agree to loan your friend \$ 100 000. Your intent is not to be a long-term investor or co-owner of the business, but rather to help your friend start his company and at the same time earn a **return on** the funds you have loaned him. Assume further that you agree to let your friend have the use of your \$ 100 000 for one year and, if you had not loaned this amount to him, you could have earned an 7 percent return by placing your money in another investment.

In addition to wanting to help a friend, you are interested in knowing how much risk you are taking with regard to your \$ 100 000. You expect your friend to pay that \$ 100 000 back, and to also pay you an additional amount of \$ 7 000 (\$ 100 000×7%) for his use of your money. The total **return of** your investment (\$ 100 000) back to you one year later, added to the amount you expect to receive for his having used your money

for a year (\$ 7 000), are as follow :

Cash flow from your original investment	\$ 100 000
Cash flow from a return for allowing another's use of your funds	(\$ 100 000×7%) \$ 7 000
Total cash flow expected to be received in one year	\$ 107 000

Providing information for you to assess your friend's ability to meet his cash flow commitment to you is essentially what financial reporting is about. You need information assess the risk you are taking and the prospects that your friend will be able to deliver \$ 107 000 to you one year from the time you loan him the \$ 100 000. While this is a relatively simple example, it sets the stage for your understanding of the kinds of information at will help you make this important investment decision.

Key words, phrases, and special terms

accounting	会计,会计学
information system	信息系统
enterprise	企业
business	商业,企业
decision making	制定决策
bookkeeping	簿记
transaction	交易,经济业务
investor	投资者
creditor	债权人
nonprofit organization	非营利性组织
return of	(投资)回收
return on	(投资)回报,报酬
cash flow	现金流量

Multiple-choice questions

1. Which of the following describe accounting? ().

- a. Is language of business
 - b. Is an information system
 - c. Is an end rather than a means to an end
 - d. Useful for decision making
2. Accounting is an information system that ().
- a. measures business activities
 - b. processes information into reports
 - c. communicates findings to decision-makers
 - d. all of the above
3. Accounting information is used by ().
- a. businesses
 - b. government regulation agencies
 - c. labor unions
 - d. all of the above
4. A procedural element of accounting is ().
- a. planning
 - b. control
 - c. bookkeeping
 - d. auditing
5. Purposes of an accounting system include all of the following except ().
- a. interpret and record the effects of business transactions
 - b. classify the effects of transactions to facilitate the preparation of reports
 - c. summarize and communicate information to decision makers
 - d. dictate the specific types of business transactions that the enterprise may engage in
6. An accounting process includes all of the following steps except ().
- a. analyzing
 - b. planning
 - c. classifying
 - d. summarizing

7. Purposes of an accounting system include all of the following except ().
- a. interpret and record the effects of business transactions
 - b. classify the effects of transactions to facilitate the preparation of reports
 - c. summarize and communicate information to decision makers
 - d. dictate the specific types of business transactions that the enterprise may engage in

Cases

1. You are employed by a business consulting firm as an information systems specialist. You have just begun an assignment with a start-up company and are discussing with the owner who need for an accounting system. How would you respond to the following questions from the owner?

- (1) What is the meaning of the term accounting system?
- (2) What is the purpose of an accounting system and what are its basic functions?
- (3) Who is responsible for designing and implementing an accounting system?

2. You are a loan officer at a bank that makes small loans to individuals to help finance purchases such as automobiles and appliances. You are considering an application from a young woman who needs to purchase a new car. She is requesting a loan of \$ 10 000 which, when combined with the trade-in value of her old car, will allow her to meet her needs. What are your expectations with regard to repayment of the loan, and what information would help you decide whether she is a good credit risk for your bank?

3. Mike and Brown have owned and operated a retail furniture store for more than 20 years. They have employed an independent CPA during this time to prepare various sales tax, payroll tax, and income tax return, as well as financial statements for themselves and the bank from which they have borrowed money from time to time. They are considering selling the store but are uncertain about how to establish an asking price.

What type of information is likely to be included in the material prepared by the CPA that may help Mike and Brown establish an asking price for the store?

CHAPTER 2

Accounting Standards

—What Govern Accounting Practice

Accounting practice needs certain guidelines to action. Accounting theory provides the rationale or justification for accounting practice. The accounting theory rests on foundation of basic concepts and assumptions that are very broad, few in number, and derived from accounting practice. The accounting principles provide guidelines or directives to accounting practice.

The accounting profession has developed standards that are generally accepted and universally practiced. This common set of standards is called generally accepted accounting principles (GAAP). Accounting principles are also referred to as standards, assumptions, postulates, and concepts. These standards indicate how to report economic events.

2.1 Accounting Assumptions

The most fundamental assumptions underlying the accounting process are: (1) accounting entity, (2) going concern, (3) the stable monetary unit, and (4) accounting period.

2.1.1 Accounting Entity

A major assumption in accounting is that economic activity can be identified with a particular unit of accountability. In other words, the activity of a business enterprise can be kept separate and distinct from its owners and any other business unit. If there were no meaningful way to separate all of the economic events that occur, no basis for accounting would exist.

Under this concept, for accounting purposes, all kinds of business concerns are conceived and treated as a separate entity, separate and distinct from its owners and from other concerns. Either the transactions or the assets of a concern should not include those of the owner or owners. As for the transactions between the concern and the owners in accounting procedures, they should be treated as those with other concerns. As a result, all the accounting records and reports should be made by a concern as an independent entity rather than by owners personally.

2.1.2 Going Concern

Most accounting methods are based on the assumption that the business enterprise will have a long life. Experience indicates that, in spite of numerous business failures, companies have a fairly high continuance rate. Although accountants do not believe that business firms will last indefinitely, they do expect them to last long enough to fulfill their objectives and commitments.

The going-concern concept, which holds that the entity will remain in operation for the foreseeable future. Most assets—that is, the firm's resources, such as supplies, land, buildings, and equipment—are acquired for use rather than for sale. Under the going concern concept, accountants assume that the business will remain in operation long enough to use existing assets for their intended purpose. The market value of an asset the price for which the asset can be sold—may change during the asset's life. Moreover, historical cost is a more reliable accounting measure for assets than market value because cost is a historical fact.

A balance sheet is prepared under the assumption that the concern for which the statement is made will continue in operation, so far a going concern the assets used in carrying on its operations are not for sale. Their current market values are not relevant and need not be shown. Also, without a sale, their current market values usually can not be objectively established as is required by the “objectivity principle”.

2.1.3 The Stable Monetary Unit

Accounting is based on the assumption that money is the common denominator by which economic activity is conducted, and that the monetary unit provides an appropriate

basis for accounting measurement and analysis. This assumption implies that the monetary unit is the most effective means of expressing to interested parties changes in capital and exchanges of goods and services. The monetary unit is relevant, simple, universally available, understandable, and useful. Application of this assumption is dependent on the even more basic assumption that quantitative data are useful in communication economic information and in making rational economic decisions.

In the United States, accountants record transactions in dollars because the dollar is the medium of exchange. British accountants record transactions in pounds sterling, and Japanese accountants in yen.

Unlike the value of a liter or a mile, the value of a dollar or of a Mexican peso changes over time. A rise in the general price level is called inflation. During inflation, a dollar will purchase less milk, less toothpaste, and less of other goods. When prices are stable—when there is little inflation—a dollar's purchasing power is also stable.

Accountants assume that the dollar's purchasing power is relatively stable. The stable monetary unit concept is the basis for ignoring the effect of inflation in the accounting records. It allows accountants to add and subtract dollar amounts as though each dollar has the same purchasing power as any other dollar at any other time.

2.1.4 Accounting Period

Life of a business often last many years and its activities go on without interruption over the years. Although the most accurate way to measure the results of enterprise activity would be to measure them at the time of the enterprise's eventual liquidation. Business, government, investors, and various other user groups, however, cannot wait indefinitely for such information. Accountants must provide financial information periodically, so that all users make their decisions upon the information.

The accounting period or time period assumption simply implies that the economic activities of an enterprise can be divided into artificial time periods of equal length. These time periods vary, but the most common are monthly, quarterly, and yearly.

2.2 Accounting Basis

There are two basis ways to do accounting: the accrual-basis and the cash basis. Generally accepted accounting principles require that business use the accrual-basis. This means that the business records revenues as they are earned and expenses as they are incurred—not necessarily when cash changes hands.

2.2.1 Cash-basis

In cash-basis accounting, the accountant records a transaction only when cash is received or paid. Cash receipts are treated as revenues and payments are handled as expenses. It ignores receivables, payables, and depreciation. Only very small business use the cash-basis.

Under the cash basis, revenues and expenses are reported in the income statement in the period in which cash is received or paid. For example, fees are recorded when cash is received from clients, and wages are recorded when cash is paid to employees. The net income (or net loss) is the difference between the cash receipts (revenues) and the cash payments (expenses).

The cash basis does not emphasize the matching principle. Instead, the receipt or payment of cash governs the recording process. Thus, the income statement under the cash basis could provide an unrealistic picture of the company's operations.

2.2.2 Accrual-basis

In accrual-basis accounting, an accountant recognizes the impact of a business transaction as it occurs. When the business performs a service, makes a sale, or incurs an expense, the accountant must enter the transaction into the journals, whether or not cash has been received or paid. Most business use the accrual-basis.

Under the accrual-basis, revenues are reported in the income statement in the period in which they are earned. For example, revenue is reported when the services are provided to customers. Cash may or may not be received from customers during this period. The con-

cept that supports this reporting of revenues is called the **revenue recognition concept**.

Accrual - basis accounting can provide more complete information than cash - basis accounting does, which is very important for decision - makers.

Accrual - basis accounting is more complex—and more complete—than cash - basis. Accrual - basis accounting records both **cash** transactions, including:

- Collecting from customers
- Receiving cash from interest earned
- Paying salaries, rent, income tax, and other expenses
- Borrowing money
- Paying off loans
- Issuing stock

It also records such **non - cash** transactions as:

- Purchases of inventory on account
- Sales on account
- Accrual of interest and other expenses incurred but not yet paid
- Depreciation expense
- Usage of prepaid insurance, supplies, and other prepaid expenses

The accrual - basis accounting is designed to avoid misleading income statement results that could otherwise result from the timing of cash receipts and payments. If the income statement is to portray a realistic net income figure based upon accrual accounting, all revenues earned during the period and all expenses incurred must be shown. Therefore, it is often necessary to adjust some account balances at the end of each accounting period to achieve a proper matching of costs and expenses with revenue. The adjusting step occurs after the journals have been posted, but before financial statements are prepared.

2.3 Accounting Principles

There are several basic principles of accounting that are used to record transactions: (1) historical cost, (2) realization principle, (3) matching principle, (4) full disclosure, and so on.

2.3.1 The Cost Principle —*Valuing Assets*

Traditionally, preparers and users of financial statements have found that cost is generally the most useful basis for accounting measurement and reporting. Under the cost principle, all goods and services purchased by an enterprise are recorded at acquisition cost and appear on financial statement at cost. This is often referred to as the **historical cost principle**.

The cost principle states that acquired assets and services should be recorded at their actual cost (also called historical cost). Even though the purchaser may believe the price paid is a bargain, the item is recorded at the price paid in the transaction and not at the “expected” cost. Suppose your stereo shop purchases stereo equipment from a supplier who is going out of business. Assume that you get a good deal on this purchase and pay only \$ 2 000 for merchandise that would have cost you \$ 3 000 elsewhere. The cost principle requires you to record this merchandise at its actual cost of \$ 2 000, not the \$ 3 000 that you believe it is worth.

The cost principle also holds that accounting records should maintain the historical cost of an asset for as long as the business holds the asset. Why? Because cost is a reliable measure. Suppose your store holds the stereo equipment for six months. During that time, stereo prices increase and the equipment can be sold for \$ 3 500. Should its accounting value—the figure “on the books”—be the actual cost of \$ 2 000 or the current market value of \$ 3 500? According to the cost principle, the accounting value of the equipment remains at actual cost, \$ 2 000.

2.3.2 The Realization Principle—*Measuring Revenues*

The realization principle means that revenue are usually measured in which they occur, rather than in the period in which they are collected. In other words, this is the period in which goods are shipped or services are rendered, in which revenue is said to be realized. At this point the business has essentially completed the earning process and the sales value of the goods or service can be measured objectively. In most cases, revenue is earned when the business has delivered a completed good or service to the customer. The reason is

that the business has done everything required by the agreement, including transferring the item to the customer. At any time prior to sale, the ultimate sales value of the goods or services sold can only be estimated. The revenue should be recognized and reported in the income statement when the timing of revenue is reasonably determinable and the earnings process is completed.

2.3.3 The Matching Principle—*Measuring Expenses*

Matching principle requires that revenues and expenses be matched. It is well recognized that a business incurs expenses in order to earn revenues. The revenues earned are the results of the expenses paid. Consequently it is only proper that expenses be matched with the revenues they helped to produce.

In recognizing expenses, accountants attempt to follow the approach of “let the expense follow the revenue.” Expenses are recognized not when wages are paid, or when the work is performed, or when a product is produced, but when the work (service) or the product actually makes its contribution to revenue. Thus, expense recognition is tied to revenue recognition. This practice is referred to as the matching principle because it dictates that efforts (expenses) be matched with the revenues whenever it is reasonable and practicable to do so.

2.3.4 The Objective Principle

Accounting records and statements are based on the most reliable data available so that they will be as accurate and as useful as possible. This guideline is the objective principle. The key of objective principle is that accounting records and financial reports must be based on financial and economic transactions as they actually take place, in order to reflect the financial position and operating results of an enterprise objectively. Without the objective principle, accounting records would be based on whims and options and subject to dispute.

2.3.5 The Full Disclosure Principle

The full disclosure principle holds that a company's financial statement should report

enough information for outsiders to make knowledgeable decision about the company. In short, the company should report relevant, reliable, and comparable information about its economic affairs. Adequate disclosure can be accomplished either in the financial statements or in the notes accompanying the statements. Such disclosure should make the financial statements more useful and less subject to misinterpretation. The key point to bear in mind is that the supplementary information should be relevant to the interpretation of the financial statements.

2.3.6 The Materiality Principle

In following general accepted accounting principles, accountants must consider the relative importance of any transactions. Accountants are primarily concerned with significant information and not overly concerned with those items which have little effect on financial statements. However, to determine whether the materiality of a transaction is or not, no precise criteria can be formulated. Accountants are required to judge the materiality in accounting practice. An item is judged to be material if it is important enough to influence the decisions of statement users. Materiality of an item may depend not only on its amount but also on its nature.

2.3.7 The Consistency Principle

The principle of consistency implies that accounting methods should be consistent from one period to the other and should not be arbitrarily changed. Changes and reasons for changes, if necessary, and their impact on an enterprise's financial position and operating results, should be reported in notes to the financial statements. This assumption is very important because it assists users of financial statements in interpreting changes in financial position and changes in net income.

2.3.8 Conservatism Principle

Conservatism holds that accountants should be conservative in their selection of procedures—valuation of assets and determination of revenues, choosing those that is lower among several alternatives. It means: **when in doubt choose the solution that will be**

least likely to overstate assets and income. The financial positions can be presented reasonably and the income amount be calculated correctly if the principle of conservatism is applied properly.

Applying the Cost Principle

Applying Your Knowledge

You are considering the purchase of land for future expansion. The seller is asking \$ 50 000 for land that cost him \$ 35 000. An appraisal shows a value of \$ 47 000. You first offer \$ 44 000, the seller makes a counteroffer of \$ 48 000, and you agree on \$ 46 000. What dollar value should be reported for the land on your financial statements?

According to the cost principle, assets and services should be recorded at their actual cost. You report the land at \$ 46 000, which is its historical cost. Because it is the value that you pay actually for the land.

Key words, phrases, and special terms

accounting standard	会计规范
accounting assumptions	会计假设
accounting entity	会计主体
going concern	持续经营
monetary unit	货币计量
accounting period	会计分期
cash-basis	现金收付制
accrual-basis	权责发生制(应计制)
cost principle	成本原则
realization principle	实现原则
matching principle	配比原则
objective principle	客观性原则

consistency principle	一致性原则
full disclosure	充分反映
materiality	重要性
conservatism	稳健性

Multiple-choice questions

1. GAAP are very important to ().
 - a. managers
 - b. auditors
 - c. investors
 - d. accountants
2. All goods and service purchased are recorded at acquisition cost in order to meet the requirement of ().
 - a. objectivity principle
 - b. cost principle
 - c. continuing concern concept
 - d. time period assumption
3. () has the assumption that the business will continue in operation.
 - a. Objectivity principle
 - b. Accounting entity
 - c. Continuing concern
 - d. Accounting periods
4. Under (), the accountants must consider the relative importance of any event.
 - a. objectivity principle
 - b. continuing concern
 - c. cost principle
 - d. materiality principle
5. () implies the stability of money such as U. S. dollar.

- a. Cost principle
 - b. Accounting entity
 - c. Monetary measurement
 - d. Objectivity principle
6. If the going-concern assumption is no longer valid for a company, ().
- a. land held as an investment would be valued at its liquidation value
 - b. all prepaid assets would be completely written off immediately
 - c. total contributed capital and retained earnings would remain unchanged
 - d. the allowance for uncollectible accounts would be eliminated
7. Which accounting concept or principle specifically states that we should record transactions at amounts that can be verified? ().
- a. Entity concept
 - b. Reliability principle
 - c. Cost principle
 - d. Going-concern concept

Exercises

(Applying accounting concepts and principles)

1. Dell Computer began in Michael Dell's dorm room at The University of Texas at Austin. Suppose Dell kept a single checkbook to account for both his personal affairs and Dell Computer transactions. Would he be able to determine the success or failure of the business? Which accounting concept or principle is applicable to Dell's situation?

2. Dell Computer owns real estate around Austin, Texas. Suppose the company purchased land for \$ 3 million in 1995, and its value has risen. The business is offering the land for sale. One real estate appraiser says the land is worth \$ 10 million; another appraises the land at \$ 15 million. Should Dell record a gain on the value of the land, or should Dell wait to record the gain after it has actually sold the land? Which accounting concept or principle controls this situation?

3. Dell Computer has several divisions. Managers of each division are evaluated on

their division's profit performance. Which concept or principle helps Dell Computer design an accounting system to identify the most profitable division managers?

4. Suppose Dell Computer decides to get out of the magnetic imaging business and offers its magnetic imaging division for sale. Which accounting concept or principle helps Dell account for its magnetic imaging division differently from its main operations?

5. Dell Computer must pay for the materials, labor, and overhead inputs to its computers. After assembly, a computer is much more valuable than the sum of the inputs. Which accounting concept or principle provides guidance on how to account for the materials, labor and overhead?

Cases

1. You are a professional accountant working for a public accounting firm and find yourself in a difficult situation. You have discovered some irregularities in the financial records of your firm's client. You are uncertain whether these irregularities are the result of carelessness on the part of the company's employees or represent intentional steps taken to cover up questionable activities. You approach your superior about this and she indicates that you should ignore it. Her response is "These things happen all of the time and usually are pretty minor. We are on a very tight time schedule to complete this engagement, so let's just keep our eyes on our goal of finishing our work by the end of the month."

What would you do?

2. At December 30, 2008, Ham Software Inc. purchased a computer system from a mail-order supplier for \$ 14 000. The retail value of the system—according to the mail-order supplier—was \$ 20 000. On January 7, however, the system was stolen during a burglary. In its December 31, 2008, balance sheet, Ham showed this computer system at \$ 14 000 and made no reference to its retail value or to the burglary. The December balance sheet was issued in February of 2009.

In this case, indicate the appropriate balance sheet amount of the asset under GAAP. If the amount assigned by the company is correct or not, briefly explain the accounting principle that justify or violated this amount.

CHAPTER 3

Accounting Equation

—*Why All Accounts are Always Balance*

The most basic tool of accounting is the accounting equation. The equation presents the resources of the business and the claims to those resources. The financial statements, as the final product of the accounting process, are prepared based on this equation.

3.1 The Accounting Elements

Before the accounting process can begin, the organization must be defined. A business entity could be an individual, association, or other organization that engages in business activities. This definition separates personal from business finances of an owner.

A business that is owned by one person is called a proprietorship. The owner of the business is known as the proprietor. Here, we will only discuss proprietorship.

The three basic accounting elements are assets, liabilities, and owner's equity. They exist in every business entity.

Assets

An item of value that is owned and will provide future benefits is called an asset. Such items include cash, office supplies, office equipment and land. Another type of asset is an account receivable.

This is an unwritten promise by a customer to pay for services rendered.

Liabilities

A liability is an amount owed to another business. Liabilities are usually paid in cash.

The most common liability is accounts payable. An account payable is an unwritten

promise to pay at a later date.

Owner's Equity

The amount by which business assets exceed business liabilities is called owner's equity. If there are no liabilities, the owner's equity is equal to the total amount of the assets. Owner's equity is increased with revenue, and decreased by expenses or an owner's withdrawal.

Revenue

Revenue is the economic resources flowing into a business as a result of rendering goods sold and services during a given accounting period. Sales revenue, service revenue, and investment revenue are subdivisions of revenue. Increase in revenue will increase owner's equity.

Expenses

Expenses are the outflow of a business's economic resources resulting from earning revenue or the cost of the operational activities for the business. Expenses include cost of goods sold, administrative expenses, selling expenses, and financial expenses. Increase in expenses will decrease owner's equity.

Net Income

Net income (or net loss) is the result of matching revenue with expenses. When revenue exceeds expenses, net income occurs, otherwise net loss occurs. The earning of net income, or profits, is a major goal of almost every enterprise, larger or small.

3.2 The Accounting Equation

The relationship between the three basic accounting elements—assets, liabilities, and owner's equity—is expressed in the accounting equation, shown as follows:

$$\begin{array}{ccc} \text{Assets} = & \underbrace{\text{Equities}} & \\ & \text{Creditors} \quad \text{Owner} & \\ & \swarrow \quad \searrow & \\ \text{Assets} = & \text{Liabilities} + \text{Owner's Equity} & \end{array}$$

This equation shows assets are equal to equities. Equities are divided into liabilities

and owner's equity. When the amounts of any two of these elements (assets, liabilities, or owner's equity) are known, the third can be calculated. The following are variations of the accounting equation:

$$\begin{aligned}
 \text{Owner's Equity} &= \text{Assets} - \text{Liabilities} \\
 \text{Liabilities} &= \text{Assets} - \text{Owner's Equity} \\
 \text{Liabilities} + \text{Owner's Equity} &= \text{Assets}
 \end{aligned}$$

3.3 The Effects of Transaction on the Accounting Equation

Any activity of a business which affects the accounting equation is a **transaction**. Transactions are recorded in the accounting records using the **cost principle**. The actual amount paid or received is the amount recorded. Buying and selling assets, performing service and borrowing money are common business transactions.

3.3.1 The Basic Accounting Equation: Assets=Liabilities+Owner's Equity

The effect of any transaction on the accounting equation may be indicated by increasing or decreasing a special asset, liability or owner's equity element. To illustrate, assume the following transactions took place during January, 2018, for Ted Andy, Dentist. The effect of these transactions on the accounting equation can be analyzed as follows:

Transaction (1): owner invested \$ 50 000 cash in the business

Effect on Accounting Equation:

An increase in an asset offset by an increase in owner's equity.

Analysis:

Andy opened a bank account for his business with a deposit of \$ 50 000. This transaction increased the asset Cash. Since Andy contributed the asset, owner's equity—Ted Andy, Capital—was increased by the same amount. The equation for the business would appear as follows:

$$\begin{array}{rclcl}
 \underline{\text{Assets}} & = & \underline{\text{Liabilities}} & + & \underline{\text{Owner's Equity}} \\
 \text{Cash} & = & & & \text{Ted Andy, Capital} \\
 (1) \quad + \$ 50\,000 & & & & + \$ 50\,000
 \end{array}$$

Total Assets: \$ 50 000 = Total Liabilities + Owner's Equity: \$ 50 000.

Transaction (2) : purchased office equipment on account, \$ 2 500

Effect on Accounting Equation:

An increase in an asset offset by an increase in a liability.

Analysis:

Andy purchased office equipment (desks, chairs, file cabinet, etc.) for \$ 2 500 on account. This transaction caused the asset Office Equipment to increase by \$ 2 500. The liability Account Payable increased by the same amount. There was no effect on the owner's equity. The accounting equation now looks like this:

Assets			=	Liabilities	+	Owner's Equity
Cash	+	Office Equipment	=	Accounts Payable		Ted Andy, Capital
\$ 50 000						\$ 50 000
		+2 500		+2 500		
(2) \$ 50 000	+	\$ 2 500	=	\$ 2 500	+	\$ 50 000

Total Assets: \$ 52 500 = Total Liabilities + Owner's Equity: \$ 52 500.

Transaction (3) : purchased office supplies for cash, \$ 350

Effect on Accounting Equation:

An increase in one asset offset by a decrease in another asset.

Analysis:

Andy purchased office supplies (stationery, legal pads, pencils, etc.) for cash, \$ 350. This transaction caused a \$ 350 decrease in the asset Cash. The asset Office Supplies increased by \$ 350. The effect on the equation is as follows:

Assets					=	Liabilities	+	Owner's Equity					
Cash		+	Office Supp.	+	Office Equip.	=	Accounts Payable	Ted Andy, Capital					
\$	50 000				\$	2 500	\$	2 500	\$	50 000			
(3)	<u>-350</u>		<u>+350</u>										
\$	49 650	+	\$	350	+	\$	2 500	=	\$	2 500	+	\$	50 000

Total Assets: \$ 52 500 = Total Liabilities + Owner's Equity: \$ 52 500.

Transaction (4) :paid amount owed to a creditor , \$ 500**Effect on Accounting Equation :**

A decrease in an asset offset by a decrease in a liability.

Analysis :

Andy paid \$ 500 on account to the company from which the office equipment was purchased. Earlier, Andy purchased office equipment on account. The office equipment account increased and the liability Accounts Payable increased. Now Andy is going to make a payment on this account. This payment caused both the asset Cash and the liability Accounts Payable to decrease by \$ 500. The effect on the equation is as follows :

<u>Assets</u>				=	<u>Liabilities</u>	+	<u>Owner's Equity</u>	
Cash	+	Office Supp.	+	Office Equip.	=	Accounts Payable	Ted Andy, Capital	
\$ 49 650		\$ 350		\$ 2 500		\$ 2 500	\$ 50 000	
(4) <u>-500</u>						<u>-500</u>		
\$ 49 150	+	\$ 350	+	\$ 2 500	=	\$ 2 000	+	\$ 50 000

Total Assets : \$ 52 000 = Total Liabilities + Owner's Equity : \$ 52 000.

Transaction (5) :purchased office supplies on account, \$ 400**Effect on Accounting Equation :**

An increase in an asset offset by an increase in a liability.

Analysis :

Andy purchased office supplies on account for \$ 400. This transaction caused the asset Office Supplies to increase by \$ 400 and increase the liability Account Payable by the same amount. The effect of this transaction on the equation is as follows :

<u>Assets</u>					=	<u>Liabilities</u>	+	<u>Owner's Equity</u>	
	Cash	+	Office Supp.	+	Office Equip.	=	Accounts Payable	Ted Andy, Capital	
	\$ 49 150		\$ 350		\$ 2 500		\$ 2 000	\$ 50 000	
(5)	<u> </u>		<u>+400</u>		<u> </u>		<u>+400</u>	<u> </u>	
	\$ 49 150	+	\$ 750	+	\$ 2 500	=	\$ 2 400	+	\$ 50 000

Total Assets : \$ 52 400 = Total Liabilities + Owner's Equity : \$ 52 400.

3.3.2 Expanding the Accounting Equation: $\text{Revenues} - \text{Expenses} = \text{Net Income}$

To complete our discussion of the accounting equation, three additional items must be covered: revenue, expense and owner's withdrawal.

The term **revenue** generally means an increase in assets because a service was rendered. Revenue is one of two ways that owner's equity can be increased:

(1) As illustrated in transaction (1), the owner may invest cash. Such an investment increases both assets and owner's equity.

(2) Revenue earned from providing services to customers also increases owner's equity.

When **revenue** is earned, the assets are increased (normally cash or accounts receivable), and owner's equity is increased.

The term **expense** generally means a decrease in assets (usually cash) or an increase in liabilities (usually accounts payable) in order to earn more revenue. Just like revenue, an expense directly affects the owner's equity and is one of the two ways that owner's equity can be decreased:

(1) The owner may withdraw cash or other assets from the business. This type of transaction is charged to the owner's drawing account.

(2) Expense incurred in operating the business also decrease owner's equity.

Common examples of expenses are office rent, salaries of employees, telephone service, and many types of taxes.

If total revenue of the period exceeds total expenses, the result is called **net income**. On the other hand, if total expense of the period exceeds total revenue, the result is called **net loss**.

The time period covered for a business may be a month, a year, or some other period of time. Any accounting period of twelve months' duration is called a **fiscal year**. The fiscal year can also be a calendar year.

3.3.3 Effect of Revenue, Expense, and Owner's Withdrawal Transaction on the Accounting Equation

To show the effect of revenue, expense, and owner's withdrawal, the example of Ted

Andy, Dentist, will be continued.

Transaction (6) :owner withdrew \$ 300 for personal use

Effect on Accounting Equation :

A decrease in an asset offset by a decrease in owner's Equity.

Analysis :

Andy withdraw cash in the amount of \$ 300 from the business for his personal use. This transaction resulted in a decrease to the asset Cash and a decrease to owner's equity. Owner's equity decreased because of a personal withdraw of cash by the owner. A withdrawal, or the use of the term **drawing**, is used to indicate a personal expense and not a business expense. The effect of this transaction on the equation is as follows :

Assets				=	Liabilities	+	Owner's Equity							
Cash	+	Office Supp.	+	Office Equip.	=	Accounts Payable	+	Capital Ted Andy, Capital	-	Drawing Ted Andy Drawing	+	Revenue	-	Expense
\$ 49 150		\$ 750		\$ 2 500		\$ 2 400		\$ 50 000						
(6) <u>-300</u>										<u>+300</u>				
\$ 48 850	+	\$ 750	+	\$ 2 500	=	\$ 2 400	+	\$ 50 000	-	\$ 300				

Total Assets: \$ 52 100 = Total Liabilities + Owner's Equity: \$ 52 100.

(Notice that owner's drawing decreases total owner's equity by \$ 300.)

Transaction (7) :received cash as payment for professional fees, \$ 3 500

Effect on Accounting Equation :

An increase in an asset offset by an increase in owner's equity.

Analysis :

Andy received \$ 3 500 cash from a client for dental services performed. This transaction caused the asset Cash to increase by \$ 3 500. Since cash was received for services performed, owner's equity also increased. Professional Fees is the account title used for revenue. The effect of this transaction on the equation is as follows :

Assets				=	Liabilities	+	Owner's Equity				
Cash	+	Office Supp.	+	Office Equip.	=	Accounts Payable	+	Capital Ted Andy, Capital	- Drawing Ted Andy Drawing	+ Revenue	- Expense
\$ 48 850		\$ 750		\$ 2 500		\$ 2 400		\$ 50 000	\$ 300		
(7) +3 500										+3 500	
\$ 52 350	+	\$ 750	+	\$ 2 500	=	\$ 2 400	+	\$ 50 000	- \$ 300	+	\$ 3 500

Total Assets: \$ 55 600 = Total Liabilities + Owner's Equity: \$ 55 600.

Transaction (8) : paid office rent \$ 1 000

Effect on Accounting Equation:

A decrease in an asset offset by a decrease in owner's equity.

Analysis:

Andy paid \$ 1 000 for office rent for January. This transaction caused the asset Cash to decrease by \$ 1 000, with an equal reduction in owner's equity. Owner's equity was decreased because of rent expense. The effect of this transaction on the equation is as follows:

Assets				=	Liabilities	+	Owner's Equity							
Cash	+	Office Supp.	+	Office Equip.	=	Accounts Payable	+	Capital Ted Andy, Capital	-	Drawing Ted Andy Drawing	+	Revenue	-	Expense
\$ 52 350		\$ 750		\$ 2 500		\$ 2 400		\$ 50 000		\$ 300		\$ 3 500		
(8) -1 000														+1 000
\$ 51 350	+	\$ 750	+	\$ 2 500	=	\$ 2 400	+	\$ 50 000	-	\$ 300	+	\$ 3 500	-	\$ 1 000

Total Assets: \$ 54 600 = Total Liabilities + Owner's Equity: \$ 54 600.

(Notice that even though \$ 1 000 is added to expenses, there is a minus sign in front of expenses in the equation, which means that expenses decrease owner's equity.)

Transaction (9) : paid telephone expense, \$ 75

Effect on Accounting Equation:

A decrease in an asset offset by a decrease in owner's equity.

Analysis:

Andy paid a bill for telephone service, \$ 75. This transaction, like the previous one, decreased the asset Cash, and also decreased owner's equity. Owner's equity was decreased because of the Telephone Expense. The effect of this transaction on the equation is as follows:

Assets				=	Liabilities	+	Owner's Equity							
Cash	+	Office Supp.	+	Office Equip.	=	Accounts Payable	+	Capital Ted Andy, Capital	-	Drawing Ted Andy Drawing	+	Revenue	-	Expense
\$ 51 350		\$ 750		\$ 2 500		\$ 2 400		\$ 50 000		\$ 300		\$ 3 500		\$ 1 000
(9) <u>-75</u>														<u>+75</u>
\$ 51 275	+	\$ 750	+	\$ 2 500	=	\$ 2 400	+	\$ 50 000	-	\$ 300	+	\$ 3 500	-	\$ 1 075

Total Assets: \$ 54 525 = Total Liabilities + Owner's Equity: \$ 54 525.

From the above analysis, we know that every business transaction, no matter how simple or how complex, can be expressed in terms of its effect on the accounting equation. Each business transaction makes at least two effects on the accounting equation that always keeps balance after every Business transaction was finished, i. e., the total amount of left side equals to that of the right side.

Applying the Accounting Equation

Applying Your Knowledge

Mark Corporation begins the year, if the assets are \$ 174 300 and the liabilities are \$ 82 000, how much is the owners' equity?

If the owners' equity in the business increased \$ 10 000 and the liabilities decreased \$ 5 000 in this year, how much are the assets?

If the company reported yearly revenues of \$ 77 600 and assets of \$ 210 000 at the end of this period. The other items have no change. What is expenses and how much are

the result of operations for the period?

We can apply **the accounting equation** to determine the amounts of all the above items:

$$(1) \text{The owners' equity} = \$ 92\,300 (\$ 174\,300 - \$ 82\,000)$$

$$(2) \text{The assets} = \$ 179\,300 (\$ 92\,300 + \$ 10\,000 + \$ 82\,000 - \$ 5\,000)$$

$$(3) \text{The expense} = \$ 46\,900 [\$ 77\,600 - (\$ 210\,000 - \$ 179\,300)]$$

$$\text{The result of operations (Net income)} = \$ 30\,700 (\$ 77\,600 - \$ 46\,900).$$

Key words, phrases, and special terms

asset	资产
liability	负债
owner's equity	所有者权益
accounting equation	会计平衡公式
fiscal year	会计年度
transaction	交易, 业务
basic accounting elements	基本会计要素
drawing	提款, 资本撤回
net income	净利润
net loss	净损失
expense	费用
revenue	收入

Multiple-choice questions

1. Suppose a Target store has cash of \$ 50 000, receivables of \$ 60 000, and furniture and fixture totaling \$ 200 000. The store owes \$ 80 000 on account and has a \$ 100 000 note payable. How much is the store's owner equity? ().

- a. \$ 20 000
- b. \$ 310 000

c. \$ 180 000

d. \$ 130 000

2. Carolina Corporation begins the year with retained earnings of \$ 100 000. During the year, the corporation earns \$ 40 000 and declares dividends of \$ 15 000.

Carolina Corporation

Change in retained earnings

Beginning Retained Earnings	\$ 100 000
Add: Income	_____
Less: Dividends Declared	_____
Ending Retained Earning	_____
Carolina should report ending retained earnings of ().	

a. \$ 100 000

b. \$ 115 000

c. \$ 125 000

d. \$ 140 000

e. \$ 150 000

3. Portions of Home Company's balance sheet were damaged by spilled coffee. Using your knowledge of balance sheet relationships, calculate the ending Capital Stock account balance.

Home Company

Balance sheet at December 31, 2018

Assets		Liabilities	
Cash	\$ 40 000	Accounts Payable	\$ 60 000
Inventory	100 000	Capital Stock	?
Investments	100 000	Retained Earning	80 000
	\$ 240 000		\$?

The balance in the Capital Stock account is ().

a. \$ 80 000

b. \$ 100 000

c. \$ 120 000

d. \$ 150 000

e. \$ 180 000

4. All of Associated Company's balance sheet accounts except cash are shown here:

Associated Company

Balance sheet items at December 31, 2018

Expenses Payable	\$ 20 000
Retained Earnings	230 000
Inventory	10 000
Equipment	80 000
Capital Stock	110 000
Note Payable	40 000
Factory	230 000

For this exercise, first classify the accounts as assets, liabilities, or owners' equity.

Then use the balance sheet equation to calculate the missing amounts.

Associated's cash balance is().

a. \$ 40 000

b. \$ 50 000

c. \$ 70 000

d. \$ 80 000

e. \$ 100 000

5. This exercise involves recognition of asset, liability, and owners' equity accounts.

Hillside Company's balance sheet at the beginning of 2018 shows the following:

Cash	\$ 500
Capital Stock	100
Accounts Receivable	48
Accumulated Depreciation	90
Accounts Payable	30
Inventory	10
Retained Earning	528
Equipment	190

Hillside's assets (net of accumulated depreciation) on January 1, 2018 total().

- a. \$ 621
- b. \$ 658
- c. \$ 660
- d. \$ 710
- e. \$ 719

6. Dalmatian Corporation begins the year with \$ 200 000 of retained earnings. During the year, the corporation earns \$ 60 000. Ending retained earnings are \$ 220 000.

Dalmatian Corporation

Change in retained earnings

Beginning Retained Earnings	\$ 200 000
Add: Income	_____
Less: Dividends Declared	_____
Ending Retained Earnings	\$ 220 000

The corporation declared the following dividends to Sandra, Sally, and Susie, the three shareholders: ().

- a. \$ 20 000
- b. \$ 40 000
- c. \$ 60 000
- d. \$ 80 000
- e. \$ 90 000

7. If Fossil paid expenses totaling \$ 35 000. How does this transaction affect Fossil's accounting equation? ().

- a. Increases assets and decreases liabilities
- b. Increases both assets and owner's equity
- c. Decreases both assets and owner's equity
- d. Decreases assets and increases liabilities

Exercises

1. Answer these questions about two actual companies.

(2) Johnson & Johnson, famous for Band-Aids and other health-care products, began the year with total assets of \$ 12.2 billion and total liabilities of \$ 6.7 billion. Net income for the year was \$ 2.0 billion, and dividends and other decreases in stockholders' equity totaled \$ 0.4 billion. How much is stockholders' equity at the end of the year?

- Paid \$ 400 cash for office equipment
- Paid office rent for January, \$ 1 100
- Received \$ 4 400 cash for professional services
- Paid for telephone service, \$ 210
- Paid \$ 3 800 on the account payable
- Withdrew \$ 900 for personal use

Calculate the beginning balance for capital and indicate the effect of each transaction on the accounting equation by using the form shown below. Each amount should be preceded by a plus sign if it represents an increase or by a minus sign if it represents a decrease. Calculate the balance in each account after each transaction has been entered to verify that the accounting equation is in balance.

[illegible]

- e. _____
f. _____

3. Complete the following chart concerning increases and decreases in the accounting elements.

	Recorded on Debit Side	Recorded on Credit Side
a. Increase in cash account	_____	_____
b. Decrease in accounts payable account	_____	_____
c. Increase in owner's capital account	_____	_____
d. Increase in owner's drawing account	_____	_____
e. Increase in expense account	_____	_____
f. Increase in revenue account	_____	_____
g. Increase in accounts payable account	_____	_____

4. During the month of April, Macon Co. had cash receipts from customers of \$ 79 000, Expenses totaled \$ 52 000, and accrual basis net income was \$ 14 000. There were no gains or losses during the month.

Required:

- a. Calculate the revenues for Macon Co. for April.
b. Explain why cash receipts from customers can be different from revenues.

5. Indicate the effect of each of the following transactions on total assets, total liabilities, and total owner's equity. Use (+) for increase, (–) for decrease, and (NE) for no effect. The first transaction is provided as an illustration.

	Assets	Liabilities	Owner's Equity
a. Borrowed cash on a bank loan	+	+	NE
b. Paid an account payable			
c. Sold common stock			
d. Purchased merchandise inventory on account			
e. Declared and paid dividends			
f. Collected an account receivable			
g. Sold merchandise inventory on account at a profit			

- h. Paid operating expenses in cash
- i. Repaid principal and interest on a bank loan

Cases

1. Contact a local business and arrange with the owner to learn what accounts the business uses.

Required:

- (1) Obtained a copy of the business's chart of accounts.
- (2) Prepare the company's financial statements for the most recent month, quarter, or year.

You may use either made-up account balances or balances supplied by the owner.

If the business has a large number of accounts within a category, combine related accounts and report a single amount on the financial statements. For example, the company may have several cash accounts. Combine all cash amounts and report a single Cash amount on the balance sheet.

You will probably encounter numerous accounts that you have not yet learned. Deal with these as best as you can.

Keep in mind that the financial statements report the balances of the accounts listed in the company's chart of accounts. Therefore, the financial statements must be consistent with the chart of accounts.

2. Assume you are out of school for the summer and decide to begin a small business to make money to help cover the cost of school next year and to have spending money this summer. You decide to establish a lawn care service. What assets would you expect to need to start and maintain your business? Assuming you are successful in getting the business started, what revenues and expenses would you expect to incur as you run your business? How would you know if you were doing well in terms of covering your costs and earning money for school next year?

3. How to use the accounting equation to understand the following questions.

- (1) When you deposit money in your bank account, the bank credits your account. Is

the bank misusing the word credit in this context? Why does the bank use the term credit to refer to your deposit, and not debit?

(2) Your friend asks, “when revenues increase assets and expenses decrease assets, why are revenues credits and expenses debits and not the other way around?” Explain to your friend why revenues are credits and expenses are debits.

4. Ted, a charitable organization in a city, has a standing agreement with a bank. The agreement allows Ted to overdraw its cash balance at the bank when donation are running low. In the past, Ted managed funds wisely and rarely used this privilege. Jacob Henson has recently become the president of Ted. To expand operation, Henson acquired office equipment and spent large amounts on fund-raising. During Henson’s presidency, Ted has maintained a negative bank balance of approximately \$ 6 000.

Required: What is the ethical issue in this situation? State why you approve or disapprove of Henson’s management of Ted’s funds.

CHAPTER 4

Accounting Methods

—How to Record What Happened in Business

In chapter 3, we saw how business transactions cause a change in one or more of the three basic accounting elements. Every transaction affects at least two accounting elements. This forms the basis of **double-entry accounting**.

4.1 The Double-Entry System of Accounting

The mechanics of double-entry accounting are such that transaction is recorded in the debit side of one or more accounts and in the credit side of one or more accounts with equal debits and credits. Such form is called accounting entry. Where there are only two accounts affected, the debit amounts are equal. If more than two accounts are affected, the total of the debit entries must equal the total of the credit entries.

The double entry accounting is used by virtually every business organization, regardless of whether the company's accounting records are maintained manually or by computer. Today we have computer software programs like Quick Books that appear to be single-entry (like your checkbook), but are actually written in a double-entry format.

Accuracy is improved because the accounting equation must balance after each transaction. Luca Paciolo, an Italian monk, introduced double-entry accounting back in 1494. The reason that double-entry accounting has been in existence for over 500 years is because it ensures accuracy. By applying the double-entry accounting, accountants can locate many types of errors which might be made while maintaining accounting records. Nowadays, the double-entry accounting is almost used in the worldwide.

4.2 The Account

As we early mentioned, business transactions were recorded and summarized in the accounting equation format. However, this format is difficult to use when thousands of transactions must be recoded daily. Thus accounting systems are designed to show the increases and decreases in each financial statement item in a separate record. This record is called an account.

The assets of a business may consist of a number of items, such as cash and office supplies. A form or record used to keep track of the increases and decreases in each item is known as account. Accounts are used to maintain an orderly record of all transactions affecting that item. The following accounts with their account classification were used in the example of Ted Andy, Dentist:

Assets

Cash

Office Supplies

Office Equipment

Liabilities

Accounts Payable

Owner's Equity

Ted Andy, Capital

Ted Andy, Drawing

Revenue

Professional Fees

Expenses

Rent Expense

Telephone Expense

4.2.1 The T-Accounts

To record transaction, accountants often use T-accounts. A T-account is commonly used for instructional purposes. It consists of a two-line drawing resembling the capital letter T. The term get its name from that. The vertical line in the divides the account into its two sides: left and right. The Account title rests on the horizontal line at the top of the T. For example, the Cash account of a business appears in the following T-account format (Figure 4-1):

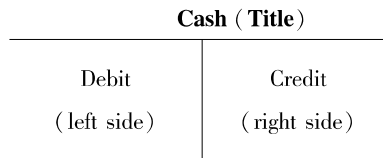


Figure 4-1 T-Account Format

4.2.2 Four-Column Account Format

The ledger accounts illustrated thus far have been in a two-column T-account format, with the debit column on the left and the credit column on the right. The T-account clearly distinguishes debits from credits and is often used for illustrative purposes that do not require much detail.

Another standard format has four amount columns, as illustrated for the Cash account in Exhibit 4-1. The first pair of amount columns are for the debit and credit amounts posted from journal entries. The second pair of amount columns are for the account's balance. This four-column format keeps a running balance in the two rightmost columns of the account. For this reason, the four-column format is used more often than the two-column format. In Exhibit 4-1, Cash has a debit balance of \$ 50 000 after Air & Sea's first transaction and a debit balance of \$ 10 000 after its second transaction is posted. The "J. 1" in the Journal Reference column indicates that the posted amount came from journal page 1.

Exhibit 4-1 Four-column Account Format

Account; Cash			Account No. 111			
Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2018						
Apr. 1		J. 1	\$ 50 000		\$ 50 000	
		J. 1		\$ 40 000	\$ 10 000	

The account you see is called a four-column account. It is different from the T-account, but it accomplishes the same purpose. In the T-account, you added the left side (debits) and then the right side (credits) to see which was larger. Then you subtracted the smaller from the larger, and the balance remaining was on the side with the larger amount.

In the four-column account, you first enter the amount and then compute a new balance. After each entry is posted, the new account balance is computed.

4.2.3 Normal Balance of an Account

An account's normal balance is on the side of the account—debit or credit—where increases are recorded. That is, the normal balance is on the side that is positive. For example, because cash and other assets usually have a debit balance (the debit side is positive and the credit side negative), the normal balance of assets is on the debit side. Assets are called debit-balance accounts. Conversely, because liabilities and stockholders' equity usually have a credit balance, their normal balances are on the credit side. They are called credit-balance accounts. Exhibit 4-2 illustrates the normal balance of all the assets, liabilities, and stockholders' equities, including revenues and expenses.

An account that normally has a debit balance may occasionally have a credit balance, which indicates a negative amount of the item. For example, Cash will have a temporary credit balance if the entity overdraws its bank account. Similarly, liability Accounts Payable—normally a credit-balance account—will have a debit balance if the entity overpays its account. In other instances, the shift of a balance amount away from its normal balance indicates an accounting error. For example, a credit balance in Office Supplies, Office Furniture, or Buildings indicates error because negative amounts of these assets do not exist.

Exhibit 4-2 Normal Balances of Accounts

Assets	Debit
Liabilities	Credit
Stockholders' equity	Credit
Common stock	Credit
Retained earnings	Credit
Dividends	Debit
Revenues	Credit
Expenses	Debit

4.2.4 The Chart of Accounts

Prior to journalizing, the bookkeeper must know which account to use, or which account to debit and which to credit. One of the first things a new business does is to determine what accounts it will use in its day-to-day operations. A separate account is kept for each type of asset and each type of liability, along with the owner's equity accounts. These three types of accounts are called permanent accounts because they will have ongoing balances from one accounting period to the next. These accounts are also called Balance Sheet accounts because they always appear on balance sheet.

In addition to the permanent accounts, there are three types of temporary accounts: (1) revenue, (2) expense, and (3) drawing. These temporary accounts are used to match this month's revenues with this month's expenses. These accounts prevent numerous entries to the owner's equity account. At the end of the accounting period, revenues and expenses are totaled. The difference between these two totals becomes either an increase or a decrease to owner's equity. When revenues exceed expenses, it's called net income, when expenses exceed revenues, it's a net loss. These accounts are also called Income Statement accounts because they always appear on income statement. Likewise, the drawing account is totaled and subtracted from the total owner's equity. Each of these temporary accounts is, in effect, closed at the end of each accounting cycle (month or year), and reopened at the beginning of the next month or year (with a beginning balance of zero).

The chart of accounts is a list of all accounts used by a business. It is common practice to assign a number to each account and to keep the account in numerical order. This numbering system follows a consistent pattern. Typically, asset accounts are 100s, liabilities are 200s, owner's equity accounts are 300s, revenue accounts are 400s, and expense accounts are 500s. A chart of accounts for Ann's Delivery Service Company, a general delivery service, is shown in Exhibit 4-3 (In her business, Ann performs delivery services and bill some customers at the end of the month; therefore, she will have an account called "Accounts Receivable" for accounts billed but not yet collected).

Exhibit 4-3**Ann's Delivery Service Company****Chart of Accounts****Assets :**

111 Cash

121 Accounts Receivable

131 Office Supplies

141 Office Equipment

151 Delivery Truck

Liabilities :

211 Accounts Payable

221 Notes Payable

Owners Equity :

311 Ann Moe, Capital

312 Ann Moe, Drawing

Revenue :

411 Delivery Fees

Expenses :

511 Rent Expense

522 Salary Expense

525 Utilities Expense

531 Telephone Expense

533 Advertising Expense

555 Entertainment Expense

560 Truck Expense

599 Miscellaneous Expenses

Some accountants prefer to assign numbers to accounts in alphabetical order, although this procedure is not a requirement of good accounting practice. In expense accounts, the preferred sequence is to assign numbers in order of anticipated dollar amounts. Therefore, the account expected to have the largest amount (Rent Expense) is assigned the first number, and other accounts follow in descending order. Miscellaneous Expense is generally assigned as the last number, even though it may not always be the smallest amount.

4.3 Debits and Credits

Learning the rules of debits and credits is similar to learning the rules on how to drive a car. You learn to drive your car on the right side of the road. As you learn debits and credits, remember there are established rules that everyone must follow.

4.3.1 The symbol of debit and credit

To debit an account means to enter an amount on the left side of the account. To credit an account means to enter an amount on the right side of the account. The abbreviation

for debit is Dr. and for credit Cr. (based on the Latin terms debere and credere). Sometimes the word charge is used as a substitute for debit. In entering transactions, the debits must always equal the credits.

4.3.2 The rules of debit and credit

The rules of debit and credit are based upon the location of the basic elements in the accounting equation. Since left means debit in accounting and assets are on the left side of the equation, increases in assets are entered on the left or debit side of an account. Decreases in assets are entered on the right or credit side. Liabilities and owner's equity are on the right side of the accounting equation. Increases are entered on the right or credit side of an account. Decreases in liabilities or owner's equity are entered on the left or debit side. By following these rules, the basic equality of assets to equities (Assets = Liabilities + Owner's Equity) will be maintained. These basic relationships are shown as follows:

Assets		=				Liabilities+Owner's Equity	
All Asset Accounts				All Liability Accounts			
Debit to enter increases (+)	Credit to enter decreases (-)			Debit to enter decreases (-)		Credit to enter increases (+)	
				All Owner's Equity Accounts			
				Debit to enter decreases (-)		Credit to enter increases (+)	
				Drawing Accounts		Revenue Accounts	
		Debit to enter increases (+)	Credit to enter decreases (-)	Debit to enter decreases (-)		Credit to enter increases (+)	
		Expense Accounts					
		Debit to enter increases (+)	Credit to enter decreases (-)				
Total Debits				=		Total Credits	

Figure 4-2 The Rules of Debit and Credit

4.4 Applying of Double-entry Accounting

4.4.1 Use of Asset, Liability, and Owner's Equity Accounts

The next step in learning accounting is to combine the accounting equation with the rules of debit and credit. We will review the same transactions for Ted Andy, Dentist, using T-accounts.

Transaction (a) : Ted Andy started a business by investing \$ 30 000 in cash

Cash	Ted Andy, Capital
(a) 30 000	(a) 30 000

Analysis :

The asset Cash and Andy's equity in the business increased. Since Cash is an asset and assets are on the left side of the accounting equation, the Cash account was increased by a debit. Ted Andy, Capital, is on the right side of the equation and to show an increase in this account, Ted Andy, Capital, was credited for \$ 30 000.

Transaction (b) : Andy purchased office equipment for \$ 2 500 on account

Office Equipment	Accounts Payable
(b) 2 500	(b) 2 500

Analysis :

To show an increase in the asset account, Office Equipment, it was debited for \$ 2 500. Since liabilities are on the right side of the equation, increases to liabilities are shown on the right or credit side of the account. To increase the liabilities of the business, Accounts Payable was credited for \$ 2 500.

Transaction (c) : Andy purchased office supplies for cash, \$ 350

Cash	Office Supplies
(a) 30 000 (c) 350	(c) 350

Analysis:

One asset was increased while another asset was decreased. There is no change in total assets. Office Supplies was debited for the increase and Cash was credited for the decrease of \$ 350. Office supplies are an asset at the time of purchase even though they will become an expense when used. The procedure used in accounting for supplies used will be discussed later.

Transaction (d) : Andy paid \$ 500 on account to the company from which the office equipment was purchased

Cash		Accounts Payable	
(a) 30 000	(c) 350	(d) 500	(b) 2 500
	(d) 500		

Analysis:

The liability Accounts Payable was decreased with a debit, and the asset Cash was decreased with a credit for \$ 500.

Transaction (e) : Purchased office supplies on account, \$ 400

Office Supplies		Accounts Payable	
(c) 350		(d) 500	(b) 2 500
(e) 400			(e) 400

Analysis:

The asset Office Supplies was increased with a debit. The liability Accounts Payable was increased with a credit. Assets are on the left or debit side of the accounting equation, and increases to assets are shown on the debit side of the account. Likewise, liabilities are on the right or credit side of the equation, and increases to liabilities are shown on the right or credit side of the account.

Transaction (f) : Andy withdrew \$ 300 for personal use

Cash		Ted Andy, Drawing	
(a) 30 000	(c) 350	(f) 300	
	(d) 500		
	(f) 300		

Analysis:

To decrease the asset account, Cash was credited for \$ 300. Remember, a separate account, Ted Andy, Drawing, is used to accumulate withdrawals by the owner. Therefore, to decrease owner's equity, the drawing account was debited.

4.4.2 Use of Revenue and Expense Accounts

Revenue and expense accounts are to accumulate increases and decreases to owner's equity. By having a separate account for each type of revenue and expense, a clear record can be kept. Also, revenues and expenses can be kept separate from additional investments and withdrawals by the owner. The relationship of these accounts to owner's equity and the rules of debit and credit are indicated in the following diagram:

All Owner's Equity Accounts			
Debit to enter decreases (–) All Expense Accounts		Credit to enter increases (+) All Revenue Accounts	
Debit to enter increases (+)	Credit to enter decreases (–)	Debit to enter decreases (–)	Credit to enter increases (+)

To illustrate the effect that revenue and expense accounts have on the double-entry process, we will continue to analyze the transactions of Ted Andy, Dentist, using T-accounts.

Transaction (g): Received \$ 3 500 in cash from a client for professional services rendered

Cash		Professional Fees	
(a) 30 000	(c) 350		(g) 3 500
	(d) 500		
	(f) 300		
(g) 3 500			

Analysis:

This transaction increased the asset Cash, with an equal increase in owner's equity, because of revenue. The asset account Cash was debited and the revenue account Profes-

sional Fees was credited. Professional Fees is a temporary account that has the overall effect of increasing owner's equity.

Transaction (h) : Paid \$ 1 000 for office rent for one month

Cash		Rent Expense	
(a) 30 000	(c) 350	(h) 1 000	
	(d) 500		
	(f) 300		
(g) 3 500	(h) 1 000		

Analysis:

This transaction decreased the asset Cash, with an equal decrease in owner's equity because of expense. Rent Expense was debited and Cash was credited for \$ 1 000. Rent Expense is a temporary account that has the overall effect of decreasing owner's equity.

Transaction (i) : Paid bill for telephone service, \$ 75

Cash		Telephone Expense	
(a) 30 000	(c) 350	(i) 75	
	(d) 500		
	(f) 300		
(g) 3 500	(h) 1 000		
	(i) 75		

Analysis:

This transaction is identical to the previous one. Telephone Expense was debited and Cash was credited for \$ 75.

Making Decision Quickly

Applying Your Knowledge

Often people must make quick decisions. Sometimes they can't take the time to follow all the steps in an accounting system. For example, suppose the Frito-Lay route manager needs more storage space to meet customer demand. He can purchase a small building for

\$ 70 000, or he can rent a building at an annual cost of \$ 10 000. Whether to buy or rent depends on the financial effects of the two options.

The route manager doesn't need a full-blown accounting system to make this decision. If he knows a little accounting, he can figure out how the two options will affect his business. The following accounts summarize the effects of renting versus buying the building.

Rent The Building		Buy The Building	
Cash	Rent Expense	Cash	Building
10 000	10 000	70 000	70 000

The accounts make it clear that buying will require more cash. But buying the building adds an asset to the business. This may motivate the route manager to borrow cash and buy the building. A low cash balance may force the manager to rent.

Companies do not actually keep their records in this short-cut fashion. But a decision maker who needs information immediately can quickly analyze the effects of a transaction on the financial statements. Simply record the transactions directly in the T-accounts.

Key words, phrases, and special terms

account	账户
T-account	T 型账户
double-entry accounting	复式记账制
debit	借方
credit	贷方
source document	原始凭证
permanent accounts	永久性账户
temporary account	临时性账户
journalizing	记日记账
book of original entry	原始分录的记录
chart of accounts	会计科目表
balance	余额

Multiple-choice questions

1. The left side of an account is used to record().

- a. debits
- b. credits
- c. debit or credit, depending on the type of account
- d. increases

2. Posting a \$ 1 000 purchase of supplies on account appears as follow: ().

- a.
- | | |
|----------|---------------------|
| Supplies | Accounts Receivable |
| 1 000 | 1 000 |
- b.
- | | |
|----------|------------------|
| Supplies | Accounts Payable |
| 1 000 | 1 000 |
- c.
- | | |
|----------|------------------|
| Supplies | Accounts Payable |
| 1 000 | 1 000 |
- d.
- | | |
|-------|----------|
| Cash | Supplies |
| 1 000 | 1 000 |

3. Which sequence of actions correctly summarizes the accounting process? ().

- a. Prepare a trial balance, journalize transactions, post to the accounts
- b. Post to the accounts, journalize transactions, prepare a trial balance
- c. Journalize transactions, post to the accounts, prepare a trial balance
- d. Journalize transactions, prepare a trial balance, post to the accounts

4. A target store purchased supplies of \$ 1 000 on account. The journal entry to record this transaction is().

- a.
- | | |
|------------------|----------|
| Inventory | \$ 1 000 |
| Accounts Payable | \$ 1 000 |
- b.
- | | |
|------------------|----------|
| Accounts payable | \$ 1 000 |
| Supplies | \$ 1 000 |

c. Supplies	\$ 1 000	
Accounts Payable		\$ 1 000
d. Supplies	\$ 1 000	
Accounts Receivable		\$ 1 000

5. Which journal entry records Target's payment for the supplies purchased in transaction 2? ().

a. Accounts Payable	\$ 1 000	
Accounts Receivable		\$ 1 000
b. Accounts Payable	\$ 1 000	
Cash		\$ 1 000
c. Cash	\$ 1 000	
Accounts Payable		\$ 1 000
d. Supplies	\$ 1 000	
Cash		\$ 1 000

6. A Target store paid \$ 500 for supplies and purchased additional supplies on account for \$ 700. The store paid \$ 300 of the accounts payable. What is the balance in the supplies account? ().

- a. \$ 500
- b. \$ 900
- c. \$ 1 200
- d. \$ 1 500

7. Brett Wilkinson, Attorney, began the year with total assets of \$ 120 000, liabilities of \$ 70 000, and owner's equity of \$ 50 000. During the year he earned revenue of \$ 110 000 and paid expenses of \$ 30 000. He also invested an additional \$ 20 000 in the business and withdrew \$ 60 000 for living expense. How much is the law firm's equity at year-end? ().

- a. \$ 90 000
- b. \$ 120 000
- c. \$ 130 000
- d. \$ 160 000

Exercises

1. Complete the following chart concerning increases and decreases in the accounting elements.

	Recorded on Debit Side	Recorded on Credit Side
a. Increase in cash account	_____	_____
b. Decrease in accounts payable account	_____	_____
c. Increase in owner's capital account	_____	_____
d. Increase in owner's drawing account	_____	_____
e. Increase in expense account	_____	_____
f. Increase in revenue account	_____	_____
g. Increase in accounts payable account	_____	_____

2. Carl Brown decided to establish an advertising agency to be known as Brownie's advertising. Brown's business transactions for the first month of operations ending June 30, 2018 were as follows:

- a. Brown invested \$ 40 000 cash in the business
- b. Paid office rent for one month, \$ 1 600
- c. Purchased office equipment on account, \$ 11 700
- d. Paid cash for office supplies, \$ 700
- e. Paid telephone bill, \$ 425
- f. Received \$ 5 120 for advertising fees earned
- g. Paid \$ 4 000 on account
- h. Received \$ 3 200 for advertising fees earned
- i. Paid \$ 2 200 wages to office secretary
- j. Withdrew \$ 5 000 for personal use

Required:

(1) Open T-accounts using the following account titles: Cash; Office Supplies; Office Equipment; Accounts Payable; Carl Brown, Capital; Carl Brown, Drawing; Advertising Fees; Rent Expense; Telephone Expense; and Wages Expense.

(2) Enter the above transactions in the accounts.

(3) Foot the accounts and enter the ending balance on the plus side or larger side.

3. Journalize the following transactions for the month of May, 2018, using a general journal, beginning on Page 4. Use the chart of accounts for Excel Appliance Repair Company for account titles.

- May 1 Purchased office supplies on account, \$ 500
 5 Borrowed \$ 5 000, giving a 90-day, 10% note
 9 Performed services for \$ 200, which will be paid later
 10 Owner withdrew \$ 500 cash for personal use
 11 Paid the rent, \$ 1 000
 13 Paid the telephone bill, \$ 75
 19 Received \$ 200 for services previously rendered on May 9
 24 Received \$ 1 500 cash for repair services rendered
 29 Paid \$ 100 to a creditor on account (amount previously owed)

Required:

Post the transactions above to the general ledger.

4. At the beginning of the year, Street Company's account balances for Equipment and Accumulated Depreciation were \$ 300 000 and \$ 100 000, respectively. By year-end, the balances had increased to \$ 400 000 and \$ 151 000. Depreciation expense for the year was \$ 70 000. The company paid \$ 150 000 for new equipment and sold old equipment at a \$ 25 000 loss. Your mission is to determine the selling price of the old equipment.

Equipment	Cash	Loss on sale
300 000		
400 000		
Accumulated depreciation	Depreciation expense	
100 000		
151 000		

Required:

What is the old equipment's selling price?

5. You have been requested by a friend named Stephanie Bernina to advise her on the effects certain transactions will have on her business. Time is short, so you cannot journalize the transactions. Instead, you must analyze the transactions without a journal. Bernina will continue the business only if she can expect to earn monthly net income of \$ 5 000. the following transactions occurred during March:

- a. Bernina deposited \$ 8 000 cash in a business bank account to start the company.
- b. Paid \$ 300 cash for supplies.
- c. Incurred advertising expense on account, \$ 700.
- d. Paid the following cash expenses: secretary's salary, \$ 1 400; office rent, \$ 1 150.
- e. Earned service revenue on account, \$ 8 800.
- f. Collected cash from customers on account, \$ 1 200.

Required:

(1) Open the following T-accounts: Cash; Accounts Receivable; Supplies; Accounts Payable; Stephanie Bernina, Capital; Service Revenue; Salary Expense; Advertising Expense; Utilities Expense; Interest Expense.

(2) Record the transactions directly in the accounts without using a journal. Key each transaction by letter.

(3) Compute the amount of net income or net loss for this first month of operations. Would you recommend that Bernina continue in business?

Cases

1. Tighten your grip on accounting by filling in the blanks to review some key definitions. (using accounting terms)

Lance Alworth is describing the accounting process for a friend who is a philosophy major. Lance states, "The basic summary device in the accounting is the _____. The left side is called the _____ side, and the right side is called the _____ side. We record transactions first in a _____. Then we post (copy the data) to the _____.

It is helpful to list all the accounts with their balances on a _____. ”

2. Art Sudan is tutoring Nice Mull, who is taking introductory accounting. Art explains to Nice that “debit” are used to record increases in accounts and “credit” record decreases. Nice is confused and seek your advice. Could you give the rules of debit and credit?

3. When you deposit money in your bank account, the bank credits your account. Is the bank misusing the word credit? Why the bank use the credit to refer to your deposit, and not debit?

4. One of your friend asks, “When revenues increase assets and expenses decrease assets, why are revenues credits, and expenses debits and not the other way around?” Explain to your friend why revenues are credits, and expenses are debits.

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CHAPTER 5

Accounting Procedures

—How Many Steps for the Accounting Process

Accounting is the process of analyzing, recording, classifying, summarizing, reporting, and interpreting information. Financial data enters the accounting process in the form of transactions (financial events). This chapter will show how these transactions are recorded and form useful financial information for enterprises management.

5.1 Source Document

The accounting cycle begins with analysis of source documents—a piece of paper or source of information that contains data that affects the business such as a receipt, invoice, sales ticket, or cash register tape. Careful study of each source document will determine which accounts are affected. For example, a cash receipt for money spent tells you that some account, perhaps an asset, has increased, while the Cash account has decreased. When a source documents is received, it is examined to determine how it affects the business's financial position, in other words, does all asset increase or decrease? Does a liability increase or decrease? Does owner's equity increase or decrease? After each transaction, the accounting equation must still be in balance (assets equal liabilities plus owner's equity).

5.2 Journals

5.2.1 General Journals

The second step in the accounting cycle is journalizing. First the debit and then the

credit of each transaction is recorded in the general journal. In addition, a brief explanation of the transaction is given. For example, an asset (Cash) account may increase while a liability account (Notes Payable) increases, indicating that money is borrowed and the business will repay it.

The general journal is called a book of original entry because it is where the first accounting record of a transaction is made from a source document. The two column general journal illustrated in Exhibit 5-1, is the most simple to form of journal used in business. General journal pages are numbered consecutive.

Exhibit 5-1

General Journal

Page

Date		Account title & explanation	Post. Ref.	Debit	Credit	
1						1
2						2
3						3
4						4
5						5

(1) The date column. The year is written once at the first line, together with the month and day. After the first entry, only the day is written until the beginning of the next month's entries.

(2) Accounts that are affected by each transaction are written in the description column. A separate line is used for each account title (such as Cash and Accounts Payable). This column may also include a brief reason for the journal entry.

(3) The posting reference column (Post. Ref.). This column provides a cross-reference between the journal and the general ledger accounts. Entries in this column are made when journal entries are posted to the ledger accounts.

(4) The debit column. The amount being debited to an account is listed in this column.

(5) The credit column. The amount being credited to an account is listed in this column.

5.2.2 Special Journals

Posting transactions in the general journals to the debit and credit columns of various accounts is quite a burdensome labor, especially for the big-size enterprises. The way to save the labor is to divide the transactions into groups of like nature and to record them respectively in special journals. So usually the following special journals may be established:

(1) Sales Journal

It is used to record sales on credit. As for cash sales, they are written in the cash receipts & disbursements journal. When sales journal is used, posting labor is saved by waiting until the end of month totaling the numerous sales recorded in it (Exhibit 5-2).

Exhibit 5-2 Sales Journal

Date	Accounts debited	Post. Ref.	Amounts
1. 1	<i>Smith company</i>		\$ 10 000
1. 4	<i>Roth club</i>		23 000
1. 15	<i>John service Co.</i>		31 000
1. 23	<i>Roth club</i>		50 000

(2) Purchase Journal

In this journal, the accounts payable column is used to record the amounts credits to each creditor's account. These amounts are posted daily to the individual creditor's accounts in the accounts payable subsidiary ledger. The column total represents an entry to be made at the end of the month (Exhibit 5-3).

Exhibit 5-3 Purchase Journal

Date	Accounts debited	Terms	Post. Ref.	Amounts
1. 3	<i>ACM company</i>			\$ 35 000
1. 12	<i>RPD Co.</i>			73 000
1. 19	<i>Green Station</i>			44 000
1. 28	<i>ACM company</i>			20 000

(3) Cash Receipts & Disbursements Journal

Cash is such an important asset that it is necessary to establish a special journal to record cash receipts and disbursements. The cash receipts of a business differ as to their sources. They normally fall into three groups: (1) cash from cash sales, (2) cash from charge customers in payment of their accounts, (3) cash from all the sources other than the above two sources. Similar to the cash receipts, cash disbursements also have repetitive debits and credits of cash payments, which are debits to accounts payable and credit to both purchase discount and cash (Exhibit 5-4).

Exhibit 5-4

Cash Receipts & Disbursements Journal

Date	Accounts debited(credited)	Explanation	Post. Ref.	Debit	Credit	Balance
1. 1	<i>Capital</i>			\$ 80 000		\$ 80 000
1. 8	<i>Rent expense</i>				\$ 5 000	75 000
1. 16	<i>Sales</i>			10 000		85 000
1. 22	<i>Wages payable</i>				6 400	78 600

5.3 Ledgers

An accounting system should be designed to provide information on the amounts due from various customers (accounts receivable) and amounts owed to various creditors (accounts payable). A separate account for each customer and creditor could be added to the ledger. However, as the number of customers and creditors increases, the ledger becomes awkward to use when it includes many customers and creditors.

5.3.1 General Ledger

The primary ledger, which contains all of the balance sheet and income statement accounts is then called the general ledger. The general ledger or ledger is a book of accounts that contains a separate account for each account listed in the chart of accounts.

5.3.2 Subsidiary Ledger

A large number of individual accounts with a common characteristic can be grouped together in a separate ledger called a subsidiary ledger. Each subsidiary ledger is represented in the general ledger by a summarizing account, called a controlling account. The sum of the balances of the accounts in a subsidiary ledger must equal the balance of the related controlling account.

The individual accounts with customers are arranged in alphabetical order in a subsidiary ledger called the accounts receivable subsidiary ledger. The controlling account in the general ledger that summarizes the debits and credits to the individual customer accounts is Accounts Receivable. The individual accounts with creditors are arranged in alphabetical order in a subsidiary ledger called the accounts payable subsidiary ledger. The related controlling account in the general ledger is Accounts Payable.

Exhibit 5-5 is an illustration of another kind subsidiary ledger called Inventory Subsidiary Ledgers which consist of all kinds of inventory.

Exhibit 5-5

Inventory Subsidiary Ledgers

Description: Computer

Primary supplier: DELL Co.

Location: Storage Room 3

Secondary supplier: HP Co.

Date	Purchased			Sold			Balance		
	Units	Unit cost	Total	Units	Unit cost	Total	Units	Unit cost	Total

5.4 Journalizing Transactions

Journalizing begins when a transaction occurs. For each transaction, the entry includes the date, the titles of the accounts affected, the amounts, and a brief description. These four steps are followed in journalizing:

(1) The date is entered with the year written above the month. The year is entered only at the top of every journal page.

(2) The debit entry is recorded. The title of the account being debited is entered next to the vertical line, in the description column. The debit amount is written in the debit column.

(3) The credit entry is recorded. The title of the account being credited is entered (indented one-half inch to the right of the vertical line) below the debited account title. The credit amount is written in the credit column.

(4) A brief explanation may be entered (indented one inch to the right of the vertical line). The explanation should be short, but should clearly indicate the purpose of the journal entry.

To illustrate the journalizing process, we will enter some transactions for Mersley Company in 2018 into the general journal (Exhibit 5-6).

Exhibit 5-6**Journalizing Process**

On January 1, the owner of the company invested \$ 25 000 cash to get the business started. The general journal entry would look like this:

General Journal					page 1
Date	Account Title & Explanation		Post. Ref.	Debit	Credit
1 2018					
2 Jan 1	Cash			\$ 25 000	
3	Capital				\$ 25 000
4	(Initial investment)				
5					

On January 3, the business purchased office equipment on account for \$ 15 000.

6	3	Office equipment		\$ 15 000	
7		Accounts payable			\$ 15 000
8		(Purchased equipment			
9		on account)			
10					

On January 10, office supplies are purchased for \$ 450 cash.

11		10	<i>Office supplies</i>		\$ 450	
12			<i>Cash</i>			\$ 450
13			<i>(Purchased supplies)</i>			
14						

On January 15, the company paid \$ 7 000 toward what was owed on a previous obligation (the office equipment purchased January 3) :

15		15	<i>Accounts payable</i>		\$ 7 000	
16			<i>Cash</i>			\$ 7 000
17			<i>(Paid on account)</i>			
18						

On January 19, delivery services were performed which resulted in delivery fees for \$ 500, which will be paid in two weeks.

19		19	<i>Accounts receivable</i>		\$ 500	
20			<i>Delivery fees</i>			\$ 500
21			<i>(Services performed</i>			
22			<i>on account)</i>			
23						

On January 28, the telephone bill of \$ 750 is paid from cash.

24		28	<i>Telephone expenses</i>		\$ 750	
25			<i>Cash</i>			\$ 750
26			<i>(Paid telephone bill)</i>			
27						

5.5 Posting to the Ledger

After journalizing, transactions are posted to file general ledger accounts (such as Cash, Office Supplies, and Accounts Payable). Posting is the process of entering the journal amounts into the appropriate general ledger accounts. At the end of the month, each account's ending balance is used to prepare the financial statements that reveal how the business did for the month (profit or loss) and its new financial position.

Posting to the Ledger

The general ledger or ledger is a book of accounts that contains a separate account for each account listed in the chart of accounts. All amounts in the general journal are posted to the general ledger accounts so that balances may be kept during the month. Such posting is done daily, weekly or at regular intervals. Only when posting is up-to-date will information in the general ledger be accurate.

Posting from the journal to the ledger accounts involves four steps:

- (1) Enter the date of each transaction in the account;
- (2) Enter the amount of each transaction in the account;
- (3) Enter the journal page in the posting reference column of the account;
- (4) Enter the account number in the posting reference column of the journal.

Steps 3 and 4 provide a line between the journal and the ledger known as a cross-reference. By checking the ledger account, you can see where the entry was posted from. By checking the journal, you can see which account received the posting.

In Exhibit 5-6, we've posted the first journal entry for Mersley Company where she invested \$ 25 000 in the business to get it started.

Step 1 shows transfer of the date;

Step 2 shows posting of the debit amount;

Step 3 shows posting of the journal page number of the account, and Step 4 shows posting account page number to the general journal. This same process is repeated for the credit to the capital account (Exhibit 5-7).

Exhibit 5-7

General Journal

General journal					page 1	
Date	Description	Post.Ref.	Debit	Credit		
Jan. 1	cash	111	\$25 000			
	Capital	311		\$25 000		
Initial investment						
Account: Cash					account no. 111	
Date	Item	Post.Ref.	Debit	Credit	Balance	
					debit	credit
Jan. 1		GJ1	\$25 000		\$25 000	

Account: Capital					account no. 311	
Date	Item	Post.Ref.	Debit	Credit	Balance	
					debit	credit
Jan. 1		GJ1		\$25 000		\$25 000

5.6 The Trial Balance

Since equal dollar amounts of debits and credits are entered in the account for every transaction recorded the sum of all the debits in the ledger must be equal to the sum of all the credits. If the computation of account balances has been accurate, it follows that the total of the accounts with debit balances must be equal to the total of the accounts with credit balances. Before using the account balance to prepare a balance sheet, it is desirable to prove that the total of account with debit balance is in fact equal to the total of accounts with credit balance. This proof of the equality of debit and credit balance is called a trial balance.

A trial balance is a three-column schedule listing the names and balance of all the accounts; the debit balances are listed in the left-hand column and the credit balances in the right-hand column. The totals of the two columns should agree. A trial balance taken from Mersley's ledger accounts is shown in Exhibit 5-8. This trial balance proves the e-

quality of the debit and credit entries in the company's accounting system. Notice that the trial balance contains both balance sheet and the income statement accounts.

Exhibit 5-8**MERSLEY COMPANY****Trial Balance**

January 31, 2018

Account	Debit	Credit
<i>cash</i>	\$ 16 800	
<i>office supplies</i>	450	
<i>office equipment</i>	15 000	
<i>accounts receivable</i>	500	
<i>accounts payable</i>		\$ 8 000
<i>delivery fees</i>		500
<i>telephone expenses</i>	750	
<i>capital</i>		25 000
	\$ 33 500	\$ 33 500

Uses and Limitations of the Trial Balance

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

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

Suppose that the debit and credit totals of the trial balance do not agree. This situation indicates that one or more errors have been made. Typical of such errors are:

- (1) The posting of a debit as a credit, or vice versa;
- (2) Arithmetic mistakes in determining account balances;
- (3) Clerical errors in copying account balance into the trial balance;
- (4) Listing a debit balance in the credit column of the trial balance, or vice versa;
- (5) Errors in addition of the trial balance.

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

5.7 Error Correction

Errors will sometimes occur in journalizing and posting transactions. In the following paragraphs, we describe and illustrate how errors may be discovered and corrected. In some cases, however, an error might not be significant enough to affect the decisions of management or others. In such cases, the materiality concept implies that the error may be treated in the easiest possible way. For example, an error of a few dollars in recording an asset as an expense for a business with millions of dollars in assets would be considered immaterial, and a correction would not be necessary. In the remaining paragraphs, we assume that errors discovered are material and should be corrected.

5.7.1 Discovery of Errors

As mentioned previously, preparing the trial balance is one of the primary ways to discover errors in the ledger. However, it indicates only that the debits and credits are equal. If the two totals of the trial balance are not equal, it is probably due to one or more of the errors described in Figure 5-1.

Among the types of errors that will not cause the trial balance totals to be unequal are the following:

- (1) Failure to record a transaction or to post a transaction.
- (2) Recording the same erroneous amount for both the debit and the credit parts of a transaction.
- (3) Recording the same transaction more than once.
- (4) Posting a part of a transaction correctly as a debit or credit but to the wrong

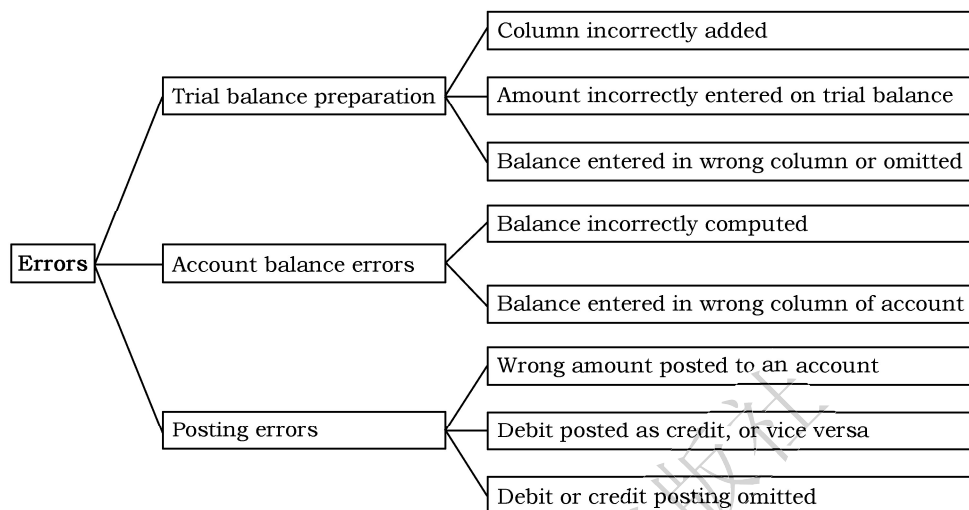


Figure 5-1 Error Causing Unequal Trial Balance

account.

It is obvious that care should be used in recording transactions in the journal, and in posting to the accounts. The need for accuracy in determining account balances and reporting them on the trial balance is also evident.

Errors in the accounts may be discovered in various ways: (1) through audit procedures, (2) by looking at the trial balance or (3) by chance. If the two trial balance totals are not equal, the amount of the difference between the totals should be determined before searching for the error.

The amount of the difference between the two totals of a trial balance sometimes gives a clue as to the nature of the error or where it occurred. For example, a difference of 10 100, or 1 000 between two totals is often the result of an error in addition. A difference between totals can also be due to omitting a debit or a credit posting. If the difference can be evenly divided by 2, the error may be due to the posting of a debit as a credit, or vice versa. For example, if the debit total is \$ 20 640 and the credit total is \$ 20 236, the difference of \$ 404 may indicate that a credit posting of \$ 404 was omitted or that a credit of \$ 202 was incorrectly posted as a debit.

Two other common types of errors are known as transpositions and slides. A transposition occurs when the order of the digits is changed mistakenly, such as, writing \$ 542 as \$ 452 or \$ 524. In a slide, the entire number is mistakenly moved one or more spaces to the right or the left, such as writing \$ 542.00 as \$ 54.20 or \$ 5 420.00. If an error of either type has occurred and there are no other errors, the difference between the two trial balance totals can be evenly divided by 9.

If an error is not revealed by the trial balance, the steps in the accounting process must be retraced, beginning with the last step and working back to the entries in the journal. Usually, errors causing the trial balance totals to be unequal will be discovered before all of the steps are retraced.

5.7.2 Correction of Errors

The procedures used to correct an error in journalizing or posting vary according to the nature of the error and when the error is discovered. These procedures are summarized in Exhibit 5-9.

Exhibit 5-9 Procedures for Correcting Errors

Error	Correction Procedure
(1) Journal entry is incorrect but not posted.	Draw a line through the error and insert correct title or amount.
(2) Journal entry is correct but posted incorrectly.	Draw a line through the error and post correctly.
(3) Journal entry is incorrect and posted.	Journalize and post a correcting entry.

Correcting the first two types of errors involves simply drawing a line through the error and inserting the correct title or amount. Usually, the person making corrections initials the correction in case questions arise later.

Correcting the third type of error is more complex. To illustrate, assume that on March 9 a \$ 20 500 purchase of office equipment on account was incorrectly journalized and posted as a debit to Supplies and a credit to Account Payable for \$ 20 500. This posting of the incorrect entry is shown in the following T-accounts (Figure 5-2).

Supplies	Accounts Payable
20 500	20 500

Figure 5-2 Incorrect

Before making a correcting entry, it is best to determine the debit(s) and credit(s) that should have been recorded. These are shown in the following T-accounts (Figure 5-3).

Office Equipment	Accounts Payable
20 500	20 500

Figure 5-3 Correct

Comparing the two sets of T-accounts shows that the incorrect debit to Supplies may be corrected by debiting Office Equipment for \$ 20 500 and crediting Supplies for \$ 20 500. The following correcting entry is then journalized and posted (Exhibit 5-10):

Exhibit 5-10

Entry to Correct Error

18	March	31	Office equipment	18	\$ 20 500	
19			Supplies	14		\$ 20 500
20			To correct erroneous			
21			Debit to Supplies on March 9			

Applying a Trial Balance

Applying Your Knowledge

The following is Air & Sea Travel company's trial balance dated April 30, 2018. Suppose you are one of the owners. Your accountant is out of town, and the only accounting re-

cord available to you is the trial balance. You need a business loan, and your banker requests some information.

Air & Sea Travel Co.

Travel Trial Balance

April 30, 2018

Account Title	Debit	Credit
Cash	\$ 33 300	
Accounts receivable	2 000	
Office supplies	500	
Land	18 000	
Accounts payable		\$ 100
Common stock		50 000
Dividends	2 100	
Service revenue		8 500
Rent expense	1 100	
Salary expense	1 200	
Utilities expense	400	
Total	\$ 58 600	\$ 58 600

Answer the following questions by developing the information from the trial balance:

- (1) How much are Air & Sea Travel's total assets?
- (2) Does the business already have any loans payable to other banks?
- (3) How much does the business owe in total?
- (4) How much equity do the owners have in the business before considering revenues and expenses? Compute owners' equity by the accounting equation.
- (5) What was the business's net income or net loss for the month of April?

Answer:

- (1) \$ 53 800 (\$ 33 300+ \$ 2 000+ \$ 500+ \$ 18 000)
- (2) No loans payable to other banks
- (3) \$ 100 for accounts payable
- (4) \$ 53 700 (Assets of \$ 53 800–Liabilities of \$ 100)

(5) Net income was \$ 5 800 =

[Revenues of \$ 8 500—Expenses of \$ 2 700 (\$ 1 100+ \$ 1 200+ \$ 400)]

Key words, phrases, and special terms

accounting cycle	会计循环
entry	(会计)分录
general journal	普通日记账
ledger	分类账
posting	过账
special journals	特种日记账
subsidiary ledgers	明细分类账
trial balance	试算平衡表
error correction	差错更正

Multiple-choice questions

- Which sequence of actions incorrectly summarizes the accounting process? ().
 a. Prepare a trial balance, journalize transactions, post to the accounts
 b. Post to the accounts, journalize transactions, prepare a trial balance
 c. Journalizes transactions, post to the accounts, prepare a trial balance
 d. Journalizes transactions, prepare a trial balance, post to the accounts
- On February 10th, posting a \$ 300 purchase of supplies on account appears as follows: ().

a.

Date	Description	Debit	Credit
Feb. 10	<i>Supplies</i>	\$ 300	
	<i>Accounts receivable</i>		\$ 300

b.

Date	Description	Debit	Credit
Feb. 10	<i>Accounts payable</i>	\$ 300	
	<i>Supplies</i>		\$ 300

c.

Date	Description	Debit	Credit
Feb. 10	<i>Supplies</i>	\$ 300	
	<i>Accounts payable</i>		\$ 300

d.

Date	Description	Debit	Credit
Feb. 10	<i>Supplies</i>	\$ 300	
	<i>Cash</i>		\$ 300

3. Indicate all correct answers, in the accounting cycle: ().

- a. Transactions are posted before they are journalized
- b. A trial balance is prepared after journal entries have been posted
- c. The retained earnings account is not shown as an up-to-date figure in the trial balance
- d. Journal entries are posted to appropriate ledger accounts

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

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

5. ABC company recorded a cash collection on account by debiting Cash and crediting Account Payable. What will the trial balance show for this error? ().

- a. Too much for liabilities
- b. The trial balance will not balance

- c. Too much for assets
 - d. Both A and B
6. If a journal entry is incorrect but not posted, how to correct this error? ().
- a. Draw a line through the error and post correctly
 - b. Draw a line through the error and insert correct title or amount
 - c. Journalize and post a correcting entry
 - d. None of the above
7. A payment of cash for the purchase of services should be recorded in the: ().
- a. purchase journal
 - b. cash payment journal
 - c. revenue journal
 - d. cash receipts journal

Exercises

1. After operating for a month, JKL company completed the following transactions during the latter part of October:

October 15 Borrowed \$ 50 000 from the bank, signing a note payable.

22 Performed service for patients on account, \$ 3 600.

30 Received cash on account from patients, \$ 2 000.

31 Received a utility bill, \$ 200, which will be paid during November.

31 Paid monthly salary to nurse, \$ 3 000.

31 Paid interest expense of \$ 200 on the bank loan.

Required:

Journalize the transactions of the company, including an explanation with each journal entry.

2. The accounts in the ledger of MN Co. as of August 31 of the current year listed in alphabetical order as follows. All accounts have normal balances. The balance of the cash account has been intentionally omitted.

Accounts Payable	\$ 13 710	Notes Payable	\$ 40 000
Accounts Receivable	27 500		
Cash	?	Prepaid Insurance	3 150
Don Cline, Capital	110 290	Rent Expense	58 000
Don Cline, Drawing	25 000	Supplies	4 100
Fees Earned	333 500	Supplies Expense	5 900
Insurance Expense	5 000	Unearned Rent	6 000
Land	125 000	Utilities Expense	41 500
Miscellaneous Expense	9 900		
Wages Expense	175 000		

Required:

Prepare a trial balance, listing the accounts in their proper order and inserting the missing figure for cash.

3. The following errors took place in journalizing and posting transactions:

(1) withdrawal of \$ 20 000 by Julie Snyder, owner of the business, was recorded as a debit to Salary Expense and a credit to Cash.

(2) Rent of \$ 3 000 paid for the current month was recorded as a debit to Rent Expense and a credit to Accounts Payable.

Required:

Journalize the entries to correct the errors. Omit explanations.

4. DEF company opened for business on January 25, 2017. The company maintains the following ledger accounts:

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

The company engaged in the following business activity in January:

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

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

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

Jan. 22 Purchased office equipment for \$ 15 000 cash.

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

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

Required:

(1) Record each of the above transactions in general journal form.

(2) Prepare a trial balance dated January 31, 2017.

Cases

1. A law office opened on December 2 of the current year. During the first month of operations, the business completed the following transactions:

Dec. 2 The owner deposited \$ 30 000 cash in the business bank account.

3 Purchased supplies, \$ 500, and furniture, \$ 2 600, on account.

4 Performed legal service for a client and received cash, \$ 1 500.

7 Paid cash to acquire land for a future office site, \$ 22 000.

11 Prepared legal documents for a client on account, \$ 900.

15 Paid secretary's salary, \$ 570.

16 Paid for the furniture purchased December 3 on account.

18 Received \$ 1 800 cash for helping a client sell real estate.

19 Defended a client in court and billed the client for \$ 800.

29 Received partial collection from client on account, \$ 400.

31 Paid secretary's salary, \$ 570.

31 Paid rent expense, \$ 700.

Required:

(1) Open the necessary T-accounts.

(2) Record each transaction in the journal. Key each transaction by date. Explanations are required.

(3) Post the transactions to the ledger, using transaction dates as posting references in the ledger.

(4) Prepare the trial balance of the law office, at December 31 of the current year.

2. How many errors can you find in the following trial balance? All accounts have normal balances;

Goulet Co. Trial Balance

For the Month Ending January 31, 2018

Account Title	Debit	Credit
Cash	\$ 8 016	
Accounts Receivable		\$ 16 400
Prepaid Insurance	2 400	
Equipment	52 000	
Accounts Payable	1 850	
Salary Payable		750
Pug, Capital		39 600
Pug, Drawing		5 000
Service Revenue		78 700
Salary Expense	28 400	
Advertising Expense		7 200
Miscellaneous Expense	1 490	
Total	\$ 94 150	\$ 94 150

3. Analyze the T-account that are related to the Interest payable shown below.

Interest	Payable
February	Feb. 1 balance \$ 1 200
transactions \$ 1 500	Feb. 28 adjustment ?
	Feb. 28 balance \$ 2 100

- a. What is the amount of the Feb. 28 adjustment?
- b. What account most likely has been credited for the amount of the Feb. 28 transactions?
- c. What account would most likely have been debited for the amount of the Feb. 28 adjustment?
- d. Why would this adjustment entry have been made?

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CHAPTER 6

The Adjustment Process

—*How to Match the Revenues and Expenses*

In the former chapters, we have completed most of the accounting process. Now we will see that there are many transactions affecting the revenue or expenses of two or more accounting periods. How do the enterprises reflect these conditions? The answer is to make adjusting entries at the end of accounting period. After the introduction of adjusting entries, we have to know the net income is calculated by the process of closing entries.

6.1 Adjusting Entries

There is more to the measurement of business income than merely recording simple revenue and expense transactions that affect only a single accounting period. Certain transactions affect the revenue or expense of two or more accounting periods. The purpose of adjusting entries is to single to each accounting period appropriate amounts of revenue and expense.

6.1.1 The Need for Adjusting Entries

For purpose of measuring income and preparing financial statements, the life of a business is divided into a series of accounting periods. This practice enables decision makers to compare the financial statements of successive periods and to identify significant trends.

But measuring net income for a relatively short accounting period—such as month or even a year poses a problem. Because, as mentioned above, some business activities affect the revenue and expense of multiple accounting periods. Therefore, adjusting entries are

needed at the end of each accounting period to make certain that appropriate amounts of revenue and expense are reported in the company's income statement.

For example, magazine publisher often sell two or three year subscriptions to their publications. At the end of each accounting period, these publishers make adjusting entries recognizing the portion of their advance receipts that have been earned during the current period. Most companies also purchase insurance policies that benefit more than one period. Therefore, an adjusting entry is needed to make certain that an appropriate portion of each policy's total cost is in the income statement as insurance expense for the period. In short, adjusting entries are needed whenever transactions affect the revenue or expense of more than one accounting period. These entries assign revenues to the period in which they are earned, and expenses to the periods in which related goods or services are used.

In theory, a business should make adjusting entries on a daily basis. But as a practical matter, these entries are made only at the end of each accounting period. For most companies, adjusting entries are made on a monthly basis.

6.1.2 Types of Adjusting Entries

The number of adjustments needed at the end of each accounting period depends entirely upon the nature of the company's business activities. However, most adjusting entries fall into one of four general categories:

(1) Converting Assets to Expenses

A cash expenditure (or cost) that will benefit more than one accounting period usually is recorded by debiting an asset account (for example, Supplies, Unexpired Insurance and so on) and by crediting Cash. The asset account created actually represents the deferral (or the postponement) of an expense. In each future period that benefits from the use of this asset, an adjusting entry is made to allocate a portion of the asset's cost from the balance sheet to the income statement as an expense. This adjusting entry is recorded by debiting the appropriate expense account (for example, Supplies Expense or Insurance Expense) and crediting the related asset account (for example, Supplies or Unexpired Insurance).

(2) Converting Liabilities to Revenue

A business may collect cash in advance for services to be rendered in future account-

ing periods. Transactions of this nature are usually recorded by debiting Cash and by crediting a liability account (typically called Unearned Revenue). Here, the liability account created represents the deferral (or the postponement) of a revenue. In the period that services are actually rendered, an adjusting entry is made to allocate a portion of the liability from the balance sheet to the income statement to recognize the revenue earned during the period. The adjusting entry is recorded by debiting the liability (Unearned Revenue) and by crediting Revenue Earned (or a similar account) for the value of the services.

(3) Accruing Unpaid Expenses

An expense may be incurred in the current accounting period even though no cash payment will occur until a future period. These accrued expenses are recorded by an adjusting entry made at the end of each accounting period. The adjusting entry is recorded by debiting the appropriate expense account (for example, Interest Expense or Salary Expense) and by crediting the related liability (for example, Interest Payable or Salaries Payable).

(4) Accruing Uncollected Revenue

Revenue may be earned (or accrued) during the current period, even though the collection of cash will not occur until a future period. Unrecorded earned revenue, for which no cash has been received, requires an adjusting entry at the end of the accounting period. The adjusting entry is recorded by debiting the appropriate asset (for example, Accounts Receivable or Interest Receivable) and by crediting the appropriate revenue account (for example, Service Revenue Earned or Interest Earned).

Types of adjusting entries are illustrated as follows:

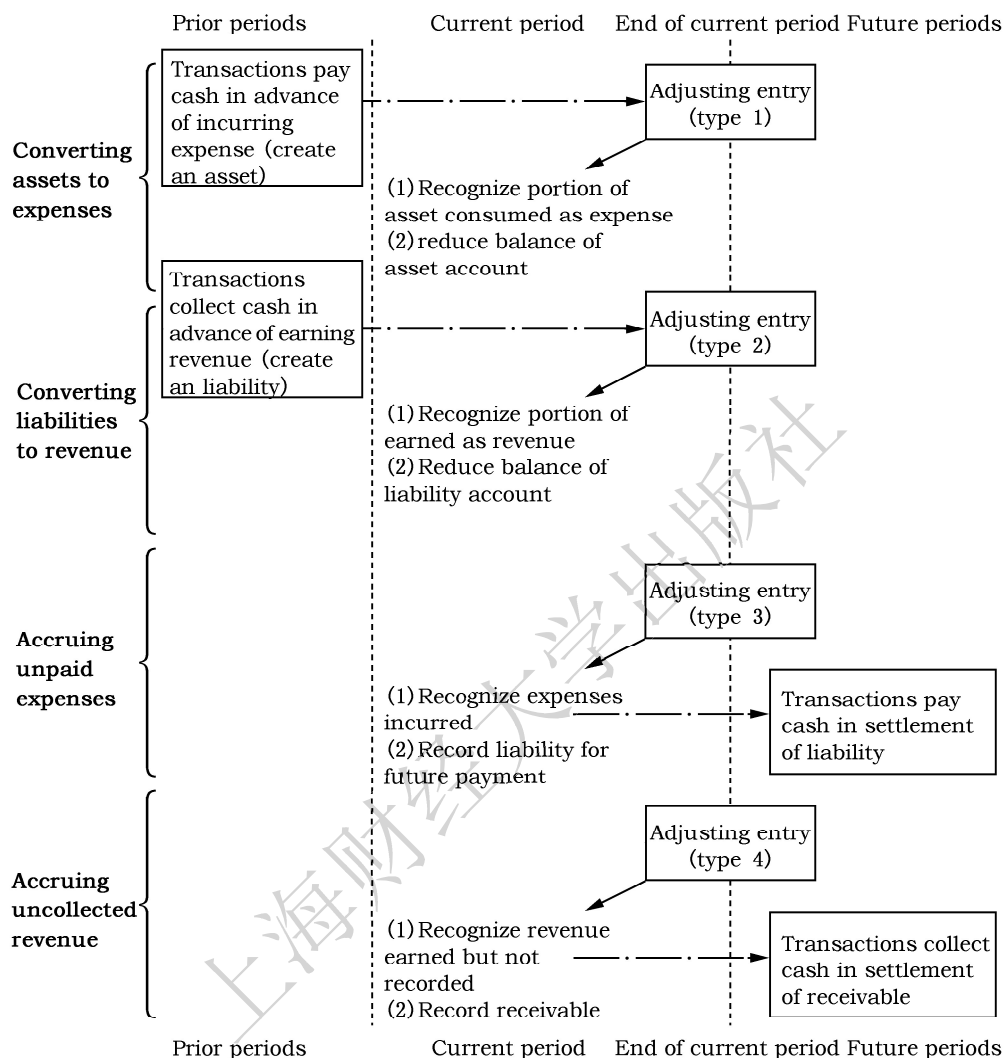


Figure 6-1 Types of Adjusting Entries

6.2 An Illustration

To illustrate the various types of adjusting entries, we will again use our example involving Mersley Company. Chapter 5 concluded with Mersley's trial balance on January 31, 2018. We will now ship ahead to December 31, 2018—the end of Mersley's first year

of operations, so that we can describe how to prepare yearly financial statement.

We will assume that Mersley has been following this approach throughout 2018, adjusting entries must be made every month. The Company's unadjusted trial balance dated December 31, 2018, appears in Exhibit 6-1. It is referred to as an unadjusted trial balance because Mersley last made adjusting entries on November 30; therefore, it is still necessary to make adjusting entries for the month of December.

Exhibit 6-1**MERSLEY COMPANY****Trial Balance**

December 31, 2018

Accounts	Debit	Credit
Cash	\$ 18 592	
Accounts receivable	6 500	
Shop supplies	1 800	
Unexpired insurance	4 500	
Land	52 000	
Building	36 000	
Accumulated depreciation: building		\$ 1 500
Tools and equipment	12 000	
Accumulated depreciation: tools and equipment		2 000
Notes payable		4 000
Accounts payable		2 690
Income taxes payable		1 560
Unearned rent revenue		9 000
Capital		80 000
Retained earnings		0
Repaired service revenue		157 250
Advertising expense	3 900	
Wages expense	56 800	
Supplies expense	6 900	
Depreciation expense: building	1 500	
Depreciation expense: tools and equipment	2 000	
Utilities expense	19 400	
Insurance expense	13 500	
Income taxes expense	22 608	
	\$ 258 000	\$ 258 000

6.2.1 Converting Assets to Expenses

When a business makes expenditure that will benefit more than one accounting period, the amount usually is debited to an asset account. At the end of each period benefiting from this expenditure, an adjusting entry is made to transfer an appropriate portion of the cost from the asset account to an expense account. This adjusting entry reflects the fact that part of the asset has been used up or become an expense—during the current accounting period.

An adjusting entry to convert an asset to an expense consists of a debit to an expense account and a credit to an asset account (or contra-asset account). Examples of them: adjustments include the entries to apportion the costs of prepaid expenses and entries to record depreciation expense.

Prepaid Expenses Payments in advance often are made for such items as insurance, rent and office supplies. If the advance payment (or prepayment) will benefit more than just the current accounting period, the cost represents an asset rather than an expense. The cost of this asset will be allocated to expense in the accounting periods in which the services or the supplies are used. In summary, prepaid expenses are assets; they become expenses only as the goods or services are used up.

(1) Shop Supplies

To illustrate, consider Mersley's accounting policies for shop supplies. As supplies are purchased, their cost is debited to the asset account Shop Supplies; it is not practical to make journal entries every few minutes as supplies are used. Instead, an estimate is made of the supplies remaining on hand at the end of each month; the supplies that are "missing" are assumed to have been used.

Prior to making adjusting entries at December 31, the balance in Mersley's Shop Supplies account is \$ 1 800. The balance of this asset account represents shop supplies on hand on November 30. The Supplies Expense account shows a balance of \$ 6 900, which represents the cost of supplies used through November 30. Assume that approximately \$ 1 200 of shop supplies remain on hand at December 31. This suggests that supplies costing about \$ 600 have been used in December; thus, the following adjusting entry is made:

Dec. 31

Supplies Expenses	\$ 600
Shop Supplies	\$ 600

Estimate of shop supplies used in December.

(2) Insurance Policies

Insurance policies also are a prepaid expense. These policies provide a service, insurance protection, over a specific period of time. As the time passes, the insurance policy expires—that is, it is used up in business operations.

To illustrate, assume that on March 1, Mersley purchased for \$ 18 000 a one year insurance policy providing comprehensive liability insurance and insurance against fire and damage to customers' vehicles while in Mersley's localities. This expenditure was debited to an asset account, as follows:

Mar. 1	
Unexpired Insurance	\$ 18 000
Cash	\$ 18 000

Purchased an insurance policy providing coverage for the next 12 months.

This \$ 18 000 expenditure provides insurance coverage for a period of one full year. Therefore, 1/12 of this cost, or \$ 1 500, is recognized as insurance expense every month. By December 31, another full month of the policy has expired. Thus, the insurance for December 31 is recorded by the following adjusting entry at month-end:

Dec. 31	
Insurance Expense	\$ 1 500
Unexpired Insurance	\$ 1 500

Monthly insurance accrued in December.

(3) Depreciation

Each accounting period, a portion of a depreciable assets usefulness expires. Therefore, a corresponding portion of its cost is recognized as depreciation expense.

Depreciation of Mersley's Building

Mersley purchased its building for \$ 36 000 on January 22. Because the building was old, its estimated remaining useful life is only 20 years. Therefore, the building's monthly depreciation expense is \$ 150 (\$ 36 000 cost divided by 240 months).

The adjusting entry to record depreciation expense on Mersley's building for the month of December is:

Dec. 31

Depreciation Expense: Building	\$ 150
Accumulated Depreciation: Building	\$ 150

Monthly depreciation on building.

Depreciation of Tools and Equipment

Mersley depreciates its tools and equipment over a period of five years (60 months) using the straight-line method. The December 31 trial balance shows that the company owns tools and equipment that cost \$ 12 000. Therefore, the adjusting entry to record December's depreciation expense is:

Dec. 31

Depreciation Expenses: Tools and Equipment	\$ 200
Accumulated Depreciation: Tools and Equipment	\$ 200

Monthly depreciation on tools and equipment.

6.2.2 Converting Liabilities to Revenue

For accounting purposes amounts collected in advance do not represent revenue, these amounts have not yet been earned. Amounts collected from customers in advance are recorded by debiting the Cash account and crediting an unearned revenue account. Unearned revenue also may be called deferred revenue.

When a company collects money in advance from its customers, it has an obligation to render services in the future. Therefore, the balance of an unearned revenue amount is considered to be a liability; it appears in the liability section of the balance sheet, not in the income statement. Unearned revenue differs from other liabilities because it usually will be settled by rendering services, rather than by making payment in cash. In short, it will be worked off rather than paid off. Of course, if the business is unable to render the service, it must discharge this liability by refunding money to its customers.

To illustrate these concepts, assume on December 1, Harbor Co. agreed to rent space in Mersley's building to provide indoor storage for some of its cabs. The agreed-upon rent

is \$ 3 000 per month, and Harbor paid for the rent of three months in advance. The journal entry to record this transaction on December 1 was:

Dec. 1	
Cash	\$ 9 000
Unearned Rent Revenue	\$ 9 000

Collected in advance from Harbor Co. for rental of storage space for three months.

Remember that Unearned Rent Revenue is a liability account, not a revenue account. Mersley will earn rental revenue gradually over a three month period as it provides storage facilities for Cab. At the end of each of the three months, Mersley will make an adjusting entry, transferring \$ 3 000 from the Unearned Rent Revenue account to an earned revenue account, Rent Revenue Earned, which will appear in Mersley's income statement. The first in this series of monthly transfer will be made at December 31 with the following adjusting entry:

Dec. 31	
Unearned Rent Revenue	\$ 3 000
Rent Revenue Earned	\$ 3 000

Portion rent received in advance from Harbor cab was earned in December.

6.2.3 Accruing Unpaid Expenses

This type of adjusting entry recognizes expenses that will be paid in future transactions; therefore, no cost has yet been recorded in the accounting records. Salaries of employees and interest on borrowed money are common examples of expense that accumulate from day to day but that usually are not recorded until they are paid. These expenses are said to accrue over time, that is, to grow or to accumulate. At the end of the accounting period, an adjusting entry should be made to record any expenses that have accrued but that have not yet been recorded. Since these expenses will be paid at a future date, the adjusting entries consist of a debit to an expenses account and a credit to a liability account.

(1) Accrual of Wages (or Salaries) Expense

Time cards indicate that since the last payroll date, Mersley's employees have worked total of 130 hours. Including payroll taxes, Mersley's wage expenses averages about \$ 15 per hour. Therefore, at December 31, the company owes its employees approximately

\$ 1 950 for work performed in December. The following adjusting entries should be made to record this amount both as wages expense of the current period and as a liability:

Dec. 31

Wages Expenses	\$ 1 950
Wages Payable	\$ 1 950

To accrue wages owed to employees but unpaid as of month-end.

This adjusting entry increases Mersley's wages expense for 2018 and also creates a liability—wages payable—that will appear in the December 31 balance sheet.

On January 3, Mersley will pay its regular biweekly payroll. Let us assume that this payroll amounts to \$ 2 397. In this case, the entry to record payment is as follows:

Jan. 3, 2019

Wages Expense	\$ 447
Wages Payable	1 950
Cash	\$ 2 397

Two weekly payroll, \$ 1 950 of which had been accrued at December 31.

(2) Accrual of Interest Expense

On November 30, 2018, Mersley borrowed \$ 4 000 from bank by issuing an interest-bearing note payable. This trade is to be repaid in three months (on February 28, 2019), along with interest computed at an annual rate of 9 percent. The entry made on November 30 to record this borrowing transaction is:

Nov. 30

Cash	\$ 4 000
Notes Payable	\$ 4 000

Borrowed cash from bank, issuing a 9%, \$ 4 000 note payable, due in three months.

The following adjusting entry is made at December 31 to charge December operations with one month's interest expense and to record the amount of interest owed to the bank at month-end:

Dec. 31

Interest Expense	\$ 30
Interest Payable	\$ 30

Interest expense accrued during December note payable (\$ 4 000×0.09×1/12).

The \$ 30 interest expense that accrued in December will appear in Mersley's 2018 income statement. Both the \$ 30 interest payable and the \$ 4 000 note payable to bank will appear as liabilities in the December 31, 2018, balance sheet.

Mersley will make a second adjusting entry recognizing another \$ 30 in interest expense on January 31 of the coming year. The entry on February 28 to record the repayment of this loan, including \$ 90 in interest charges, is:

Feb. 28, 2019	
Notes Payable	\$ 4 000
Interest Payable	60
Interest Expense	30
Cash	\$ 4 090
Repaid \$ 4 000 note payable to Bank, including \$ 90 in interest charges.	

6.2.4 Accruing Uncollected Revenue

A business may earn revenue during the current accounting period but not bill the customer until a future accounting period. This situation is likely to occur if additional services are being performed for the same customer, in which case the bill might not be prepared until all services are completed. Any revenue that has been earned but not recorded during the current accounting period should be recorded at the end of the period by means of an adjusting entry. This adjusting entry consists of a debit to an account receivable and a credit to the appropriate revenue account.

To illustrate this type of adjusting entry, assume that in December, Mersley entered an agreement to perform routine maintenance on several vans owned by Semy Company. Mersley agreed to maintain these vans for a flat fee of \$ 1 500 per month, payable on the fifteenth of each month. No entry was made to record the signing of this agreement, because no services had yet been rendered. Mersley began rendering services on December 15, but the first monthly payment will not be received until January 15. Therefore, Mersley should make the following adjusting entry at December 31 to record the revenue earned from Semy Company during the month:

Dec. 31

Accounts receivable	\$ 750
Repair Service revenue	\$ 750

To recognize revenue from services rendered on Semy Company maintenance contract.

The collections of the first monthly fee from Semy Company will occur in the next accounting period (January 15, to be exact). Of this \$ 1 500 cash receipt, half represents collection of the receivable recorded on December 31; the other half represents revenue recorded in January. Thus the entry to record the receipt of \$ 1 500 from Semy Company on January 15 will be:

Jan. 15, 2019

Cash	\$ 1 500
Accounts Receivable	\$ 750
Repair Service revenue	750

Collected from Semy Company for van maintenance December 15 through January 15.

6.3 Adjusted Trial Balance

After these adjustments are posted to ledger, Mersley's ledger will be up-to-date (except for the balance in the Retained Earnings account). The company's adjusted trial balance at December 31, 2018 appear in Exhibit 6-2.

Exhibit 6-2

MERSLEY COMPANY

Adjusted Trial Balance

December 31, 2018

Accounts	Debit	Credit
Cash	\$ 18 592	
Accounts receivable	7 250	
Shop supplies	1 200	
Unexpired insurance	3 000	
Land	52 000	
Building	36 000	

			Continued
Accounts	Debit	Credit	
Accumulated depreciation; building		\$ 1 650	
Tools and equipment	\$ 12 000		
Accumulated depreciation; tools and equipment		2 200	
Notes payable		4 000	
Accounts payable		2 690	
Wages payable		1 950	
Income taxes payable		1 560	
Interest payable		30	
Unearned rent revenue		6 000	
Capital		80 000	
Retained earnings		0	
Repaired service revenue		158 000	
Rent revenue earned		3 000	
Advertising expense	3 900		
Wages expense	58 750		
Supplies expense	7 500		
Depreciation expense; building	1 650		
Depreciation expense; tools and equipment	2 200		
Utilities expense	19 400		
Insurance expense	15 000		
Interest expense	30		
Income taxes expense	22 608		
	\$ 261 080	\$ 261 080	

6.4 The Closing Entries

6.4.1 Journalizing the Closing Entries

Immediately after journalizing and posting the adjusting entries, all the temporary

owner's equity accounts are closed. Each account listed on the income statement is a temporary owner's equity account. Temporary accounts are used to accumulate balances to list income and expends for the period. They are "temporary" because they are open only for the accounting period, and their balances begin with zero each new accounting period. The process of reducing temporary accounts to zero balances is called the closing procedure. The closing procedure consists of closing all of the temporary accounts: revenue, expend. To close out, or remove balances from these accounts, a new owner's equity account called Income Summary is created. Income Summary is also a temporary account, and it is used only for the closing procedure.

The four steps in closing temporary accounts are illustrated below:

Step 1: Close the Revenue Account(s)

Because the revenue account has a credit balance, it is closed (reduced to zero balance) by debiting it for its balance, and crediting the Income Summary account.

Repaired Service Revenue	\$ 158 000
Rent Revenue Earned	3 000
Income Summary	\$ 161 000

Step 2: Close the Expense Accounts

The expense accounts have debit balances, they are closed (reduced to zero) by crediting each of them; the total of these accounts is debited to the Income Summary account.

Income Summary	\$ 131 038
Advertising Expense	\$ 3 900
Wages Expense	58 750
Supplies Expense	7 500
Depreciation Expense: Building	1 650
Depreciation Expense: Tools and Equipment	2 200
Utilities Expense	19 400
Insurance Expense	15 000
Interest Expense	30
Income Taxes Expense	22 608

Step 3: Close the Income Summary Account

After the above postings, there will be a debit balance or a credit balance in the Income Summary account. The balance in this account is closed to the capital account. Therefore, to close a credit balance, the Income Summary account is debited, and the Capital account is credited:

Income Summary	\$ 29 962
Retained earnings	\$ 29 962

6.4.2 Posting the Closing Entries

Immediately after they are journalized, closing entries are posted and new balances are computed in the general ledger accounts. One of the purposes of closing entries is to post the net income or net loss to the Capital account.

After the closing entries are journalized and posted, the only general ledger accounts with balances remaining are the permanent accounts. These balance sheet accounts are assets, liabilities, and the owner's equity (capital) account, when the income, expense, and drawing accounts are closed out (zero balances), the new accounting period can begin. This way, each period's revenue and expenses are matched. Only one last check is needed to be certain that the accounting equation is still in balance. This is done by preparing a post-closing trial balance.

6.5 The Post-closing Trial Balance

The post-closing trial balance contains a listing of all general ledger accounts that remain open (permanent accounts) after the closing process is complete (journalized and posted). The purpose of the post-closing trial balance is to prove that the general ledger is in balance at the beginning of the new accounting period. It is important to know that the accounting equation (Assets = Liabilities + Owner's Equity) is still in balance before any new transactions are recorded for the new accounting period.

The post-closing trial balance is dated as of the last day of the accounting period. The Mersley Company's Post-Closing Trial Balance is shown in Exhibit 6-3.

Exhibit 6-3

MERSLEY COMPANY

Post-closing Trial Balance

December 31, 2018

Accounts	Debit	Credit
Cash	\$ 18 592	
Accounts receivable	7 250	
Shop supplies	1 200	
Unexpired insurance	3 000	
Land	52 000	
Building	36 000	
Accumulated depreciation; building		\$ 1 650
Tools and equipment	12 000	
Accumulated depreciation; tools and equipment		2 200
Notes payable		4 000
Accounts payable		2 690
Wages payable		1 950
Income taxes payable		1 560
Interest payable		30
Unearned rent revenue		6 000
Capital		80 000
Retained earnings		29 962
	\$ 130 042	\$ 130 042

The post-closing trial balance is prepared as an internal tool; it is not a financial statement such as the income statement, the statement of cash flow, and the balance sheet. Nevertheless it is an important statement because it ensures that the accounting equation is in balance at the beginning of the new accounting period.

Applying the Adjusting Entries

Applying Your Knowledge

The following is PQ company's year end unadjusted trial balance dated December 31, 2018.

PQ COMPANY
Unadjusted Trial Balance
December 31, 2018

Accounts	Debit	Credit
Cash	\$ 49 100	
Consulting fees receivable	23 400	
Prepaid office rent	6 300	
Prepaid dues and subscriptions	300	
Supplies	600	
Equipment	36 000	
Accumulated depreciation; equipment		\$ 10 200
Notes payable		5 000
Income taxes payable		12 000
Unearned consulting fees		5 950
Capital stock		30 000
Retained earnings		32 700
Dividends	60 000	
Consulting fees earned		257 180
Salaries expense	88 820	
Telephone expense	2 550	
Rent expense	22 000	
Income taxes expense	51 000	
Dues and subscriptions expense	560	
Supplies expense	1 600	
Depreciation expense; equipment	6 600	
Miscellaneous expenses	4 200	
	\$ 353 030	\$ 353 030

1. On December 1, the company signed a new rental agreement and paid three months' rent in advanced at a rate of \$ 2 100 per month. This advance payment was debited to the Prepaid office Rent account.

2. Dues and subscriptions expiring during December amounted to \$ 50.

3. An estimate of supplies on hand was made at December 31; the estimated cost of the unused supplies was \$ 450.

4. The useful life of the equipment has been estimated at five years (60 months) from date of acquisition.

5. Accrued interest on notes payable amounted to \$ 100 at year-end.
6. Consulting services valued at \$ 2 850 were rendered during December to clients who had made payment in advance.
7. At December 31, consulting services valued at \$ 11 000 had been rendered to clients but not yet billed. No advance payments had been received from these clients.
8. Salaries earned by employees but not paid as of December 31 amount to \$ 1 700.
9. Income taxes expense for the year is estimated at \$ 56 000. Of this amount, \$ 51 000 has been recognized as expense in prior months, and \$ 39 000 has been paid to tax authorities. The company plans to pay the \$ 17 000 remainder of its income tax liability on January 15.

Required:

Prepare the necessary adjusting journal entries on December 31, 2018.

Solution to the Demonstration Problem:**PQ COMPANY****General Journal**

December 31, 2018

1. Rent Expense	\$ 2 100
Prepaid Office Rent	\$ 2 100
Rent expense for December.	
2. Dues and Subscriptions Expense	\$ 50
Prepaid Dues and Subscriptions	\$ 50
Dues and subscriptions expense for December.	
3. Supplies Expense	\$ 150
Supplies	\$ 150
Supplies used during December.	
4. Depreciation Expense; Equipment	\$ 600
Accumulated Depreciation; Equipment	\$ 600
Depreciation expense for December (\$ 36 000/60 mos.).	
5. Interest Expense	\$ 100
Interest Payable	\$ 100

Continued

Interest accrued on notes payable in December.	
6. Unearned Consulting Fees	\$ 2 850
Consulting Fees Earned	\$ 2 850
Consulting services performed for clients who paid in advance.	
7. Consulting Fees Receivable	\$ 11 000
Consulting Fees Earned	\$ 11 000
Consulting services performed in December for which billings have not been made nor payments received.	
8. Salaries Expense	\$ 1 700
Salaries Payable	\$ 1 700
Salaries accrued in December but not yet paid.	
9. Income Taxes Expense	\$ 5 000
Income Taxes Payable	\$ 5 000
Estimated income taxes accrued on income in December.	

Key words, phrases, and special terms

accumulated depreciation	累计折旧
adjusting entries	调整分录
adjusted trial balance	调整后试算平衡
contra-asset account	备抵账户
closing entries	结账分录
capital stock	股本
depreciation expense	折旧费用
post-closing trial balance	结账后试算平衡
prepaid expense	待摊费用
income summary	收益汇总(本年利润)
insurance policies	(保险)保单
miscellaneous expenses	杂项费用,其他费用

revenue earned

已实现收入

unearned revenue

(预收账款) 未实现收入

Multiple-choice questions

1. The purpose of adjusting entries is to ().
 - a. adjust the Retained Earnings account for the revenue, expense, and dividends recorded during the accounting period
 - b. adjust daily the balances in asset, liability, revenue and expense accounts for the effects of business transaction
 - c. apply the realization principle and the matching principle to transactions affecting two or more accounting period
 - d. prepares revenue and expense accounts for recording the transactions of the next accounting period
2. Unearned revenue is always a (an) ().
 - a. liability
 - b. revenue
 - c. asset
 - d. owners' equity because you collected the cash in advance
3. Assume you prepay a company for a package of six dates. Which type of account should you have in your records? ().
 - a. Accrued expense
 - b. Accrued revenue
 - c. Prepaid expense
 - d. Unearned revenue
4. The adjusted trial balance shows: ().
 - a. Amounts that may be out of balance
 - b. Assets, liabilities, and owner's equity only
 - c. Revenues and expenses only
 - d. Amounts ready for the financial statements

5. Which of the following accounts would never appear in the after-closing trial balance? (). (More than one answer may be correct)

- a. Unearned revenue
- b. Dividends
- c. Accumulated depreciation
- d. Income taxes expense

6. Which of the following journal entries is required to close the Income Summary account of a profitable company? ().

- a. Debit Income Summary, credit Retained Earnings
- b. Credit Income Summary, debit Retained Earnings
- c. Debit Income Summary, credit Capital Stock
- d. Credit Income Summary, debit Capital Stock

7. Which of the following items represents a deferrals? ().

- a. Prepaid insurance
- b. Wages payable
- c. Fees earned
- d. Accumulated depreciation

Exercises

1. A large marketing firm, adjusts its accounts at the end of each month. The following information is available:

(1) A bank loan had been obtained on December 1. Accrued interest on the loan at December 31 amounts to \$ 1 200. No interest expense has yet been recorded.

(2) Depreciation of the firm's office building is based on an estimated life of 25 years. The building was purchased in 2001 for \$ 330 000.

(3) Accrued, but unbilled, revenue during December amounts to \$ 64 000.

(4) On March 1, the firm paid \$ 1 800 to renew a 12-month insurance policy. The entire amount was recorded as Prepaid Insurance.

(5) The firm received \$ 14 000 from the King Biscuit Company in advance of developing a six-month marketing campaign. The entire amount was initially recorded as Unearned Revenue. At December 31, \$ 3 500 had actually been earned by the firm.

(6) The company's policy is to pay its employees every Friday. Since December 31 fell on a Wednesday, there was an accrued liability for salaries amounting to \$ 2 400.

Required:

Record the necessary adjusting journal entries on December 31, 2018.

2. RST company closes its temporary owners' equity accounts once each year on December 31. The company recently issued the following income statement as part of its annual report:

RST COMPANY		
Income Statement		
For the Year Ended December 31, 2018		
<hr/>		
Revenue:		
Counseling revenue		\$ 225 000
Expenses:		
Advertising expense	\$ 1 800	
Salaries expense	94 000	
Office supplies expense	1 200	
Utilities expense	850	
Malpractice insurance expense	6 000	
Office rent expense	24 000	
Continuing education expense	2 650	
Depreciation expense: fixtures	4 500	
Miscellaneous expense	6 000	
Income taxes expense	29 400	170 400
Net income		\$ 54 600
<hr/>		

Required:

The firm's statement of retained earnings indicates that a \$ 6 000 cash dividend was declared and paid during 2018.

(1) Prepare the necessary closing entries on December 31, 2018.

(2) If the firm's Retained Earnings account had a \$ 92 000 balance on January 1, 2018, at what amount should Retained Earnings be reported in the firm's balance sheet

dated December 31, 2018.

3. A book keeper prepared the year end financial statement of Gift, Inc. The income statement showed net income of \$ 16 400, and the balance sheet showed ending retained earnings of \$ 83 000. The firm's accountant reviewed the book keeper's work and determined that adjustments should be made that would increase revenues by \$ 3 000 and increase expenses by \$ 5 700.

Required:

Calculate the amounts of net income and retained earnings after the above adjustments are recorded.

4. On Feb. 1, 2018, the balance of the retained earnings account of Blue Power Co. was \$ 630 000. Revenues for Feb. totaled \$ 123 000, of which \$ 115 000 was collected in cash. Expenses for Feb. totaled \$ 131 000, of which \$ 108 000 was paid in cash. Dividends declared and paid during Feb. was \$ 12 000.

Required:

Calculate the retained earnings balance at Feb. 28, 2018.

Cases

1. Tammy Touchtone operates a talent agency called UVW company. Some clients pay in advance for services; others are billed after services have been performed. Advance payments are credited to an account entitled Unearned Agency Fees. Adjusting entries are performed on a monthly basis. Closing entries are performed annually on December 31. An unadjusted trial balance dated December 31, 2018, follows (Bear in mind that adjusting entries have already been made for the first 11 months of 2017, but not for December).

UVW COMPANY

Unadjusted Trial Balance

December 31, 2018

Cash	\$ 14 950
Fees receivable	35 300
Prepaid rent	1 200
Unexpired insurance policies	375

Continued

Office supplies	900	
Office equipment	15 000	
Accumulated depreciation; office equipment		\$ 12 000
Accounts payable		1 500
Note payable (three-month)		6 000
Income taxes payable		3 200
Unearned agency fees		8 000
Capital stock		20 000
Retained earnings		10 800
Dividends	800	
Agency fees earned		46 500
Telephone expense	480	
Office supply expense	1 130	
Depreciation expense; office equipment	2 750	
Rent expense	6 100	
Insurance expense	1 175	
Salaries expense	24 640	
Income taxes expense	3 200	
	<u>\$ 108 000</u>	<u>\$ 108 000</u>

Other Data:

- (1) Office equipment is being depreciated over 60 months (5 years).
- (2) At December 31, 2018, \$ 2 500 of previously unearned agency fees had been earned.
- (3) Accrued but unrecorded and unpaid salary expense totals \$ 1 360 at December 31, 2018.
- (4) The agency pays rent quarterly (every three months). The most recent advance payment of \$ 1 800 payment was made November 1, 2017. The next payment of \$ 1 800 will be made on February 1, 2019.
- (5) Accrued but unrecorded and uncollected agency fees earned total \$ 3 000 at December 31, 2018.
- (6) Office supplies on hand at December 31, 2018, total \$ 530.
- (7) On September 1, 2018, the agency purchased a six-month insurance policy for \$ 750.
- (8) On December 1, 2018, the agency borrowed \$ 6 000 by signing a three-month, 9

percent, note payable. The entire amount borrowed, plus interest, is due March, 2019.

(9) Accrued income taxes payable for the entire year ending December 31, 2018, total \$ 3 900. The full amount is due early in 2019.

Required:

(1) Prepare the necessary adjusting journal entries and an adjusted trial balance on December 31, 2018.

(2) Prepare the necessary closing entries on December 31, 2018 and an after-closing trial balance.

2. As the controller of Genie car wash, you have hired a new bookkeeper, whom you must train. He objects to making an adjusting entry for accrued salaries at the end of the period. He reasons, "We will pay the salaries within a week or two. Why not wait until payment to record the expense? In the end, the result will be the same." Write a business memo to explain to the bookkeeper why the adjusting entry for accrued salary expense is needed. The format of a business memo follows.

Date: _____
To: New Bookkeeper
from: (Student name)
subject: Why the adjusting entry for salary expense is needed

3. The following trial balance was taken from the ledger of White Incorporated, at the end of its annual accounting period.

Required:

Prepare a work sheet form and copy the trial balance on the work sheet. Then complete the work sheet using the following information:

- a. Ending merchandise inventory, \$ 60.
- b. Ending store supplies inventory, \$ 10.
- c. Estimated depreciation of store equipment, \$ 10.
- d. Accrued sales salary payable, \$ 20.
- e. Beginning inventory \$ 50 to be transferred to Cost of Goods Sold account.
- f. Purchase, Purchase Discount and Freight-in to be transferred to Cost of Goods Sold account.

- g. Make closing entries and post relative amount to Income Summary account.
 h. Finish the work sheet.
 i. Prepare an Income Statement and a Balance Sheet.

White Inc.
Trial Balance
Dec. 31, 2018

Cash	\$ 30	
Accounts receivable	20	
Merchandise inventory	50	
Store supplies	40	
Store equipment	90	
Accumulated depreciation, store equipment		\$ 20
Accounts payable		20
Salary payable		—
Common stock, \$ 1 par value		100
Retained earnings		60
Income summary	—	—
Sales		310
Sales returns	10	
Purchases	120	
Purchase discounts		10
Freight-in	10	
Salary expenses	60	
Rent expenses	70	
Advertising expenses	20	
Depreciation expenses, store equipment	—	
Store supplies expenses	—	
Total	\$ 520	\$ 520