CHAPTER I

INTRODUCTION TO FINANCIAL STATEMENTS, BOOKKEEPING, AND ACCRUAL ACCOUNTING

A. IMPORTANCE TO LAWYERS

Accounting is often called "the language of business." Even if a lawyer does not represent businesses or their owners, almost every lawyer will represent clients with legal interests adverse to businesses or their owners. Lawyers, therefore, must understand certain fundamental concepts about accounting.

Resolving accounting problems that lawyers encounter ordinarily demands much the same kind of analysis and judgment necessary to solve other legal problems. A lawyer must unscramble other people's troubles or, even better, help avoid trouble before it develops. Before a lawyer can accept an assignment where accounting issues are involved, however, the lawyer faces a special difficulty. Accountants, and more generally people in business and finance, have their own way of expressing the data with which they are concerned. At first, it may seem akin to an unfamiliar language. But the basic principles on which this language is built are simple enough. This chapter is designed to show you that if you—rather than, as historians tell us, thirteenth century merchants in Venice, then the world's commercial center—had set out to devise a process for recording financial data, which a Renaissance monk named Luca Pacioli first described in 1494, you might well have reached the same system.

You should not assume, however, that every aspect of the current system was inevitable. Certainly the application of the system in particular situations is open to doubt and to analysis, and in later chapters of this book, which deal with the function of accounting statements in business life, we will occasionally question the appropriateness of the "language" as applied in particular contexts.

Before discussing specific accounting issues, we must first understand the system for reporting and recording financial information. Accountants use four different financial statements—the *balance sheet*, the *income statement*, the *statement of changes in owner's equity*, and the *statement of cash flows*—to describe an enterprise's financial condition and the results of its operations. We will see that both the names and the formats that accountants may use to refer to and to present the information in these financial statements may vary, but that they or their equivalents provide the same basic information.

Each financial statement serves a slightly different purpose. The balance sheet presents an enterprise's financial assets and liabilities, and residual equity, at a particular moment in time. The income statement shows the extent to which the enterprise's operations have caused changes in the amount of residual equity over a period of time. The statement of changes in owner's equity reconciles the change in the equity section between balance sheet dates. Finally, the statement of cash flows explains the change in the enterprise's cash during the particular period. We will discuss each financial statement in this chapter.

As discussed in the preface, the Enron crisis illustrates the importance of the complete set of financial statements. Adopting the custom of many other companies, Enron stopped providing a balance sheet in the press releases announcing its quarterly results in 1996. That practice became significant when Enron reported its 2001 third quarter earnings in October 2001. In response to questions from analysts, Enron's management later disclosed that the company recorded a $1.2 billion reduction in shareholders' equity during that third quarter. Because the income statement does not reflect this item, without a balance sheet or statement of changes in shareholders' equity, investors could not see a complete and accurate picture of Enron's financial condition and operating results. Enron's eventual issuance of its missing balance sheet, and the large write-down of shareholders' equity in the balance sheet, triggered a loss of investor confidence, which caused Enron's share price to fall, accelerated debt repayment obligations, and ultimately led to Enron's bankruptcy, at the time the largest in history in the United States.

Perhaps, even more significantly, the cash flow statement, possibly the lawyer's best friend in such situations, would have alerted a careful reader to the serious problems at Enron, including the business's declining profitability. As early as 1999, Enron's cash flows from operations dropped when compared to the previous year, even though net income for 1999 had increased. During the first six months of 2001, which reflects the period immediately before Enron's collapse, Enron reported negative cash flows from operations exceeding $1.3 billion.

The Enron scandal illustrates that *each* financial statement offers important information about an enterprise's financial health. An incomplete set of financial statements may prevent a reader from seeing the complete picture.

These financial statements, however, represent the "ends" in a process that accountants refer to as *double-entry bookkeeping*. As the "means" in the process, business enterprises use journals, ledgers, accounts, debits, credits, trial balances, and worksheets. These accounting records underlie the financial statements. This chapter will also discuss the bookkeeping process.

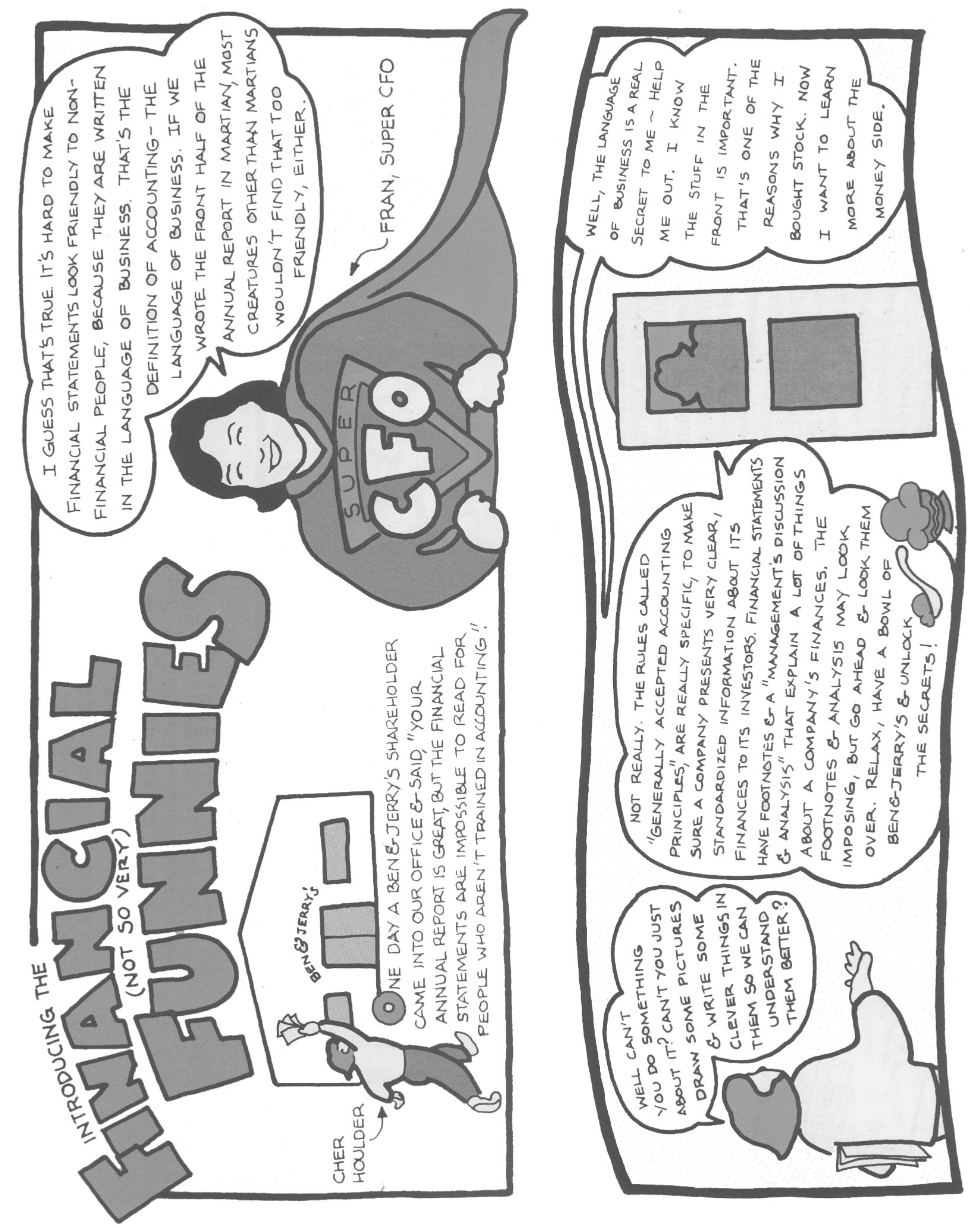
When Pacioli developed his bookkeeping system, most business ventures did not last very long. Today, businesses usually continue indefinitely or, in other words, lack a determinate period of existence. For management purposes, most businesses prepare periodic financial statements. *Accrual accounting* seeks to allocate revenues and expenses to accounting periods regardless of when the cash expenditures or receipts occur or when the obligations to pay or the rights to receive cash arise. Accrual accounting, therefore, refers to the principles and rules for numerically classifying and measuring economic events in the real world through the process of bookkeeping.

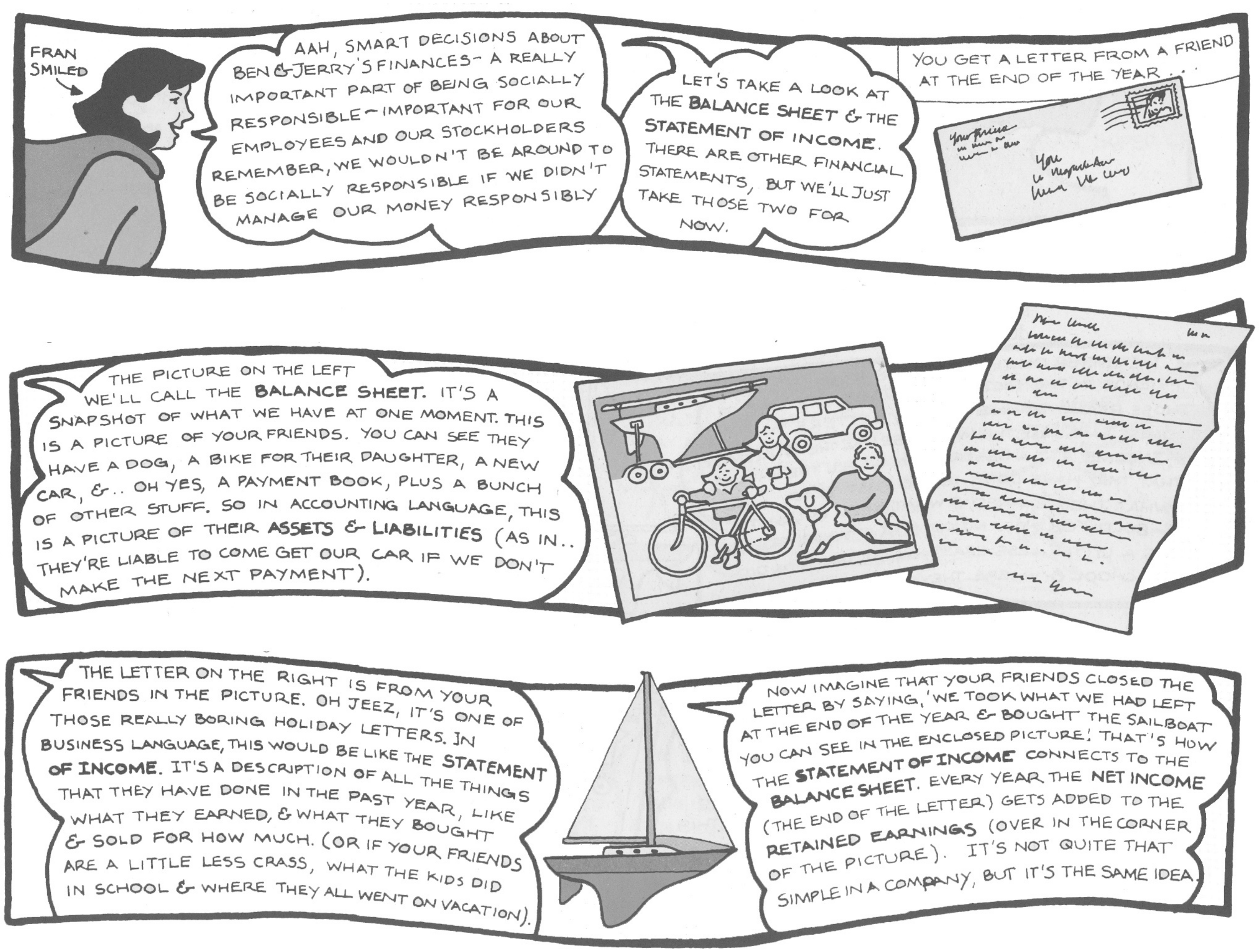
Before we begin our study of bookkeeping and accrual accounting, we should understand the first important financial statement, the balance sheet.

B. THE BALANCE SHEET

The object of bookkeeping is to make it as easy as possible for anyone who understands the language to get a clear and accurate summary of how well a business is doing. As one way of determining how well a business is doing, we can compare what the business owns with what it owes. The difference between what a business owns—its *assets*—and what it owes—its *liabilities*—represents its *net worth*, which accountants sometimes refer to as *equity*. As the first basic financial statement that we will study, the balance sheet shows a business's assets, liabilities, and equity at a particular moment in time.

The following cartoons, which originally appeared in the 1992 annual report of Ben & Jerry's Homemade, Inc., and which we reprint with permission, very simply explain the balance sheet and its components, namely assets, liabilities, and equity. After that introduction, we can then proceed to discuss those components in more detail, beginning with assets.


INTRODUCING THE
FINANCIAL
(NOT SO VERY)
FUNNIES
CHER HOULDER
BEN & JERRY'S
ONE DAY A BEN & JERRY'S SHAREHOLDER CAME INTO OUR OFFICE & SAID, "YOUR ANNUAL REPORT IS GREAT, BUT THE FINANCIAL STATEMENTS ARE IMPOSSIBLE TO READ FOR PEOPLE WHO AREN'T TRAINED IN ACCOUNTING!"
I GUESS THAT'S TRUE. IT'S HARD TO MAKE FINANCIAL STATEMENTS LOOK FRIENDLY TO NON-FINANCIAL PEOPLE, BECAUSE THEY ARE WRITTEN IN THE LANGUAGE OF BUSINESS. THAT'S THE DEFINITION OF ACCOUNTING – THE LANGUAGE OF BUSINESS. IF WE WROTE THE FRONT HALF OF THE ANNUAL REPORT IN MARTIAN, MOST CREATURES OTHER THAN MARTIANS WOULDN'T FIND THAT TOO FRIENDLY, EITHER.
SUPER CFO
FRAN, SUPER CFO
WELL, CAN'T YOU DO SOMETHING ABOUT IT? CAN'T YOU JUST DRAW SOME PICTURES & WRITE SOME CLEVER THINGS IN THEM SO WE CAN UNDERSTAND THEM BETTER?
NOT REALLY. THE RULES CALLED "GENERALLY ACCEPTED ACCOUNTING PRINCIPLES," ARE REALLY SPECIFIC, TO MAKE SURE A COMPANY PRESENTS VERY CLEAR, STANDARDIZED INFORMATION ABOUT ITS FINANCES TO ITS INVESTORS. FINANCIAL STATEMENTS HAVE FOOTNOTES & A "MANAGEMENT'S DISCUSSION & ANALYSIS" THAT EXPLAIN A LOT OF THINGS ABOUT A COMPANY'S FINANCES. THE FOOTNOTES & ANALYSIS MAY LOOK IMPOSING, BUT GO AHEAD & LOOK THEM OVER. RELAX, HAVE A BOWL OF BEN & JERRY'S & UNLOCK THE SECRETS!
WELL, THE LANGUAGE OF BUSINESS IS A REAL SECRET TO ME ~ HELP ME OUT. I KNOW THE STUFF IN THE FRONT IS IMPORTANT. THAT'S ONE OF THE REASONS WHY I BOUGHT STOCK. NOW I WANT TO LEARN MORE ABOUT THE MONEY SIDE.


FRAN SMILED
AAH, SMART DECISIONS ABOUT BEN & JERRY'S FINANCES – A REALLY IMPORTANT PART OF BEING SOCIALLY RESPONSIBLE – IMPORTANT FOR OUR EMPLOYEES AND OUR STOCKHOLDERS REMEMBER, WE WOULDN'T BE AROUND TO BE SOCIALLY RESPONSIBLE IF WE DIDN'T MANAGE OUR MONEY RESPONSIBLY
LET'S TAKE A LOOK AT THE BALANCE SHEET & THE STATEMENT OF INCOME. THERE ARE OTHER FINANCIAL STATEMENTS, BUT WE'LL JUST TAKE THOSE TWO FOR NOW.
YOU GET A LETTER FROM A FRIEND AT THE END OF THE YEAR . . .
THE PICTURE ON THE LEFT WE'LL CALL THE BALANCE SHEET. IT'S A SNAPSHOT OF WHAT WE HAVE AT ONE MOMENT. THIS IS A PICTURE OF YOUR FRIENDS. YOU CAN SEE THEY HAVE A DOG, A BIKE FOR THEIR DAUGHTER, A NEW CAR, &.. OH YES, A PAYMENT BOOK, PLUS A BUNCH OF OTHER STUFF. SO IN ACCOUNTING LANGUAGE, THIS IS A PICTURE OF THEIR ASSETS & LIABILITIES (AS IN.. THEY'RE LIABLE TO COME GET OUR CAR IF WE DON'T MAKE THE NEXT PAYMENT).
THE LETTER ON THE RIGHT IS FROM YOUR FRIENDS IN THE PICTURE. OH JEEZ, IT'S ONE OF THOSE REALLY BORING HOLIDAY LETTERS. IN BUSINESS LANGUAGE, THIS WOULD BE LIKE THE STATEMENT OF INCOME. IT'S A DESCRIPTION OF ALL THE THINGS THAT THEY HAVE DONE IN THE PAST YEAR, LIKE WHAT THEY EARNED, & WHAT THEY BOUGHT & SOLD FOR HOW MUCH. (OR IF YOUR FRIENDS ARE A LITTLE LESS CRASS, WHAT THE KIDS DID IN SCHOOL & WHERE THEY ALL WENT ON VACATION).
NOW IMAGINE THAT YOUR FRIENDS CLOSED THE LETTER BY SAYING, 'WE TOOK WHAT WE HAD LEFT AT THE END OF THE YEAR & BOUGHT THE SAILBOAT YOU CAN SEE IN THE ENCLOSED PICTURE.' THAT'S HOW THE STATEMENT OF INCOME CONNECTS TO THE BALANCE SHEET. EVERY YEAR THE NET INCOME (THE END OF THE LETTER) GETS ADDED TO THE RETAINED EARNINGS (OVER IN THE CORNER OF THE PICTURE). IT'S NOT QUITE THAT SIMPLE IN A COMPANY, BUT IT'S THE SAME IDEA.


BUSINESSES USE A SYSTEM CALLED "ACCRUAL ACCOUNTING" WHICH MEANS THAT WE RECOGNIZE INCOME BEFORE OUR CUSTOMERS PAY FOR THEIR ORDERS, & WE RECOGNIZE EXPENSES BEFORE WE PAY FOR THEM. ALSO THINGS LIKE DEPRECIATION, WHICH WE'LL EXPLAIN LATER, CREATE A DIFFERENCE BETWEEN "INCOME" & "CASH." SO WHAT'S LEFT OVER AT THE END OF THE YEAR (THE END OF YOUR FRIEND'S LETTER) ISN'T THE SAME THING AS CASH IN OUR BANK ACCOUNTS.
WOW! I STILL WISH I COULD SEE IT IN A PICTURE.
YOU CAN, BUT YOU HAVE TO DRAW THE PICTURE YOURSELF. THAT'S WHAT BEING A SMART INVESTOR IS ALL ABOUT. YOU USE THE INFORMATION IN OUR FINANCIAL STATEMENTS & ANYWHERE ELSE YOU CAN FIND IT TO MAKE YOUR OWN CONCLUSIONS.
WOW AGAIN! CAN I USE THE INFORMATION IN THE FRONT OF THE ANNUAL REPORT WHEN I DRAW MY OWN PICTURE?
OF COURSE! YOU'RE GONNA BE A GREAT ARTIST KID.
SUPER CFO
BEFORE I START, CAN YOU GIVE ME DEFINITIONS FOR SOME OF THE TERMS ON THESE STATEMENTS? I STILL DON'T QUITE GET IT.
SURE, DO YOU WANT THAT IN ENGLISH OR MARTIAN?
STOP!
IMAGINE THAT AT MIDNIGHT ON THE LAST DAY OF THE FISCAL YEAR, FRAN THE SUPER CFO HOLLERS "STOP"...
THEN SHE FLIES AROUND TO ALL THE SITES & COUNTS EVERYTHING ~ MONEY, TRUCKS FULL OF ICE CREAM, BILLS TO BE PAID, ETC. SHE WOULD COME UP WITH...
1 MILLION 3, 1 MILLION 4, 1 MILLION 5,...
MIL


ASSETS ~ THINGS THE COMPANY OWNS.
~ CASH
~ ACCOUNTS RECEIVABLE · MONEY OWED TO THE COMPANY
~ INVENTORY · MANUFACTURED PRODUCTS WAITING TO BE SOLD, ALSO INGREDIENTS, PACKAGING & SUPPLIES
~ PROPERTY, PLANT & EQUIPMENT · BUILDINGS, MACHINERY, TRUCKS ETC. DEPRECIATION IS THE PART OF THE VALUE OF THESE ASSETS THAT HAS BEEN USED UP, BASED ON HOW LONG IT IS EXPECTED TO LAST.
~ PREPAID EXPENSES, DEFERRED INCOME TAXES, OTHER ASSETS · THESE ARE MISCELLANEOUS OTHER PURCHASED ASSETS THE COMPANY HAS THAT HAVE VALUE.
...2 MILLION, 67, 2 MILLION, 68, 2 MILLION 69, ...


LIABILITIES ~ WHAT THE COMPANY OWES.
- CURRENT LIABILITIES ~ BILLS, PAYROLL DUE, TAXES & OTHER OBLIGATIONS THAT HAVE TO BE PAID WITHIN A YEAR.
- LONG TERM DEBT & OBLIGATIONS UNDER CAPITAL LEASES ~ LOANS OR AGREEMENTS TO PAY FOR USE OF EQUIPMENT A YEAR OR MORE FROM NOW.
- OTHER LIABILITIES ~ MISCELLANEOUS OTHER FINANCIAL COMMITMENTS.
BANK
NOTE
STOCKHOLDERS' EQUITY
THIS IS CALLED THE "BOOK VALUE" OF THE OWNERS' STAKE IN THE COMPANY. IT INCLUDES PROCEEDS THE COMPANY RECEIVED FROM THE INITIAL AND SUBSEQUENT SALES OF STOCK TO THE PUBLIC, PLUS ACCUMULATED PROFITS, CALLED RETAINED EARNINGS.
THIS BOOK VALUE IS NOT THE SAME AS THE VALUE OF STOCK ON THE PUBLIC STOCK MARKET WHICH IS CALLED THE "MARKET VALUE". THE STOCK MARKET DETERMINES IN ITS OWN WAYS WHETHER THE COMPANY IS WORTH MORE THAN THE BOOK VALUE OF WHAT IT OWNS MINUS WHAT IT OWES. FOR EXAMPLE, A COMPANY'S STOCK PRICE CHANGES REGULARLY WITHOUT REGARD TO THE VALUE OF THE ASSETS & LIABILITIES IT USES TO RUN ITS BUSINESS.

1. ASSETS

Suppose we want a financial picture of E. Tutt, who recently graduated from law school and has opened a law office. Certainly one important facet is how much she owns. Because we really are concerned with her business and not her personal affairs, we forget her car, her clothes, and other personal property, and we look to see what she has in her office:

(a) Office furniture

(b) Office equipment

(c) Stationery and supplies

(d) Library

(e) Cash in the bank

A layperson would understand all of these to be what the accountant calls them: assets.

Accountants view *assets* as future economic benefits that a particular accounting entity, whether a natural person, business enterprise, or charitable organization, owns or controls as a result of a past transaction or event. Accountants classify economic resources as assets when the entity satisfies three requirements pertaining to the resource. First, the entity must control the resource. Second, the entity must reasonably expect the resource to provide a future benefit. Third, the entity must have obtained the resource in a transaction so that the entity can measure the resource.

Several examples can illustrate these requirements. Would E. Tutt's friendly personality qualify as an asset that she can list on her balance sheet? No. Although Tutt can control her personality and a friendly personality should help a lawyer, she did not acquire her personality in a transaction. If Tutt purchases a computer for her office, paying $2,000 in cash, and expects the computer to last two years, can she show the computer as an asset on her balance sheet? Yes. Tutt controls the computer, which should provide at least two years of service to her law practice, and she acquired the computer in a transaction. If Tutt spends $300 to send her secretary to a training session on using software for the computer, can she treat the training cost as an asset? No. Unless Tutt and her secretary have signed an employment contract, as an at-will employee, the secretary could choose to quit her job at any time, taking along the training. Although Tutt expects to receive future benefits from the training and a transaction has occurred, Tutt does not have control over her secretary.

Before we can show an asset on a balance sheet, we need some measure for the resource. In other words, we need to assign some dollar amount to the asset. Because the price at which property was bought is ordinarily much easier to ascertain and less subjective than the current fair market value of the property, accountants generally record assets at *historical cost*. We should always remember that the balance sheet usually does not show assets at their fair market value.

We should also remember that the balance sheet shows only assets that satisfy the three requirements described above. The balance sheet does not reflect many important things that we might consider as valuable to a business. For example, the value that an outstanding management team brings to a business, good morale among the enterprise's employees, or loyal and satisfied customers, do not appear as assets on the balance sheet.

For these reasons, the balance sheet, like the other financial statements we will discuss, provides little, if any, contemporary or prospective information.

2. SOURCES

If E. Tutt bought all her property out of her own funds and has not yet earned anything, we could simply add up the assets to find out how E. Tutt stands in her business. But if she has borrowed money from a bank to buy some of her assets or, perhaps more likely, has bought some on credit, E. Tutt's personal "stake" in the business would not be as large as if she had bought everything from her own funds. To give a true picture of her financial position, we would want to know where the money came from to buy the assets. Suppose we find that she acquired the assets as follows:

(a) Office furniture: bought on credit from Frank Co. for $400;

(b) Office equipment: bought on credit from Elmer Co. for $300;

(c) Stationery and supplies: bought from Stanley for $100 on a promissory note;

(d) Library: purchased for $200 cash, out of E. Tutt's original "stake" of $1,000; and

(e) $800 cash: balance of Tutt's original "stake" remaining.

We could then list, in parallel columns, the assets and their sources:

	Assets		**Sources**		
(a)	Office furniture	$ 400	Frank Co.	$ 400	(a)
(b)	Office equipment	300	Elmer Co.	300	(b)
(c)	Stationery and supplies	100	Stanley	100	(c)
(d)	Library	200			
(e)	Cash (balance remaining)	800	E. Tutt	1,000	(d,e)
	Total	$1,800	Total	$1,800	

This parallel listing of assets and their sources is what accountants usually call a *balance sheet*. This listing may also be referred to as a *statement of financial position* or a *statement of financial condition*. As preliminary matters about the balance sheet, we should note two things. First, whatever the name, the totals of the two columns must always be equal. For this reason, we will refer to this financial statement as the balance sheet. Second, no matter how complicated a business or how long its history, the balance sheet shows, at one particular point in time, what assets the business owns and where the money came from to acquire those assets. Because the balance sheet reflects one instant in time, we can compare the balance sheet to a snapshot.

To give a somewhat clearer picture of how well off E. Tutt herself is, we can separate the sources of assets into two groups: "outside" sources—money that the business owes to creditors; and "inside" sources—amounts that Tutt herself has invested in the business. We now turn our discussion to those "outside" sources.

a. LIABILITIES

The "outside" sources would also be understood by a layperson to be what the accountant calls them: liabilities. Accountants characterize duties or responsibilities to provide economic benefits to some other accounting entity in the future as *liabilities*. Liabilities arise from borrowings of cash, purchases of assets on credit, breaches of contracts or commissions of torts, receipts of services, or passage of time. Accountants treat duties or responsibilities as liabilities when the underlying debt or obligation possesses three characteristics. First, the debt or obligation must involve a present duty or responsibility. Second, the duty or responsibility must obligate the entity to provide a future benefit. Finally, the debt or obligation must have arisen from a transaction or event that has already occurred so the entity can reasonably measure the obligation.

Again, several hypotheticals can illustrate these characteristics. If E. Tutt accepts delivery of the computer on August 1 and agrees to pay for it in full on October 1, has she incurred a liability? Yes. A transaction that has already occurred has legally bound Tutt to pay $2,000 to the seller. If Tutt orders law books worth $200, but the seller has not yet delivered the books, has she incurred a liability? No. When delivery takes place, Tutt will owe the $200, but until that time Tutt has not incurred a liability. The transaction does not become complete until the delivery takes place; only then must Tutt pay for the supplies or return them. If Tutt accepts a $300 retainer from one of her clients to prepare and file articles of incorporation in advance of rendering legal services, has she incurred a liability? Yes. Tutt has an obligation to deliver legal services worth $300 to the client. If she cannot provide the services, she must refund the client's payment. She has incurred a legal obligation and a transaction has already occurred.

Just as the balance sheet does not show "positives" that do not satisfy the accounting requirements for assets, the balance sheet also may not list "negatives" that could adversely affect the business. For example, poor management, labor problems, unsatisfied customers, or a poor reputation in the community would not appear as liabilities on a balance sheet. By ignoring these factors, which obviously present difficult measurement issues, the balance sheet can convey a false impression about a business's financial condition.

Unless the business has given a creditor a security interest in a particular asset, or a law grants such an interest, liabilities attach to the business's assets generally, rather than to the specific assets that the creditor may have helped the business acquire. If the business does not pay its debts, creditors may force the business to liquidate. In that event, creditor rights laws require the entity to satisfy its liabilities before paying any "inside" claims to its owner.

b. EQUITY

Because creditors' claims enjoy priority in liquidation over "inside" claims, any liabilities reduce E. Tutt's personal stake or equity in the business. Accountants refer to *equity* as the arithmetical amount that remains after a particular accounting entity subtracts its liabilities from its assets. In other words, if the entity sold its assets, and satisfied its liabilities, for the amounts shown on the balance sheet, we call the remainder equity because the owners could claim that residual amount.

Equity increases when the owners invest assets into the business. The equity in E. Tutt's law practice increased when she contributed $1,000 to the business. Equity decreases when the owners withdraw assets from the business.

Depending on the accounting entity involved, accountants assign different names to the residual ownership interest. Owners can use sole proprietorships, partnerships, corporations, or hybrid organizations such as limited partnerships, limited liability partnerships, and limited liability companies, to conduct business. We will now consider the residual ownership claims in these different forms of business organization.

As the name suggests, only one person owns a *sole proprietorship*. The owner usually also manages and operates the business. Many small service-type businesses, including E. Tutt's law office, operate as sole proprietorships. Sole proprietorships generally offer simplicity as an advantage. Anyone can start a sole proprietorship, and the owner can keep any profits. The owner, however, must bear any losses and remains personally liable for any debts the business incurs. Although the law does not recognize any distinction between the business and the owner, we recognize the business as a separate accounting entity. Accountants refer to the residual ownership interest in a sole proprietorship as *proprietorship*.

A *partnership* arises when two or more persons engage in business for profit as co-owners. If E. Tutt and her law school classmate, Jennifer King, decide to practice law together, they could form a partnership, which they might call "King Tutt." In many ways, a partnership resembles a sole proprietorship except that the business involves more than one owner. Again, partnerships generally offer simplicity, but the partners frequently sign partnership agreements which set forth various terms regarding the partnership, such as each partner's initial investment, responsibilities and duties, profit and loss sharing ratio, and vote in management and the procedures for ending the partnership. As a huge disadvantage, each partner incurs unlimited personal liability for the partnership's debts. Despite this unlimited personal liability, accountants recognize partnerships as separate accounting entities to segregate partnership affairs from the partners' personal activities. Accountants refer to the residual ownership interest in partnership as *partners' equity*. With multiple owners, however, partnerships keep separate equity accounts for each partner.

One or more persons owning a business could also form a *corporation* by complying with certain statutory requirements. Laws in every state treat corporations as legal entities separate from their owners. Corporate laws divide the residual ownership interest in a corporation into *shares*. Generally, each share entitles the owner to: (1) participate in corporate governance by voting on certain matters, such as the election of directors who manage the corporation's business and affairs; (2) share proportionally in any earnings, in the form of dividends, which the directors may declare and the corporation may distribute to shareholders; and (3) share proportionally in residual corporate assets upon liquidation.

The owners of the shares, usually referred to as *shareholders*, enjoy limited liability. The corporation's creditors cannot hold the shareholders personally liable for the corporation's debts. Shareholders can transfer their shares to other investors without dissolving the corporation. On the downside, federal income tax law treats corporations as separate taxpaying entities. This treatment creates double taxation because corporations must pay taxes on their income, and shareholders generally must pay taxes on any amounts that the corporation distributes as dividends.

Accountants refer to the ownership interest in a corporation as *shareholders' equity*. For practical reasons related to the free transferability of shares and the possibility that thousands, or even millions, of shareholders could own a stake in a corporation, corporations do not maintain separate equity accounts for each shareholder.

All states permit business owners to form hybrid entities such as *limited partnerships*, *limited liability companies*, or *limited liability partnerships*. These hybrid entities possess both partnership and corporate characteristics. The hybrid entities all follow partnership accounting.

Two or more persons can form a limited partnership in any state by complying with the applicable statutory requirements. A limited partnership requires one or more general partners and one or more limited partners. As a general rule, general partners manage the partnership's business while limited partners provide additional capital. Although the limited partners enjoy limited liability, the general partners remain personally liable for the limited partnership's debts. As with partnerships, accountants refer to the residual ownership interest in the limited partnership as partners' equity. Limited partnerships keep separate equity accounts for each partner, whether general or limited.

By following state law requirements, one or more owners can form a limited liability company ("LLC") as a separate legal entity in every state. The LLC's owners, usually referred to as *members*, enjoy limited liability. Accordingly, an LLC's creditors cannot hold the members personally liable for the LLC's debts. LLCs offer significant flexibility because the members can structure their *operating agreement* in almost any way they want. LLCs have become very popular because they can avoid the double tax problem. Accountants refer to the residual ownership interest in an LLC as *members' equity*. Because LLCs possess some partnership characteristics, LLCs keep separate equity accounts for each member.

All states now permit two or more owners to organize a limited liability partnership ("LLP") or to convert an existing partnership to an LLP. Depending on the statute, partners in an LLP enjoy limited liability from either certain tort-type liabilities or from all liabilities. LLPs, therefore, offer partners either partial or full shields against the LLP's obligations. As with any other partnership, accountants refer to the residual ownership interest in an LLP as partners' equity. Similarly, LLPs keep separate equity accounts for each partner.

We will discuss, in more detail, the different accounting treatments that accountants use to account for partners' equity and shareholders' equity later in the chapter.

3. THE FUNDAMENTAL ACCOUNTING EQUATION

No matter what organizational form the owners choose, we can express the relationship between equity, assets and liabilities in the following mathematical equation:

$$\text{Equity} = \text{Assets} - \text{Liabilities}$$

Under this equation, E. Tutt's equity, which we might also call her *net worth*, equals the difference between the law practice's assets and liabilities.

Accountants, however, rearrange the equation in two steps. First, they reverse the equation's two sides so that the equation reads:

Assets – Liabilities = Equity

Second, they add Liabilities to both sides of the equation to produce the restated equation:

Assets = Liabilities + Equity

Accountants refer to this restatement as the *fundamental accounting equation* because the equation serves as the underlying basis for the balance sheet. In fact, the fundamental accounting equation sustains the bookkeeping process and the accrual accounting system.

We might rearrange E. Tutt's assets, listing them in the order in which they are likely to be used up. We might also separate the source of the assets between liabilities and equity. The result would be a simple balance sheet that might look like this:

E. Tutt, Esquire
Balance Sheet, After transaction (e)

	Assets		**Liabilities & Proprietorship**		
			Liabilities:		
(e)	Cash	$ 800	Accounts Payable:		
(c)	Supplies	100	Frank Co.	$ 400	(a)
			Elmer Co.	300	(b)
			Note Payable:		
(b)	Equipment	300	Stanley	100	(c)
(a)	Furniture	400	Total Liabilities	$800	
(d)	Library	200	Proprietorship	1,000	(d, e)
	Total	$1,800	Total	$1,800	

Note that no change has been made except a change in presentation of the list of assets and sources which appears on page 9, *supra*. The essential meaning remains the same.

Having discussed each component in the balance sheet and the fundamental accounting equation, we should remember four very important points about the balance sheet. First, total assets must equal the sum of liabilities and equity. Second, the balance sheet speaks at, or as of, one particular instant in time. Third, the balance sheet records assets at historical cost. Fourth, the balance sheet shows only assets and liabilities that meet certain accounting requirements. The balance sheet, therefore, may not reflect many important things that we might consider as valuable or detrimental to the business.

4. THE CLASSIFIED BALANCE SHEET

Thus far, we have purposely kept the discussion about the balance sheet simple. The balance sheet becomes more useful to managers, creditors, owners, and potential investors, however, when the entity classifies assets and liabilities into various categories.

Accountants generally classify assets into four types: *current assets*, *long-term investments*, *fixed assets*, and *intangible assets*. They generally treat cash and other assets that the particular accounting entity would normally expect to convert into cash or use within one year as *current assets*. Current assets could include: *marketable securities*, such as stocks and bonds, which the entity holds as short-term investments; *notes receivable*, amounts due to the entity under promissory notes; *accounts receivable*, uncollected amounts owed to the entity for goods or services sold on credit; *inventories*, or goods held for sale or resale; and *prepaid expenses*, such as insurance premiums paid in advance for insurance coverage during the next year. In contrast, accountants generally classify resources that an accounting entity would not normally expect to convert into cash or use within one year as *long-term investments*. Long-term investments include stocks and bonds that the entity intends to hold; notes receivable or accounts receivable that the entity cannot collect for more than a year; and prepaid expenses, such as insurance premiums paid in advance for insurance coverage more than one year into the future. *Fixed assets* include tangible resources such as land, buildings, plant and equipment, machinery, or furniture and fixtures that the entity acquired for extended use in the business. *Intangible assets* lack physical substance and include patents, copyrights, and trademarks acquired for extended use in the business.

Accountants usually show assets on the balance sheet in the order listed in the previous paragraph. Typically, a balance sheet lists current assets first and according to declining *liquidity*. Liquidity refers to the relative ease and time necessary to convert an asset into cash. Within current assets, the balance sheet starts with cash and proceeds to marketable securities, notes receivable, accounts receivable, inventory, and prepaid expenses in that order. Long-term investments typically follow current assets. The balance sheet then proceeds to list fixed assets, usually according to permanence, and finishes with intangible assets.

Turning to liabilities, accountants also divide these duties or obligations into two types: current and long-term. They generally classify liabilities that will require payment in one year or less as *current liabilities*. Current liabilities include: money borrowed under promissory notes due within one year, usually called *notes payable*; amounts owed for purchases on credit, or *accounts payable*; money owed for services already performed, usually referred to as *accrued liabilities or wages*; those portions of long-term debt that the business must repay within one year; taxes payable; and *unearned* *revenues*, amounts that the entity will have to refund if it does not perform the required services.

In contrast to current liabilities, accountants generally consider obligations, or parts of obligations, which would normally not require payment for more than one year as *long-term liabilities*. Long-term liabilities typically include notes payable that do not require repayment for more than one year; *bonds payable*, which usually represent borrowings from numerous investors through the financial markets, rather than a loan from one creditor which gives rise to a note payable; lease and mortgage obligations due in more than one year; and obligations under employee pension plans.

Because liabilities enjoy priority in liquidation over ownership claims, the balance sheet lists liabilities above equity. Again, accountants usually show liabilities on the balance sheet in the order listed in the previous two paragraphs. Current liabilities come first, usually starting with notes payable and, then, accounts payable. Balance sheets frequently list other current liabilities in descending order of magnitude. Long-term liabilities follow, with any *secured claims*, or liabilities for which the borrower has pledged one or more assets as collateral, usually listed first. Last, the balance sheet shows equity.

We might rearrange E. Tutt's balance sheet according to these conventions. We might also show the assets above the liabilities and equity. The result would be a somewhat more refined balance sheet that might look like this:

E. Tutt, Esquire
Balance Sheet, After transaction (e)

Assets

	Current Assets:	
(e)	Cash	$ 800
(c)	Supplies	100
	Total Current Assets	$ 900
	Fixed Assets:	
(b)	Equipment	$ 300
(a)	Furniture	400
(d)	Library	200
	Total Fixed Assets	$ 900
	Total Assets	$1,800

	Liabilities & Proprietorship		
	Liabilities		
	Current Liabilities:		
(c)	Note Payable: Stanley		$ 100
	Accounts Payable:		
(a)	Frank Co.	$400	
(b)	Elmer Co.	300	700
	Total Liabilities		$ 800
(d, e)	Proprietorship		1,000
	Total Liabilities and Proprietorship		$1,800

Accountants refer to such a balance sheet as a *classified balance sheet* in *report form*. Again, note that no change has been made except a change in presentation. The essential meaning again remains the same. But because clear disclosure is one of the accountant's main concerns, matters of presentation are important. The classified balance sheet helps the user to determine whether the accounting entity owns enough current assets to pay liabilities as they come due. The classified balance sheet also shows the relative claims between short-term and long-term creditors.

C. DOUBLE-ENTRY BOOKKEEPING

As Tutt engages in practice, many events will occur to affect her financial position, and the balance sheet figures will change. If, for example, in transaction (f), she pays off the note to Stanley, her cash would decrease by $100, so that the cash balance remaining would be $700, and the liability to Stanley of $100 would disappear. If, in transaction (g), Tutt paid Elmer Co. $200 of the amount owed for equipment, cash would be further decreased, to $500, and the liability of $300 to Elmer Co. would be decreased to $100. After these two transactions, Tutt's balance sheet, shown in *simple form* where the assets appear on the left side, while the liabilities and equity share the right side, would read as follows:

E. Tutt, Esquire
Balance Sheet, After transaction (g)

	Assets		**Liabilities & Proprietorship**		
			Liabilities:		
(e,f,g)	Cash	$ 500	Accounts Payable:		
(c)	Supplies	100	Frank Co.	$ 400	(a)
(b)	Equipment	300	Elmer Co.	100	(b,g)
(a)	Furniture	400	Total Liabilities	$ 500	
(d)	Library	200	Proprietorship	1,000	(d, e)
	Total	$1,500	Total	$1,500	

Note that each of these two transactions affected two items on the balance sheet and did so in equal amounts. This is not a coincidence; the fact is that every transaction has two separate aspects of equal importance. If, (h), Tutt bought more books for $100 in cash, it would tell only half the story to record just the decrease in cash of $100; her "holdings" of books—represented by the asset, *Library*—have increased by $100. If, (i), Tutt took a chair costing $50 from her office for use thereafter at home, reducing *Furniture* by $50 would not tell the whole story because her stake in the enterprise, *Proprietorship*, has also been reduced by $50.

Tutt's balance sheet, again in simple form, after these two transactions:

E. Tutt, Esquire
Balance Sheet, After transaction (i)

	Assets		Liabilities & Proprietorship		
			Liabilities:		
(e,f,g,h)	Cash	$ 400	Accounts Payable:		
(c)	Supplies	100	Frank Co.	$ 400	(a)
(b)	Equipment	300	Elmer Co.	100	(b,g)
(a,i)	Furniture	350	Total Liabilities	$ 500	
(d,h)	Library	300	Proprietorship	950	(d,e,i)
	Total	$1,450	Total	$1,450	

You will note that recognition of the two aspects of each transaction, which are always equal in amount, may change the totals of the balance sheet columns but does not upset their equality. That should not be surprising; we have already seen that the two columns of the balance sheet mirror the two sides of the fundamental accounting equation. The balance sheet reflects the assets and their sources at any given time, and the inherent equality of the fundamental accounting equation cannot be affected by changes in the mix of assets and their sources. To illustrate, an increase in an asset may come about in one of two ways: either another asset has been exchanged for it, or an additional source of funds has been supplied to acquire it (as, for example, if Tutt bought an asset on credit from a new supplier). On the balance sheet, the increase in the asset column would either be offset by a decrease in the asset column or be balanced by an increase in the sources column. Likewise, a decrease in an asset may come about in one of two ways. If assets have been exchanged, we have the transaction already discussed, but stated in reverse order—the decrease in assets will be accompanied by an increase in assets reflecting the acquisition of the new asset. The other possibility is a decrease in the sources column, reflecting use of an asset to pay off a claim, such as the use of cash to discharge the note payable to Stanley. Finally, there can be an exchange of sources, which would be reflected by equal increases and decreases in the sources column, as, for example, if Tutt should give a note to a creditor to whom she owed money on open account.

To simplify the number of possible combinations involved, we might first set out all the possibilities:

One Effect of Transaction	**Accompanying Effect**
(1) Increase in Asset	(a) Increase in Source (b) Decrease in Asset
(2) Decrease in Asset	(a) Decrease in Source (b) Increase in Asset
(3) Increase in Source	(a) Increase in Asset (b) Decrease in Source
(4) Decrease in Source	(a) Increase in Source (b) Decrease in Asset

Obviously, a number of these possibilities simply restate others, but in reverse order: e.g., (1)(a) and (3)(a). Indeed, the four types of balance sheet effects involved could be grouped as follows:

Increase in Asset	Increase in Source
Decrease in Source	Decrease in Asset

because all transactions are some combination of an item on one side of this table with one of the two items on the other side of the table.

The balance sheet itself is simply the summary to date of all the individual transactions, and the inherent equality of its columns is confirmed by the fact that each individual transaction has two equal effects on the balance sheet.

A single transaction can have more than two effects. If, in transaction (j), Tutt bought another piece of office equipment from Elmer Co. for $100, paying $50 down, *Equipment* would increase $100, *Cash* would decrease $50, and *Accounts Payable: Elmer Co.* would increase $50. This transaction shows that sometimes two combinations may be involved at the same time; the transaction here involves an increase in an asset balanced half by a decrease in an asset and half by an increase in a source.

Tutt's balance sheet, in simple form, after the above transaction becomes:

E. Tutt, Esquire
Balance Sheet, After transaction (j)

	Assets		**Liabilities & Proprietorship**		
			Liabilities:		
(e,f,g,h,j)	Cash	$ 350	Accounts Payable:		
(c)	Supplies	100	Frank Co.	$ 400	(a)
(b,j)	Equipment	400	Elmer Co.	150	(b,g)
(a,i)	Furniture	350	Total Liabilities	$ 550	
(d,h)	Library	300	Proprietorship	950	(d,e,i)
	Total	$1,500	Total	$1,500	

Even with these few transactions, the balance sheet has been changed several times. While we could rewrite the balance sheet every time something happens, it is more efficient for a business to keep a separate record of the ups and downs of each item on the balance sheet, so that the business can determine at any time the net effect on that item of all transactions since the bookkeeper drew up the last balance sheet. Look at cash. Tutt's first balance sheet, shown earlier, showed a cash balance of $800. The bookkeeper would take a separate card, or page in a book, entitle it *Cash*, and enter the $800 from the balance sheet as the opening balance. Since we ultimately want the net result of all the ups and downs in cash, it would be convenient to divide the page into two columns, one for recording the increases in cash, the other for reflecting the decreases; and it would be sensible to use the same column for increases as the one that has the opening balance. This record is called the Cash *account*. Here, transactions (e), (f), (g), (h) and (j) would each produce an *entry* in the Cash account. When the time for drawing up a new balance sheet arrived, it would be simple to add the total of the increases in cash to the opening balance and subtract the total of the decreases to find the balance in the cash account. The process is about the same as entering the balance forward, deposits, and withdrawals in the stubs of a checkbook. The Cash account for Tutt, beginning at the date of the balance sheet on page 14, *supra*, would look like this:

Order in which entries were made

		Cash			
			(+)	(–)	
(e)	Opening balance(from last balance sheet)	(e)	$800		
(f)	To pay off Stanley			$100	(f)
(g)	To pay off Elmer Co.			200	(g)
(h)	To purchase books			100	(h)
(j)	To purchase equipment			50	(j)
	Current balance		$350		

Because this record is shaped like a "T," it is often called a *T-account*. The total of the plus column of the T-account, showing the opening cash balance plus any increases, less the total of the minus column, showing decreases, gives the current balance of $350, which would appear on the new balance sheet.

The T-accounts for the other assets, with the opening balance in each case coming from the previous balance sheet, would be as follows:

		Furniture			
			(+)	(–)	
(a)	Opening balance	(a)	$400		
(i)	On removal of chair from business			$50	(i)
	Current balance		$350		

	Equipment (+)		Equipment (–)
(b) Opening balance	(b)	$300	
(j) On new purchase from Elmer Co.	(j)	100	
Current balance		$400	

	Supplies (+)		Supplies (–)
(c) Opening balance	(c)	$100	
Current balance		$100	

(No further entries, as nothing has happened to affect the Supplies account)

	Library (+)		Library (–)
(d) Opening balance	(d)	$200	
(h) On purchase of new books	(h)	100	
Current balance		$300	

In the T-accounts for assets, it is customary to enter the opening balance in the left-hand column. This corresponds to the fact that assets are recorded on the left-hand side of the balance sheet. As noted, the increases are entered in the same column as the opening balance, just as bank deposits are added to the previous balance in a checkbook.

T-accounts similar to those illustrated for the asset accounts are also set up for the liability and the proprietorship accounts. By a convention to be analyzed in the next paragraph, the opening balance in these accounts (which, as with assets, comes from the previous balance sheet) is entered on the right-hand side of the T-account. To keep this important switch in mind, remember that these accounts are the ones on the right-hand side of the balance sheet. As with assets, increases in these accounts are entered on the same side as the opening balance; but for these accounts that means the right-hand side, with decreases on the left. Tutt's liability and proprietorship T-accounts are as follows:

	Accounts Payable: Frank Co. (–)	Accounts Payable: Frank Co. (+)	
(a) Opening balance		$400	(a)
Current balance		$400	

Accounts Payable: Elmer Co.

			(–)	(+)	
(b)	Opening balance			$300	(b)
(g)	To show partial payment of the account	(g)	$200		
(j)	On new purchase of equipment			50	(j)
	Current balance			$150	

Note Payable: Stanley

			(–)	(+)	
(c)	Opening balance			$100	(c)
(f)	To show payment of note	(f)	$100		
	Current balance			$0	

Proprietorship

			(–)	(+)	
(d,e)	Opening balance			$1000	(d,e)
(i)	On removal of chair from business	(i)	$50		
	Current balance			$950	

At first, this switch of the plus and minus columns may seem clumsy. But it has one very practical advantage that makes the bookkeeper's job easier: it results in having every transaction, no matter what accounts are affected, give rise to equal left-hand and right-hand entries in the T-accounts. To see that this is so, you should first recognize that a transaction affecting accounts on only one side of the balance sheet must produce an equal increase and decrease, and never two increases alone, or two decreases alone. Therefore, if a transaction affects only one side of the balance sheet, such as assets only or sources only, one entry will be a left-hand entry and the other a right-hand entry. In these cases there is no necessity for any convention calling for a switch between asset accounts and source accounts as to the side of the T-account on which an increase or decrease is entered.

It is when a transaction affects both sides of the balance sheet that the advantage of this convention appears. Remember that a transaction affecting accounts on both sides produces either an equal increase on both sides or an equal decrease on both sides, but never an increase on one and a decrease on the other. Whether the change on both sides of the balance sheet is an increase or a decrease, by virtue of this convention the change on one side will be a left-hand entry and the change on the other a right-hand entry. For example, an increase in assets is a left-hand entry, whereas the corresponding equal increase in liabilities or proprietorship is a right-hand entry. Again, a decrease in the assets column will be a right-hand entry, and the corresponding decrease in liabilities and proprietorship will be a left-hand entry. The table given earlier, then, actually constitutes a summary of the possible combinations of left-hand and right-hand entries:

Left-hand entries	**Right-hand entries**
Increase in Asset	Increase in Source
Decrease in Source	Decrease in Asset

This convention as to the side of the T-accounts on which increases and decreases are entered, operating in conjunction with the fact that every transaction has two equal aspects which must be recorded, forms the basis of the system that accountants call double-entry bookkeeping.

At this time, we should mention that some small businesses use *single-entry bookkeeping*. A checkbook register illustrates a single-entry bookkeeping system. If Tutt opened a checking account for her law office and deposited all cash receipts in the account and wrote checks for all cash payments, her checkbook register would tell us the balance in her checking account, where she collected cash and where she spent cash. In that example, the register would show a $350 balance in the checking account and that Tutt deposited $1,000 in the account to start the business. The register would also provide information about five cash expenditures: (1) the purchase of the library for $200, (2) the $100 payment to Stanley for stationery and supplies, (3) the $200 partial payment to Elmer Co. for office equipment that Tutt purchased on credit, (4) another $100 to purchase books for the library, and (5) the $50 down payment to Elmer Co. for another piece of office equipment. The checkbook register, however, does not tell us what other assets the business owns or what business obligations Tutt owes. For example, the checkbook register does not tell us: (1) that Tutt also owns office furniture that she bought on credit from Frank Co., (2) whether Tutt still owns the library books, (3) whether the business has used the stationary and supplies, (4) whether E. Tutt still owns the office equipment she purchased from Elmer Co., or (5) whether the business owes any other creditors. In this last regard, the checkbook register does not tell us that Tutt owes Frank Co. $400 for the office furniture that she bought on credit. Finally, the checkbook register does not reveal that Tutt took a chair that cost $50 from her office for use at home. Double-entry bookkeeping permits more comprehensive financial reports.

To see how double-entry bookkeeping is used, take another look at the transactions already considered. When Tutt paid off Stanley's note, there was a decrease in a liability, *Note Payable: Stanley*, a left-hand entry, and a decrease in an asset, *Cash*, a right-hand entry. And when Tutt bought more office equipment from Elmer Co. for $100, paying $50 down, the left-hand entry showed a $100 increase in an asset, *Equipment*; the right-hand entries included: (1) a $50 decrease in an asset, *Cash*, and (2) a $50 increase in a liability, *Accounts Payable: Elmer Co.* The left-hand and right-hand entries for each transaction are equal, no matter how many accounts are affected.

The terms "left-hand entry" and "right-hand entry" are cumbersome. Bookkeepers instead use shorthand terms. Left-hand entries are *debits* and right-hand entries are *credits*. When Tutt buys more books, the bookkeeper speaks of a *debit* to *Library*, or *debiting Library*, and a *credit* to *Cash*, or *crediting Cash*. Whatever meaning these terms have in other contexts, here debit and credit, which accountants often abbreviate "Dr." and "Cr." respectively, mean nothing more than left-hand and right-hand entries in the T-accounts. We could restate the T-accounts that appear on pages 20 to 22, *supra*, as follows:

Cash

			Dr.	Cr.	
(e)	Opening balance(from last balance sheet)	(e)	$800		
(f)	To pay off Stanley			$100	(f)
(g)	To pay off Elmer Co.			200	(g)
(h)	To purchase books			100	(h)
(j)	To purchase equipment			50	(j)
	Current balance		$350		

Furniture

			Dr.	Cr.	
(a)	Opening balance	(a)	$400		
(i)	On removal of chair from business			$50	(i)
	Current balance		$350		

Equipment

			Dr.	Cr.	
(b)	Opening balance	(b)	$300		
(j)	On new purchase from Elmer Co.	(j)	100		
	Current balance		$400		

Supplies

			Dr.	Cr.	
(c)	Opening balance	(c)	$100		
	Current balance		$100		

Library

			Dr.	Cr.	
(d)	Opening balance	(d)	$200		
(h)	On purchase of new books	(h)	100		
	Current balance		$300		

Accounts Payable: Frank Co.

		Dr.	Cr.	
(a)	Opening balance		$400	(a)
	Current balance		$400	

Accounts Payable: Elmer Co.

		Dr.	Cr.	
(b)	Opening balance		$300	(b)
(g)	To show partial payment of the account	(g) $200		
(j)	On new purchase of equipment		$50	(j)
	Current balance		$150	

Note Payable: Stanley

		Dr.	Cr.	
(c)	Opening balance		$100	(c)
(f)	To show payment of note	(f) $100		
	Current balance		$0	

Proprietorship

		Dr.	Cr.	
(d,e)	Opening balance		$1000	(d,e)
(i)	On removal of chair from business	(i) $50		
	Current balance		$950	

For convenience, the bookkeeper first records transactions chronologically in a separate book, usually referred to as the *journal*. For each transaction, the journal shows the debit and credit effects on specific accounts. Businesses may use various kinds of journals, but every business will use a *general journal*. A business may also create a journal to record transactions in various functions, such as a sales journal, a purchases journal, a cash receipts journal, or a cash disbursements journal. Today, many businesses use computers to keep their journals, but the fundamental concepts remain the same.

The general journal usually contains five columns for the date, the accounts involved and any explanation of the transaction, a cross-reference for the account number to which the bookkeeper transferred the amount in the journal entry, and separate columns for debits and credits. The general journal for a business typically looks something like this:

General Journal

Date	Account	Ref.	Debit	Credit

For each transaction, the bookkeeper first enters the date. Then, the bookkeeper writes the account to be debited as a result of the transaction and the amount of the debit. Next on the following line, but indented, is written the account to be credited and the amount. Indentation separates the credits from the debits. These items are often followed by a brief description of the transaction that makes it possible to check later to see whether the transaction was recorded properly. Representative *journal entries*, in simplified form with the letter of each transaction rather than the date and without the reference column or the linear grids, for some of Tutt's transactions would be:

(f)	Note Payable: Stanley	$100	
	Cash		$100
	(To record payment of the note to Stanley)		
(h)	Library	100	
	Cash		100
	(To record the purchase of additional books)		
(j)	Equipment	100	
	Cash		50
	Accounts Payable: Elmer Co.		50
	(To record purchase of additional business equipment from Elmer Co.)		

These entries are then recorded in the appropriate accounts, a process known as *posting* from the journal to the *ledger*. Accountants refer to the ledger as the collection of all the accounts that a business maintains. The ledger, therefore, stores in one place all the information about changes in specific account balances. Again, businesses often keep various kinds of ledgers, but every business will use a *general ledger*. The general ledger contains all the asset, liability, and equity accounts for the business. A business may also keep *sub-ledgers* when it needs to keep very detailed records. For example, an accounting entity may use an accounts receivable sub-ledger to record the individual amounts that each customer owes to the business. The accounts receivable account in the general ledger would keep track of the total amount owed to the firm by all its customers. The sum of the subsidiary accounts in the sub-ledger must equal the balance in the accounts receivable account in the general ledger.

For each ledger, businesses often use a looseleaf binder or card file with each account kept on a separate sheet or card. Businesses usually number each account for identification purposes and usually place the accounts in the general ledger in balance sheet order, starting with assets. Liabilities and equity accounts usually follow. As with journals, many businesses today use computerized ledgers, but the underlying concepts still remain the same.

Most business have developed a *chart of accounts* that lists each account and the corresponding account number that identifies the account's location in the ledger. To understand a business's accounting records, you should start with the chart of accounts. For example, E. Tutt's chart of accounts might list the following accounts and account numbers:

E. Tutt, Esquire
Chart of Accounts

Number	Account
	Assets
1	Cash
5	Accounts Receivable
9	Supplies
11	Equipment
13	Furniture
15	Library
	Liabilities
21	Notes Payable
23	Accounts Payable
	Owner's Equity
31	Proprietorship
99	Profit and Loss
	Revenues
51	Professional Income
55	Miscellaneous Income
	Expenses
71	Rent Expense
75	Secretary Expense
79	Telephone Expense
83	Miscellaneous Expense

We will discuss revenues, expenses, and profit and loss in the next section. For now, you should notice, however, that the account numbering system in the chart of accounts contains gaps to permit the bookkeeper to insert new accounts as needed.

To summarize the bookkeeping process, the bookkeeper first periodically records transactions in the journal. Next, the bookkeeper posts the information in the journal to the ledger by periodically transferring the information in the journal to accounts in the ledger. If the bookkeeper wants to prepare a balance sheet at any point in time, the bookkeeper determines the balance in each account by netting one side against the other and uses the balances in the asset, liability and equity accounts to prepare the balance sheet.

From this summary, you can already imagine that bookkeeping involves a tedious process. As previously mentioned, computers have become so important in bookkeeping and accounting that all large businesses and many, if not most, smaller businesses use computerized bookkeeping or accounting systems. Computerized systems can save enormous amounts of time because software can automatically record each journal entry in the ledger, concurrently compute the new balance in the account, and simultaneously prepare updated financial statements if desired. Beneath the computer software, however, lies the double-entry bookkeeping system.

PROBLEMS

You have now read about the basic foundations of bookkeeping. What is called for at this point is some practice in applying these techniques yourself.

Problem 1.1A. Immediately following is the balance sheet for E. Tutt on January 1 of her second year of practice, followed by a list of some of Tutt's transactions during the month of January, on the dates indicated.

(1) Set up T-accounts for each of the items on the balance sheet on one sheet of paper, with the opening balance on the appropriate side. Then on a separate piece of paper write the journal entry for each of the transactions listed, and then post them to the appropriate T-accounts, adding new T-accounts as necessary.

(2) Unless your professor directs otherwise, prepare a simple balance sheet for E. Tutt as of January 12.

E. Tutt, Esquire
Balance sheet, January 1 of Second Year

Assets		**Liabilities & Proprietorship**	
		Liabilities:	
Cash	$ 450	Accounts Payable:	
Supplies	50	Brown	$ 200
Equipment	420	Frank Co.	250
Furniture	550	Total Liabilities	$ 450
Library	630	Proprietorship	1,650
Total	$2,100	Total	$2,100

Transactions in January:

Jan.	1	Bought a new chair for the office for $75 cash.
	4	Paid Brown $100 on account.
	6	Purchased a new office machine from Jones Co. for $220 on credit.
	7	Purchased a new copy of the Ames Code Annotated from the East Publishing Co. for $120, paying $60 down, with the other $60 due in February.
	9	Received a birthday gift from her parents of $300 cash to help her stay in business—she deposited the money in her business bank account.
	11	Paid Frank Co. the $250 she owed it.
	12	Gave some law books she no longer needed, which cost her $100, to her law school's library.

Problem 1.1B. Immediately following is the balance sheet for Geoffrey P. Forgione's Diner on June 30, followed by a list of some of transactions during the month of July, on the dates indicated.

(1) Set up T-accounts for each of the items on the balance sheet on one sheet of paper, with the opening balance on the appropriate side. Then on a separate piece of paper write the journal entry for each of the transactions listed, and then post them to the appropriate T-accounts, adding new T-accounts as necessary.

(2) Unless your professor directs otherwise, prepare a simple balance sheet for Geoffrey P. Forgione's Diner as of July 31.

Geoffrey P. Forgione's Diner
Balance Sheet, June 30

Assets		Liabilities & Proprietorship	
		Liabilities:	
Cash	$ 4,000	Accounts Payable:	
Inventory	2,200	Thomas M. Henry Co.	$ 4,200
Equipment	12,000	Proprietorship	14,000
Total	$18,200	Total	$18,200

Transactions in July:

July 2 Geoff invested an additional $1,500 in the business.

5 Geoff used $300 worth of inventory at cost for a personal party for which he paid $300 cash to the business.

8 The business acquired additional inventory from Thomas M. Henry Co. on credit for $1,200.

13 Using funds in his business bank account, Geoff purchased a new fax machine for the diner for $600 cash.

17 Geoff withdrew $1,000 from the business for his personal use.

20 Thomas M. Henry Co. accepted a promissory note for the total balance due to the company.

Problem 1.1C. Immediately following is the balance sheet for Kathleen M. Brannock, Wedding Planner on June 30, followed by a list of some of transactions during the month of July, on the dates indicated.

(1) Set up T-accounts for each of the items on the balance sheet on one sheet of paper, with the opening balance on the appropriate side. Then on a separate piece of paper write the journal entry for each of the transactions listed, and then post them to the appropriate T-accounts, adding new T-accounts as necessary.

(2) Unless your professor directs otherwise, prepare a simple balance sheet for Kathleen M. Brannock, Wedding Planner as of July 31.

Kathleen M. Brannock, Wedding Planner
Balance Sheet, June 30

Assets		Liabilities & Proprietorship	
		Liabilities:	
Cash	$ 7,000	Accounts Payable:	
Inventory	5,200	Justice	$ 5,200
Equipment	19,000	Proprietorship	26,000
Total	$31,200	Total	$31,200

Transactions in July:

July 2 Kathy withdrew $6,500 from the business for her personal use.

5 Kathy sold equipment for printing invitations that cost the proprietorship $5,500 to Ron Gant for that same amount.

8 She acquired additional inventory from Terry Pendleton on credit in the amount of $1,200.

13 Kathy used proprietorship funds to purchase for the business a new computer and color printer for $3,500 in cash.

17 Kathy withdrew $1,000 from the proprietorship capital for personal use.

20 Justice demanded payment on the total balance due to him during a telephone call. Kathy promised payment to him by the end of the month.

D. THE INCOME STATEMENT

We have already seen how the balance sheet gives a reader one way to determine how well a business is doing by comparing what the business owns with what it owes. The balance sheet shows the present status of the assets and their sources resulting from all transactions since the business was formed. It is drawn up at regular intervals which will vary with the needs of the business. The balance sheet, however, cannot tell a reader very much about the business's ability to earn a profit.

As another, and probably more important way, to assess how a business is doing, we could also compare the amounts which the business's activities generate—its *revenues*—with the costs incurred to produce those revenues—its *expenses*. The *income statement*, the second basic financial statement, shows the extent to which business activities have caused an accounting entity's equity, or net worth, to increase or decrease over some period of time. Before we discuss the income statement any further, you might want to read the following cartoons that originally appeared in the 1992 annual report of Ben & Jerry's Homemade, Inc. and that we reprint with permission. Again, these cartoons very simply explain the income statement.


STATEMENT OF INCOME
- NET SALES - THIS IS THE TOTAL SALES OF THE COMPANY MINUS THE VALUE OF PRODUCT DISCOUNTED OR RETURNED.
- COST OF SALES - WHAT IT COST TO MAKE & STORE THE PRODUCTS UNTIL THEY ARE SOLD. INCLUDES INGREDIENTS, PACKAGING, LABOR COSTS, & THE COST TO RUN PRODUCTION & STORAGE MACHINERY.
- GROSS PROFIT - NET SALES MINUS COST OF SALES.
- SELLING & ADMINISTRATIVE EXPENSES - THESE ARE THE COSTS OF MARKETING & SELLING THE PRODUCT AFTER IT HAS BEEN MADE, PLUS ALL OF THE ADMINISTRATIVE COSTS TO RUN THE COMPANY.
- OPERATING INCOME - GROSS PROFIT MINUS SELLING, GENERAL & ADMINISTRATIVE EXPENSES. THIS MEASURES HOW MUCH A COMPANY EARNS (BEFORE TAXES) FROM THE CORE BUSINESS IT IS IN.
- INCOME BEFORE TAXES, INCOME TAXES & NET INCOME - INCOME TAXES ARE THE AMOUNT OF FEDERAL & STATE TAXES PAID OR DUE BASED ON THE COMPANY'S BOOK INCOME. SUBTRACTING THOSE TAXES FROM INCOME BEFORE TAXES RESULTS IN NET INCOME OR THE "BOTTOM LINE." (REMEMBER, BEN&JERRY'S HAS TWO "BOTTOM LINES." CONTINUED →
(STATEMENT OF INCOME CONTINUED)
- NET INCOME PER COMMON SHARE - USING THE WEIGHTED AVERAGE NUMBER OF SHARES "OUTSTANDING," THIS IS A CALCULATION OF HOW MUCH OF THE COMPANY'S NET INCOME CAN BE ASSIGNED TO INDIVIDUAL'S SHARES. SOMETIMES CALLED "EARNINGS PER SHARE," THIS IS AN IMPORTANT YARDSTICK FOR COMPARING A COMPANY'S PERFORMANCE IN THE CURRENT PERIOD (A YEAR OR A QUARTER) TO PERFORMANCE IN A PREVIOUS PERIOD.
BEN&JERRY'S HOMEMADE INC.
CLASS A
CHER HOULDER
CERTIFICATE OF STOCK
CORPORATE SEAL
WOW AGAIN. I'M BEGINNING TO THINK I CAN FIGURE THIS OUT!
HERE'S THE TEST. FLIP THROUGH THE FINANCIAL STATEMENTS IN THIS ANNUAL REPORT & TAKE A HARD LOOK AT THEM. READ THE MANAGEMENT'S DISCUSSION & ANALYSIS & THE FOOTNOTES. GO AHEAD - YOU CAN DO IT. THEN THINK OF THE QUESTIONS YOU WANT TO ASK. CALL OR WRITE TO OUR INVESTOR RELATIONS STAFF. SEE IF YOU CAN STUMP 'EM. I DARE YOU.
OOH! WHAT A CHALLENGE. SEE YOU AT THE ANNUAL MEETING!
TO BE CONTINUED - NEXT YEAR.

As preliminary matters, we should note three things about the income statement, which businesses sometimes call the *statement of earnings* or the *statement of operations*. First, the fundamental distinction between the balance sheet and the income statement is that, while the balance sheet speaks as of a particular date, the income statement covers a period of time between successive balance sheet dates. Just as we compared the balance sheet to a snapshot, we can compare the income statement to a motion picture. Income statements usually cover one year, either a calendar year or another twelve-month or fifty-two or fifty-three week period referred to as a *fiscal year*. For example, Appendix A contains the financial statements for Starbucks Corporation ("Starbucks") for the fiscal year ended October 2, 2005. Business owners or managers, however, may also prepare such statements on a monthly or quarterly basis. Accountants usually refer to these monthly or quarterly statements as *interim reports*.

Second, the income statement only shows the extent to which a business's activities have caused an increase or a decrease in equity, or net worth, over some period of time. If revenues exceed expenses, the resulting net income increases equity. In contrast, if expenses exceed revenues, the net loss decreases equity. You should recall, however, that a business's equity can also increase if an owner invests assets in the business or decrease if an owner withdraws assets from the business. Recall that equity increased when E. Tutt contributed $1,000 as her original stake in her law office and decreased when she removed a chair from her office to use at home. The income statement, therefore, only gives a summary of earnings or losses between balance sheet dates.

Third, the income statement, like the balance sheet and the other financial statements which we will discuss, does not provide prospective information. The income statement shows only the results from a business's operations for a period in the past. Past results, however, may provide some indications about the business's prospects.

In later chapters of this book we will have occasion to consider the relative importance of the balance sheet and the income statement. For this chapter, we must simply understand their relationship. You may need a little time to grasp the relation between the two statements and to get accustomed to the way in which double-entry bookkeeping performs a neat "bridging function" between them. But there is nothing mysterious about the income statement as such.

1. REVENUES AND EXPENSES

Drawing up a simple income statement for E. Tutt, say for the month of June, may be the easiest way to start explaining that financial statement. Suppose that during the month she receives fees of $600 and $400 for legal services.

(1)	Professional Income	$600
(2)	Professional Income	400

Accountants define *revenues* as increases in assets, decreases in liabilities, or both, resulting from delivering goods, rendering services, or engaging in ongoing major or central operations. In this example, E. Tutt produces $1,000 in revenues during June from her principal business activity, namely performing legal services. In contrast, accountants classify increases in assets or decreases in liabilities from peripheral or incidental transactions not involving investments by owners as *gains*. Because both revenues and gains increase assets or decrease liabilities, we can describe these transactions as increases in owner's equity. For these reasons, accountants occasionally describe revenues and gains as "positives." After all, revenues and gains increase equity and increase assets or decrease liabilities—consequences that a business views as favorable.

To find E. Tutt's net income, we must subtract her expenses for the month from the month's revenues. Accountants define *expenses* as decreases in assets, increases in liabilities, or both, resulting from using goods or services to produce revenue. In contrast, accountants classify decreases in assets or increases in liabilities from peripheral or incidental transactions which do not involve distributions to owners as *losses*. Once again, because both expenses and losses decrease assets or increase liabilities, these transactions decrease owner's equity. Accountants may say that expenses and losses produce a "negative" effect on a business; expenses and losses decrease equity and decrease assets or increase liabilities, all unfavorable consequences.

Suppose that E. Tutt's operating expenses were as follows:

(3)	Rent	$200
(4)	Secretary	230
(5)	Telephone	15
(6)	Heat & Light	5
(7)	Miscellaneous	5

In addition, further suppose that Tutt suffered a loss during the month when a thief broke into her office and stole $20 cash. This loss is treated as any other expense:

(8)	Theft Loss	$20

There is no particular form required for an income statement, so long as it is a clear and fair statement of the information. An acceptable one might look like this:

E. Tutt, Esquire
Income Statement
For the month of June

(1 & 2)	Professional Income		$1,000
	Less: Expenses		
(3)	Rent	$200	
(4)	Secretary	230	
(5)	Telephone	15	
(6)	Heat & Light	5	
(7)	Miscellaneous	5	
(8)	Theft Loss	20	
	Total Expenses		$ 475
	Net Income		$ 525

To see how the income statement fits into the balance sheet we might ask where Tutt's net income shows up on her balance sheet. In lay terms, Tutt's net income is an increase in her stake in the business, which we have been calling Proprietorship. Hence, if no other change in her stake occurs, the balance sheet figure for Proprietorship on June 30 should be $525 larger than on June 1.

How does this work out in the accounts? Upon receipt of the $600 fee for legal work completed in June, Tutt will debit *Cash*, since cash has increased by $600:

Cash	$600	
?		$600

Because the corresponding entry must be a credit of $600, the alternatives are a decrease in assets, an increase in liabilities, or an increase in proprietorship (or some combination thereof). But no asset has decreased, nor has any liability increased. Therefore, the credit must be an increase in proprietorship of $600.

This result makes sense. The assets of Tutt's law practice have increased, and because she is the residual owner of this enterprise, the increase redounds to her benefit; in other words, her stake in the enterprise has gone up. But common sense tells us that Tutt's "stake" has not been augmented by a full $600. Light, heat, rent, supplies, secretarial services and miscellaneous items have all gone to produce this $600 fee (and while the theft loss of $20 has not actually helped to produce any fees, it too is a cost of doing business).

These items, then, should appear as decreases in proprietorship; in the same way that income increases the stake of the proprietor, expenses decrease her stake. For example, when rent is paid, the entry could be:

Proprietorship	$200	
Cash		$200

If all revenues and expenses were entered in the Proprietorship account, the account would reflect the net increase or decrease in proprietorship for the period. The T-accounts for Cash and Proprietorship for Tutt would be:

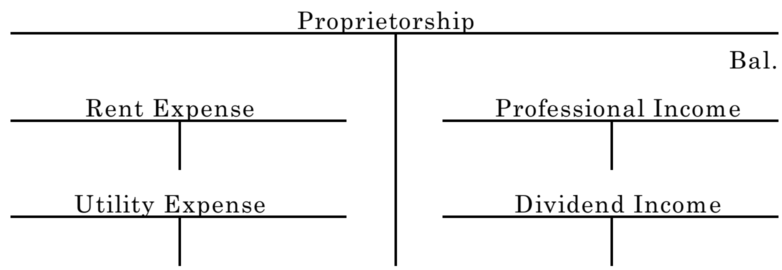
Cash

(Bal.)	$350	$200	(3)
(1)	600	230	(4)
(2)	400	15	(5)
		5	(6)
		5	(7)
		20	(8)
(Bal.)	$875		

Proprietorship

(3)	$200	$950	(Bal.)
(4)	230	600	(1)
(5)	15	400	(2)
(6)	5		
(7)	5		
(8)	20		
		$1,475	(Bal.)

Just as it is inconvenient to draw up a new balance sheet every time something happens, so it would be inconvenient, and indeed uninformative, to enter all the many operating items directly in Proprietorship. Instead, the Proprietorship account is broken up into separate T-accounts. The left-hand side of the Proprietorship account, the side on which decreases in proprietorship are recorded, is subdivided into separate T-accounts, called *expense accounts*, such as Rent Expense or Utility Expense, or sometimes *loss accounts*, such as Theft Loss, and the decreases in proprietorship other than withdrawals by Tutt are entered in those accounts rather than directly in the Proprietorship account. Similarly, the right-hand side of the Proprietorship account, on which increases are recorded, is subdivided into separate T-accounts called *income accounts*, such as Professional Income or Dividend Income, or sometimes *gain accounts*, such as Gain on Sale of Equipment, and increases other than capital investments by owners are recorded in those accounts. The relationship between the expense and income T-accounts and the Proprietorship T-account might be symbolized in the following manner:



Because an expense constitutes a decrease in proprietorship, which is a debit entry, an expense is of course reflected by a debit or left-hand entry in the appropriate expense T-account. Indeed, because the expense T-accounts are subdivisions of just the left-hand side of the Proprietorship account, you may wonder why the expense accounts themselves have two sides. The answer is simply a practical one: sometimes a portion of an expense previously paid is refunded, perhaps as a rebate, or because it was inadvertently overpaid, and it seems more sensible to record this as a reduction in the expense, by a right-hand entry in the expense T-account, than as an increase in proprietorship, either by a credit directly to that account or to some income account. Right-hand entries in expense T-accounts also facilitate the mechanics of double-entry bookkeeping, as we shall see shortly.

In the same vein, since income constitutes an increase in proprietorship, which is a credit, an income item is reflected by a credit or right-hand entry in the appropriate income T-account; and the presence of a left-hand side in the income T-accounts is simply to make it convenient to reflect any refund of an income item, such as a return by E. Tutt of an overpayment of a fee, as a reduction in the income by a debit to the income T-account (while also facilitating double-entry bookkeeping).

The number of different expense and income T-accounts set up depends upon the extent to which we want to identify separately in the books the various items of income and expense. For example, Tutt may want to show rent and secretarial expense as separate items, because they are individually important, but may be satisfied to lump together telephone, heat and light in a single Utility Expense account.

Tutt's journal entries for the income and expense transactions during the month would be as follows:

(1)	Cash	$600	
	Professional Income		$600
(2)	Cash	400	
	Professional Income		400
(3)	Rent Expense	200	
	Cash		200

(4)	Secretarial Expense	230	
	Cash		230
(5)	Utility Expense	15	
	Cash		15
(6)	Utility Expense	5	
	Cash		5
(7)	Miscellaneous Expense	5	
	Cash		5
(8)	Theft Loss	20	
	Cash		20

As these entries show, cash received for professional income has as its corresponding right-hand entry a credit to Professional Income, which is in effect an increase in proprietorship. When cash is paid out for expenses for the period, there are corresponding left-hand entries in the various expense accounts that are in effect decreases in proprietorship. When these entries have been posted to the T-accounts, the T-accounts would appear as follows:

Cash

Bal.$ 350	$200 (3)
(1) 600	230 (4)
(2) 400	15 (5)
	5 (6)
	5 (7)
	20 (8)
Bal. $875	

Proprietorship

[Expense Items]	[Income Item]
	$950 Bal.

Rent Expense

(3) $200	
Bal. $200	

Secretarial Expense

(4) $230	
Bal. $230	

Utilities Expense

(5) $15	
(6) 5	
Bal. $20	

Miscellaneous Expense

(7) $ 5	
Bal. $ 5	

Theft Loss

(8) $20	
Bal. $20	

Professional Income

	$600 (1)
	400 (2)
	$1,000 Bal.

2. THE CLOSING PROCESS

Income and expense accounts differ from other accounts in one important respect: as subsidiary accounts of proprietorship, they never appear on the balance sheet. Instead, after the accounts have performed their function of collecting in one place all items of the same kind of income or expense for the period, the net balances in these accounts are brought together in a single account. The net figure in that account, net income or loss, shows the effect of the operations of the period on proprietorship. In other words, whereas at the beginning of the period we broke the Proprietorship account down into several subaccounts for income and expense items, at the end of the period we bring these subaccounts back together, and the net figure is the increase or decrease in proprietorship due to operations.

Of course, the income and expense accounts could be brought back together in the Proprietorship account itself, by simply debiting the Proprietorship account with the various expense items, and crediting the Proprietorship account with the income items. That is ordinarily not done, however, since it is desirable to isolate in a single special account all the items relating to operations for the particular period. If the income and expense items were brought back together in the Proprietorship account, that isolation would not be achieved, since the Proprietorship account also reflects other transactions having nothing to do with the operations of the business—for example, a withdrawal from the business during the period, such as Tutt's removal of the chair from the office. A separate account is needed to show just the results of operations; that account called *Profit and Loss*, serves as the consolidating account for all the income and expense items. Accordingly, the income and expense items are transferred, or, in accounting jargon, *closed* to the Profit and Loss account.

The bookkeeper uses journal entries to transfer the balances in these individual accounts to the Profit and Loss account. Since the separate income and expense accounts are to disappear, the bookkeeper makes an entry in each of these accounts equal to and on the opposite side from the net balance found in the account. This entry, by making the two sides of the account equal, closes the account, and the bookkeeper draws a double line across the bottom of the account to show that it is closed. The corresponding opposite-hand entry is then made to the Profit and Loss account, thus putting the balance in each account on the same side of the Profit and Loss account as it was in the account from which it came, i. e., expenses on the left-hand side, income on the right. The bookkeeper would record Tutt's *closing entries* as follows:

(a)	Professional Income	$1,000	
	Profit and Loss		$1,000
(b)	Profit and Loss	200	
	Rent Expense		200

(c)	Profit and Loss	230	
	Secretarial Expense		230
(d)	Profit and Loss	20	
	Utility Expense		20
(e)	Profit and Loss	5	
	Miscellaneous Expense		5
(f)	Profit and Loss	20	
	Theft Loss		20

Of course, the bookkeeper could use compound journal entries, in which event only two closing entries would be needed:

Professional Income	$1,000	
Profit and Loss		$1,000
Profit and Loss	475	
Rent Expense		200
Secretarial Expense		230
Utility Expense		20
Miscellaneous Expense		5
Theft Loss		20

Using the first alternative, the T-accounts would become:

Cash

Debit	Credit
Bal.$ 350	$200 (3)
(1) 600	230 (4)
(2) 400	15 (5)
	5 (6)
	5 (7)
	20 (8)
Bal. $875	

Proprietorship

[Expense Items]	[Income Item]
	$950 Bal.

Rent Expense

Debit	Credit
(3) $200	
Bal. $200	$200 (b)

Professional Income

Debit	Credit
	$600 (1)
	400 (2)
(a) $1,000	$1,000 Bal.

Secretarial Expense

Debit	Credit
(4) $230	
Bal. $230	$230 (c)

Utilities Expense

Debit	Credit
(5) $15	
(6) 5	
Bal. $20	$20 (d)

Miscellaneous Expense

Debit	Credit
(7) $ 5	
Bal. $ 5	$5 (e)

Theft Loss

Debit	Credit
(8) $20	
Bal. $20	$20 (f)

Proprietorship (Continued)

Profit and Loss

(b)	$200	$1,000	(a)
(c)	230		
(d)	20		
(e)	5		
(f)	20		
		$525 Bal.	

What has been achieved? Compare the Profit and Loss account with the income statement which we made up on page 34, *supra*, at the beginning of this section. They are of course essentially the same, for the income statement is nothing more than a somewhat more detailed presentation of the Profit and Loss account. The creation of separate income and expense accounts in effect sets up slots for recording the transactions as they occur; it permits the immediate classification of the various categories of income and expense and provides a single place for the orderly accumulation and preservation of all items of the same category. The utility of a separate Profit and Loss account, reflecting solely the operations of the business, will become increasingly apparent.

The final step is to close the Profit and Loss account into the Proprietorship account: because at present the net figure in the Profit and Loss account is a credit of $525, we need a debit to Profit and Loss of $525 to close the account, and a credit to Proprietorship in the same amount:

(g)	Profit and Loss	$525	
	Proprietorship		$525

Nothing more is happening, of course, than to transfer the credit of $525 to the Proprietorship account, where it would have been in the first place if we had not created the separate income and expense accounts. The T-accounts then appear as follows:

Cash

Bal. $875	

Proprietorship

	$ 950	Bal.
	525	(g)
	$1,475	Bal.

Profit and Loss

(b)	$200	$1,000	(a)
(c)	230		
(d)	20		
(e)	5		
(f)	20		
(g)	525	$ 525	Bal.

The circle is now complete; the resulting balances of $875 in the Cash account and $1,475 in the Proprietorship account are exactly the same as we saw earlier in this section, before we went through the bookkeeping processes for expense and income items. If no change in other assets or liabilities has occurred, so that the balances in those accounts remain as they were on page 19, *supra*, the ending balance sheet, in simple form, would be:

E. Tutt, Esquire
Balance Sheet, End of June

Assets		**Liabilities & Proprietorship**	
		Liabilities:	
Cash	$875	Accounts Payable:	
Supplies	100	Frank Co.	$400
Equipment	400	Elmer Co.	150
Furniture	350	Total Liabilities	$550
Library	300	Proprietorship	1,475
Total	$2,025	Total	$2,025

To summarize our discussion of the bookkeeping process in the context of both the balance sheet and the income statement, the bookkeeper first records transactions in the journal. Second, the bookkeeper posts the information in the journal to the ledger. At the end of an accounting period, the bookkeeper closes the books by transferring the balances in the revenue, gain, expense and loss accounts to owner's equity.

During the *closing process*, the bookkeeper first determines the balance in each account by netting one side against the other. Next, the bookkeeper prepares closing journal entries which transfer the balances in the revenue and expense accounts to the clearinghouse Profit and Loss account and posts those entries to the ledger. Then, the bookkeeper prepares a final closing entry which transfers the balance in the Profit and Loss account to the Proprietorship account and posts this entry to the ledger.

As the final step in the bookkeeping process, the bookkeeper prepares financial statements.

PROBLEMS

You have now read about the basic principles underlying the balance sheet and the income statement. At this point, we should practice the techniques we have read about.

Problem 1.2A. As a continuation of Problem 1.1A, below are the rest of E. Tutt's transactions for the month of January in her second year. Prepare the journal entries for these transactions, and post them to the appropriate T-accounts, setting up any additional T-accounts that may be needed (including, of course, the necessary expense and income accounts). Then close the expense and income accounts to the Profit and Loss account, and close the Profit and Loss account to the Proprietorship account. Prepare an income statement for the month of January and a simple balance sheet as of the end of January, using the forms set out after the list of transactions.

Additional Transactions in January:

Jan 13 Gave Smith some legal advice and received $150.

15 Got a reminder from her landlord that she had not paid the rent of $150 for her office for January, and sent a check immediately.

16 Paid her secretary a salary of $200 for the first half of January.

20 Received $375 for her work during January on Bolton's Estate.

23 Paid an electrician $20 to repair a lighting fixture.

25 Purchased some supplies for $75 cash from Stanley Co.

27 Did some work for Sam's Book Store, and in exchange received a new East's Digest which sells for $220.

29 Prepared a deed for Ingersoll and received a fee of $250.

30 Paid her secretary $200 for the second half of January.

31 Went to Telephone Co. and paid her bill of $50 for the month of January.

E. Tutt, Esquire
Income Statement
For the Month of January

Professional Income		$_________
Less: Expenses		
Secretary	$__________	
Rent	__________	
Telephone	__________	
Miscellaneous	__________	
Total Expenses		$_________
Net Income		$_________

E. Tutt, Esquire
Balance Sheet, January 31

Assets		Liabilities & Proprietorship	
		Liabilities:	
Cash	$ _________	Accounts Payable:	$ _________
Supplies	_________	Brown	_________
Equipment	_________	Jones Co.	_________
Furniture	_________	East Publishing	_________
Library	_________	Total Liabilities	$ _________
	_________	Proprietorship	_________
Total	$ _________	Total	$ _________

Problem 1.2B. The balance sheet on December 31 of James Stief, Attorney at Law, appears below.

James Stief, Attorney at Law
Balance Sheet, December 31

Assets		**Liabilities & Proprietorship**	
		Liabilities (all current):	
Cash	$ 4,000	Accounts Payable:	
Office Equipment	3,500	Jackson	$ 1,400
Library	3,000	Proprietorship	9,100
Total	$10,500	Total	$10,500

During January, Stief's office engaged in the transactions listed below. Prepare journal entries for those transactions and post them to the appropriate T-accounts, setting up any additional T-accounts that may be needed (including, of course, the necessary expense and income accounts). Then close the expense and income accounts to the Profit and Loss account, and close the Profit and Loss account to the Proprietorship account. Unless your professor directs otherwise, prepare an income statement for the month of January and a classified balance sheet as of the end of January, using the forms set out after the list of transactions.

Transactions in January:

Jan. 1 Paid $500 on his account due to Jackson.

4 Rendered legal services to Lee and received payment in the amount of $700.

5 His secretary, Lulu, purchased for cash $85 worth of office supplies that she used before the end of the month.

8 Received payment in the amount of $1,500 for legal services rendered to Jones.

11 Purchased a set of state reporters from West Group for $1,200 on account.

15 Paid $1,100 rent for the month to the landlord of the office building.

20 Received and paid a bill of $75 for printing services.

31 Paid Lulu $500 as her monthly salary.

James Stief, Attorney at Law
Income Statement
For the Month of January

Professional Income		$________
Less: Expenses		
Rent	$________	
Secretary	________	
Office Supplies	________	
Printing	________	
Total Expenses		$________
Net Income		$________

James Stief, Attorney at Law
Balance Sheet, January 31

Assets		Liabilities & Proprietorship	
Current:		Liabilities (all current):	
Cash	$______	Accounts Payable:	
Fixed:	______	Jackson	$______
Office Equipment	______	West Group	______
Library	______	Total Liabilities	$______
Total Fixed Assets	$______	Proprietorship	______
Total Assets		Total	$______

Problem 1.2C. The balance sheet of Donna Preston, Attorney at Law, as of December 31 appears below:

Donna Preston, Attorney at Law
Balance Sheet, December 31

Assets		Liabilities & Proprietorship	
		Liabilities (all current):	
Cash	$ 5,000	Notes Payable	$ 1,400
Office Equipment	4,000	Accounts Payable:	
Library	2,500	Acme Equipment	1,600
Total	$11,500	Total Liabilities	$ 3,000
		Proprietorship	8,500
		Total	$11,500

During January, Preston's office engaged in the transactions listed below. Prepare journal entries for those transactions and post them to the appropriate T-accounts, setting up any additional T-accounts that may be needed (including, of course, the necessary expense and income accounts). Then close the expense and income accounts to the Profit and Loss account, and close the Profit and Loss account to the Proprietorship account. Unless your professor directs otherwise, prepare an income statement for the month of January and a classified balance sheet as of the end of January, using the forms set out after the list of transactions.

Transactions in January:

Jan. 2 Rendered legal services to Lee and received payment in the amount of $1,700.

4 Paid $600 on her note payable.

5 Purchased a new copy machine from Office Devices Co. for $2,700 on account.

11 Minnie, the secretary, purchased for cash $50 of supplies for the office that she used before the end of the month.

15 Minnie paid $200 for monthly parking in the lot adjacent to the office. This fee covered all of the firm's employees and clients during the month.

20 Paid a bill for court reporter's fees in the amount of $250 from Depositions Unlimited, Inc. for services rendered during the week.

25 Paid $500 on the note payable.

31 Minnie paid $1,000 rent to the landlord for office space for January.

Donna Preston, Attorney at Law
Income Statement
For the Month of January

Professional Income		$_____
Less: Expenses		
Rent	$_____	
Court Reporting Services	_____	
Parking	_____	
Supplies	_____	
Total Expenses		$_____
Net Income		$_____

Donna Preston, Attorney at Law
Balance Sheet, January 31

Assets		**Liabilities & Proprietorship**	
Current:		Liabilities (all current):	
Cash	$_____	Note Payable	$_____
Fixed:		Accounts Payable:	
Office Equipment	_____	Acme Equipment	_____
Library	_____	Office Devices Co.	_____
Total Fixed Assets	$_____	Total Liabilities	$_____
Total Assets	$_____	Proprietorship	_____
		Total	$_____

3. THE TRIAL BALANCE AND SIX-COLUMN WORKSHEET

To assist in the closing process, many bookkeepers will also prepare either a *trial balance* or a *worksheet*. Lawyers and law students can benefit from understanding both of these bookkeeping tools. The trial balance presents another application of the fundamental accounting equation while the worksheet further illustrates the relationship between the income statement and the balance sheet.

You will recall that to begin the closing process, the bookkeeper determines the balance in each account by netting one side against the other. Before proceeding any further, many bookkeepers will then prepare a *trial balance*. The trial balance lists all accounts and their temporary balances. As the final step in completing the trial balance, the bookkeeper totals the debits and credits.

Using the T-accounts above and the balances in the other accounts from the balance sheet on page 19, *supra*, because no change in those accounts has occurred, we could prepare a trial balance for E. Tutt as follows:

E. Tutt, Esquire
Trial Balance, After transaction (8) on page 38, *supra*

Account	Debit	Credit
Cash	$ 875	
Supplies	100	
Equipment	400	
Furniture	350	
Library	300	
Accounts Payable: Frank Co		$ 400
Accounts Payable: Elmer Co.		150
Proprietorship		950
Professional Income		1,000
Rent Expense	200	
Secretary Expense	230	
Utility Expense	20	
Miscellaneous Expense	5	
Theft Expense	20	
Totals	$2,500	$2,500

If the debits do not equal the credits, the bookkeeper has made an error. Under the fundamental accounting equation and double-entry bookkeeping, debits must always equal credits. In this way, the trial balance provides a minimal check on the process of recording and posting daily transactions. Preparing a trial balance will detect any addition or subtraction errors that the bookkeeper may have made, any incomplete journal entries or postings to the ledger, and transposition errors in posting amounts to the ledger. The trial balance, however, only detects errors that result in unequal debits and credits. The trial balance will not detect incorrect, but equal amounts, which the bookkeeper may have recorded in the journal entries, entries to the wrong accounts, or omitted or duplicate transactions.

After determining that the debits equal the credits in the trial balance, many bookkeepers will use a *worksheet* to aid in the closing process and the preparation of financial statements. The worksheet allows the bookkeeper to separate the revenue, gain, expense and loss accounts in the trial balance which flow into the income statement and the asset, liability, and equity accounts which will appear on the balance sheet. The worksheet also helps the bookkeeper prepare the closing entries which we have already discussed.

We will discuss a six-column worksheet, which bookkeepers sometimes refer to as the *working trial balance*. The six-column worksheet actually contains seven columns. The first column lists each account in the ledger. The second and third columns display the debit and credit balances, respectively, from the trial balance. The fourth and fifth columns collect the debit and credit balances, respectively, for the revenue, gain, expense and loss accounts which will appear on the income statement while the sixth and seventh columns, respectively, compile the debit and credit balances for the asset, liability and equity accounts which will appear on the balance sheet. Consequently, a six-column worksheet would look something like this:

E. Tutt, Esquire
Six-Column Worksheet

	Trial Balance		Income Statement		Balance Sheet	
Account	Debit	Credit	Debit	Credit	Debit	Credit
	____	____	____	____	____	____

As the first step in the preparation of the worksheet, the bookkeeper lists all accounts in the ledger in the first column and enters any debit balances in the second column and any credit balances in the third column respectively. As a result, E. Tutt's worksheet might look something like this:

E. Tutt, Esquire
Six-Column Worksheet, After transaction (8)

Account	Trial Balance Debit	Trial Balance Credit	Income Statement Debit	Income Statement Credit	Balance Sheet Debit	Balance Sheet Credit
Cash	$ 875					
Supplies	100					
Equipment	400					
Furniture	350					
Library	300					
Accounts Payable: Frank Co.		$ 400				
Accounts Payable: Elmer Co.		150				
Proprietorship		950				
Professional Income		1,000				
Rent Expense	200					
Secretary Expense	230					
Utility Expense	20					
Miscellaneous Expense	5					
Theft Expense	20					
Subtotals	$2,500	$2,500				

At the second step, the bookkeeper extends each trial balance amount to one of the four remaining columns, entering debit amounts in the debit columns and credit amounts in credit columns. The bookkeeper enters balance sheet accounts, such as Cash and Accounts Payable: Frank Co., in the balance sheet debit and credit columns, respectively. Similarly, the bookkeeper extends the account balances for the income statement accounts, such as Professional Income and Secretarial Expense, to the appropriate income statement columns.

After extending each trial balance amount to one of the four remaining columns, the bookkeeper subtotals the last four columns as follows:

E. Tutt, Esquire
Six-Column Worksheet, After transaction (8)

Account	Trial Balance Debit	Trial Balance Credit	Income Statement Debit	Income Statement Credit	Balance Sheet Debit	Balance Sheet Credit
Cash	$ 875				$ 875	
Supplies	100				100	
Equipment	400				400	
Furniture	350				350	
Library	300				300	
Accounts Payable: Frank Co.		$ 400				$ 400
Accounts Payable: Elmer Co.		150				150
Proprietorship		950				950
Professional Income		1,000		$1,000		
Rent Expense	200		$ 200			
Secretary Expense	230		230			
Utility Expense	20		20			
Miscellaneous Expense	5		5			
Theft Expense	20		20			
Subtotals	$2,500	$2,500	$ 475	$1,000	$2,025	$1,500

You will note that the debit and credit columns for both the income statement and the balance sheet do not balance at this intermediate stage in the worksheet. At this point, the bookkeeper can determine the net income or loss for the period by computing the difference between the two income statement columns. If the total credits for the income statement exceed the total debits for the income statement, the business has earned net income for the period. In that event, the bookkeeper inserts the words "Net income" in the account column. The bookkeeper then enters the net income amount, or the difference between the total credits and total debits in the income statement columns, $525 in this illustration, in both the debit column for the income statement *and* the credit column for the balance sheet.

E. Tutt, Esquire
Six-Column Worksheet, After transaction (8)

	Trial Balance		Income Statement		Balance Sheet	
Account	Debit	Credit	Debit	Credit	Debit	Credit
Cash	$ 875				$ 875	
Supplies	100				100	
Equipment	400				400	
Furniture	350				350	
Library	300				300	
Accounts Payable: Frank Co.		$ 400				$ 400
Accounts Payable: Elmer Co.		150				150
Proprietorship		950				950
Professional Income		1,000		$1,000		
Rent Expense	200		$ 200			
Secretary Expense	230		230			
Utility Expense	20		20			
Miscellaneous Expense	5		5			
Theft Expense	20		20			
Subtotals	$2,500	$2,500	$ 475	$1,000	$2,025	$1,500
Net Income			525			525
Totals			$1,000	$1,000	$2,025	$2,025

The debit entry balances the income statement columns and the credit entry balances the balance sheet columns. The credit in the balance sheet column also indicates the increase in equity from net income. Consequently, the worksheet powerfully illustrates the interrelationship between the income statement and the balance sheet. Once again, we see how the income statement shows the change in equity from net income or loss resulting from operations during an accounting period.

You will recall that the bookkeeper determines the net income or loss for the period by computing the difference between the two income statement columns in the worksheet. If the total debits for the income statement exceed the total credits for the income statement, the business has suffered a net loss for the period. In that event, the bookkeeper inserts the words "Net loss" in the account column. The bookkeeper then enters this net loss amount in both the credit column for the income statement *and* the debit column for the balance sheet. Again, the credit entry balances the income statement columns while the debit entry balances the balance sheet columns. The debit in the balance sheet column also indicates the decrease in equity from the net loss.

As a final step in completing the worksheet, the bookkeeper computes new column totals for the income statement and balance sheet columns. If either the income statement or balance sheet columns do not balance, the bookkeeper has made an error in preparing the worksheet. The completed worksheet can also help the bookkeeper prepare the closing entries which we have already discussed as follows:

(a)	Professional Income	$1,000	
	Profit and Loss		$1,000
(b,c,d,e,f)	Profit and Loss	475	
	Rent Expense		200
	Secretarial Expense		230
	Utility Expense		20
	Miscellaneous Expense		5
	Theft Loss		20
(g)	Profit and Loss	525	
	Proprietorship		525

The bookkeeper would then continue with posting the closing entries to the ledger and preparing the financial statements.

If the bookkeeper uses either a trial balance or worksheet, we can refine our summary of the bookkeeping process. First, the bookkeeper records transactions in the journal. Second, the bookkeeper posts the information in the journal to the ledger. At the end of an accounting period, the bookkeeper closes the books by transferring the balances in the revenue and expense accounts to owner's equity. During the closing process, the bookkeeper first determines the balance in each account by netting one side against the other. Second, the bookkeeper prepares a trial balance to ensure that total debits equal total credits. Next, the bookkeeper may use a six-column worksheet to separate the items in the trial balance into the revenue and expense accounts which flow into the income statement and the asset, liability, and equity accounts that will appear on the balance sheet. Using the worksheet, the bookkeeper then prepares the closing journal entries which transfer the balances in the revenue and expense accounts to the clearinghouse Profit and Loss account and posts those entries to the ledger. Then, the bookkeeper prepares a final closing entry which transfers the balance in the Profit and Loss account to equity and posts the final closing entry to the ledger. As the final step in the bookkeeping process, the bookkeeper prepares the financial statements.

PROBLEMS

You have now read about the basic techniques underlying the trial balance and the six column worksheet. At this point, we should practice what we have learned.

Problem 1.3A. Unless your professor directs otherwise, and based on the following trial balance for Chamberlain's Romance Bookstore, construct a six-column worksheet and prepare August financial statements (classified balance sheet and income statement only). Ignore depreciation and any other accruals or deferrals.

Chamberlain's Romance Bookstore
Trial Balance, August 31

Account	Debit	Credit
Accounts Payable		$ 3,500
Accounts Receivable	$ 1,500	
Advertising Expense	2,800	
Book Binding Expense	1,300	
Cash	8,700	
Equipment	8,000	
Notes Payable		2,400
Proprietorship		13,700
Rent Expense	5,000	
Revenue		16,000
Salary Expense	6,000	
Supplies Expense	1,500	
Traveling Expense	800	
Totals	$35,600	$35,600

Problem 1.3B. Unless your professor directs otherwise, and based on the following trial balance for Dave Dutile, Attorney at Law, construct a six-column worksheet and prepare July financial statements (classified balance sheet and income statement only). Ignore depreciation and any other accruals or deferrals.

Dave Dutile, Attorney at Law
Trial Balance, July 31

Account	Debit	Credit
Accounts Receivable	$ 9,800	
Accounts Payable		$ 3,300
Cash	5,700	
Notes Payable		10,000
Office Equipment	8,100	
Proprietorship		10,800
Rent Expense	800	
Revenue		2,200
Salary Expense	1,600	
Supplies Expense	100	
Telephone Expense	200	
Totals	$26,300	$26,300

Problem 1.3C. Unless your professor directs otherwise, and based on the following trial balance for Glen's Ice Cream Shop, construct a six-column worksheet and prepare June financial statements (classified balance sheet and income statement only). Ignore depreciation, income taxes and any other accruals or deferrals.

Glen's Ice Cream Shop
Trial Balance, June 30

Account	Debit	Credit
Accounts Receivable	$ 3,600	
Accounts Payable		$ 3,500
Cash	13,000	
Food Expense	4,000	
Notes Payable		6,500
Notes Receivable	4,100	
Office Equipment	5,000	
Office Supplies	1,500	
Proprietorship		18,200
Rent Expense	7,500	
Revenue		14,000
Salary Expense	2,300	
Supplies Expense	1,200	
Totals	$42,200	$42,200

E. THE STATEMENT OF CHANGES IN OWNER'S EQUITY

We have now studied both the balance sheet and the income statement. We have seen how the income statement serves as a "bridge" between two balance sheets. The income statement, however, only shows the extent to which a business's activities have caused an increase or a decrease in equity over some period of time. During that same period of time, equity also could have increased if an owner invested assets in the business, or it could have decreased if an owner withdrew assets from the business. The *statement of changes in owner's equity* fully reconciles the changes in net worth between balance sheet dates.

To separate the various changes in equity that can arise from operations, investments by owners, and withdrawals, accounting entities often maintain different accounts for *capital*, *drawings*, and *retained earnings*. Accountants use capital accounts to record an owner's investment in the business. Investments obviously increase equity and capital. An owner also may withdraw cash or some other asset for use outside the business. To illustrate, E. Tutt removed a chair from her law office for personal use. Such withdrawals decrease equity and could directly decrease capital. Accountants, however, normally prefer to use a separate account, referred to as Drawings, to track an owner's total withdrawals for an accounting period. For a corporation, accountants usually net any withdrawals, which we usually refer to as *distributions* or *dividends*, against the corporation's cumulative net income or loss in an account called Retained Earnings. We will examine the accounting treatment for the equity section in the three basic business forms, the sole proprietorship, the partnership, and the corporation.

1. THE SOLE PROPRIETORSHIP

In a sole proprietorship, accountants might describe the account to record capital as either Proprietorship or Capital. When E. Tutt invested $1,000 in her legal practice, the bookkeeper could have recorded the following entry in the general journal:

(d)	Cash	$1,000	
	Proprietorship		$1,000
	(To record original investment in business)		

Similarly, when E. Tutt removed the chair from her law office, the bookkeeper could have used the following journal entry for the transaction:

(i)	Drawings	$50	
	Furniture		$50
	(To record withdrawal of chair for personal use)		

At the end of the accounting period, the bookkeeper would close the Drawings account to the Proprietorship account as follows:

Proprietorship	$50	
Drawings		$50
(To close drawings)		

To reconcile the equity amounts that appear in the balance sheets on pages 14 and 42, *supra*, we could prepare the following financial statement:

E. Tutt, Esquire
Statement of Changes in Owner's Equity
For the Month of June

Proprietorship, beginning of period	$1,000
Net income	525
Subtotal	$1,525
Less: Drawings	50
Proprietorship, ending of period	$1,475

The statement of changes in owner's equity, therefore, reconciles the amount of the residual ownership interest from the beginning to the end of an accounting period. In other words, the statement summarizes the various changes that have occurred in equity since the last balance sheet. Either net income or additional investments can increase equity, while a net loss or withdrawals decrease equity. Depending on the accounting entity involved, the statement of changes in owner's equity can assume different forms. We turn next to the statement in a partnership context.

PROBLEMS

Problem 1.4A. Using the trial balance in Problem 1.3A, *supra* at 52, and assuming no investments or drawings during the month of August, prepare a statement of changes in owner's equity for Chamberlain's Romance Bookstore for the month of August.

Problem 1.4B. Using the trial balance in Problem 1.3B, *supra* at 52, and assuming that the $5,700 debit balance in Cash and the $10,800 credit balance in Proprietorship already reflect $2,000 in drawings during July, prepare a statement of changes in owner's equity for Dave Dutile, Attorney at Law, for the month of July.

Problem 1.4C. Using the trial balance in Problem 1.3C, *supra* at 53, and assuming that the $15,000 debit balance in Cash, the $5,000 debit balance in Office Equipment, and the $18,200 credit balance in Proprietorship already reflect a $2,000 computer that Glen decided to contribute to the business and $1,500 in drawings during June, prepare a statement of changes in owner's equity for Glen's Ice Cream Shop for the month of June.

2. THE PARTNERSHIP

You may recall that accountants assign different names to the residual ownership interest depending on the accounting entity involved. In a partnership, accountants call that remainder *partners' equity*. With multiple owners, however, partnerships maintain separate equity accounts for each partner. Therefore, the King Tutt partnership would keep separate equity accounts for both E. Tutt and Jennifer King. The partnership might call their capital accounts *Partner's Equity, E. Tutt* and *Partner's Equity, J. King*, respectively. Similarly, the partnership might also call their drawings accounts *Drawings, E. Tutt* and *Drawings, J. King*.

Assume that E. Tutt and Jennifer King each invested $1,000 to start King Tutt on September 1. We could record their contributions as follows in the general journal:

Cash	$2,000	
Partner's Equity, E. Tutt		$1,000
Partner's Equity, J. King		$1,000
(To record original investment in partnership)		

If during September, the partnership collected $2,000 for professional services and incurred $800 in expenses, the partnership would show $1,200 net income. Further assume that each partner withdrew $400 for living expenses during the month. When the partners withdrew $400 for living expenses, we could record the following journal entry:

Drawings, E. Tutt	$400	
Drawings, J. King	400	
Cash		$800
(To record draws)		

At the end of the accounting period, we could close the Drawings accounts to the Partner's Equity accounts as follows:

Partner's Equity, E. Tutt	$400	
Partner's Equity, J. King	400	
Drawings, E. Tutt		$400
Drawings, J. King		400
(To close the drawings accounts)		

Because the partnership earned $1,200 in net income, the Profit and Loss account would contain a $1,200 credit balance after transferring the balances in the revenue and expense accounts. To close the Profit and Loss account, we could make the following entry to divide the net income for the month equally between E. Tutt and Jennifer King:

Profit and Loss	$1,200	
Partner's Equity, E. Tutt		$600
Partner's Equity, J. King		600

To reconcile the changes in partners' equity during September, we could prepare the following financial statement:

King Tutt
Statement of Changes in Partners' Equity
For the Month of September

		Tutt	King
Total			
Partners' Equity, September 1	$–0–	$–0–	$–0–
Original investment	1,000	1,000	2,000
Net income	600	600	1,200
Subtotals	$1,600	$1,600	$3,200
Less: Drawings	400	400	800
Partners' Equity, September 30	$1,200	$1,200	$2,400

If the partnership included more than two partners, the bookkeeper could add a column for each partner. At some point, however, a partnership may move to a summary approach to the statement as follows:

King Tutt
Statement of Changes in Partners' Equity
For the Month of September

Partners' Equity, September 1	$–0–
Original investment	2,000
Net income	1,200
Subtotals	$3,200
Less: Drawings	800
Partners' Equity, September 30	$2,400

3. THE CORPORATION

Rather than operate her legal practice as a sole proprietorship, E. Tutt could have formed a corporation to practice law. In fact, all fifty states allow lawyers to practice law as a professional corporation. If Tutt had so incorporated, she would have contributed her $1,000 initial investment to the corporation in exchange for shares in the corporation. Those shares represent the residual ownership interest in the corporation. One, several, or many investors can own shares in a corporation. Because, as a general rule, *shareholders,* sometimes referred to as *stockholders*, can transfer their shares at any time, and the fact that thousands, or even millions, of shareholders could own shares at any time, corporations do not create separate equity accounts for each shareholder. In addition, even in a small corporation, corporate laws do not grant a shareholder, unlike a partner, any claim to any specified amount of the corporation's assets, whether at liquidation or otherwise. Corporate laws merely give each shareholder the right to share proportionately with all other holders of the same class, after the corporation has satisfied all prior interests.

As a result, accountants typically divide shareholders' equity into three components: *capital stock*, *additional paid-in capital*, and *retained earnings*. These three categories of accounts track changes in the two primary sources from which a corporation derives its equity: (1) amounts that shareholders invest in the corporation, commonly referred to as *contributed capital*; and (2) *earned capital* or profits that the corporation reinvests in the business. The single *Retained Earnings account* tracks all undistributed profits that remain invested in the corporation. Accounting for the corporation's total contributed capital, in contrast, typically requires at least two separate accounts: a capital stock account and the *Additional Paid–In Capital account*.

a. CONTRIBUTED CAPITAL

To best understand why accountants subdivide contributed capital into two separate accounts, we must briefly introduce the so-called *legal capital system*, which we will discuss at greater length in Chapter V, and, especially, the concept of *legal capital*, or *stated capital*. To incorporate a business, one or more owners must file *articles of incorporation*, which the specific language in some corporate statutes refers to as a *certificate of incorporation*, with the appropriate state official. Lawyers frequently refer to either the articles or certificate of incorporation as the *corporate charter*. Among other things, the corporate charter must set forth the number of *authorized shares*, or the maximum number of shares that the corporation can lawfully issue.

Historically, the corporate charter would also specify the total amount of capital that the shareholders would originally invest in the corporation. Charters often described this total capital as being divided into a specified number of shares. For example, the articles of incorporation of Tutt, Inc. might provide that "the capital of this corporation shall be $1,000 divided into 100 shares." Each share bore the figure designating the fractional portion of the total capital that the share represented, here $10. Eventually, lawyers referred to this figure as the share's *par value*. Unfortunately, this term included the word "value"; except perhaps at the very outset, the figure bears no necessary relation to the share's actual worth.

In modern corporate practice, the term *par value* refers to the nominal amount, if any, assigned to each share in a corporation's charter. For example, the certificate of incorporation may describe a corporation's shares as "$1 par value." Again, this figure bears no necessary relation to the share's fair market value. Under the legal capital system and the corporate laws still followed in about one-fifth of the states, including Delaware (the state where about half of all publicly traded corporations have incorporated), the cumulative par value of all issued shares constitutes the corporation's *legal capital* or *stated capital*, and, as we shall discuss shortly and explain more fully in Chapter V, that amount creates important legal consequences. In those jurisdictions that still use the legal capital system, a corporation's *stated capital* equals the product of the total number of its *issued shares* times the shares' par value. Lawyers use the term *issued shares* to refer to the number of shares that the corporation has sold or otherwise put into the hands of shareholders. If a corporation issues 1,000 shares of $100 par value stock, the corporation's stated capital equals $100,000.

As we will discuss in more detail in Chapter V, corporations increasingly repurchase shares from their shareholders. In that event, lawyers often refer to the repurchased shares as *treasury shares*, especially in those states that continue to follow the legal capital system. Similarly, the term *outstanding shares* refers to those shares that shareholders continue to own. If a corporation that previously issued 500 shares subsequently repurchased twenty shares, then 480 shares would remain outstanding. We could also use the phrase *issued, but not outstanding* to describe the twenty treasury shares.

Over the years, corporate statutes have required corporations to identify their legal capital for two major reasons. First, the concept of stated capital helped to assure equality and fairness among shareholders in a new corporation. By providing a stated par value on each stock certificate, the corporation assured investors that all shareholders purchased their shares for equivalent amounts. For this premise to hold true, of course, corporate statutes dictated that corporations could not give favorable treatment to a shareholder by allowing the shareholder to purchase a share for less than its par value. With the benefit of this statutory provision, an investor purchasing newly issued $100 par value stock from a corporation would know that the other shareholders also paid at least $100 per share for their shares.

Second, the concept of legal capital purportedly protected corporate creditors. As we will see in Chapter V, corporate statutes placed restrictions on a company's ability to distribute its legal or stated capital to its stockholders. Traditional corporate statutes under the legal capital system sought to provide a "cushion" for corporate creditors. By placing limits on a corporation's ability to distribute to shareholders amounts representing the stated capital that the shareholders contributed to the company, those statutes sought to assure the corporation's creditors that the shareholders would permanently dedicate the stated capital to the enterprise's activities and obligations, subject to operating losses, of course.

Not surprisingly, however, the ingenuity of lawyers soon rendered the legal capital system illusory. Today, in states such as Delaware that still use the legal capital system, we typically see corporations issue stock with very low par values, such as $1, $.01, or even $.001, thereby minimizing the portion of contributed capital that the corporation may not distribute to the shareholders. For example, refer to page 41 of Starbucks' 2005 Form 10-K in Appendix A on page 1009, *infra*, and notice the $.001 par value that Starbucks has assigned to the company's common shares.

As a practical matter, even in states still following the legal capital system, corporations usually do not issue shares for consideration equal to their par value. Although these corporate statutes do not impose any requirements as to what amount a corporation should fix as the par value, the statutes require that the company not issue shares for *less than* par value. Because a corporation cannot always accurately determine beforehand the exact price that investors might pay for a share of its newly issued stock, companies using par value shares often set the figure at a low amount, thereby ensuring that the corporation will not experience any difficulty in selling a share for an amount *at least equal to* its par value. When a corporation issues shares for an amount that exceeds par value under the legal capital system, the corporation does not classify the excess as legal capital or stated capital, but instead refers to the excess as *capital surplus*. If a corporation issues 1,000 shares of $1 par value stock for $20 per share, $1,000 (1,000 shares times $1 par value per share) would represent stated capital. The legal capital system treats the remaining $19,000 (1,000 shares times the difference between (i) the $20 per share selling price and (ii) the $1 par value per share) as capital surplus. Together, then, legal capital and capital surplus represent the total capital that the shareholders contribute to a corporation. As we will see in Chapter V, however, depending upon the corporate statute, the restriction precluding a corporation from distributing to shareholders amounts that represent the stated capital that the original shareholders contributed to the company may not apply to capital surplus.

In addition, most corporate statutes following the legal capital system, including the Delaware General Corporation Law, permit corporations to issue shares that do not bear any specified par value. *See, e.g.*, DEL. CODE ANN. tit. 8, §§ 151(a), 153(b) (2001). Lawyers refer to such shares as *no-par* shares. Obviously, the use of no-par shares avoids the legal restriction against issuing shares for consideration less than par value, and, as will be noted shortly, reduces concerns about distributions from stated capital to shareholders. A corporation can issue no-par shares for such consideration as the company's board of directors may determine. When a corporation issues no-par shares, its board of directors generally has discretion in allocating the price that shareholders pay for the shares between stated capital and capital surplus. Thus, those involved with corporate practice soon recognized stated capital as a wholly arbitrary number, unrelated in any way to any economic facts that are relevant to the company.

A corporation can also issue more than one class or type of shares, with one class representing the basic residual ownership rights while the articles of incorporation will give preference to each additional class in one way or another. For example, a corporation may issue a class of *preferred shares*, which offer special rights or privileges to the preferred shareholders. For example, the articles of incorporation may give preferred shareholders the right to receive a fixed amount of dividends before the corporation can distribute any amount to the common shareholders. Preferred shares typically also entitle shareholders to receive a fixed amount of money upon liquidation from the residual assets before the corporation may distribute any amount to the common shareholders. In exchange for these privileges, preferred shareholders almost always sacrifice rights that common shareholders enjoy. For example, articles of incorporation usually provide that preferred shareholders cannot vote to elect directors, who manage the corporation's business and affairs, except in very limited circumstances, such as when the corporation has not paid dividends to preferred shareholders for some specified period of time. Furthermore, preferred shareholders usually forego the right to share in the corporation's profits beyond the stated preference.

To illustrate the different types of shares that a corporation may issue, we can take a look at pages 67 and 91 of Google Inc.'s ("Google") Form 10-K for the fiscal year ended December 31, 2004. You can access the Form 10-K, which Google incorporates into its 2004 Annual Report, via http://investor.google.com/. Alternatively, from Google's home page at www.google.com, select the "About Google" link. Under the "Our Company" section, select the "Investor Relations" link. Prior to its 2004 initial public offering, Google had issued 71,662,000 convertible preferred shares, which remained outstanding and held a $40,815,000 liquidation preference on

December 31, 2003, which meant that the preferred shareholders would have received almost $41 million upon liquidation before the company could distribute any amount to the holders of the Class A and Class B common stock. The holders of the Class A and Class B common shares enjoy identical rights, except as to voting. The Class B common shares enjoy *super-voting power*. The company's certificate of incorporation grants the holders of the outstanding Class A shares one vote per share. By comparison, the holders of outstanding Class B shares enjoy ten votes per share. The holders of Class B common shares can convert their shares into Class A shares at any time. In addition, the Class B shares automatically convert to Class A shares upon sale or transfer.

If a corporation issues more than one class of stock, the legal capital system requires the company to maintain a separate legal capital or stated capital account for each class. For example, a corporation that has issued both common shares and preferred shares will maintain two separate capital stock accounts, each recording the stated capital associated with a particular class. Accounting for contributed capital mirrors this legal capital system, although the legal and accounting terminology differ.

When the articles of incorporation authorize a corporation to issue more than one class of shares, accountants typically divide the capital stock component into *Common Stock* and *Preferred Stock accounts*. The Common Stock account will show an amount equal to the product of the total number of issued common shares times the par value per common share. Similarly, the Preferred Stock account will contain an amount equal to the product of the total number of issued preferred shares times the par value per preferred share, which usually differs from the par value per common share. If the articles of incorporation only authorize one class of shares, the corporation would use a Common Stock account as the only capital stock account.

(1) Shares with Par Value

When a corporation issues shares at par value, the company debits the appropriate asset account, whether cash, property, or other consideration, and credits a capital stock account for the par value amount. To illustrate, if Tutt, Inc. issues 100 shares, $10 par value, to E. Tutt for $1,000, the corporation's bookkeeper would record the following journal entry:

Cash	$1,000	
Common Stock, $10 par value		$1,000
(To record the issuance of 100 shares to E. Tutt)		

If instead, Tutt, Inc. issues five shares of $100 par value preferred stock to Tutt for $500 and fifty shares of $10 par value common stock to her for another $500, the bookkeeper would make the following entry:

Cash	$1,000	
Preferred Stock, $100 par value		$500
Common Stock, $10 par value		500

(To record the issuance of five preferred shares and fifty common shares to E. Tutt)

You will recall, however, that corporations usually do not issue shares at their stated par value. Under the legal capital system, when a corporation sells shares for an amount that exceeds par value, the company treats the excess as capital surplus. For accounting purposes, the corporation records this excess as *additional paid-in capital* or *capital contributed in excess of par*. Because the legal capital system does not require a corporation to isolate any capital surplus derived from issuing different classes of shares, a corporation usually maintains only one additional paid-in capital account. Combined then, the accounts for capital stock, namely the Common Stock and Preferred Stock accounts, and the Additional Paid–In Capital account, represent the corporation's total contributed capital.

Thus, if Tutt, Inc. had issued all 100 shares of $1 par stock that the articles of incorporation authorize to E. Tutt for $1,000, the bookkeeper would have recorded the following entry:

Cash	$1,000	
Common Stock, $1 par value		$100
Additional Paid-In Capital		900

In that event, we could revise the classified balance sheet that appeared on pages 16 and 17, *supra*, as follows:

Tutt, Inc., a Professional Corporation
Balance Sheet, After transaction (e)

Assets

	Current Assets:	
(e)	Cash	$ 800
(c)	Supplies	100
	Total Current Assets	$ 900
	Fixed Assets:	
(b)	Equipment	$ 300
(a)	Furniture	400
(d)	Library	200
	Total Fixed Assets	$ 900
	Total Assets	$1,800

Liabilities & Shareholder's Equity

	Liabilities:		
(c)	Current Liabilities:		
	Note Payable: Stanley		$100
	Accounts Payable:		
(a)	Frank Co.	$400	
(b)	Elmer Co.	300	700
	Total Liabilities		$800
(d,e)	Shareholder's Equity:		
	Common stock, $1 par; 100 shares authorized, issued, and outstanding	$100	
	Additional Paid-In Capital	900	
	Total Shareholder's Equity		1,000
	Total Liabilities and Shareholder's Equity		$1,800

Because Tutt, Inc. has sold shares only to E. Tutt, she stands as the corporation's sole shareholder. Accordingly, the balance sheet above appropriately refers to "shareholder's equity." Most corporations, however, issue shares to more than one shareholder. In fact, publicly traded corporations typically issue shares to thousands, or even millions, of shareholders, so most corporations report "shareholders' equity," alternatively captioned *stockholders' equity*, on their balance sheets. We should note that this shareholders' equity section, sometimes discloses certain important information about a corporation's capital structure. First, the corporate charter sets $1 as the par value for each common share. Second, the charter allows Tutt, Inc. to issue 100 shares. Third, the corporation has sold or otherwise distributed all 100 shares during its existence. Fourth, those 100 shares remain outstanding, which implicitly tells us, fifth, that no treasury shares exist. Finally, from the information in the shareholder's equity section and in the absence of any additional information in any notes to the financial statements, we can discern two other things: (1) that the corporation may only issue common shares; and (2) that the articles of incorporation authorize par value, as opposed to no-par, shares.

For a more complex shareholders' equity section, you can use the Internet to access Google's balance sheet for the year ended December 31, 2004 on page 67, plus related note 10 on page 91 and the statements of redeemable convertible preferred stock warrant and stockholders' equity on pages 69 to 71, of the company's 2004 Form 10-K. From those portions of Google's 2004 Form 10-K, we can determine that as of December 31, 2004, Google's Certificate of Incorporation authorized 100 million preferred shares, six billion shares of Class A common stock, and three billion shares of Class B common stock, and set a $0.001 par value for all 9.1 billion authorized shares. Over the years, Google has issued at least 79,234,000 convertible preferred shares, 95,542,010 shares of Class A common stock, and 178,980,030 shares of Class B common stock, not counting 7,605,222 unvested shares related to options granted and exercised subsequent to March 21, 2002 to purchase Class A or Class B common stock. Using note 10 and the statement of redeemable convertible preferred stock warrant and stockholders' equity for the year ended December 31, 2004 on page 71 of Google's 2004 Form 10-K, we can also tell that during 2004, the holder exercised the warrant and the shareholders converted all previously outstanding shares convertible preferred stock to common shares. As a result, 266,917,000 Class A or Class B common shares remained outstanding on December 31, 2004.

(2) No–Par Shares

For no-par shares, absent some special action by the board of directors, the legal capital system treats the entire amount of consideration that the shareholder pays for the shares as legal capital or stated capital. Most statutes in this system, however, permit the board of directors to treat some of the total amount that the corporation receives for shares without par value as capital surplus. In most states that follow the legal capital system, only the amount allocated to stated capital constitutes legal capital which the corporation cannot distribute to the shareholders. Lawyers sometimes refer to the amount per share that the board of directors has allocated to stated capital with respect to no-par shares as *stated value*, a misnomer that, like par value, does not necessarily bear any relation to the shares' actual value.

From an accounting standpoint, if the board of directors does not elect to treat some of the consideration that the corporation receives for no-par shares as capital surplus or if the corporation issues no-par shares for their stated value, the company debits the appropriate asset account and credits a capital stock account for the stated value amount. To illustrate, if Tutt, Inc. issues 100 shares, without par value, to E. Tutt for $1,000, and the directors do not elect to allocate some of the consideration to capital surplus, the corporation's bookkeeper would record the following journal entry:

Cash	$1,000	
Common Stock, without par value		$1,000
(To record the issuance of 100 shares to E. Tutt)		

If instead, Tutt, Inc. issues 100 shares, without par value, but the board of directors assigns a $10 stated value to the shares, the bookkeeper would make a similar entry:

Cash	$1,000	
Common Stock, $10 stated value		$1,000
(To record the issuance of 100 shares to E. Tutt)		

When a corporation issues no-par shares for an amount that exceeds stated value, the corporation records the excess as additional paid-in capital. Thus, if Tutt, Inc. had issued all 100 no-par shares that the articles of incorporation authorize to E. Tutt for $1,000, and the directors assigned a $5 stated value to those shares, the bookkeeper would have recorded the following entry:

Cash	$1,000	
Common Stock, no-par value, $5 stated value		$500
Additional Paid-In Capital		500
(To record the issuance of 100 shares to E. Tutt)		

In summary, accountants and lawyers divide contributed capital into two categories, but they assign different names to these categories. Accountants use a capital stock account, typically either a Common Stock account or a Preferred Stock account, to hold an amount that represents the product of the number of issued shares times the par value or stated value per share. Lawyers call this same product legal capital or stated capital. Accountants refer to any excess of the amount that a shareholder pays for shares and those shares' collective par or stated value as additional paid-in capital. Lawyers describe this excess as capital surplus.

b. EARNED CAPITAL

As we have already mentioned, reinvested earnings provide the second source from which a corporation derives its equity. A corporation can either use earnings to pay dividends to, or repurchase shares from, shareholders or retain those earnings in the business.

Accountants use the Retained Earnings account to track all earnings that remain invested in the enterprise. The legal capital system usually refers to this amount as *earned surplus*.

To this point, we have seen that accountants generally divide shareholders' equity into three components: capital stock accounts—either common stock or preferred stock; additional paid-in capital; and retained earnings. By comparison, the legal capital system refers to these categories as stated capital, capital surplus, and earned surplus, respectively. The following chart compares the various titles that accountants and the legal capital system assign to the different components of shareholders' equity:

SHAREHOLDERS' EQUITY CATEGORIES	
ACCOUNTING NOMENCLATURE	LEGAL TERMINOLOGY
Capital Stock: Common Stock or Preferred Stock	Stated Capital or Legal Capital
Additional Paid-in Capital	Capital Surplus
Retained Earnings	Earned Surplus

At the end of each accounting period, a corporation closes the Profit and Loss account to the Retained Earnings account. If the corporation declares dividends, the corporation debits the Retained Earnings account and credits another account, usually cash, for the dividend amount.

When E. Tutt removed the chair from her law office, presumably with the consent of the board of directors, the bookkeeper could have used the following journal entry for the transaction:

Dividends	$50	
Furniture		$50
(To record withdrawal of chair for personal use as a dividend)		

In the alternative, the bookkeeper could have debited the Retained Earnings account directly.

If we assume that Tutt, Inc. earned $525 for the month, the Profit and Loss account would contain a $525 credit balance after transferring the balances in the revenue and expense accounts. To close the Profit and Loss account, we could make the following entry to transfer the balance in the Profit and Loss account to Retained Earnings:

Profit and Loss	$525	
Retained Earnings		$525
(To close the Profit and Loss account)		

If the bookkeeper did not debit the Retained Earnings account directly when E. Tutt removed the chair from the law office, the bookkeeper would also close the Dividends account to Retained Earnings as follows:

Retained Earnings	$50	
Dividends		$50
(To close the Dividends account)		

To reconcile the equity amounts from the balance sheets that appear on pages 14 and 42, *supra*, we could prepare the following financial statement:

E. Tutt, Esquire
Statement of Changes in Shareholder's Equity
For the Month of June

Shareholder's Equity, beginning of period	$1,000
Net Income	525
Subtotal	$ 1525
Less: Dividends	50
Shareholder's Equity, ending of period	$1,475

Some corporations call this financial statement the *statement of shareholders' equity*, the *statement of stockholders' equity*, or the *statement of changes in stockholders' equity*. In any event, we again see how the statement of changes in owner's equity reconciles the amount of the residual ownership interest from the beginning to the end of an accounting period. In this example, however, the only changes involved retained earnings. For that reason, some corporations call the reconciliation the *statement of retained earnings*. Still other corporations combine the income statement and the statement of retained earnings into a *combined statement of income and retained earnings*. Finally, some corporations disclose the changes shown in these various statements in the notes to the financial statements.

By whatever name or presentation format, a full set of financial statements must provide information that reconciles the change in the amount of the residual ownership interest from the beginning to the end of an accounting period.

PROBLEMS

Problem 1.5A. Using the materials in Appendix A on pages 1008 to 1043, *infra*, describe as fully as possible the different classes of shares in the capital structure of Starbucks Corporation as of October 2, 2005. For each class or type of shares: (1) state the par or stated value, if any; (2) describe any dividend or liquidation preferences or other features; and (3) list the number of (a) authorized, (b) issued, (c) outstanding, and (d) treasury shares. Explain exactly where you found any relevant information.

Problem 1.5B. You can obtain information about the capital structure of Amazon.com, Inc. ("Amazon.com") as of December 31, 2004 from the company's Form 10-K for the fiscal year ended on that date. You can access the Form 10-K, which Amazon.com incorporates into its 2004 Annual Report, via http://phx.corporate-ir.net/phoenix.zhtml?c=97664&p=irol-reportsAnnual. Alternatively, from Amazon.com's home page at www.amazon.com, select the "Investor Relations" link at the very bottom of the page. Under the heading "Financial Documents," select "Annual Reports and Proxies" to access the company's 2004 Annual Report. Describe as fully as possible the different classes of shares in Amazon.com's capital structure as of December 31, 2004. For each class or type of shares: (1) state the par or stated value, if any; (2) describe any dividend or liquidation preferences or other features; and (3) list the number of (a) authorized, (b) issued, (c) outstanding, and (d) treasury shares. Explain exactly where you found any relevant information.

Problem 1.5C. You can obtain information about the capital structure of United Parcel Service, Inc. ("UPS") as of December 31, 2004 from the company's Form 10-K for the fiscal year ended on that date. You can access the Form 10-K via the company's Investor Relations website at http://www.shareholder.com/ups/. Under the heading "Investor Kit," select "SEC Filings." Choose the "Annual" view option and open the Form 10-K filed on March 14, 2005. Describe as fully as possible the different classes of shares in UPS's capital structure as of December 31, 2004. For each class or type of shares: (1) state the par or stated value, if any; (2) describe any dividend or liquidation preferences or other features; and (3) list the number of (a) authorized, (b) issued, (c) outstanding, and (d) treasury shares. Explain exactly where you found any relevant information.

F. ACCRUAL ACCOUNTING

Thus far, we have been studying bookkeeping, or the technique for recording a business's transactions. In addition to recording business transactions, accrual accounting seeks to provide quantitative information, primarily financial in nature, about a business's activities for use in decision-making. When Pacioli first wrote about the double-entry bookkeeping system, most ventures did not last very long. Bookkeepers could determine an enterprise's net profit by calculating the difference between what the owners contributed to the business and what they received at the venture's conclusion. Today, however, most businesses plan to continue indefinitely. For management purposes, most businesses prepare periodic financial statements to determine income and net worth.

Accrual accounting, or *accounting* for short, seeks to allocate revenues and expenses to accounting periods, regardless of when the cash receipts or expenditures actually occur. From an accounting standpoint, earning revenue does not require a cash receipt. Similarly, an expense may not require a cash expenditure in the accounting period in which the business incurred the expense. Under accrual accounting, an accounting entity recognizes revenues when earned and expenses when incurred, without regard to the actual cash receipts or payments.

We can illustrate these points by returning to our example involving E. Tutt. You will recall that during the month of June, Tutt received $1,000 in fees for legal services that she performed during the month. What if Tutt had sent a $300 bill to a client on June 29 for services she had performed earlier in the month, but the client did not pay the bill until July 3? Under the *cash method*, an accounting entity recognizes revenues when the enterprise actually receives cash or payment for goods or services. If Tutt used the cash method, she would not recognize the $300 revenue until the client paid the bill in July, even though she actually performed the services in June. In contrast, under the accrual method, an accounting entity recognizes revenues when the business delivers the goods or performs the services. If Tutt had adopted the accrual method, she would have included the $300 in June's revenues because she performed the services during the month.

These same distinctions apply to expenses. An accrual method business records expenses when it actually incurs them. Under the cash method, the business would not record the expenses until it paid them. To illustrate, assume that Tutt hired a company supplying janitorial services to clean her office for $50 per month starting June 1. The company performed the requested services during June, but did not bill Tutt until July 1. Tutt paid the bill promptly on July 5. When should she record the expense? If Tutt uses the cash method, she would not record the expense until July, when she paid the bill. Under the accrual method, however, Tutt would have recorded a $50 janitorial expense in June because the company performed the requested services during June, which means that Tutt incurred those expenses during the month.

In both examples, the underlying event preceded payment. Sometimes, however, cash precedes the underlying event. For example, Tutt could collect a retainer, or legal fee prepayment, from a client in July for services that she would not perform until August. Under the cash method, Tutt would include the retainer in July's revenue, even though she has not earned anything yet. The accrual method would require her to wait until she performed the services to recognize the income. Similarly, during July, Tutt might prepay a registration fee for a seminar that she planned to attend in September. If she used the cash method, she would record the prepayment as an expense in July. Under the accrual method, Tutt would treat the prepayment as an asset until she attended the seminar in September, at which point she would eliminate the asset and record an expense.

The federal government's annual financial reports further illustrate the differences between the cash and accrual methods. For its fiscal year ending September 30, 2005, the federal government reported a $319 billion budget deficit, applying the cash method of accounting. When the federal government used the accrual method and considered the increase in amounts owed for government pensions and disability programs, the deficit for the same fiscal year increased to almost $760 billion. FIN. MGMT. SERV., U.S. DEP'T OF THE TREASURY, 2005 FINANCIAL REPORT OF THE UNITED STATES GOVERNMENT 1, 6, *available at* http://www.fms.treas.gov/fr/05frusg/05frusg.pdf. Unfortunately, the federal deficit under the accrual method receives far less media attention than the widely publicized cash shortfall.

By comparison, the revenues for most businesses typically exceed their expenses. In the usual case, earned but uncollected revenues surpass incurred but unpaid expenses. The Internal Revenue Code generally requires most corporations, plus certain other enterprises whose average revenues exceed $10 million per year, to use the accrual method for federal income tax purposes. Those taxpayers eligible to use the cash method for federal income tax purposes typically prefer it, but they must also follow that method in keeping their financial accounting records.

Accrual accounting seeks to recognize revenues when earned, and to match expenses with the revenues that they produce. Accrual accounting includes the processes of deferral and accrual, which we will discuss in detail shortly. Very briefly, *deferral* refers to the process whereby the accountant delays an event involving cash or cash's worth in the current period until a subsequent accounting period or periods. In deferral, the accountant "pushes" a past payment into the future. In our example, at the end of July, the accountant would defer the retainer and the seminar prepayment until August and September, respectively. By comparison, *accrual* refers to the process whereby an accountant records a revenue or expense in the current accounting period even though no payment occurred during the current period. In accrual, the accountant "pulls" the future payment into the current period. In our example, during June, the accountant would accrue the income from the billed, yet unpaid, legal services and the expense from the janitorial services.

In summary, accrual accounting refers to those rules and principles that accountants use to classify and measure "real world" economic events in numbers to fit into the bookkeeping process. Before we begin our detailed study of accrual accounting, as opposed to bookkeeping, we should understand the basic assumptions, principles, and modifying conventions underlying the process.

1. INTRODUCTION

Many accounting practices make sense only if you understand the assumptions, principles, and modifying conventions underlying accrual accounting. As we discuss and attempt to resolve various accounting issues, we should ask whether the general assumptions still apply in the specific circumstances and whether the basic principles and modifying conventions suggest a particular accounting treatment.

a. ASSUMPTIONS

Several basic assumptions underlie accrual accounting. These suppositions include the economic entity assumption, the monetary unit assumption, the periodicity assumption, and the going concern assumption. Thus far, we have only implicitly considered these suppositions. We will now explicitly consider each assumption and its implications.

(1) Economic Entity Assumption

Accountants presuppose that they can separate the activities of a business from those of its owners and any other business. Under this assumption, accountants identify economic activity with a particular accounting entity even though the law may not recognize the accounting entity as a distinct legal entity. Recall that we kept separate accounting records for E. Tutt's legal practice even though the law holds a sole proprietor personally liable for a business's obligations. In addition, the accounting records for the law office did not include E. Tutt's personal expenses even though E. Tutt undoubtedly had to eat and pay various housing, transportation, and clothing expenses.

(2) Monetary Unit Assumption

Accountants recognize that money serves as the common denominator that enables businesses to conduct economic activity. In the United States, the applicable monetary unit, the dollar, theoretically provides an appropriate basis for accounting measure and analysis. This assumption implies that the monetary unit best communicates economic information regarding exchanges of goods and services, as well as changes in owners' equity, and assists in rational, economic decision-making.

As a practical matter, accountants use the monetary unit because that measure offers a simple, universally available, and easy-to-understand standard. This selection assumes that the unit of measure—again, the dollar in the United States—remains reasonably stable. As a result, accountants add 1960 dollars to 2000 dollars without any adjustment for inflation. Accountants, therefore, assume that we can ignore the difference in purchasing power between 1960 dollars and 2000 dollars. In a period of inflation with continuous and significant rises in prices, users of financial statements should question this assumption. In the inflationary period of the 1970s and early 1980s, accountants required and provided additional information to reflect the effect of inflation on financial statements. With inflation in relative control as we begin the new millennium, accountants usually do not provide that supplemental information.

(3) Periodicity Assumption

As we have already suggested, an accountant could most accurately measure an enterprise's financial results by waiting until the enterprise's liquidation. The accountant could then determine the enterprise's net profit by calculating the difference between what the owners contributed to the business and what they received at liquidation. Management, investors, lenders, and governments cannot wait indefinitely to assess an enterprise's financial performance. Consequently, periodic evaluation of an enterprise's operations becomes important.

The periodicity assumption presupposes that an accountant can divide an accounting entity's economic activities into artificial time periods. In dividing continuous operations into separate time periods, accountants must determine the relevance of each business transaction or event to distinct accounting periods. The shorter the time period, the more difficult it becomes to determine what belongs in the period.

(4) Going Concern Assumption

Under the going concern assumption, accountants presume that the accounting entity will continue normal operations into the future. Accountants use this continuity assumption because experience indicates that modern business enterprises will carry on indefinitely. The going concern assumption creates several implications. First, the assumption lends credibility to the historical cost principle. If accountants adopted a liquidation approach to valuing assets, the balance sheet would show assets at net realizable value rather than at historical cost. Second, without a going concern assumption, classifying assets and liabilities as either current or non-current loses its significance.

The going concern assumption does not apply where liquidation appears imminent. If an accountant doubts a business's ability to continue as a going concern, she will want to provide different information to the users of the financial statements. In particular, the accounting entity should show assets at net realizable value, rather than use figures based upon historical costs.

b. BASIC PRINCIPLES

Given the fundamental assumptions underlying accounting, accountants follow certain basic principles and rules in recording transactions. We have already met some of these principles. The basic principles include the historical cost principle, the objectivity or verifiability principle, the revenue recognition principle, the matching principle, the consistency principle, the full disclosure principle, and an emerging fair value or relevance principle. We will discuss various exceptions to these principles in subsequent chapters.

(1) Historical Cost Principle

As we have already seen, accountants initially record assets at original or historical cost. Thereafter, accountants have historically continued to use a figure based on historical cost because that measure offers a definite and determinable standard. Once established, historical cost remains fixed as long as the accounting entity owns the asset. At the same time, however,historical cost usually does not provide the most relevant or helpful information for decision-making purposes because the measure will only coincidentally reflect an asset's fair market value. Users of financial statements increasingly want contemporary or prospective information. Opponents have also criticized the historical cost principle on the grounds that during inflationary periods, original cost soon becomes out of date.

As an alternative to historical cost, accountants could use current fair market value. Using that measure, however, would offer less precision and require more estimates. With this background, we will soon discuss the recent movement toward a "mixed-attribute" system that combines historical cost reporting with a fair value model.

(2) Objectivity or Verifiability Principle

As an ideal, accountants prefer a system that will reach essentially similar measures and conclusions if two or more qualified persons examine the same data. The objectivity principle seeks to attain that goal and provides additional support for the historical cost principle. If we asked two accountants to record the transaction in which E. Tutt purchased her office equipment from Elmer Co., they would record the office equipment at $300.

If we asked the accountants to determine the equipment's fair market value, they would probably give us two different answers. Under the verifiability principle, which most accountants consider as a corollary to the objectivity principle, accountants prefer accounting treatments that available and reliable evidence can support. To further illustrate, financial accounting generally uses historical cost because the two accountants in our previous example could verify that E. Tutt paid $300 by examining the invoice from the transaction.

We should not overstate this objectivity principle. As we will see in this section on accrual accounting, financial accounting requires estimates. Consequently, financial statements do not present completely objective information. Nevertheless, as long as others can corroborate supporting data and methodology, accountants consider an estimate to be objective and verifiable. Whenever an accounting entity makes an estimate that significantly affects the financial statements, however, the disclosure principle, which we will discuss below, requires that the financial statements reveal the basis for the estimate and the amount of the estimate.

(3) Revenue Recognition Principle

Apart from income tax considerations, most businesses would prefer to recognize income as soon as possible and to defer expenses as long as possible. Under the revenue recognition principle, however, accountants usually recognize revenue only when: (1) an exchange transaction has occurred; and (2) the accounting entity has completed, or virtually completed, the earnings process. We will discuss this principle and its exceptions at length in Chapter VI.

(4) Matching Principle

At periodic intervals, accountants compute the results of operations, seeking as much accuracy as possible. The matching principle dictates that an accounting entity offset expenses against the resulting revenues in the same accounting period wherever feasible. If the revenue recognition principle precludes an entity from recognizing certain revenue, the income statement should not subtract the expenses necessary to produce that revenue. On the other hand, the income statement should show those expenses that the accounting entity incurred to generate reported income for an accounting period, even though no cash outflow has occurred for those expenses.

(5) Consistency Principle

Under the consistency principle, accounting entities must give economic events the same accounting treatment from accounting period to period. If readers can compare financial statements with similar reports for prior periods, accounting statements and records become much more useful. The consistency principle restricts an accounting entity from changing an accounting method between accounting periods to those situations in which accountants would consider the newly adopted principle as preferable to the old method. If an accounting entity does change an accounting principle, the entity must disclose the change's nature and effect, as well as the justification, for the accounting period in which the entity adopts the change. We should not, however, overstate the consistency principle. Because accounting practices vary from business to business, comparisons between the financial statements of different businesses can prove quite difficult.

(6) Full Disclosure Principle

This basic accounting principle generally requires an accounting entity to report in financial statements any fact important enough to influence an informed reader's judgment. Because enterprises can often choose from alternative accounting treatments, unless explicitly informed a reader might assume that the organization had followed an entirely different accounting practice. Common methods for satisfying this disclosure requirement include presenting an account as a line item in the financial statements, adding an accompanying parenthetical disclosure, and including an explanatory footnote. For this reason, remember to read the footnotes! At the same time, accountants recognize that financial statements must reasonably condense and summarize the details of the enterprise's operations and financial position to convey meaningful information to a user of financial statements. Too much detail and information can overwhelm and confuse a reader.

(7) An Emerging Fair Value or Relevance Principle

Because financial statements based solely on historical costs typically do not provide the most relevant or helpful information for decision-making purposes, financial accounting increasingly requires enterprises to use fair value or market value, rather than historical cost, to report certain assets and liabilities. As a result, current financial accounting technically uses a so-called "mixed-attribute" system that combines historical cost-reporting with a fair value model. Professor Stanley Siegel has highlighted this development and predicted that the "accounting principles of the twenty-first century may bear little resemblance to their forbears." In addition to replacing the historical cost principle, the movement to fair value calls into question the objectivity, revenue recognition, consistency, and full disclosure principles. Stanley Siegel, *The Coming Revolution in Accounting: The Emergence of Fair Value as the Fundamental Principle of GAAP*, 42 WAYNE L. REV. 1839, 1841, 1847–49, 1859 (1996).

In December 1999, the leading body of accounting rulemakers in the United States published a document setting forth its preliminary views on measuring and reporting certain financial assets and liabilities at fair value.

This document marked an important step in the seemingly inevitable move toward accounting standards that will eventually compel enterprises to use fair value to report all financial assets and liabilities. As we will read later in this text, more and more accounting standards, both domestically and internationally, require that enterprises report certain assets and liabilities at fair value. In their preliminary views, the rulemakers specifically stated that because they have not resolved all the conceptual and practical issues related to determining the fair values of financial assets and liabilities, they have not decided when, if ever, the basic financial statements should report such fair values. As possible alternatives, the rulemakers observed that they could require enhanced disclosures about fair values or a separate set of financial statements based upon fair value. Because market prices do not exist for many financial assets, enterprises would need to develop valuation models to determine fair value. Such valuation models would inherently depend upon subjective assumptions. MAJOR ISSUES RELATED TO REPORTING FIN. INSTRUMENTS AND CERTAIN RELATED ASSETS AND LIABILITIES AT FAIR VALUE, Preliminary Views (Fin. Accounting Standards Bd. 1999).

After starting a project in 2001 to require additional disclosures about the use of fair values in financial statements, the rulemakers later decided in mid-2003 to remove that project from their agenda so that they could concentrate first on issues related to fair value measurement. That project articulates its focus as *how* to measure fair value, not *what* to measure at fair value. The rulemakers plan to consider the latter question on a project-by-project basis. For the present, the *how* task seeks to codify and simplify the guidance that currently exists for developing fair value measurements, improve their consistency and comparability, and enhance disclosures about those measurements. In June 2004, the rulemakers released an exposure draft of a proposed standard on fair value measurements. The proposal defines “fair value” as “the price at which an asset or liability could be exchanged in a current transaction between knowledgeable, unrelated willing parties.” FAIR VALUE MEASUREMENTS, Proposed Statement of Fin. Accounting Standards ¶ 4 (Fin. Accounting Standards Bd. 2004). As of June 1, 2006, the project’s timetable envisioned a final document during the second quarter in 2006, seemingly an optimistic prediction. Not surprisingly, various organizations of enterprises that must prepare financial statements, most notably the American Bankers Association, have questioned whether a move to fair value accounting would offer either relevance or reliability. In any event, most observers agree that such a significant change to the principles underlying financial accounting will almost certainly require several years to complete and implement.

Shortly before issuing the exposure draft described in the previous paragraph, and in response to certain developments in international accounting principles, the rulemakers in the United States began another project that would permit, but not require, enterprises to account for financial instruments and similar instruments at fair value. Under the first phase of this project, in early 2006 those rulemakers issued an exposure draft that would allow an irrevocable one-time election to use fair value to measure and report certain financial assets and financial liabilities on a contract-by-contract basis, with any changes in fair value recognized in earnings as those changes occur. THE FAIR VALUE OPTION FOR FINANCIAL ASSETS AND FINANCIAL LIABILITIES, Proposed Statement of Fin. Accounting Standards ¶ 6 (Fin. Accounting Standards Bd. 2006). As of June 1, 2006, the project's timetable envisioned a final document on this first phase during the fourth quarter in 2006, another seemingly aggressive timetable.

c. MODIFYING CONVENTIONS

Accountants realize that they cannot regard the basic accounting principles as infallible rules. Not only do exceptions apply to almost every basic accounting principle, but certain practical considerations, which we will refer to as *modifying conventions*, often help to shape accounting practices. Such modifying conventions, which include materiality, conservatism, and industry practices, also merit our attention.

(1) Materiality

Accounting's practical side recognizes that precise attention to theory can impose unreasonable costs and burdens. At times, the added complication and cost involved in attempting to determine how to treat a minor item in an unimportant activity do not justify the benefit that any user of the financial statements would derive. When other, more important items dwarf a small and unimportant amount, the concept of materiality permits the accountant to disregard otherwise applicable accounting principles and rules.

Materiality includes quantitative as well as qualitative components, and hence involves questions of both relative size and importance. Quantitatively, materiality depends not only on an item's size, but also on the business's size. To illustrate, an accountant would consider $20,000 in missing inventory to be material for a small business showing $100,000 in annual sales, while that amount in missing inventory would not qualify as material for Starbucks Corporation. From a qualitative standpoint, materiality can vary with an item's nature. For example, an accountant might consider any illegal payment, even a very small payment, as material for certain businesses.

(2) Conservatism

As another modifying convention, accountants frequently refer to conservatism. Over the years, accountants have tried to avoid overly optimistic financial statements by anticipating and recording possible losses, while at the same time refusing to recognize potential income. In a nutshell, the convention pushes accountants toward the pessimistic side, to offset the natural optimism, if not exuberance, of business owners or managers in reporting the results of their operations. Accountants have summed up this convention's theme in the adage, "Recognize all losses, anticipate no gains." To avoid later unpleasant surprises, accountants should undertake an effort to reflect all losses or expenses as soon as they appear likely, while delaying the recognition of income or gain until it is virtually assured.

Conservatism counsels the accountant to choose the approach least likely to overstate assets and income. As a result, this modifying convention can lead to an accounting entity understating its income, assets, and equity. Although conservatism still enjoys considerable influence, accountants increasingly recognize that undue pessimism in reporting financial results can cause almost as many undesirable consequences as over-optimism. For example, unduly discouraging financial statements could lead an investor to sell an investment for a lower price. As a result, we should remember that application of this convention, as with any other accounting doctrine, requires the exercise of sound judgment. The convention only applies when uncertainty or doubt exists.

(3) Industry Practices

As a final modifying convention, peculiarities in some industries and businesses allow departure from basic accounting principles. For example, while accounting entities generally use historical cost to value their inventories, businesses engaged in the meat-packing industry sometimes carry inventories at sales price less distribution cost because a meat-packer cannot allocate the cost of an animal to the ribs, chucks, and shoulders with any ease or precision.

Having discussed the assumptions, principles and modifying conventions underlying accrual accounting, we can now turn to discuss the process itself in some detail. The process involves both accrual and deferral. We begin our detailed discussion with deferral.

PROBLEMS

Problem 1.6A. In 1960, Bellia Company purchased land costing $10,000. For real estate tax purposes, the county assessor has valued the land at $75,000 for tax year 200X. A local real estate agent has suggested to the company's president that the land is worth at least $100,000. Based on increases in the consumer price index, which reveals that $1 in 1960 bought six times as much as $1 in 200X, one could say that the original cost of the land in 200X dollars is $60,000.

(1) At what amount should the land appear on the company's books and in its 200X financial statements?

(2) Which financial accounting assumptions, basic principles or modifying conventions require your result? Explain briefly.

Problem 1.6B. The Beck Corporation has a policy of recording all purchases of supplies as expenses at the time of purchase, even though the company might not use the supplies during that accounting period. The value of unused supplies represents a large portion of the firm's assets and varies greatly from period to period. What financial accounting assumptions or basic principles, if any, does this accounting treatment violate? Explain briefly.

Problem 1.6C. Sunburst Partners lists office stationery purchased two years ago on its balance sheet at its $1,260 cost, although no one else would buy all this stationery for more than $25 as scrap paper. What financial accounting assumptions, basic principles, or modifying conventions dictate this treatment? Explain briefly.

2. DEFERRAL OF EXPENSES AND INCOME

As briefly mentioned already, deferral refers to the process whereby an accountant delays a payment in the current period until a subsequent accounting period or periods. Accountants defer both prepaid expenses and unearned revenues. In the first instance, the accountant delays treating a cash expenditure as an expense until some subsequent accounting period when the business will enjoy the benefit of the expenditure. Similarly, he delays recognizing a cash receipt as income when the business will not earn the income until a subsequent period.

a. EXPENSES

You will recall that at the end of July in the illustration on page 69, *supra*, the accountant classified the seminar prepayment as an asset so that E. Tutt would not treat the payment as an expense until she attended the seminar in September. The prepayment would then appear as a current asset on E. Tutt's classified balance sheet.

(1) In General

As a practical matter, the fact that assets and expenses are each increased by a debit and decreased by a credit is not coincidental. There is a significant relationship between assets and expenses. In fact, dishonest corporate executives have used this relationship to perpetrate financial frauds. At WorldCom, senior financial officers improperly treated about $11 billion in operating expenses as assets, which tremendously overstated the company's income and led, in 2002, to the largest bankruptcy filing in U.S. history.

To illustrate the relationship between assets and expense, suppose that when Tutt first hangs out her shingle, she pays $60,000 to purchase a small building to use as her office. She would debit the asset Building for $60,000, and would credit the Cash account in the same amount, and no income or expense account would be affected. If she pays a week's rent for an office instead, a debit to the Rent Expense account would be appropriate. But what if she pays advance rent for six months? Ten years? Ninety-nine years? Clearly, at some point it no longer can be said that Tutt is "out" or "poorer" by the amount of the advance payment, or that her stake in the enterprise has been reduced in that amount. Rather, she has exchanged cash for an asset, just as she did when she purchased a building; here, the asset would be the right to occupy the office for the period covered by the payment.

Actually, any expense paid in advance creates an asset, although that asset may be short-lived; even the advance payment of rent for a week gives rise to an asset—the right to occupy for one week. By the end of the week, however, the asset has been used up, and the payment has become an expense. By the same token, almost all assets are simply prepaid expenses, since ultimately they will be used up and will disappear. For the key to deciding how much of an advance payment is an expense and how much is an asset, remember that the income and expense accounts collect the items affecting proprietorship *in a particular period*. The amount of an advance payment that is used up during the period is an expense for that period; any portion of the payment not used up in the current period is something the business still owns, and hence is an asset as of the end of the period. Thus, if Tutt pays $60,000 advance rent for ten years, at the end of the first year $6,000 is an expense, and $54,000 remains as an asset. If, as we have been assuming, Tutt prepares statements each month, then for the first month $500 (1/120 times $60,000) is an expense, and the remaining $59,500 is an asset at the end of the first month.

If, for simplicity, we assume that the useful life of a building can be estimated with precision, and we ignore scrap or other salvage value at the end of the useful life, the purchase of a building with a useful life of, say, ten years for $60,000 may be thought of in exactly the same way as an advance rent for ten years. Like the advance rent, the cost of the building will be completely used up at the end of the tenth year; that cost, therefore, should be apportioned among the periods in which the building helps to produce income under the matching principle.

To see how the bookkeeper uses entries to handle prepaid expenses, suppose that on January 1 of her first year Tutt pays $15,000 for rent for three years in advance. At the end of the first year, no matter how the entries are made during the year, she should end up with an expense of $5,000 and an asset of $10,000. Because at first blush a payment for rent seems like an expense, Tutt's bookkeeper might make this entry on January 1:

Rent Expense	$15,000	
Cash		$15,000

Assuming, for the moment, that we are only concerned with Tutt's annual statements, the various income and expense accounts will be closed into the Profit and Loss account at the end of the year. But only $5,000 of the $15,000 now in the Rent Expense account "belongs" to the first year; thus if the whole $15,000 is closed to the Profit and Loss account, rent expense for that year will be overstated, and net income will be understated. At the same time, Tutt's balance sheet for December 31 will not include all of her assets because the asset representing the right to occupy the premises for two more years will be missing. What is needed, then, is a reduction of the expense to the amount actually used up and the creation of an asset to show what Tutt actually still owns. To show the existence of the asset, that is, the right to occupy, a debit of $10,000 should be made to an asset account, such as Deferred Rent Cost. To decrease the expense from $15,000 to $5,000, a credit to the Rent Expense account of $10,000 is needed. A single entry would accomplish both objectives. The entry could be journalized as follows:

Deferred Rent Cost (asset)	$10,000	
Rent Expense		$10,000

The term deferral describes this process of reducing an expense to the amount actually used up during the accounting period while creating an asset to show something the business still owns at the end of the period. The word appropriately connotes the fact that part of the expenditure is held back from the current period because it has not yet been used. Accordingly, the asset created is often called a *deferred cost* or, perhaps, a *deferred expense*—here, the asset might also be called *Deferred Rent Expense*. An accounting purist would hesitate to use the word "Expense" in a balance sheet account, preferring to limit the use of the word to income statement accounts, but not everyone in the real world agrees.

Accountants commonly refer to such an asset as a *prepaid expense*, in this case, *Prepaid Rent*, or *Prepaid Rent Cost*, which, of course, connotes the fact that a future expense has been paid in advance. The fact that a single entry, often referred to as an *adjusting entry*, accomplishes both the reduction in the expense and the creation of the asset in the proper amount is another example of the neat "bridging function" that double-entry bookkeeping performs between the balance sheet and the income statement.

Look now at the case in which, at the beginning of her first year, Tutt purchases a building with a useful life of ten years, to use as her office. This is clearly a purchase of an asset, and the entry would be:

Building	$60,000	
Cash		$60,000

Unless some entry is made at the end of the first year, however, the balance sheet drawn up then will show the asset Building at $60,000. That would be an overstatement of Tutt's assets, because the building would have a remaining useful life of only nine years. In addition, Tutt's net income for the first year would be overstated, since there would be no deduction for the expense of using the building, although one-tenth of the total life of the building has been used up during the year. What is called for, then, is the creation of an expense of $6,000, which we could call *Building Expense*, and a reduction of the asset Building to $54,000. Again, a single entry would do the job:

Building Expense	$6,000	
Building		$6,000

As we will see on pages 82 to 84, *infra*, the accountant would not normally call the expense Building Expense nor credit the Building account. In any event, the adjusting entry properly puts an expense of $6,000 into the current year and reduces the asset figure to $54,000 to show what is really left for future years.

It might be noted, incidentally, that the advance payment for rent could have been handled in exactly the same way, rather than as we did it above. Upon payment of the $15,000 on January 1 of the first year, the entire payment could have been recorded as a Deferred Rent asset:

Deferred Rent	$15,000	
Cash		$15,000

In that event, on December 31 an adjusting entry creating an expense of $5,000 and decreasing the asset by the same amount would have been necessary to show that one-third of the asset had been used up:

Rent Expense	$5,000	
Deferred Rent		$5,000

The product of these two entries is exactly the same as the one we obtained by first recording the entire advance payment as an expense and then deferring the portion not used up during the period.

As a third alternative, upon payment of the $15,000 on January 1 of the first year, the bookkeeper could have simply reflected the obvious split between rent expense for the first year and deferred rent as follows:

Rent Expense	$5,000	
Deferred Rent	10,000	
Cash		$15,000

The one entry produces exactly the same effect as the earlier illustrations where we: (1) first recorded the entire advance payment as an expense and then deferred the portion not used up during the period; or (2) first recorded the entire advance payment as an asset and then decreased the asset by the amount of the asset that had been used up. With the single entry, the bookkeeper would not need to record an adjusting entry at the end of the first year. In the two subsequent years, as in the earlier illustrations, however, the bookkeeper would need to make an adjusting entry to create an expense of $5,000 and decrease the asset by the same amount to show that the business had used up one-third of the asset in each of those years.

Whichever of these methods the bookkeeper uses depends entirely upon whether she initially records an expenditure as an asset, an expense, or a combination; the end result is the same. Therefore, if you find it easier, handle any advance payment that may not be used up in the current period just as you would an obvious asset like a building—that is, first record the payment as an asset, and then at the end of the period reduce the asset and create an expense to the extent that the asset was used up during the period. In practice, however, the initial entry for an expenditure often depends upon whether it looks more like an expense or an asset in the lay sense; hence, a payment of rent to a landlord will normally be debited to an expense account initially, even though it may cover far more than the current period. That is because the bookkeeper's functions are fairly mechanical and do not include, except in obvious cases, deciding how much of a particular expenditure the business will use up during the current period. That often difficult question, which will receive considerable attention in later chapters of this book, is then resolved by the accountant who supervises the closing of the books at the end of the period and makes whatever adjusting entries are necessary.

(2) Depreciation Accounting

We have already seen that a close relationship exists between deferred expenses and fixed assets, such as buildings, which may benefit several, or even many, accounting periods. For example, suppose E. Tutt purchases computer equipment for her law office for $2,000. Because this expenditure will benefit the business in future months and years, Tutt must not treat the entire amount as an expense in the month she buys the computer equipment. Rather, most of the expenditure reflects a future benefit or unexpired cost, which she should record as an asset. Computer equipment, however, like most tangible fixed assets other than land, will not last forever. Ultimately, Tutt will retire the computer equipment. At some point, the computer will physically wear out or become inefficient to operate. Alternatively, technological changes may cause Tutt to replace the machine. In any event, the $2,000 that she spent to acquire the computer equipment, less any *salvage value* that Tutt will receive in exchange for the equipment when she decides to retire it, constitutes an expense of producing revenues during the time she uses the computer equipment, a period accountants usually refer to as the computer's useful life. If we assume that Tutt will sell the computer for $200 in three years, she should allocate $1,800, the difference between the $2,000 cost and the $200 salvage value, to expense in some reasonable and systematic manner during the computer's useful life. Accountants refer to this allocation process as *depreciation* for fixed assets and as *amortization* for intangible assets. We should note that the term depreciation in this context does not refer to any diminution in the asset's value. Although almost all equipment declines in value as time passes, depreciation does not attempt to measure that decrease.

Assuming Tutt decides to use the straight-line method to allocate the $1,800 equally among the three years that she plans to use the computer equipment in her law office, she should treat $600 per year, or $50 per month, as depreciation expense for the computer equipment. We could express this computation as the following formula:

$$\text{Monthly Depreciation Expense} = \frac{(\text{Cost} - \text{Salvage Value})}{\text{Useful life in months}}$$

At the end of the first month, therefore, Tutt might record the following entry:

Depreciation Expense	$50	
Computer Equipment		$50

If Tutt bought the computer in the middle of the month, she might only treat $25, or one-half the normal monthly amount, as depreciation expense.

Using a general term like *Depreciation Expense* enables Tutt to lump together, under one heading, all of the expenses of using up fixed assets during an accounting period. Although Tutt does not own many fixed assets, a large company might own thousands or even millions of individual fixed assets.

As another practical matter, an accountant would normally not credit the Computer Equipment account. Instead, he would credit a separate *contra-asset* account called *Accumulated Depreciation*, which would appear as an offset to, or reduction from, the Computer Equipment account on the balance sheet. As the name suggests, a contra-asset account records reductions in a particular asset account separately from the relevant asset account. Basically, the Accumulated Depreciation account at any time simply represents the cumulative amount of the fixed asset's cost that the accounting entity has charged to expense. Accountants use this account so that they can preserve the fixed asset's original cost in the accounting records and show that amount on the balance sheet. Hence, we could restate the previous journal entry as:

Depreciation Expense	$50	
Accumulated Depreciation: Computer Equipment		$50

At the end of the first month, the computer equipment would appear as a fixed asset on Tutt's balance sheet, perhaps as follows:

Fixed Assets:	
Computer Equipment	$2,000
Less: Accumulated Depreciation	50
Net Computer Equipment	$1,950

Accountants often refer to the net amount–original cost less accumulated depreciation–as the asset's *book value*. The book value, therefore, represents the amount of the original cost remaining to be allocated to future periods, plus any estimated salvage value. If Tutt purchases additional equipment for her office, such as a copy machine or a fax machine, her bookkeeper will likely lump together all such office equipment so that only a single figure showing the total cost of all office equipment would appear on Tutt's balance sheet together with an offsetting figure for the total accumulated depreciation on that equipment.

b. REVENUES

A relation similar to that between expenses and assets exists between income items and liabilities, both of which are decreased by a debit and increased by a credit. Consider the bookkeeping for Ohner, the lessor of the building in which E. Tutt rents office space for three years by paying $15,000 in advance. When Ohner receives the $15,000, he might make the following entry in his books:

Cash	$15,000	
Rent Income		$15,000

Without some further entry, this $15,000 item will be closed into the Profit and Loss account along with the other income and expense items at the end of the year. We should remember, however, that the income accounts, like the expense accounts, are supposed to collect items affecting proprietorship *in the current period*. The entire $15,000 of rent income does not belong to the first year; $10,000 of that amount was received for the second and third years. Thus, if the whole $15,000 is closed to the Profit and Loss account for the first year, rent income for that year will be overstated, which will result in an overstatement of net income for the year. And net income for each of the next two years would be understated, because there would be no rent income for those years, although there would still be such expenses as insurance, janitor service, property taxes and the like.

At the same time, there would be an item missing from Ohner's balance sheet for the end of the first year. If for some reason Ohner defaulted in his agreement to furnish Tutt with office space for the next two years, presumably Ohner would at least be required to refund to Tutt the $10,000 paid for those two years. To put it another way, as of the end of the first year, Ohner has an obligation to provide office space to Tutt for the next two years, and the most convenient measure of this obligation is the $10,000 Tutt paid for those two years. This obligation should appear on Ohner's balance sheet as a liability at the end of the first year.

What is needed, then, is a reduction of rent income to the amount actually applicable to the current period, here $5,000, and the creation of a liability in the amount of $10,000 to show Ohner's future obligation. To reduce rent income to $5,000, a debit of $10,000 should be made to that account. To create the liability account, which is typically called *Unearned Rent*, or perhaps, *Deferred Income*, or even, *Deferred Rent Income*, because it results from deferring income from the current period, a credit of $10,000 should be made to that account. Again, a purist would not use the word "Income" in a balance sheet account, but you may encounter such account titles in your practices. The entry would be journalized as follows:

Rent Income	$10,000	
Unearned Rent		$10,000

Once again a single adjusting entry has accomplished both objectives—and we see here another example of the bridging function of double-entry bookkeeping.

Just as it is permissible to record an advance payment which may not be used up during the current period initially as an asset rather than as an expense, so an advance receipt can properly be recorded first by a credit to the appropriate liability account rather than as income. Such an entry for Ohner would be:

Cash	$15,000	
Unearned Rent		$15,000

In that event, at the close of the period it would be necessary to make an adjusting entry crediting the Rent Income account in the amount of $5,000 and decreasing the liability by the same amount. Again, a single entry will do the job:

Unearned Rent	$5,000	
Rent Income		$5,000

This entry properly puts income of $5,000 into the current year, and reduces the liability to $10,000 to show a more meaningful measure of Ohner's obligation for future years. The result of these two entries is exactly the same as the one we obtained by first recording the entire advance receipt as income and then deferring the amount not applicable to the current period.

As a third alternative, the bookkeeper for Ohner could have split the $15,000 advance payment between rent income and unearned rent as follows:

Cash	$15,000	
Rental Income		$5,000
Unearned Rent		10,000

Again, the one entry produces exactly the same effect as the earlier illustrations where we: (1) first recorded the entire advance payment as income and then deferred the portion not earned during the period or (2) first recorded the entire advance payment as a liability and then decreased the liability by the amount earned during the period. With the single entry, the

Ohner's bookkeeper would not need an adjusting entry at the end of the first year. In the two subsequent years, as in the earlier illustration, however, the bookkeeper would need to make an adjusting entry to create income of $5,000 and decrease the liability by the same amount to show that Ohner had earned one-third of the total $15,000 in each of those years.

Determination of the period or periods in which to reflect, or as the accountants say, *recognize*, the income represented by a payment received in advance is not always as easy as in the foregoing illustration. Actually, the advance rent example, in which the total income involved is allocated pro rata among the periods affected, is somewhat atypical; in many situations, all of the income from a single transaction is recognized in just one period, and not allocated among several periods. That treatment flows from the general rule governing revenue recognition which has been mentioned before and will be developed in more detail later in Chapter VI. Under that rule, accountants recognize income only in the period in which it is earned. Based in part on conservatism, accountants do not consider any of the income from a particular transaction earned until the recipient has "substantially performed" everything required under the contract. Under this test, a lawyer who receives a fee from a client for a professional undertaking which will not be completed until a later period would normally not recognize any income from the transaction until the period in which the lawyer in fact substantially completes the assignment, even if the lawyer does some of the work in a prior period; and any portion of the fee received prior to completion would be treated as liability, such as unearned fees. Similarly, a seller of goods who receives payment in advance ordinarily would not recognize any of the income from the transaction until the period in which a transfer of the goods to the customer (or some counterpart indication of substantial completion of performance) occurs. Even if some of the work is done in the period in which the advance receipt was received, or in an intervening period, none of the income would be allocated to either period, and all of the advance payment would be deferred until the period in which performance is substantially completed. As you might expect, some close questions arise as to what constitutes "substantial performance" or a single transaction, whether in the practice of law, the sale of goods, or whatever the activity. We will also examine these issues in Chapter VI.

Returning to our example involving Ohner's receipt of an advance payment of rent for three years, it might seem that Ohner would not have completed his agreed-upon performance until the end of the third year, and therefore would not have earned any of the income involved in the transaction until that time. However, transactions in which the performance by the recipient of income consists primarily of permitting another to enjoy the use of property or money for a period of time, as in the case of rent or interest, are usually treated differently from the standard types of business activity like the practice of law or the sale of goods. These transactions involving leasing property or lending money at interest, which produce income by virtue of the passage of time, are viewed as though they consist of a series of separable agreements covering the consecutive accounting periods over which the entire transaction runs, and the income proportionate to the passage of time during each accounting period is regarded as having been earned in that period. Hence, one-third of the income from Ohner's advance receipt of three years' rent would be treated as earned at the end of the first of the three years. Similarly, for anyone interested in monthly periods, one-twelfth of the one-third earned in the first year would be regarded as earned during each of the twelve months of that first year. Accountants find some justification for this difference in treatment in the fact that even under the most conservative view of things the lender of money or the lessor of property will almost invariably perform their agreement in full.

3. ACCRUAL OF EXPENSE AND INCOME

Thus far we have been considering the proper treatment of expense and income items when cash has been paid or received. We have seen that cash payments or receipts do not necessarily determine the amount of expense or income for the current period. As a matter of fact, the time when cash changes hands in a business transaction is often governed by factors which have little to do with the question of when the expense or income represented by the cash should be reflected. That holds true whether the cash moves beforehand, as in the deferral cases we have been considering, or moves afterward, as in accrual. The absence of cash payment or receipt does not negate current expense or income.

a. IN GENERAL

Accrual refers to the process whereby an accountant records an expense or revenue during the current accounting period even though no payment occurred during the current period. In accrual, the accountant "pulls" the future event involving cash or cash's worth into the current period. In our original example, you will recall that the accountant would accrue in June both: (1) the expense from the janitorial services, even though no cash changed hands during the month, and (2) the income from the billed, yet unpaid, legal services.

(1) Expenses

Let us look in more detail at a situation where no cash has moved. Suppose Tutt signed a three-year lease of office space calling for rent of \$5,000 per year, payable at the end of each year. Obviously, if Tutt paid the \$5,000 due for rent at the end of the first year, an entry debiting Rent Expense in the amount of \$5,000 and crediting Cash in the same amount would be routine. But suppose instead that due to inadvertence, or otherwise, Tutt failed to pay the rent due at the end of the first year. If the movement of cash were controlling, then there would not be any entry reflecting rent expense during the first year; hence, when Tutt closes her books at the end of that first year, net income for the year would be overstated because there would be no deduction for the expense of using the office during the year. Moreover, when Tutt pays the $5,000 for the first year's rent shortly into the second year, presumably it would be debited to the current Rent Expense account at that time; but if Tutt also pays the rent for the second year by the end of that year, as she is supposed to, that too would be charged to current rent expense, with the result that the income statement for the second year would be burdened with $10,000 of rent expense, and net income for the year would be seriously understated.

What is needed, then, is the creation of an expense in the first year in the amount properly allocable to that year. That is, the first year should bear its fair share of the total cost of utilizing office space, even though none of that cost was actually paid during the first year. A bookkeeping entry can be used to accomplish this purpose. The debit part is simple enough, for that is dictated by the judgment that rent expense in the amount of $5,000 belongs in the current (first) year. There is only one way to reflect an expense in a particular year, and that is to debit the appropriate expense account in that year, so that it will be closed to the Profit and Loss account at the end of the year and netted with all of the other expense and income items for the period.

Rent Expense	$5,000	
?		$5,000

As to the credit, of course if cash had been paid that would be easy. But since Tutt has not paid, as she was supposed to, is it not clear that she owes the $5,000 at the close of the year, just as clearly as if she had bought more office equipment for $5,000 on account? The credit, therefore, should be to a liability account to reflect her obligation to pay. This process of pulling an expense into the current period even though it has not yet been paid, while creating a liability account reflecting the obligation to pay, constitutes accrual. Taken together with deferral, accrual makes it possible to free the reporting of expense items from the movement of cash. When cash has moved in an amount greater than the expense that belongs in the current period, deferral makes it possible to charge only the proper amount to expense for the current period. When an expense belongs in the current period even though the cash has not moved as yet, accrual makes it possible to reflect the expense in the current period.

Incidentally, with regard to the name given the liability account which is created when an expense is accrued, it would probably not be called an Account Payable, because that term is usually reserved for credit purchases of goods and supplies; moreover, it is often helpful to identify other liabilities as to their source. Hence, the liability would more likely be called *Accrued Rent Payable*, which serves as a reminder that the liability results from the accrual of an expense into the current period. Other common terms for such a liability include *Expense Payable* or *Accrued Expense Payable*, or in this example *Rent Expense Payable*, *Accrued Rent Expense Payable*, *Rent Payable* or *Accrued Rent Payable*. These terms connote that the liability arises from an accrual. So the entry here might be:

Rent Expense	$5,000	
Accrued Rent Payable		$5,000

This entry puts $5,000 of rent expense into the current year, and creates a liability account to show that Tutt owes this amount for rent at the end of the first year.

Now suppose that Tutt's lease of office space for three years had not called for payments at the end of either of the first two years, but instead provided that the total of $15,000 should all be paid at the end of the third year. Once again, unless some entry is made when Tutt closes her books at the end of the first year, net income for the first year will be overstated since there will be no deduction for the expense of using an office during the year. Moreover, presumably the entire $15,000 payment in the third year would have to be treated as an expense of that year, with the result that net income for the third year would be greatly understated. Here, too, we need to accrue in the first year the amount of rent expense properly applicable to that year, even though no amount has been paid during that year. Because one-third of the total rent of $15,000 is properly applicable to the first year, an entry exactly the same as before is called for, with a debit of $5,000 to Rent Expense, and a credit of $5,000 to Accrued Rent Payable or Rent Payable.

To be sure, because Tutt has agreed to pay only at the end of the third year, strictly speaking, she is under no legal obligation to pay anything at the end of the first year. Nevertheless, in an accounting sense, Tutt does owe $5,000 at the end of the first year, since she must pay it ultimately, and, what is more significant, $5,000 of the total commitment has been used up in the current period. Hence, it is entirely appropriate to credit either Accrued Rent Payable, Rent Payable, Accrued Rent Expense Payable, Rent Expense Payable, Accrued Rent Expense or some similarly titled liability account. Tutt, however, may want to segregate liabilities of this sort, which do not have to be paid for quite some time, from current liabilities which she must pay within one year on the balance sheet. The important point is that an expense which belongs in the period may be accrued, that is, reflected in a current expense account, even though it not only has not been paid but there is not yet even a current obligation to pay it.

Notice that in this case when the rent expense is accrued for the first year, the Accrued Rent Payable, Rent Payable, Accrued Rent Expense Payable, Rent Expense Payable, Accrued Rent Expense or similar liability account reflects only an amount equal to the expense related to that year, not the entire rent obligation for the three-year period. That is because the very purpose of an accrual is to reflect an expense currently, with the creation of the liability being simply a corollary, to provide a companion credit to go along with the debit to an expense account, and obviously that credit must be in the same amount as the debit. Indeed, unlike the case of an advance payment, when of course some entry must be made to reflect the reduction in cash even though not all of the payment is chargeable to current expense, which is where deferral comes in, in the case of an expected future payment, usually no entry at all need be made in the current period unless, and then only to the extent that, a charge to current expense is called for. So if Tutt signed a three-year lease for office space during the year before the beginning of the lease, no entry at all relating to the lease commitment would be called for in that year. If material, however, it would be desirable to disclose the existence of the lease commitment scheduled to start the following year in the financial statements for the current year. In fact, an accounting entity must disclose the future minimum rental payments required under leases as of the latest balance sheet date presented for each of the five succeeding years. As we shall see, the use of footnotes or other adjuncts to the financial statements may provide suitable mechanisms for such disclosure.

When the rent for the three years is ultimately paid, the debit will be to Accrued Rent Payable, Rent Payable, Accrued Rent Expense Payable, Rent Expense Payable, Accrued Rent Expense or the similar liability account, just as any debtor who pays money owed on open account debits the account payable:

Accrued Rent Payable	$15,000	
Cash		$15,000

The important fact is that no account on the income statement is affected by the actual payment, which is as it should be since the expense has already been reflected at an earlier time.

At this point, we should also observe that there may be some occasions when the full amount of the obligation should be recorded on the balance sheet, rather than only disclosed, say, in a footnote, even though some, or even all, of the obligation is not yet properly chargeable to current expense. This situation can arise when some, or even all, of the benefit remains to be enjoyed in future periods. These occasions might include scenarios where an obligation to make future payments is relatively very large or the obligation is all currently due as a matter of contract. In those events, the entire amount of the obligation would have to be credited to the liability account, which might then need a different name. As to the accompanying debit in such a case, the only sensible one, except for any amount charged to current expense, would be a debit to a prepaid or deferred asset account. Recording the liability functions as a kind of substitute for the payment of cash which is the usual basis for creating a deferred asset.

(2) Revenues

Similar accrual techniques are available where income should be recognized in a period prior to the receipt of cash. Look at the bookkeeping for Ohner when he leases an office to Tutt for three years, for a total rent of $15,000. Ohner's recognition of income from this transaction should not depend upon when he receives the cash; the amount of income reflected in the first year, or any subsequent year for that matter, should be the same, whether Ohner (1) received cash during the year or (2) was entitled to receive cash but Tutt inadvertently failed to pay, or (3) was not entitled to receive any cash until the end of the three years. As to the amount of income to be reflected in the first year, recall that under the rules for recognizing income noted earlier, the income represented by rent and interest is regarded as earned uniformly with the passage of time. Accordingly, at the end of the first year Ohner has earned $5,000 of the rent, and therefore he should recognize $5,000 in current income, even though no cash has been received, or is even due as yet.

Once a judgment has been made that $5,000 of rent income belongs in the first year, it follows that a credit in that amount must be made to the Rent Income account for that year. As with the counterpart reflection of an expense, the only way that any income item can ever be put into a particular year is to credit a current income account during that year. This is another example of accrual; the rent income is accrued, i. e., pulled into the current period, although the cash has not yet been received. As to the accompanying debit, which would of course have been to cash if the $5,000 had been received, a receivable should be created, to reflect the fact that although the cash has not been received Ohner has a right to receive it in the future. This receivable might be called *Accrued Rent Receivable* or *Rent Receivable*, or perhaps even *Accrued Rent Income Receivable*, *Accrued Rent Income*, or *Rent Income Receivable*, terms which connote the fact that the receivable reflects the right to receive an amount which has been recognized as income prior to the receipt of cash. So the entry might be:

Accrued Rent Receivable	$5,000	
Rent Income		$5,000

Notice that if the lease provided that none of the rent was due until the end of the third year, then technically Ohner would not have any legal right to $5,000 at the end of the first year. Nevertheless, in the same sense that Tutt owed $5,000 at the end of the first year even though she was not obligated to pay anything until the end of the third year, so Ohner would have a right to $5,000 at the end of the first year since he is entitled to receive it ultimately, and it has been earned during the first year. Therefore, it is entirely appropriate to debit an account like Accrued Rent Receivable, Rent Receivable, Accrued Rent Income Receivable, Accrued Rent Income, or Rent Income Receivable. On a balance sheet, Ohner may again want to segregate long-term receivables like this, on which the cash will not be received for more than one year, from receivables which qualify as current assets because they will be converted into cash within one year. Note that, paralleling the accrual of expenses, the primary purpose of accrual of income is to reflect an item in current income even though cash has not yet been received, and the creation of a receivable account is merely an adjunct needed to show that there is a right to receive the cash in the future. Hence, as with the counterpart payables discussed earlier, these receivables will normally show only that portion of a future receipt which has been earned, rather than the full amount of the expected future payment.

When Ohner ultimately receives the money for the entire three-year period, the credit will be to the Accrued Rent Receivable or a similar account, just as a creditor who receives money owed to him on open account credits the account receivable:

Cash	$15,000	
Accrued Rent Receivable		$15,000

The important fact is that no account on the income statement is affected by the actual receipt, which is as it should be since the income has already been recognized.

As we noted in connection with advance receipts, transactions involving the rental of property, as here, or lending money at interest, are atypical so far as recognition of income is concerned, because in such cases the income is viewed as earned by the passage of time. For standard types of income-producing activity, like the practice of law or the sale of goods, the general rule applies, to the effect that all of the income from a transaction is to be recognized in the period in which substantial completion occurs. Sometimes, recognition of income from performance of services is delayed until a bill has been sent, to avoid the need for estimation, and perhaps also provide greater assurance that performance has indeed been completed. The important point is that it does not matter whether the cash has been received as yet, so long as the income has been earned. Accrual provides the mechanism for recognizing the income in the period in which it is earned, even though no cash has been received.

Notice that, unlike the case of an advance receipt where some entry must be made to reflect the receipt of cash even though the related income has not been earned in the current period, in the case of an expected future receipt no entry is called for in the current period if the income has not yet been earned. An entry will be made only in the period when the income is finally earned, unless, of course, the cash moves sooner, in which event the case becomes simply one of an advance receipt.

One special aspect of the treatment of an expected receipt deserves brief mention here. It arises because accounting, mirroring business in this regard, still attributes considerable importance to the ultimate receipt of cash, even though it does not make such receipt a pre-condition for the recognition of income. Obviously, however, no question about the ultimate receipt of cash can arise in cases involving advance receipts, because the cash has already been received. In the case of an expected future receipt, if there is substantial doubt as to the ultimate collectibility of cash, because of the insolvency of the debtor or otherwise, no income is recognized from the transaction even though it has been earned in the current period. It should be emphasized that this qualification applies only when there is some special reason for concern about collectibility, not just the general risk of non-payment that is inherent in any business done on credit. For the latter, other tools exist, which will be introduced when this subject is discussed in more detail in Chapter VI.

PROBLEMS

The following problems involve both deferral and accrual techniques.

Problem 1.7A. Andrew Company borrowed $50,000 from Bradford, Inc. at twelve percent annual interest on January 1. Twelve percent annual interest on a $50,000 loan translates to $6,000 in interest per year, or $500 in interest each month. The promissory note requires Andrew Company to pay the $500 monthly interest on, or before, the last day of each month. Andrew Company made three interest payments, $600 on January 15, $250 on February 20, and $350 on March 10.

(1) Prepare appropriate journal entries for Andrew Company for the months of January, February and March, assuming each month is a separate accounting period.

(2) Prepare appropriate journal entries for Bradford, Inc. for the months of January, February and March, assuming each month is a separate accounting period.

Problem 1.7B. Jones Company leased a machine from Smith, Inc. on January 1. Under the terms of the lease, Jones Company agreed to pay $250 rent per month, due on the first day of each month. Jones Company made two rental payments, one of $300 on January 1 and the other of $350 on February 14.

(1) Prepare appropriate journal entries for Jones Company for the months of January, February, and March, assuming each month is a separate accounting period.

(2) Prepare appropriate journal entries for Smith, Inc. for the months of January, February, and March, assuming each month is a separate accounting period.

Problem 1.7C. Dallas Inc. borrowed $30,000 from Crayne Corporation at eight percent annual interest on January 1. Eight percent annual interest on a $30,000 loan translates to $2,400 in interest per year, or $200 in interest each month. The promissory note requires Dallas Inc. to pay the $200 monthly interest on, or before, the last day of each month. Dallas Inc. made three interest payments, $100 on January 15, $250 on February 25, and $150 on March 5.

(1) Prepare appropriate journal entries for Dallas Inc. for the months of January, February and March, assuming each month is a separate accounting period.

(2) Prepare the appropriate journal entries for Crayne Corporation for the months of January, February and March, assuming each month is a separate accounting period.

b. INCOME TAX ACCOUNTING

Income taxes present a special application of accrual accounting for corporations that do not file a subchapter S election under the Internal Revenue Code. Such an election treats income as taxable to the corporation's shareholders rather than to the corporation. Sole proprietorships, partnerships and most subchapter S corporations do not pay federal income taxes. Instead, the owners must report their allocable share of the business's income on their federal income tax returns and pay taxes on that income. As separate legal and taxable entities, corporations generally must file federal income tax returns, compute taxable income according to the Internal Revenue Code and related Treasury Regulations, and pay taxes on their taxable income. State and local laws may also require corporations and other businesses to pay income taxes. In most cases, a business will not pay all of its income taxes attributable to income from a particular accounting period during that period. As a result, corporations, in particular, frequently must accrue income tax expense during the closing process.

If we assume that Tutt, Inc. earned $525 in taxable income during the month and that the corporation will pay taxes at a forty percent total rate for all federal, state and local income taxes, the corporation will owe $210 in income taxes on the month's income. To properly match expenses against revenues, Tutt, Inc. should accrue $210 as income tax expense for the month as an adjusting journal entry. To reflect this income tax expense, at the end of the month, the bookkeeper could record the following entry:

Income Tax Expense	$210	
Accrued Income Taxes Payable		$210

Accountants usually show *Income Tax Expense* as a separate caption on the income statement. Accordingly, assuming the facts from the income statement on page 35, *supra*, we could restate Tutt, Inc.'s income statement for the month as follows:

Tutt, Inc.
Income Statement
For the Month of June

Professional Income		$1,000
Operating Expenses		
Rent	$200	
Secretary	230	
Telephone	15	
Heat & Light	5	
Miscellaneous	5	
Theft Loss	20	475
Net Income Before Income Taxes		$ 525
Income Taxes		210
Net Income		$ 315

On the company's balance sheet, Accrued Income Taxes Payable would normally appear as a current liability because an income tax obligation will usually require a cash payment within one year.

4. PRACTICE PROBLEM

Deferral and accrual are the most important tools of bookkeeping, and it is therefore essential that you master the mechanics of these two techniques. They are easy enough to summarize: deferral problems arise only after cash has moved, and the objective is to allocate an expenditure or a receipt between the current period and future periods; accrual problems arise only when cash has not yet moved, and the objective is to bring into the current period an item of income or expense which properly belongs there. However, here, as in so many areas, there is no substitute for practice. To gain the necessary confidence in handling these mechanics you must satisfy yourself that you can make them work as they should. Then we will be ready to turn to the matters that make the field of Accounting worth your time and attention as a prospective lawyer, that is, the questions of judgment and discretion involved in determining the period in which particular items of income and expense should be recognized.

The following problem is designed to afford some additional practice in bookkeeping. Set out after the list of transactions are the appropriate journal entries, with explanatory comments, the completed T-accounts, and the final balance sheet and income statement. However, you would do best to work out the problem on your own, before looking at the recommended solution and the comments.

Assume that E. Tutt's balance sheet on June 30 was as follows:

E. Tutt, Esquire
Balance Sheet, June 30

Assets		Liabilities & Proprietorship	
Cash	$1,150	Liabilities:	
Accounts Receivable:		Accounts Payable:	
Southacre Corp.	300	Robertson Law	
Georgina Hats, Inc.	100	Book Co.	$ 40
Jack Self Clothes	125		
Office Equipment	575		
Library	650	Proprietorship	2,860
Total	$2,900	Total	$2,900

Although you should ignore depreciation, the following transactions occurred during the month of July:

July 1 Purchased a piece of land for a contemplated new office building for $1,800. She paid $600 down, and gave a one-year 5% note for the balance, interest payable at maturity.

2 Paid $75 cash to landlord for rent for July.

3 Paid $100 cash to Douds for painting interior of office.

5 Bought adding machine for $200 from P. M. Ryan on account.

9 Received $150 cash for legal services rendered on July 7 and 8 to Jones.

11 Mailed bill for $225 to Potter for legal services rendered in July.

13 Paid Ryan $100 cash on account.

15 Received check from Southacre for $200 on account.

16 Paid temporary secretarial replacement $180 cash for salary for first three weeks in July.

18 Jack Self settled account with $25 cash and a suit of clothes for Ms. Tutt.

20 Paid Robertson Law Book Company $40 cash.

21 Uncle Zeke Tutt's executor delivered law books worth $100 which had been bequeathed to E. Tutt.

25 Paid $15 filing fee to Clerk of County for client Coogan in Coogan v. Sargeant. The engagement letter requires Coogan to reimburse Tutt for any fees advanced.

26 Tutt carelessly dropped a cigarette, starting a fire that destroyed books costing $120, for which she had no insurance.

28 Received $200 advance retainer from Annan.

29 Received telephone bill of $25 for July.

30 Probate court allowed $1,000 fee for services to executor of Estate of Smith.

31 Paid temporary secretary $180 salary for last week in July and first two weeks in August.

RECOMMENDED SOLUTION

July			
1	Land	$1,800	
	Cash		$600
	Note Payable		1,200

Comment: This entry records Tutt's purchase of land, partly for cash, and partly on credit by giving a note. The Note Payable account is basically the same kind of account as an Account Payable, except that the term "Note Payable" or, in the case of bonds, "Bonds Payable" is used when a written instrument is given. A separate account is particularly desirable when the written instruments are negotiable. Notice that nothing is done at this time to record the obligation for interest, since no interest is yet due.

2	Rent Expense	$75	
	Cash		$75

Comment: Tutt debits Rent Expense because she wants a separate record of her rent payments. If she had no interest in identification of rent payments, the debit might be simply to Miscellaneous Expense. Because this payment is all for July, it is all an expense for July, and no asset will appear on the balance sheet on July 31.

3	Miscellaneous Expense	$100	
	Cash		$100

Comment: Tutt might have used a separate account for Maintenance Expense, in which case the debit would have been to that account. Note also that there is a deferral problem: Because the paint job will doubtless have utility beyond the month of July, should all this expense be considered a cost of doing business in the month of July? Factors affecting the accounting judgment of whether some of the $100 should be allocated to later periods will be considered in Chapter IX; here, for simplicity, Tutt treats this item as an expense of the current period.

5	Office Equipment	$200	
	Accounts Payable: Ryan		$200

Comment: If Tutt distinguished among the various kinds of office equipment that she owned, such as computers, copiers, and printers, the debit would then be to the appropriate one of these accounts, which would be in effect subaccounts of Office Equipment. Note that, in fact, Tutt has moved in the opposite direction, and now includes both Furniture and Equipment in the Office Equipment account.

9	Cash	$150	
	Professional Income		$150

Comment: Because Tutt has performed all the services called for by the agreement, the income arising from this receipt has been earned and is therefore income for the current period.

11	Accounts Receivable: Potter	$225	
	Professional Income		$225

Comment: Although no cash has yet been received, Tutt has earned the income in July. Therefore, unless Potter is insolvent or for some other reason collection is not reasonably assured, the income should be recognized in the current period. The debit might just as appropriately be to Fees Receivable: Potter; there is no uniform practice where income from personal services is involved.

If Tutt had not yet sent a bill, she might postpone the recognition of this income; the recognition of income from services is often postponed until the sending of a bill, even though the services have been completed and collection of the income is reasonably assured, because of uncertainty as to the amount to be charged.

13	Accounts Payable: Ryan	$100	
	Cash		$100

Comment: This is exactly like payment of the amount due Elmer Co., described earlier in this chapter; note that the transaction affects both sides of the balance sheet, resulting in a decrease on both sides of $100.

15	Cash	$200	
	Accounts Receivable: Southacre		$200

Comment: Note that the income account is not affected. An entry like that of July 11 had already been made in a prior period, and Tutt is now simply converting into cash the asset she then recorded.

16	Secretarial Expense	$180	
	Cash		$180

Comment: Because this payment will be completely used up in July, it is recorded immediately as an expense for the current period, and no deferral problem will arise.

18	Cash	$25	
	Proprietorship	100	
	Accounts Receivable: Jack Self		$125

Comment: The troublesome element, the debit of $100 to Proprietorship, is exactly the same in theory as the entry upon Tutt's removal of a chair from the office for use at home.

20	Accounts Payable: Robertson	$40	
	Cash		$40

Comment: This is exactly like payment of the amount due Ryan on July 13. Once again, the transaction affects both sides of the balance sheet, resulting in a decrease on both sides of $40.

21	Library	$100	
	Proprietorship		$100

Comment: Here, in effect, Tutt has contributed $100 more assets to the business, and there is an increase in Proprietorship.

25	Accounts Receivable: Coogan	$15	
	Cash		$15

Comment: The $15 is chargeable to Coogan and is not an expense of Tutt's.

26	Fire Loss	$120	
	Library		$120

Comment: Tutt lost one of her assets other than cash. Nevertheless, this loss, like the theft loss described earlier in the text, is one of the costs of doing business, and is therefore treated like an expense. Fire Loss may be regarded as simply shorthand for Fire Loss Expense. The credit to Library reduces that account by the amount of the books lost.

28	Cash	$200	
	Client Advances		$200

Comment: Because Tutt has not yet performed the services for which this fee was received, the income arising from this advance receipt has not been earned. The income, therefore, should not be recognized in the current period, and the credit is to Client Advances, or Deferred Income. If, by the end of the current period, Tutt were to complete performance of all the services called for by the agreement, the income would be recognized currently, by a debit to Client Advances and a credit to Professional Income; because she did not, Client Advances will appear as a liability account on the balance sheet at the end of July.

29	Telephone Expense	$25	
	Accrued Telephone Services Payable		$25

Comment: This is an example of accrual of expense. Because this expense is clearly applicable to the current period, it should be reflected in this period. Even if no bill had been received, Tutt would still reflect this expense in the current period. Recognition of an expense applicable to the current period is usually not postponed until the receipt of a bill, even though there is uncertainty as to the amount of the charge; instead, a reasonable estimate of the charge is made. This differs somewhat from the treatment often adopted in connection with accrual of income. See the Comment to the entry on July 11.

30	Accounts Receivable: Smith Estate	$1,000	
	Professional Income		$1,000

Comment: The accrual problem here is exactly like that in the transaction of July 11.

31	Prepaid Salary	$180	
	Cash		$180

Comment: Here, the payment will not be completely used up by the end of the period. If, as here, Tutt initially records the payment as an asset, she must make an adjusting entry at the end of the period, to create an expense and to reduce the asset in the amount used up during the period. The adjusting entry:

(a)	Salary Expense	$60	
	Prepaid Salary		$60

Alternatively, it would be equally proper to record the payment as an expense, first. In that event, the initial entry would be:

31	Salary Expense	$180	
	Cash		$180

Upon closing her books at the end of the period, Tutt's adjusting entry would defer the amount not used up during the period as follows:

(a)	Prepaid Salary	$120	
	Salary Expense		$120

As a final alternative, Tutt could split the original entry between expense and unexpired asset. The split entry eliminates the need for an adjusting entry at the end of July.

31	Salary Expense	$60	
	Prepaid Salary	120	
	Cash		$180

As the net effect of each alternative, Tutt treats $60 as salary expense for July and defers $120 to August. In each alternative, Tutt will also have to make an adjusting entry in August to record the salary expense for that month.

One other adjusting entry is necessary:

(b)	Interest Expense	$5	
	Accrued Interest Payable		$5

Comment: Recall that no entry reflecting interest expense was made at the time of the borrowing transaction on July 1, because the note had then just been given. The interest that Tutt will ultimately have to pay, however, should not all be treated as an expense in the month when she makes the payment. This is just like the situation in the text above, in which we saw that Tutt should not charge the entire payment for rent for three years to the third year simply because it was all paid during that year. Instead, Tutt should attribute a *pro rata* share of the total interest expense to each month during the time that she has the use of the money, just as she charged a *pro rata* share of the rent expense to each of the years in which she had the use of the office premises. Because the interest charge per year is five percent of $1,200, or $60, one-twelfth of $60, or $5, should be treated as an expense in each month. Hence, Tutt should debit an expense account, here Interest Expense, to reflect this expense in the current period; the credit is to a liability account, here Accrued Interest Payable, to reflect the eventual liability for this current expense. Tutt will make similar entries during the next eleven months. When Tutt ultimately pays the interest at maturity, she will record the following entry:

Accrued Interest Payable	$60	
Cash		$60

Note that no entry is called for to reflect the fact that the due date of the principal amount of the note is one month closer. Just as the borrowing of the funds did not affect Tutt's income statement, neither will the repayment. Therefore, no further entry need be made in connection with the ultimate liability to pay the principal until the note is actually discharged, at which time the entry will be simply:

Note Payable	$1,200	
Cash		$1,200

The T-accounts that follow reflect the journal entries we have been discussing:

Cash

Bal.	$1,150	$600	7-1
7-9	150	75	7-2
7-15	200	100	7-3
7-18	25	100	7-13
7-28	200	180	7-16
		40	7-20
		15	7-25
		180	7-31
Bal.	$435		

Accounts Receivable: Southacre

Bal.	$300	$200	7-15
Bal.	$100		

Accounts Receivable: Georgina

Bal.	$100		
Bal.	$100		

Accounts Receivable: Jack Self

Bal.	$125	$125	7-18
Bal.	–0–		

Library

Bal.	$650	$120	7-26
7-21	100		
Bal.	$630		

Office Equipment

Bal.	$575		
7-5	200		
Bal.	$775		

Accounts Receivable: Potter

7-11	$225		
Bal.	$225		

Accounts Payable: Robertson

7-20	$40	$40	Bal.
Bal.	–0–		

Proprietorship

7-18	$100	$2,860	Bal.
		100	7-21
		$2,860	Bal.
		810	(j)
		$3,670	Bal.

Note Payable

		$1,200	7-1
		$1,200	Bal.

Accrued Interest Payable

		$5	(b)
		$5	Bal.

Accounts Payable: Ryan

7-13	$100	$200	7-5
		$100	Bal.

Accrued Telephone
Services Payable

		$25	7-29
		$25	Bal.

Client Advances

		$200	7-28
		$200	Bal.

Rent Expense

7-2	$75		
Bal.	$75	$75	(c)

Miscellaneous Expense

7-3	$100		
Bal.	$100	$100	(d)

Accounts Receivable: Coogan

7-25	$15		
Bal.	$15		

Accounts Receivable: Estate of Smith

7-30	$1,000		
Bal.	$1,000		

Land

7-1	$1,800		
Bal.	$1,800		

Prepaid Salary

7-31	$180		
Bal.	$180	$60	(a)
Bal.	$120		

Fire Loss Expense

7-26	$120		
Bal.	$120	$120	(g)

Salary Expense

7-16	$180		
(a)	60		
Bal.	$240	$240	(e)

Telephone Expense

7-29	$25		
Bal.	$25	$25	(f)

Interest Expense

(b)	$5		
Bal.	$5	$5	(h)

Professional Income

		$150	7-9
		225	7-11
		1,000	7-30
(i)	$1,375	$1,375	Bal.

Profit and Loss

(c)	$75	$1,375	(i)
(d)	100		
(e)	240		
(f)	25		
(g)	120		
(h)	5		
(j)	$810	$810	Bal.

Using the T-accounts, we can prepare the following income statement for the month of July and balance sheet as of July 31:

E. Tutt, Esquire
Income Statement
For the Month of July

Professional Income		$1,375
Expenses:		
Rent	$ 75	
Secretarial	240	
Telephone	25	
Miscellaneous	100	
Fire Loss	120	
Interest	5	565
Net Income		$ 810

E. Tutt, Esquire
Balance Sheet, July 31

Assets

Cash		$ 435
Accounts Receivable:		
Estate of Smith	$1,000	
Potter	225	
Southacre Corp.	100	
Georgina Hats, Inc.	100	
Coogan	15	1,440
Prepaid Salary		120
Land		1,800
Office Equipment		775
Library		630
Total Assets		$5,200

Liabilities & Proprietorship

Liabilities:	
Note Payable	$1,200
Accounts Payable: Ryan	100
Accrued Costs Payable	30
Client Advances	200
Total Liabilities	$1,530
Proprietorship	3,670
Total Liabilities and Proprietorship	$5,200

PROBLEMS

Problem 1.8A. Below is the balance sheet for E. Tutt on March 1, followed by Tutt's transactions during March. Prepare the journal entries and post them to the appropriate T-accounts; then make up the income statement for the month of March and the balance sheet as of March 31. Ignore depreciation and income taxes. Blank forms for these financial statements are set out after the list of transactions.

E. Tutt, Esquire
Balance Sheet, March 1

Assets		Liabilities & Proprietorship	
Cash	$ 345	Liabilities:	
Accounts Receivable:		Accounts Payable:	
Estate of Smith	500	Jones Co.	$ 220
Potter Corp.	225	Stanley	100
Supplies	110	Accrued Telephone	
Prepaid Salary	200	Costs Payable	40
Office Furniture &		Client Advances	300
Equipment	1,250	Total Liabilities	$ 660
Library	870	Proprietorship	2,840
Total	$3,500	Total	$3,500

Transactions in March:

March 1 Purchased a three-section Super Fireproof Safe for $480 from Jarald Co. on credit.

2 Paid the landlord $150 rent for her office for March.

5 Paid $120 for a one-year liability insurance policy ordered the week before and running through next February 28.

7 Paid $60 for a one-year subscription to the local weekly legal journal, to start on April 1.

9 Purchased a $100 treatise on bankruptcy from East Publishing Company on credit.

11 Received $350 from Homer Co. for legal advice given during the week.

13 A new client, Fashion Corp., sent her $250 as a retainer for an argument on a motion scheduled for April 10.

14 Completed the work for which Anderson paid her $300 in advance last month.

15 Borrowed $480 from First State Bank on a one-year note, with interest at ten percent, payable at maturity, and immediately paid her debt to Jarald Co.

16 Paid $50 to Manpower, Inc. for temporary typing assistance last week.

17 Received bill from landlord for additional rent of $15 due for March under the fuel-adjustment clause in her lease.

20 Sent $40 to the telephone company to pay her outstanding bill.

21 Gave tax advice to Olson and received $200 for it.

22 Prepared and filed incorporation papers for Nelson, Inc. and sent a bill for $250.

24 Received $300 of the $500 due from Estate of Smith.

26 Rented a section of her new safe to Bilder, a lawyer in the adjacent office, for ninety days, at a rental of $90 payable at the end of the term.

30 Paid her secretary $100 of the $200 owed for the second half of March.

31 Checked with telephone company and learned that her bill for March would be $45.

E. Tutt, Esquire
Income Statement
For the month of March

Professional Income	$________	
Rent Income	________	$________
Less Expenses:		
Rent	$________	
Insurance	________	
Secretarial	________	
Telephone	________	
Interest	________	$________
Net Income		$________

E. Tutt, Esquire
Balance Sheet, March 31

Assets		**Liabilities & Proprietorship**	
		Liabilities:	
Cash	$________	Note Payable	$________
Accounts Receivable	________	Accounts Payable	________
Accrued Rent Receivable	________	Accrued Costs Payable	________
Supplies	________	Client Advances	________
Prepaid Costs	________	Total	$________
Office Furniture & Equipment	________		
Library	________	Proprietorship	________
Total	$________	Total	$________

Problem 1.8B. Tomlin Realty Company began business on January 1 and engaged in the transactions listed below during its first month.

(1) Unless your professor directs otherwise, prepare journal entries, including any adjusting entries, post them to T-accounts, complete the closing process, and prepare an income statement for January and a classified balance sheet as of January 31. Ignore income taxes and depreciation on all assets except for the building. The company uses straight-line depreciation for the building.

Jan. 1 Issued all 1,000 authorized shares of $1 par value common stock as follows:

200 shares to Michael Smith for $20,000.

300 shares to Gregory Myers for marketable securities worth $30,000.

500 shares to Steven Braggs for land worth $50,000.

1 Purchased land and building from William Marzano for $25,000, $5,000 down and the balance pursuant to a 9% simple interest per annum note secured by a mortgage. Interest on the unpaid balance of the note is payable annually on December 31. The note is due in ten annual installments of $2,000 each at the end of each calendar year, plus accrued interest. The land is valued at $5,000. The useful life of the building is 25 years and estimated salvage value is $5,000.

7 Purchased for $365 in cash a one-year liability insurance policy, effective through next January 6, for the building.

12 Mrs. Hayes, a sales agent, sold a parcel of real estate for a client and the company received a $6,000 commission, half of which it paid to Mrs. Hayes.

15 Paid Angie Roberts, a secretary, $500 salary for the first half of January.

17 Made a down payment of $250 for office equipment costing $750 which was ordered but not received.

19 Received a $1,000 dividend check on the marketable securities.

21 Mailed a check for $120 to South Bend News, Inc. for a six month subscription beginning February 1 to Realty News.

22 Sold marketable securities which were worth $10,000 at the time of their transfer to the company on January 1 for $10,500.

29 Paid Angie Roberts, the secretary, $300 of the $500 the company owed her as salary for the second half of January.

30 The previously ordered office equipment arrived.

31 Received a telephone bill for January for $30.

(2) Use the same facts as above, but assume that the corporation pays income taxes at a forty percent (40%) rate.

Problem 1.8C. Nemo Hand, a great grandchild of a prominent high-court judge, decided to pursue the field of optometry after receiving an F in his first-year torts class.

(1) Unless your professor directs otherwise, prepare journal entries, including any adjusting entries, post them to T-accounts, complete the closing process, and prepare an income statement for June and a classified balance sheet as of June 30 from the following information for Hand Optometry, Inc. Ignore depreciation on all assets except for the building. The company uses straight-line depreciation for the building.

June 1 Issued 500 of the 1000 authorized shares of $5.00 par value common stock as follows:

(1) 150 shares to Benjamin Cardizi for $3,000
(2) 250 shares to Brian White for marketable securities worth $5,000
(3) 100 shares to Sandy Connors for farmland worth $2,000

1 Paid $730 for a one-year professional liability insurance policy effective through next May 31.

2 Purchased eyeglasses and contact lenses for inventory on account from Rice Optometry for $3,150.

4 Paid an assistant named Charlie his $300 salary for the first two weeks of June in advance because Charlie was strapped for cash.

7 Made a down payment of $500 to Tidmarsh Supply for optometry equipment costing $1,500, which was ordered but not received.

9 Received a $100 dividend check on the marketable securities.

12 Received a check for $450 from a customer, $250 of which was for optometry services rendered and the remainder was for a pair of glasses which Nemo purchased from Rice Optometry on June 2 for $100.

16 Purchased land and a building adjacent to the farmland for $31,000, $1,000 down and the balance pursuant to a 10% simple interest per annum note secured by a mortgage. Interest on the unpaid balance of the note is payable annually on December 31. The note is due in five annual installments of $6,000 each at the end of this year and each of the next four calendar years, plus accrued interest. The land is valued at $3,000. The useful life of the building is thirty years and its estimated salvage value is $10,000.

19 Sold the following investments in marketable securities:

(1) Received $2,200 for marketable securities worth $2,000 at the time of their transfer to the company on June 1.

(2) Received $2,250 for other marketable securities. Nemo expected this investment to decline drastically in value in the near future. These securities were worth $2,500 when transferred to the company on June 1.

22 Mailed a check for $360 to the Journal of Optometry for a one-year subscription beginning on August 1.

25 Tidmarsh Supply received the equipment that was ordered on June 7.

28 Received a telephone bill for June for $40.

29 Paid Charlie's $300 salary for the last two weeks of June.

30 Sent bills totaling $2,250 to various insurance companies for services provided during the month. These bills reflected optometric services of $1,400 and $850 for glasses and contact lenses which Nemo purchased from Rice Optometry on June 2 for $450.

(2) Use the same facts as above, but assume that the corporation pays income taxes at a forty percent (40%) rate.

G. ACCOUNTING FOR MERCHANDISE INVENTORY

Many businesses earn profits from the sale of goods rather than, like Tutt, from providing services. In such a business, inventory, or goods held for sale or resale in the ordinary course of business, comprises one of the business's basic assets. Inventory differs from the assets which Tutt owns because the goods in inventory are constantly turning over; sales take goods out of inventory, and purchases are made to replace them. As we will see in Chapter VIII, for an enterprise engaged in manufacturing, the process is a bit more complex: the manufactured, or, as they are often termed, "completed," goods are sold and replaced by purchases of raw materials which will be turned into completed goods through the manufacturing operations. This section is designed to introduce you to the special techniques used to deal with the problems that this constant turnover creates.

To take a simple example, suppose Marty Jones operates a retail store which sells inexpensive shoes. Further suppose that during the month of January he sells 1,000 pairs of shoes for $10 per pair. To calculate his net income, Jones must include in his expenses not only the ones that Tutt had, such as rent, utilities, and salaries, but also the cost of the shoes sold. In bookkeeping language, the business sold shoes for $10,000 from which Jones must deduct the cost of the goods sold, as well as his other operating expenses, to determine his net income. If the shoes cost Jones $7 per pair, and his other operating expenses for the month came to $1,000, his net income would be $2,000. A simplified version of his income statement might look something like this:

Jones Shoes
Income Statement
For the Month of January

Sales	$10,000
Cost of Goods Sold	7,000
Gross Profit	$ 3,000
Operating Expenses	1,000
Net Income	$ 2,000

The chief differences between this statement and Tutt's are: the different name given to the income account; the introduction of the Cost of Goods Sold account; and the new caption "Gross Profit." We will discuss these differences in sequence.

1. Sales

Sales are simply another type of income (i. e., increase in proprietorship resulting from operations), and the Sales account reflects the total amount of sales completed during the period. Invariably, however, some customers will bring back goods for various reasons. Customers may return damaged, defective, unwanted or unneeded goods for credit or a cash refund. Accountants call these transactions *sales returns*. Sometimes, the customer may decide to keep the goods if the seller grants an allowance or deduction from the selling price. Accountants refer to these transactions as *sales allowances*, but usually combine sales returns and sales allowances into a single account, *Sales Returns and Allowances*. We can describe this account as a contra-revenue account to the Sales account. The Sales Returns and Allowances account normally contains a debit balance. Accountants use this contra-revenue account, rather than debiting the Sales account directly, to separately identify and disclose sales returns and allowances in both the accounts and in the income statement. Debiting the Sales account directly would hide the comparative size of the returns and allowances relative to sales. Large returns or allowances suggest inferior goods, sloppy sales techniques, or poor handling, shipping or delivery practices. The caption *Net Sales* simply shows the numerical difference between the Sales and Sales Returns and Allowances accounts.

To illustrate, suppose that Jones actually sold 1,020 pairs of shoes during January, but that customers returned twenty pairs for refunds and Jones restored those shoes to inventory. In bookkeeping language, Jones sold shoes for $10,200, from which he must subtract $200 in sales returns, leaving him with $10,000 in net sales. We could restate his income statement as follows:

Jones Shoes
Income Statement
For the Month of January

Sales	$10,200
Less: Sales Returns and Allowances	200
Net Sales	$10,000
Cost of Goods Sold	7,000
Gross Profit	$ 3,000
Operating Expenses	1,000
Net Income	$ 2,000

From net sales, he must deduct the cost of the goods sold, as well as his other operating expenses, to determine his net income.

2. COST OF GOODS SOLD

There are various ways to determine the figure for the cost of goods sold during an accounting period. For example, Jones might keep a record of the cost of each pair of shoes as they are purchased for resale and then sold. Accountants usually refer to such a system as a *perpetual inventory system* because the accounting records continuously show the quantity and cost of the goods which the business holds as inventory at any time. As the business sells goods, the bookkeeper transfers their cost from the Inventory account to the Cost of Goods Sold account. At the end of the period, the balance in the Cost of Goods Sold account would give Jones the cost of all the shoes sold during the period. Ordinarily, however, it might be difficult, and it would certainly be time-consuming, to identify the cost of each pair of shoes.

As an alternative, Jones could merely keep a record of the cost of the shoes on hand at the beginning of the period and the cost of the shoes acquired during the period. Then at the end of the period Jones can *take inventory*, that is, count up the number of shoes he has left and determine their total cost. By subtracting the cost of what he has left from the sum of what he had at the beginning of the period and what he acquired during the period, he can compute the cost of what he sold. Accountants call this system the *periodic inventory method* because the accounting entity determines inventory only at the end of an accounting period.

Suppose, for example, that Jones had an inventory at the beginning of January of 300 pairs of shoes which cost $7 per pair, and that during the month he purchased another 1,200 pairs of shoes at $7 per pair. Because Jones sold 1,020 pairs of shoes during January, but returned 20 pairs which Jones placed back in inventory, upon taking inventory at the end of the month, he would find 500 pairs of shoes which cost a total of $3,500. The difference between that figure and the sum of what Jones had on hand and what he acquired, $10,500, gives the cost of goods sold figure of $7,000 which we had previously assumed.

A somewhat more detailed version of his income statement might then look like this:

Jones Shoes
Income Statement
For the Month of January

Net Sales		$10,000
Cost of Goods Sold:		
Opening Inventory	$ 2,100	
Purchases	8,400	
Goods Available for Sale	$10,500	
Less: Closing Inventory	3,500	7,000
Gross Profit		$3,000
Operating Expenses		1,000
Net Income		$2,000

At this point, we can explain *gross profit* and its presentation on the income statement.

3. GROSS PROFIT AND THE MULTI-STEP INCOME STATEMENT

The "Gross Profit" caption in the income statement reflects the difference between net sales and the cost of goods sold. Accountants call an income statement which lists gross profit as an intermediate figure in computing net income or loss as a *multiple-step* income statement. The income statement for Jones Shoe shows two steps: (1) the statement calculates gross profit by subtracting the cost of goods sold from net sales and (2) the statement computes net income by deducting operating expenses from gross profit. Although gross profit does not measure the business's overall profitability, users of financial statements often pay particular attention to that figure, which frequently serves as a better guide to market conditions and the efficiency of the selling operations than net income.

A multi-step income statement may also provide additional information by separating the business's operating activities and non-operating activities and presenting more detailed information about revenues and expenses. You will recall that businesses derive revenues and incur expenses from normal operating activities while gains and losses flow from peripheral or incidental transactions. The non-operating section for Jones Shoe might show interest income, rental income from subleasing part of the store, gain from the sale of office equipment, interest expense, fire damage, and loss from the sale of office equipment.

If we assume that Jones has incorporated the business and that the corporation pays income taxes at a forty percent tax rate, a multi-step income statement for Jones Shoe Co. might look something like:

Jones Shoe Co.
Income Statement
For the Month of January

Sales		$10,200
Less: Sales Returns and Allowances		200
Net Sales		$10,000
Cost of Goods Sold:		
Opening Inventory	$ 2,100	
Purchases	8,400	
Goods Available for Sale	$10,500	
Less: Closing Inventory	3,500	7,000
Gross Profit		$ 3,000
Operating Expenses		
Rent Expense	$ 600	
Selling Commission Expense	250	
Utility Expense	100	950
Operating Income		$ 2,050
Non–Operating Items		
Rental Income	$ 50	
Interest Expense	(100)	(50)
Income Before Taxes		$ 2,000
Income Taxes		800
Net Income		$ 1,200

You will note that the multi-step income statement shows non-operating items immediately after the company's operating income and nets the non-operating items. In this case, the company subtracted the non-operating items from operating income to determine income before taxes.

For comparison purposes, we should also mention that some companies use a so-called *single-step* income statement. The single-step income statement classifies all items into two categories: (1) revenues, which includes both operating revenues and gains, and (2) expenses, which includes cost of goods sold, operating expenses and losses. To determine net income or loss, the single-step income statement subtracts total expenses from total revenues. The following illustrates a single-step income statement for Jones Shoe Co.:

Jones Shoe Co.
Income Statement
For the Month of January

Revenue		
Net Sales		$10,000
Rental Income		50
Total Revenues		$10,050
Expenses		
Cost of Goods Sold	$7,000	
Operating Expenses	950	
Income Taxes	800	
Interest Expense	100	
Total Expenses		8,850
Net Income		$ 1,200

4. PERIODIC INVENTORY SYSTEM

Let us now see how the bookkeeper uses T-accounts and entries to make these computations under the periodic inventory system. On his balance sheet at the beginning of the period, Jones has an asset, Inventory, in the amount of $2,100. This account, which was derived by taking inventory at the close of the period just ended, becomes *Opening Inventory* for the new period. During the period, Jones opens a T-account called *Purchases* to which the amount of purchases made during the period is debited; the corresponding credit is to Cash or an account payable, depending upon whether the purchase is made for cash or on credit. Actually, the purchases during the period could as well be debited directly to the Inventory T-account, thus eliminating the need for opening a new Purchases T-account; but in practice it appears that a separate T-account for purchases is commonly used.

If Jones returns any purchases or a seller grants any allowance for defective or damaged goods, the bookkeeper would credit an account called *Purchase Returns and Allowances*. Again, we can describe this account as a contra account to Purchases. The Purchase Returns and Allowances account normally contains a credit balance. Similar to Sales Returns and Allowances, accountants use this contra account, rather than crediting the Purchases account directly, to separately identify and disclose purchase returns and allowances in the accounts and in the income statement. Crediting the Purchases account directly would hide the comparative size of the returns and allowances relative to purchases. Large returns or allowances suggest sloppy purchasing procedures or unreliable suppliers. If shown on the income statement, the caption *Net Purchases* simply shows the difference between the Purchases and Purchases Returns and Allowances accounts.

Thus, if Jones purchased the entire $8,400 worth of goods acquired in January in a single cash transaction, the entry would be:

(a) Purchases	$8,400	
Cash		$8,400

Whether or not Jones purchased all the goods at the same time, or purchased them all for cash, the T-account for Purchases would show a total debit of $8,400 at the end of the month of January.

At the end of the period the bookkeeper sets up a new T-account called *Cost of Goods Sold*. As we have already seen, Cost of Goods Sold is an expense and therefore this account should be increased by a debit and decreased by a credit. The bookkeeper then closes Opening Inventory, Purchases, and Purchase Returns and Allowances to the Cost of Goods Sold account in much the same way that expense and income accounts are closed to the Profit and Loss account. Because Jones did not return any purchases, the entries would consist of debits to the Cost of Goods Sold account, and credits to the Opening Inventory and Purchases accounts respectively to close them out:

(b) Cost of Goods Sold	$2,100	
Inventory		$2,100
(c) Cost of Goods Sold	8,400	
Purchases		8,400

If the Purchase Returns and Allowances account contained a credit balance, the bookkeeper would have closed that account by debiting Purchase Returns and Allowances and crediting the Cost of Goods Sold account.

The bookkeeper then learns from the person who took inventory at the end of the month how much inventory remains unsold—here $3,500. This information has two aspects of equal significance to the bookkeeper. It tells the bookkeeper that there remains at the end of the period an asset of $3,500 of closing inventory which should appear on the balance sheet at the end of the period. It also tells the bookkeeper that the cost of goods sold is $3,500 less than would be indicated simply by adding together the opening inventory and the purchases. The bookkeeper can reflect both these facts by a single journal entry:

(d) Inventory	$3,500	
Cost of Goods Sold		$3,500

The amount debited to the Inventory account is balanced by a credit to the Cost of Goods Sold account. The Cost of Goods Sold account performs the subtraction of what Jones has left from the sum of what he had at the beginning of the period plus what he bought during the period; the net debit in the Cost of Goods Sold account is the cost of what was sold during the period.

A little thought will show that this entry debiting the amount of the goods still on hand at the close of the period to Closing Inventory, and crediting the same figure to the Cost of Goods Sold account, is just another example of deferral. The sum of what Jones originally had on hand and what he bought during the period constitutes an overstatement of the expense applicable to the current period; the cost of merchandise remaining at the end of the period should not be included as an expense of the current period, but rather should be deferred to later periods. Thus *Closing Inventory* is just another, but more descriptive, name for *Deferred Cost of Goods Sold Expense*. The closing inventory will appear as an asset, usually called simply Inventory, on the balance sheet at the end of the period, like any other deferred item. The Inventory account on the balance sheet will then become Opening Inventory for the new period, and the cycle will start all over again.

It is not necessary to use separate T-accounts for opening inventory and closing inventory. Instead, the bookkeeper usually uses a single T-account called simply Inventory. At the close of each period, this account is temporarily closed out with a credit in the amount of the opening inventory and an equal debit to the Cost of Goods Sold account. The bookkeeper then reopens the Inventory account with a debit in the amount of the closing inventory.

Once the net figure in the Cost of Goods Sold account is arrived at, here \$7,000, that cost, like any other expense, is closed to Profit and Loss:

(e) Profit and Loss	\$7,000	
Cost of Goods Sold		\$7,000

Here is a summary of the journal entries described above, along with the related T-accounts.

(a) Purchases	\$8,400	
Cash		\$8,400
(b) Cost of Goods Sold	2,100	
Inventory		2,100
(c) Cost of Goods Sold	8,400	
Purchases		8,400
(d) Inventory	3,500	
Cost of Goods Sold		3,500
(e) Profit and Loss	7,000	
Cost of Goods Sold		7,000

Inventory

Bal.	$2,100	$2,100	(b)
(d)	$3,500		

Purchases

(a)	$8, 400	$8,400	(c)

Cost of Goods Sold

(b)	$2,100	$3,500	(d)
(c)	8,400		
Bal.	$7,000	$7,000	(e)

The Profit and Loss account would then look like this (after Cost of Goods Sold, together with Sales Income of $10,000 and other expenses of $1,000 have been closed to it):

Profit and Loss

(e)	$7,000	$10,000	
	1,000		
		$2,000	Bal.

and this balance of $2,000 would be closed to Proprietorship.

The foregoing illustrates the mechanics of handling inventory under what is known as the periodic inventory system. This system relies upon a physical count of closing inventory at the end of a period to determine the amount of inventory sold during the period. As you might expect, some difficult problems can arise in particular situations, such as determining the cost of the closing inventory when the price has been fluctuating during the period. It is not necessary to do more than allude to such problems here; however, they are considered in detail in Chapter VIII.

5. SUMMARY OF THE BOOKKEEPING AND ACCRUAL ACCOUNTING PROCESS

At this point, we should summarize our entire discussion of the bookkeeping and accrual accounting process in outline form and provide a format for a classified balance sheet and multi-step income statement:

A. Prepare original journal entries
B. Post journal entries to accounts in the ledger after entering beginning balances from previous balance sheet, if applicable
C. Prepare necessary adjusting entries after reviewing the beginning balance sheet and current period transactions:
   1. Defer paid but unused expenses
   2. Defer received but unearned revenues
   3. Record depreciation
   4. Accrue incurred but unrecorded expenses
   5. Accrue earned but unrecorded revenues

6. Complete periodic inventory accounting
    a. Transfer beginning balance in Inventory account to Cost of Goods Sold
    b. Transfer balances in Purchases and Purchase Returns and Allowances accounts to Cost of Goods Sold
    c. Record ending inventory and reduce Cost of Goods Sold
        (i) Physically count inventory at end of period
        (ii) Calculate cost of ending inventory
7. Accrue income taxes

D. Post adjusting entries to the ledger

E. Close revenue and expense accounts
1. Determine the account balances
2. Prepare trial balance
3. Prepare worksheet
4. Make closing journal entries
    a. Transfer debit balances to Profit and Loss account
    b. Transfer credit balances to Profit and Loss account
    c. Transfer balance in Profit and Loss account to Owner's Equity
5. Post closing journal entries to the ledger

F. Preparing the financial statements
1. Balance Sheet

Assets
- Current Assets
    - Cash
    - Marketable Securities
    - Notes Receivable
    - Accounts Receivable
    - Inventory
    - Prepaid Costs
        - Total Current Assets
- Long–Term Investments
- Fixed Assets
    - Land
    - Buildings
        - Less: Accumulated Depreciation
    - Equipment
        - Less: Accumulated Depreciation
        - Total Fixed Assets
- Intangible Assets
    - Total Assets

- Liabilities and Owners' Equity
  - Liabilities
    - Current Liabilities
      - Notes Payable
      - Accounts Payable
      - Accrued Liabilities
      - Taxes Payable
      - Unearned Items
        - Total Current Liabilities
    - Other Liabilities
      - Total Liabilities
  - Owners' Equity
    - Proprietorship
    - Partners' Equity
      - Partners' Capital
      - Drawings
    - Shareholders' Equity
      - Capital Stock
        - Preferred Stock
        - Common Stock
      - Additional Paid–In Capital
      - Retained Earnings
        - Total Owners' Equity
  - Total Liabilities and Owners' Equity

2. Income Statement
   - Sales
   - Less: Sales Returns and Allowances
   - Net Sales
   - Cost of Goods Sold
     - Beginning Inventory
     - Purchases
     - Less: Purchase Returns and Allowances
     - Net Purchases
     - Cost of Goods Available for Sale
     - Less: Ending Inventory
     - Cost of Goods Sold
   - Gross Profit
   - Operating Expenses
   - Operating Income
   - Non–Operating Items (interest and non-recurring items)
   - Income Before Income Taxes
   - Income Taxes
   - Net Income

PROBLEMS AND QUESTIONS

The following problems and questions are designed to provide some experience in handling the mechanics of accounting for inventory, as well as some additional practice in bookkeeping generally.

Problem 1.9A.

(1) The Nifty-Novelty Company was organized as a partnership on February 1, to operate a wholesale knick knack business at rented premises formerly occupied by Samuel Nifty. The following transactions during February are to be recorded on the firm's books. Using the periodic inventory method, make the appropriate journal entries and post them to the T-accounts. Draw up a simplified income statement for the month and a balance sheet as of February 28. Ignore depreciation and taxes.

Feb.	1	Samuel Nifty contributed store fixtures valued at $10,000; Hiram Novelty contributed merchandise valued at $2,000 and $8,000 in cash.
	1	Paid February rent for store of $200.
	2	Paid painter $72 for lettering on store front which will not have to be redone for a year.
	3	Purchased costume jewelry on account from Acme, Inc., for $1,000.
	4	Purchased counter and trays for displaying merchandise from Blake & Co. for $1,500 on account.
	6	Sold merchandise for $550 cash.
	8	Received $400 from Ritter for goods to be delivered in March.
	9	Sold party decorations and favors to Lincoln Hotel on account for $310.
	11	Paid February wages of $260 to salesperson.
	12	Paid $500 on account to Acme, Inc.
	15	Sold merchandise for $2,150 cash.
	17	Purchased merchandise from Klips Corp. giving note for $1,300 due in six months.
	20	A display tray which cost $19 was accidentally destroyed.
	22	Received $100 on account from Lincoln Hotel.
	24	Paid Blake & Co. $1,000 on account.
	26	Sold merchandise for $700 cash.

28 Determined that telephone bill for February will amount to $20.

28 Distributed $100 to each of the partners.

Assume further that:

(i) Rent of $105 will be due Smith Corp. on April 30 for storage space leased to Nifty-Novelty on Feb. 1 for 3 months.

(ii) A physical inventory on February 28 discloses $1,700 worth of merchandise on hand.

Nifty-Novelty Company
Income Statement
For the month of February

Sales		$__________
Cost of Goods Sold		
Opening Inventory	$__________	
Purchases	__________	
Goods Available for Sale	$__________	
Less: Closing Inventory	__________	__________
Gross Profit on Sales		__________
Less: Expenses		__________
Net Income		$__________

Nifty-Novelty Company
Balance Sheet, February 28

Assets		**Liabilities & Partners' Equity**	
		Liabilities:	
Cash	$________	Note Payable	$_________
Accounts Receivable	________	Accounts Payable	_________
Inventory	________	Accrued Costs Payable	_________
Prepaid Costs	________	Customer Deposits	_________
Store Fixtures	________	Total Liabilities	$_________
Total	$________	Partners' Equity	$_________
		Total Liabilities & Equity	$_________

(2) Suppose the Nifty-Novelty bookkeeper was not aware of the lease of storage space from Smith Corp. referred to in (i) above, and made no entry reflecting this transaction. What would the effect of this omission be on Nifty-Novelty's financial statements?

(3) Could any of the transactions listed above or on the previous page, *supra*, have been overlooked by the bookkeeper, and hence not recorded, without changing either the balance sheet totals or the net income figure?

Problem 1.9B

(1) The balance sheet of Camera Sales Co. as of March 31, Year 1 is presented below:

Camera Sales Co.
Balance Sheet, March 31, Year 1

Assets

Current Assets:		
Cash		$14,800
Accounts Receivable		2,700
Inventories (21 cameras)		2,100
Prepaid Insurance (representing the unused cost of a one-year policy purchased on January 1, Year 1 at a cost of $300)		225
Total Current Assets		$19,825
Fixed Assets:		
Land		$10,000
Buildings	$40,000	
Less: Accumulated Depreciation	11,700	
Net Buildings		28,300
Furniture and Fixtures	$ 3,600	
Less: Accumulated Depreciation	480	
Net Furniture and Fixtures		3,120
Total Fixed Assets		$41,420
Total Assets		$61,245

Liabilities and Stockholders' Equity

Liabilities:	
Current Liabilities:	
Accounts Payable	$ 7,900
Accrued Interest Payable	225
Total Current Liabilities	$ 8,125
Long–Term Liabilities:	
Note Payable, due December 31, Year 5, bearing nine percent interest payable annually on December 31 of each year	$10,000
Total Liabilities	$18,125
Shareholders' Equity:	
Common Stock (1,000 shares, $10 par value, authorized, issued and outstanding)	$10,000
Retained Earnings	33,120
Total Shareholders' Equity	$43,120
Total Liabilities and Shareholders' Equity	$61,245

Unless your professor directs otherwise, prepare journal entries for the following transactions which occurred during April, prepare any necessary adjusting entries, post to T-accounts, construct a six-column worksheet, prepare and post closing entries and prepare April financial statements (multi-step income statement and classified balance sheet only). Assume that Camera Sales Co. pays income taxes at a flat rate of thirty percent (30%) of net income and uses the periodic inventory method and separate accounts for sales returns and allowances and purchase returns and allowances. The building has an estimated useful life of thirty years and a salvage value of $4,000. The furniture and fixtures have an estimated useful life of ten years and no salvage value.

Apr.	1	Purchased ten cameras for $100 each on account from Kojak, Inc.
	2	Returned one camera to Kojak, Inc. for credit because of a slight defect.
	4	Sold eight cameras in various cash sales totaling $1,325.
	7	Sold three cameras to *The Observer* for $675. *The Observer* paid $75 down and issued a promissory note, due in three months, for the $600 balance with interest at the rate of ten percent per annum.
	9	Sold fourteen cameras for $2,300, $1,700 on account and $600 cash.
	11	Sold camera to Thelma Bird for $175 on account.
	14	Thelma Bird returned the camera she purchased for credit on her account.
	15	Paid salaries of $500 for the first half of the month.
	18	Purchased fifteen cameras on account at $100 each from Nikon Inc.
	21	Gave George Land, the President, a $600 advance for May salary.
	23	Paid $100 in wages which had been accidentally overlooked to a former employee who was fired in January.
	25	Paid $24 for April telephone bill.
	27	Accepts a $100 down payment from a customer to order a camera costing $200, which the company will sell to the customer for $500.
	30	Physical inventory reveals seventeen cameras in inventory. All cameras were purchased for $100 each. Bookkeeper decides not to pay $500 in salaries for the second half of the month until May.

(2) Suppose the bookkeeper for Camera Sales Co. was not aware of prepaid insurance described in the balance sheet as of March 31, and made no entry during April regarding this insurance. What would the effect of this omission be on the company's financial statements?

(3) Could any of the transactions listed on the previous page have been overlooked by the bookkeeper, and hence not recorded, without changing the figures on the balance sheet, the balance sheet totals, or net income?

Problem 1.9C.

(1) The balance sheet of the Tortious Toys Company, as of March 31, Year 1 is presented below.

Tortious Toys Company
Balance Sheet, March 31, Year 1

Assets

Current Assets:		
Cash		$12,000
Accounts Receivable		4,500
Inventory		8,500
Prepaid Insurance (representing the unused cost of a one-year policy purchased on January 1, Year 1 at a cost of $1,500)		1,125
Total Current Assets		$26,125
Fixed Assets:		
Land		$ 8,000
Buildings	$50,000	
Less: Accumulated Depreciation	6,375	
Net Buildings		43,625
Furniture and Fixtures	$12,000	
Less: Accumulated Depreciation	5,100	
Net Furniture and Fixtures		6,900
Total Fixed Assets		$58,525
Total Assets		$84,650

Liabilities & Shareholders' Equity

Liabilities:	
Current Liabilities:	
Accounts Payable	$14,750
Accrued Interest Payable	450
Wages Payable	1,100
Total Current Liabilities	$16,300
Long–Term Liabilities:	
Note Payable (due December 31, Year 3, bearing nine percent interest payable annually on December 31 of each year)	$20,000
Total Liabilities	$36,300
Shareholders' Equity:	
Common Stock (5,000 shares authorized, $5 par value; 3,000 shares issued and outstanding)	$15,000
Retained Earnings	33,350
Total Shareholders' Equity	$48,350
Total Liabilities and Shareholders' Equity	$84,650

Unless your professor directs otherwise, prepare journal entries for the following April transactions, prepare any necessary adjusting entries, post to T-accounts, construct a six-column worksheet, prepare and post closing entries, and prepare the April financial statements (income statement and classified balance sheet only). Assume that Tortious Toys Co. pays income taxes at a flat rate of thirty percent (30%) of net income and uses the periodic inventory method and separate accounts for sales returns and allowances and purchase returns and allowances. The building has an estimated useful life of thirty years and a salvage value of $5,000. The furniture and fixtures have an estimated useful life of ten years and no estimated salvage value.

Apr. 1 Purchased twenty "Easy Bake Ovens" for $15 each on account from the manufacturer.

4 Sold three "My First Shuttle Ride" kits to a German retailer and four "Debbie's Doggie Dentist" kits to a French outlet store for cash totaling $6,000. The company had purchased the shuttle kits two months ago for $750 each. The dentist kits cost the company $500 each last year.

6 After reading a news release mentioning that the popular "Easy Bake Ovens" were being recalled due to burn-related injuries, the company's attorney determined that two of the ovens were poorly manufactured and unacceptable even for Tortious Toys. The company returned the two ovens to the manufacturer for credit to account due to the obvious defects.

9 Sold five "Inspector Troy's Obtain–O–Confession" kits to Toys–R–Us for $1,700. Toys–R–Us paid $500 down and issued a promissory note, due in six months, for the balance with interest

at the rate of ten percent (10%) per annum. The company had purchased the kits for a total of $500 last month.

11 Paid $1,100 to the store employees for wages for the last two weeks of March after they threatened to turn over confidential files to the "60 Minutes" crew that stopped by earlier in the day. The amount paid represented the entire wages payable liability on the March 31, Year 1 balance sheet.

14 Sold six of the ever-popular "My First Sternos" to Gloria Vanderpohl on account for $150. Each sterno cost $10 when purchased in February.

15 Paid salaries for the month of April totaling $1,075.

16 Mrs. Vanderpohl returned all six of the "My First Sternos" which she purchased two days earlier for credit to her account.

18 Gave Ted Tungstra, a manager, a $500 advance on his May salary.

21 Sold five "Little Bubble Boy Suits" to Bud's Discount Sales for $368 in cash and twenty "Johnny Switchblade Adventure Punk Dolls." The dolls are worth $240 in total. The company purchased the five suits for a total of $200 last year.

23 Purchased thirty boxes of date-expired "Silly Putty" for $30 on account.

24 Paid $50 for the April telephone bill.

25 Paid $150 to Jack & Jill Magazine for advertisements which will appear in the issues published in May and June.

27 Accepted a $500 down payment from a valued customer to order two "My First Shuttle Ride Kits" which will cost the company $600 each and which the company will sell to the customer for $900 each.

30 Physical inventory revealed that the closing inventory balance was $3,750.

(2) Suppose the bookkeeper for Tortious Toys was not aware of note payable described in the balance sheet as of March 31, and made no entry during April to reflect the interest on the note. What would the effect of this omission be on the company's financial statements?

(3) Could any of the transactions listed above or on the previous page have been overlooked by the bookkeeper, and hence not recorded, without changing the figures on the balance sheet, the balance sheet totals, or net income?

H. THE STATEMENT OF CASH FLOWS

Under accrual accounting, as we have seen, the movement of cash does not control the determination of expenses and income for an accounting period. A business's *cash flow*, which refers to the movement of cash into and out of the enterprise, however, often determines the business's financial success. To remain in business, an enterprise must either own or have access to the cash needed to meet recurring expenses, such as payroll and rent, to pay its accounts payable to suppliers, and to pay its outstanding debt obligations as they come due. In addition, any distributions which the enterprise returns to its owners normally come from cash. Accordingly, judging a business's future prospects calls for some consideration, and comparison, of the business's cash-generating potential and cash needs, over both the short and long terms.

Obviously, an enterprise's revenues from operations provide its primary source of cash, while its expenses serve as the principal cash drain. Estimated future earnings, therefore, provide some indication as to expected cash resources. But operations afford only a starting point, because transactions not reflected in the income statement, such as borrowing money, paying cash dividends, or purchasing long-lived assets, including buildings, machinery, and equipment, may significantly increase or decrease a business's cash. We must also keep in mind, as a corollary of accrual accounting, that some expenses will not require any current or prospective cash outflow. For example, the periodic charge off, or amortization, of a deferred expense asset, like E. Tutt's deferred insurance expense, illustrates this common occurrence. As a practical matter, depreciation on tangible fixed assets purchased for cash epitomizes those situations in which the actual cash expenditure occurred in an earlier accounting period. The enterprise acquired and paid for the asset in an earlier accounting period, but did not expense the cost at that time. As the enterprise allocates the unexpired cost to subsequent accounting periods, the business records a depreciation expense, but does not make any additional cash payments. The only cash outlay occurred when the enterprise purchased the asset. In contrast to situations where the cash expenditure precedes expense recognition on the income statement, income recognition under the accrual method normally reflects an expected cash receipt. In this situation, however, a substantial time lag can separate the income recognition and the actual cash receipt. This delay can significantly affect an enterprise's overall financial picture.

By comparing an enterprise's current balance sheet with a previous balance sheet, a reader can glean some useful information relating to cash flow. For example, the relative amounts of cash and accounts receivable, and the change in those figures from the prior year, may indicate significant trends. A number of important transactions, however, such as borrowing, issuing new stock, or buying capital assets, greatly affect cash but do not appear in the income statement for the period and emerge on the balance sheet at the end of the period only as accomplished facts. While a reader may surmise what happened by comparing the current balance sheet with the prior balance sheet, users of financial statements often want more explanatory information.

In any event, prudent investors and creditors want a statement of cash flows, which details the effect on cash of an enterprise's regular operations during the year and those other types of significant transactions. Common cash inflows include sales for cash; collection of accounts receivable; short and long-term borrowings; sale of property, plant and equipment; and issuance of stock for cash. Common cash outflows include current operating costs; acquisition of property, plant, equipment, and other long-term assets; repayment of short and long-term debt; and distributions to owners. As enterprises increasingly rely on debt to finance activities such as expanded operations, buy-outs and mergers, attorneys as well as accountants, financial analysts, creditors, investors and others must increase their awareness of the mechanics and usefulness of the statement of cash flows. Both the Enron and Tyco scandals show that lawyers should understand not only the statement of cash flows, but also the ways that enterprises can manipulate that financial statement.

The W.T. Grant Company illustrates the importance of the statement of cash flows to both investors and creditors. In 1975, the W.T. Grant Company, then the nation's largest retailer, filed for protection under the federal bankruptcy laws because the company did not have enough cash to pay its debts. For almost ten years before the company filed for bankruptcy, its income statement reported steady profits, but its operations produced a cash deficit, which required W.T. Grant to borrow huge sums of money to continue the business. If investors and creditors had benefitted from access to a statement of cash flows, they would have noticed that the company's operations did not generate any positive cash flow and that the company borrowed cash year after year to compensate for the deficits. *See* James A. Largay, III & Clyde P. Stickney, *Cash Flows, Ratio Analysis and the W.T. Grant Company Bankruptcy*, FIN. ANALYSTS J., July–Aug. 1980, at 51, 51–54.

1. HISTORY

Accountants have prepared statements that explain flows of cash and other financial resources for many years. The names of these statements have included *Statement of Sources and Uses of Funds*, *Funds Statement*, *Statement of Changes in Financial Position*, and most recently, *Statement of Cash Flows*. In fact, the statement of cash flows replaced the statement of changes in financial position for financial statements for fiscal years ending after July 15, 1988. Several problems inherent in the previous cash flow reporting practice caused the change to the statement of cash flows. These problems included the ambiguity of terms, such as "funds," lack of comparability among statements resulting from different definitions, different formats and the reporting of net changes in amounts of assets and liabilities rather than gross inflows and outflows of cash.

We should note that statutes, regulations, and legal documents may use outdated terminology. For example, Congress and the Securities and Exchange Commission continue to use terminology that refers to "changes in financial condition," rather than "cash flows" or "the statement of cash flows" in various statutes and administrative rules that involve "financial condition, *changes in financial condition*, and results of operation." *See*, *e.g.*, Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, § 401(a), 116 Stat. 745, 786, 15 U.S.C.A. § 78m(j) (West Supp. 2005) (emphasis added); 17 C.F.R. 229.303(a) (2005). As another example, section 114 of the California Corporations Code uses "statement of changes in financial position" instead of "statement of cash flows." CAL. CORP. CODE § 114 (West 1990). Almost twenty years after the adoption of the current accounting standards, forty-five states continue to use "statement of changes in financial position" in their state codes or administrative regulations. *See, e.g.*, DEL. CODE ANN. tit. 5, § 3341(b)(1) (2001) (business and industrial development corporations); FLA. STAT. ANN. § 331.310 (13) (West 2003) (powers and duties of the board of supervisors of spaceport authority); 215 ILL. COMP. STAT. ANN. 5/123C–9(B)(1) (West 2000) (Illinois insurance code); IND. CODE ANN. § 16–21–6–3(a)(3) (LexisNexis 2005) (hospital financial disclosure law); N.Y. PUB. HEALTH LAW § 4607 (2)(b)(i)(D) (McKinney 2002) (annual statements for continuing care retirement communities). In addition to the previously quoted language in the Sarbanes-Oxley Act of 2002, at least two states have enacted legislation that uses the outdated "statement of changes in financial position" since the publication of this casebook's third edition in 2001. *See, e.g.*, MINN. STAT. ANN. § 53B.07(3)(7) (West 2002) (enacted 2001); KY. REV. STAT. ANN. § 304.50-110 (West Supp. 2005) (enacted 2005).

Today, the statement of cash flows complements the other major financial statements. The statement of cash flows reports the changes in cash and cash equivalents during an accounting period and, most importantly, *explains* those changes. Whereas the balance sheet summarizes an enterprise's assets, liabilities and owner's equity at a specific point in time and the income statement summarizes the enterprise's performance on an accrual basis, the statement of cash flows allows its reader to assess an enterprise's cash transactions.

2. THE PURPOSE OF THE STATEMENT OF CASH FLOWS

According to accounting pronouncements, the statement of cash flows should provide relevant information about an enterprise's cash receipts and payments during an accounting period. The information provided in a statement of cash flows, if used with related disclosures and information in the other financial statements, should help investors, creditors and other users of financial statements to:

(a) assess the enterprise's ability to generate positive future net cash flows;

(b) assess the enterprise's ability to meet its obligations, its ability to pay dividends, and its needs for external financing;

(c) assess the reasons for differences between net income and associated cash receipts and payments; and

(d) assess the effects on an enterprise's financial position of both its cash and noncash investing and financing transactions during the period.

To achieve this purpose, the statement of cash flows should report the cash effects during a period of an enterprise's operations, investments in capital assets and financing transactions. As an example, Starbucks includes its statements of cash flows on page 42 of its Form 10-K for the fiscal year ended October 2, 2005 ("2005 Form 10-K") in Appendix A at page 1010, *infra*.

3. CASH AND CASH EQUIVALENTS

The statement of cash flows explains the change during the period in *cash and cash equivalents*. To establish consistency in financial reporting, companies must report the changes in "cash and cash equivalents" rather than in the ambiguous term "funds." Cash includes not only currency, but bank accounts that the enterprise can access "on demand." The applicable accounting pronouncement defines cash equivalents as "short-term, highly liquid investments." To satisfy this definition, cash equivalents must meet two requirements:

1. An enterprise must be able to convert the equivalents to cash readily, and

2. These equivalents' original maturity dates must not exceed three months, so that changes in interest rates do not threaten to affect adversely their value.

Examples of cash equivalents include United States Treasury bills, certificates of deposit, commercial paper and money market funds. The original maturity date means the maturity date when an enterprise acquires the investment. For example, a five-year U.S. Treasury note purchased three months from maturity qualifies as a cash-equivalent because the note will mature in three months. A five-year U.S. Treasury note purchased two years before its maturity date does not become a cash equivalent three months before its maturity because the note's maturity exceeded three months on the acquisition date. According to accounting standards, an enterprise must combine cash and cash equivalents on the balance sheet and on the statement of cash flows. These same standards require an enterprise to include its definition of cash equivalents in a related disclosure to its statement of cash flows. As an example, Starbucks includes its definition of cash and cash equivalents on page 45 of its 2005 Form 10-K in Appendix A at page 1013, *infra*. Note 3 on page 55 of that same document, which appears on page 1023 in Appendix A, provides a breakdown of the amounts included in cash and cash equivalents.

4. CLASSIFICATION OF THE STATEMENT OF CASH FLOWS

An enterprise must classify its statement of cash flows into three separate categories: operating, investing and financing activities. These three categories represent an enterprise's three major functions and help the readers of the statement of cash flows recognize important relationships between the three activities. Each activity can produce a cash inflow or outflow to the enterprise. Once again, note Starbucks' statements of cash flows on page 42 its 2005 Form 10-K in Appendix A at page 1010, *infra*. Along with separating these three sections, the statement of cash flows must reconcile the total change in cash and cash equivalents for the period with the beginning and ending balances which appear on the current and prior balance sheets.

The **operating activities** of an enterprise involve acquiring and selling the enterprise's products and services. For example, Starbucks' operating section would mainly report cash disbursements and receipts from roasting coffee beans, selling coffees and other beverages, and its licensing and foodservice activities. For a service organization, such as a law firm, this section may include inflows from legal fees collected and outflows for associate and secretarial salaries, rents, and utilities. Cash inflows from operating activities include interest and dividends from loans to and ownership investments in other enterprises, while cash outflows from operating activities include cash interest payments to lenders and other creditors. This category also serves as a "catch all" for any cash flows from transactions which do not qualify as investing or financing activities.

The **investing activities** of an enterprise include acquiring and disposing of long-term investments and long-lived assets. The investing section also shows cash expenditures to acquire other companies through mergers or stock acquisitions. Manufacturing enterprises typically spend the largest amount of cash on long-lived assets, such as property, plant and equipment, which accountants sometimes refer to as *capital expenditures*. During its fiscal year ended October 2, 2005, for example, Starbucks spent almost $644 million on additional property, plant, and equipment and more than $643 to purchase available-for-sale securities. Note that investing activities do not refer to all investments in the usual sense of the word. The term does not, for example, apply to the purchase or sale of U.S. Treasury bills which qualify as cash equivalents. The term also does not apply to interest and dividends from those long-term investments.

The **financing activities** of an enterprise include the obtaining of resources from owners and providing them with a return on, and a return of, their investment. Financing activities also include the issuance and retirement of short and long-term debt from creditors. An individual reading Amazon.com's statement of cash flows for 2004 in Appendix A on page 1010, *infra*, should notice that the company received more than $60 million from exercises of stock options, while repaying about $157 million in long-term debt and capital lease obligations during calendar year 2004. Cash outflows from financing activities include cash dividends or other distributions to owners.

5. THE OPERATING SECTION

An enterprise may use the direct or indirect method to report its cash flows from operations. The direct method requires an enterprise to report major classes of cash receipts and cash payments which relate to the enterprise's operations. Enterprises that use the direct method must report, at a minimum, the following seven classes of cash transactions, if they exist:

1. Cash collected from customers, including lessees and licensees
2. Interest and dividends received
3. Other operating cash receipts
4. Cash paid to employees and other suppliers of goods or services, including suppliers of insurance and advertising
5. Interest paid
6. Income taxes paid
7. Other operating cash payments

Although the authoritative accounting pronouncement expresses a preference for the direct method, only a very small percentage of large, publicly-traded companies actually use that method. Illustration 1–1 illustrates the direct method.

Illustration 1–1: Direct Method of Reporting Cash Flows from Operating Activities

Widgets, Inc.
Statement of Cash Flows
For the Year Ended December 31, 200X

Cash Flows From Operating Activities:	
Cash receipts from:	
Customers	$1,150,000
Interest	15,000
Other Receipts	100,000
Total Cash Receipts	$1,265,000

Cash Payments for:	
Inventory	$(650,000)
Salaries and Wages	(140,000)
Utilities	(40,000)
Interest	(55,000)
Income Taxes	(90,000)
Total Cash Payments	$(975,000)
Net Cash Provided from Operating Activities	$ 290,000

Under the indirect method of presenting net cash flows from operations, an enterprise must reconcile net income, determined pursuant to accrual accounting, to net cash from operations. This reconciliation involves adjusting net income to remove the effect of any current recognition of income or expense attributable to a past deferral of operating cash receipts or payments and all accruals in the current period of future operating cash receipts and payments. The reconciliation also eliminates any recognized gains or losses from the sale of long-term investments and property, plant and equipment because the full amount of the proceeds from such sales will appear as inflows from investing activities. These adjustments require an enterprise to add back (1) depreciation, amortization and other non-cash expenses, (2) so-called "sources" of cash from decreasing accounts receivable, inventories, or prepaid expenses, and from increasing payables, and (3) losses from the sale of long-term investments and property, which reduced net income. The enterprise must also subtract so-called "uses" of cash to increase accounts receivable, inventories or prepaid expenses, or to reduce payables, as well as any gains from the sale of long-term investments and property, which increased net income. Because the indirect method starts with net income, any inaccuracies in the income statement directly affect the statement of cash flows. Starbucks' statements of cash flows in its 2005 Form 10-K, which you can find on page 1010 in Appendix A, use the indirect method of reporting cash flows from operations.

The consolidated statement of cash flows for Eastman Kodak Co. ("Kodak") for the year ended December 31, 1999, which appeared in this text's previous edition and which you can access via the "Investor Center" link on the company's website at www.kodak.com, illustrates the adjustment necessary under the indirect method of determining cash flows from operating activities when a business sells a long-term investment or property, plant and equipment. That statement of cash flows subtracts $129 million from net earnings for "[g]ain on sale of businesses" in deriving net cash provided from operating activities for the year ended December 31, 1999. In addition, that statement shows $310 million as "[p]roceeds from sale of businesses" in the cash flows from investing activities for that same year. Putting the pieces together, the businesses that Kodak sold had a book value of $181 million. Because Kodak actually sold the businesses for $310 million cash (which produced the $129 million gain), $310 million must appear as a cash inflow from investing activities for the year ended December 31, 1999. Because the resulting $129 million gain already appears in "[n]et earnings" for 1999, Kodak had to subtract that amount in determining the net cash flow from operating activities for the year or the statement of cash flows would double-count the cash inflow from that gain, appearing both in the operating section and in the investing section. In addition, the statement would not reconcile to the ending amount of cash and cash equivalents. Finally, please observe that the $129 million in gain did not arise from an operating activity, but rather from the sales of investments, namely investments in other businesses.

Regardless of whether an enterprise uses the direct or indirect method for reporting cash flows from operations, a user of financial statements should note several important disclosures. First, accounting standards require an enterprise that uses the direct method of reporting net cash flows from operations to include an indirect operating section in its financial statements. On the other hand, because the indirect method does not disclose certain details involving operating receipts and disbursements, an enterprise that chooses the indirect method must also disclose the amounts of interest and income taxes paid during the period, either on the face of the statement of cash flows or in the notes to the financial statements. The indirect operating section must also report separately the changes in inventory, receivables and payables. You can find all of these disclosures on Starbucks' consolidated statements of cash flows, which appear on page 42 of the company's 2005 Form 10-K in Appendix A at page 1010, *infra*.

Until the recent financial scandals, many readers of financial statements erroneously assumed that dishonest corporate executives could not manipulate the statement of cash flows, especially cash flows from operating activities. Because the indirect method starts with net income, however, any inaccuracies in the income statement directly affect cash flows from operating activities. In addition, numerous public companies that provide vendor financing to customers, either directly or indirectly through subsidiaries, incorrectly classified certain cash flows arising from the sale of inventory as cash flows from investing activities rather than as operating cash flows. Michael Rapoport, *GE Cuts Past Operating Cash Flows*, WALL ST. J., Mar. 7, 2005, at C3; Jonathan Weil, *'Cash Flow Never Lies'—Or Does It?*, WALL ST. J., Apr. 16, 2004, at C3.

Both the Enron and Tyco scandals illustrate devious techniques that so-called "financial engineers" can use to manufacture fictitious operating cash flows. In a series of complex transactions, usually referred to simply as "prepays," Enron treated more than $6 billion in advances that it obtained from J.P. Morgan Chase & Co. and Citigroup, Inc. as cash from operating activities rather than as cash from financing activities. In the so-called "Mahonia transactions," Mahonia Ltd. functioned as a front for J.P. Morgan Chase. Enron entered into contracts that purported to sell various commodities to Mahonia, which obtained the necessary funds to pay for the commodities from the bank. At the same time, the bank sold the identical commodities back to Enron on credit. The net effect left Enron as the seller and purchaser of the same amounts of a commodity, at the same price on the same day. Enron received billions in cash from the transactions and treated those receipts as operating cash flows. Later, Enron paid back those sums, plus interest. Nevertheless, Enron treated the transactions as sales that generated operating cash flows, rather than as loans that gave rise to financing cash flows. Citicorp engaged in similar transactions with Enron, using Delta Energy Corporation as its front. In 2003, the leading body of accounting rulemakers in the United States issued a new pronouncement that clarifies that when such "prepays" contain a borrowing element, the borrower must report all cash inflows and outflows from the transaction as financing activities.

Tyco relied upon a different technique to boost its cash flows from operations. Rather than treat as operating cash outflows about $830 million that Tyco spent in 2001 to buy about 800,000 individual customer contracts for its security-alarm business from a network of independent dealers, Tyco treated these amounts as investing outflows. Since Tyco treated every penny of the monthly fees that those individual customers paid as operating cash flows, this technique both increased operating cash inflows and reduced operating outflows. In early 2003, however, Tyco announced its plans to change the accounting treatment for the amounts to acquire customer accounts. Mark Maremont & William M. Bulkeley, *Tyco Cuts Outlook, Fires Executive*, WALL ST. J., Mar. 13, 2003, at A5; Mark Maremont, *How Is Tyco Accounting for Its Cash Flow?*, WALL ST. J., Mar. 5, 2002, at C1.

6. NONCASH INVESTING AND FINANCING ACTIVITIES

Occasionally, an enterprise will engage in an activity that does not involve a cash transfer and which, therefore, does not fall into any of the three prescribed sections. For example, an enterprise may exchange stock for the assets of another company. Although this exchange involves both an investing and financing activity, accounting standards do not require the enterprise to report the transaction on the statement of cash flows because cash did not change hands. Because of the possible significance of these types of events to readers of the financial statements, accounting standards require any enterprise which engages in a material noncash activity to disclose the transaction in the footnotes to the financial statements. Other examples of noncash activities include converting debt to equity, acquiring assets by assuming related liabilities, entering into a lease to obtain a capital asset, exchanging noncash assets for other noncash assets, and converting preferred stock to common stock.

7. DISCLOSURES

An attorney should know that accounting standards require certain disclosures and reporting techniques by an enterprise preparing a statement of cash flows. First, an enterprise should disclose its policy for determining which items it treats as cash equivalents; remember the Starbucks illustration. If an enterprise changes that policy, a change in accounting principle has occurred and the enterprise must restate any financial statements for earlier years which the financial statements present for comparative purposes. Second, as we have already mentioned, a business choosing to report its net cash flow from operations under the direct method must also disclose in footnotes to its financial statements its net cash flows from operations using the indirect method. When an enterprise reports its net cash flow from operations under the indirect method, the enterprise must disclose the amounts of interest and income taxes paid during the period on its statement of cash flows or in the notes to the financial statements. The indirect section of an enterprise's statement of cash flows must also separately report changes in inventory, receivables and payables. Third, the notes to the financial statements must disclose any material noncash investing or financing activities. Finally, accounting standards forbid the reporting of the cash flow per share ratio in an enterprise's financial statements.

PROBLEMS

Problem 1.10A. Explaining where you found the relevant information, answer the following questions about Amazon.com's cash flows for the year ended December 31, 2004:

(1) How does the company define the term "cash and cash equivalents"?

(2) Did the company's cash and cash equivalents increase or decrease during the year?

(3) Does the company use the direct or indirect method to calculate operating cash flows?

(4) What was the company's net cash used in, or provided by:
- (a) Operating activities?
- (b) Investing activities?
- (c) Financing activities?

(5) What amount, if any, did the company pay for:
- (a) Interest?
- (b) Income taxes?

(6) How does the amount that the company paid for interest during the year compare with the amount that the company treated as interest expense

for the year? Describe what amount, if any, the company treated as interest expense for the year.

(7) How does the amount that the company paid for income taxes during the year compare with the amount that the company treated as income tax expense for the year? Describe what amount, if any, the company treated as income tax expense for the year.

(8) How did operating activities affect the following operating assets and liabilities:
(a) Inventories?
(b) Receivables?
(c) Payables?

(9) Did the company report any material noncash investing or financing activities? Explain briefly.

Problem 1.10B. Explaining where you found the relevant information, answer the following questions about Google's cash flows for the year ended December 31, 2004:

(1) How does the company define the term "cash and cash equivalents"?

(2) Did the company's cash and cash equivalents increase or decrease during the year?

(3) Does the company use the direct or indirect method to calculate operating cash flows?

(4) What was the company's net cash used in, or provided by:
(a) Operating activities?
(b) Investing activities?
(c) Financing activities?

(5) What amount, if any, did the company pay for:
(a) Interest?
(b) Income taxes?

(6) How does the amount that the company paid for interest during the year compare with the amount that the company treated as interest expense for the year? Describe what amount, if any, the company treated as interest expense for the year.

(7) How does the amount that the company paid for income taxes during the year compare with the amount that the company treated as income tax expense for the year? Describe what amount, if any, the company treated as income tax expense for the year.

(8) How did operating activities affect the following operating assets and liabilities:

(a) Inventories?
(b) Receivables?
(c) Payables?

(9) Did the company report any material noncash investing or financing activities? Explain briefly.

Problem 1.10C. Explaining where you found the relevant information, answer the following questions about UPS's cash flows for the year ended December 31, 2004:

(1) How does the company define the term "cash and cash equivalents"?

(2) Did the company's cash and cash equivalents increase or decrease during the year?

(3) Does the company use the direct or indirect method to calculate operating cash flows?

(4) What was the company's net cash used in, or provided by:

(a) Operating activities?
(b) Investing activities?
(c) Financing activities?

(5) What amount, if any, did the company pay for:

(a) Interest?
(b) Income taxes?

(6) How does the amount that the company paid for interest during the year compare with the amount that the company treated as interest expense for the year? Describe what amount, if any, the company treated as interest expense for the year.

(7) How does the amount that the company paid for income taxes during the year compare with the amount that the company treated as income tax expense for the year? Describe what amount, if any, the company treated as income tax expense for the year.

(8) How did operating activities affect the following operating assets and liabilities:

(a) Inventories?
(b) Receivables?
(c) Payables?

(9) Did the company report any material noncash investing or financing activities? Explain briefly.

Problem 1.11A. Using the information in Problem 1.9A on pages 120 to 121, *supra*, try to prepare a statement of cash flows for the Nifty-Novelty Company for the month of February under:

(1) The direct method
(2) The indirect method

Problem 1.11B. Using the information in Problem 1.9B on pages 122 to 123, *supra*, try to prepare a statement of cash flows for Camera Sales Co. for the month of April under:

(1) The direct method
(2) The indirect method

Problem 1.11C. Using the information in Problem 1.9C on pages 124 to 126, *supra*, try to prepare a statement of cash flows for the Tortious Toys Company for the month of April under:

(1) The direct method
(2) The indirect method

I. CONSOLIDATED FINANCIAL STATEMENTS

A corporation that carries on two or more businesses may own them directly or may use a wholly- or substantially-owned subsidiary or other legal entity, such as partnership, limited liability company or trust, to hold one or more indirectly. Although corporate law treats a corporation and its subsidiaries and affiliated organizations (collectively, "its investees") as separate legal entities, accountants aggregate financial data for a parent company and its investees as if the parent and the investees constitute a single economic or accounting entity because such treatment provides more meaningful information to readers. To take the simplest example, it should not make any difference in the overall evaluation of an enterprise whether the firm owns all of its businesses directly or indirectly through a wholly-owned subsidiary. Similarly, as long as the parent enjoys as much control over a substantially-owned investee as over directly-owned assets, the same conclusion should apply even if the parent does not completely own the investee.

Accountants refer to the process of combining the accounts of two or more affiliated enterprises to present a unified, composite picture of the overall enterprise as *consolidating*. Today, companies must consolidate all majority-owned investees, whether foreign or domestic, unless control does not rest with the majority owner. Circumstances in which a parent may not control an investee include bankruptcy, legal reorganization, foreign exchange restrictions, or other governmentally imposed limitations or uncertainties so severe that they cast significant doubt on the parent's ability to control the investee.

An accountant, however, cannot simply add the assets of the affiliated enterprises together because the parent's assets will include any investment in an affiliate, which reflects the affiliate's residual ownership interest, or, in other words, the affiliate's assets less liabilities. Similarly, an entity cannot report earnings by entering into revenue-producing transactions with itself. Therefore, in the consolidating process the accountant or bookkeeper eliminates reciprocal accounts, which track the dealings between the parent and the affiliate, and combines only nonreciprocal accounts.

In recent years, the Enron scandal has caused the subject of consolidating controlled entities to explode in importance. Enron demonstrated that an enterprise could use contractual agreements, the entity's organizational instruments, or other governing documents to obtain or retain control or significant influence over an entity without holding a majority voting interest. In its "financial engineering," Enron designed a number of so-called "special purpose entities" ("SPEs"), which appeared independent, but which Enron or its officers controlled in fact. Enron used these SPEs to generate manipulated profits, to conceal poorly performing assets, and to hide large amounts of debt. Following Enron's collapse, accounting standard-setters in the United States issued new rules that adopt a new model for consolidation, in addition to the so-called "voting interest model." Under the "risk and rewards model" that also now applies, the primary beneficiary of a "variable interest entity" ("VIE"), a term that includes not only entities that the business community referred to as SPEs, but also other entities, must consolidate the VIE when the beneficiary receives a majority of the VIE's expected residual returns, absorbs a majority of the entity's expect losses, or both. We will pursue this important topic in more detail in Chapter VI. For now, we need only an introduction to the process of consolidation. Please keep in mind, however, that this consolidation process applies to situations where either an entity owns a controlling voting interest or qualifies as the primary beneficiary of a VIE.

To illustrate the consolidation process, assume that X Corp. plans to purchase all of Y Corp.'s stock. Before the purchase, simplified balance sheets for X and Y show the following:

X Corp.
Balance Sheet, Before Transaction

Assets		Liabilities & Equity	
Cash	$300,000	Liabilities	$250,000
Plant	400,000	Common Stock	300,000
	$700,000	Retained Earnings	150,000
			$700,000

Y Corp.
Balance Sheet, Before Transaction

Assets		Liabilities & Equity	
Cash	$ 50,000		
Plant	150,000	Common Stock	$200,000
	$200,000		$200,000

If X purchases all of Y's stock for $200,000 in cash, X's balance sheet might then be:

X Corp.
Balance Sheet, After Transaction

Assets		Liabilities & Equity	
Cash	$100,000	Liabilities	$250,000
Investment	200,000	Common Stock	300,000
Plant	400,000	Retained Earnings	150,000
	$700,000		$700,000

Because each share of capital stock in a corporation is a proportionate interest in the equity of the corporation and consequently an indirect interest in its net assets, X's purchase of all of Y's stock amounts to an indirect purchase of Y's net assets. If X and Y engage in related operations, we might want to show, both to the outside world and to X's stockholders, the enterprise's composite picture. Because X's investment indirectly represents Y's assets, we can achieve this composite or *consolidated* picture by substituting Y's assets for the asset *Investment* which appears on X's balance sheet. X's balance sheet would then appear as follows:

X Corp. and Subsidiary
Consolidated Balance Sheet, After Transaction

Assets		Liabilities & Equity	
Cash	$100,000	Liabilities	$250,000
Cash (Y)	50,000	Common Stock	300,000
Plant (Y)	150,000	Retained Earnings	150,000
Plant	400,000		$700,000
	$700,000		

and, after combining similar items:

X Corp. and Subsidiary
Consolidated Balance Sheet, After Transaction

Assets		Liabilities & Equity	
Cash	$150,000	Liabilities	$250,000
Plant	550,000	Common Stock	300,000
	$700,000	Retained Earnings	150,000
			$700,000

This last statement presents the consolidated balance sheet for X and its affiliated subsidiary, Y. Although X and Y must maintain their separate legal entities for most legal purposes, as a practical matter X could dissolve Y at any time and bring all the assets together under one corporate roof. Even without dissolution or merger, consolidating the corporations' accounts may provide a more meaningful picture—both to outsiders interested in the enterprise as a whole and to X's stockholders—about the assets that X actually controls.

We assumed, for the sake of simplicity, that Y did not owe any liabilities. Unless "intra-family" obligations between X and Y exist, the consolidation process remains about the same if Y had owed amounts to creditors. Assume that Y's balance sheet at the time of acquisition reflected the following financial position:

Y Corp.
Balance Sheet, Before Transaction

Assets		Liabilities & Equity	
Cash	$150,000	Liabilities	$100,000
Plant	150,000	Common Stock	200,000
	$300,000		$300,000

You will note that Y's net assets remain the same as before. Other things being equal, the purchase price might stay the same. To consolidate the accounts of the two corporations, we replace the asset Investment on X's balance sheet with the actual assets and liabilities which that investment represents. This presentation provides the most meaningful picture of what the composite enterprise owns and owes as a whole. The consolidated balance sheet would appear as follows:

X Corp. and Subsidiary
Consolidated Balance Sheet, After Transaction

Assets		Liabilities & Equity	
Cash	$250,000	Liabilities	$350,000
Plant	550,000	Common Stock	300,000
	$800,000	Retained Earnings	150,000
			$800,000

"Intra-family" obligations between X and Y do not belong in the composite picture. An accountant would eliminate any liabilities between X and Y in the consolidation process by canceling the receivable in one corporation's accounts against the payable on the other corporation's books.

The same consolidation procedure applies when the acquired corporation's balance sheet shows retained earnings on the acquisition date. Suppose that Y's balance sheet appeared as follows:

Y Corp.
Balance Sheet, Before Transaction

Assets		Liabilities & Equity	
Cash	$ 50,000	Common Stock	$100,000
Plant	150,000	Retained Earnings	100,000
	$200,000		$200,000

Here again X's purchase of Y's stock amounts to an indirect acquisition of Y's net assets. The source of the subsidiary's net assets, whether capital stock, additional paid-in capital, or retained earnings does not matter. Because the net assets remain the same as before, the purchase price for the investment might still stay the same. To accomplish the consolidation, we again replace the asset Investment on X's balance sheet with the actual assets and liabilities which that investment represents. The consolidated balance sheet would then appear as follows:

X Corp. and Subsidiary
Consolidated Balance Sheet, After Transaction

Assets		Liabilities & Equity	
Cash	$150,000	Liabilities	$250,000
Plant	550,000	Common Stock	300,000
	$700,000	Retained Earnings	150,000
			$700,000

Note that the consolidated retained earnings do not include the retained earnings which appeared on Y's balance sheet at the acquisition date. In a cash purchase, X in effect buys Y's net assets. Consequently, whether those residual assets arise from capital stock, additional paid-in capital or retained earnings does not matter. Any shareholders' equity which Y accumulated prior to X's acquisition does not belong in the composite picture when X acquires the net assets for cash.

To summarize, when preparing a consolidated balance sheet the accountant or bookkeeper eliminates the parent's investment in the subsidiary, substituting instead the subsidiary's assets and liabilities, while eliminating the subsidiary's equity accounts. In addition, the consolidation process eliminates any intercompany transactions, such as intercompany loans or intercompany sales, to avoid duplication and premature revenue recognition. Finally, the consolidation process reclassifies any transaction arising from the sale of inventory in which one member of the consolidated group recorded an operating cash inflow from financing that another member of the group recorded as an investing cash outflow. Just as the elimination avoids duplication and premature revenue recognition, the reclassification prevents the enterprise from recognizing operating cash inflow from the sale of any inventory until a member of the consolidated group actually receives cash from the customer.

Thus far, we have considered only very simple consolidations. When X acquires Y's stock by issuing its own shares rather than paying cash, the accounting becomes much more complex. Additionally, in the real world, unlike our simplistic examples, the price that the acquiring corporation pays would ordinarily differ from the book value of the acquired corporation's net assets. Finally, as noted above, the accounting rules do not limit consolidated financial statements to wholly-owned subsidiaries. As long as the parent holds majority ownership or controls the subsidiary, consolidated financial statements may present more meaningful information than separate company statements. In such cases, an account *minority interests*, typically but not always listed as a long-term liability, reflects net book value of, or other amount necessary to purchase, the shares that the parent corporation or other subsidiaries do not own. For example, note 11 to Starbucks' 2005 financial statements, which appears on page 1031 in Appendix A, shows that Starbucks included $11,153,000 as "[m]inority interest liabilities" in the $193,565,000 in "[o]ther long-term liabilities" that the company lists on its consolidated balance sheet as of October 2, 2005. Because these minority interests do not represent present obligations of the parent to pay cash or to distribute other assets to minority shareholders, other companies sometimes report these amounts in the "mezzanine," or in a section between liabilities and equity on the balance sheet. Although the basic consolidation process outlined above generally applies to transactions involving shares rather than cash, acquisitions for amounts other than book value, and less than wholly-owned subsidiaries, the accountant must make some complicated adjustments, which we can ignore for the present.

We should also briefly mention two other presentation formats before finishing this chapter. *Consolidating financial statements* present not only consolidated financial statements, but also the financial statements of the consolidated group's individual components in different columns plus a separate column for any eliminations. A consolidating balance sheet for X and Y might appear, therefore, as follows:

X Corp. and Subsidiary
Consolidating Balance Sheet

	X Corp.	Y Corp.	Eliminations	Consolidated
Assets				
Cash	$100,000	$ 50,000	–0–	$150,000
Investment	200,000	–0–	($200,000)	–0–
Plant	400,000	150,000	–0–	550,000
Totals	$700,000	$200,000	($200,000)	$700,000
Liabilities & Equity				
Liabilities	$250,000	–0–	–0–	$250,000
Common Stock	300,000	$200,000	($200,000)	300,000
Retained Earnings	150,000	–0–	–0–	150,000
Totals	$700,000	$200,000	($200,000)	$700,000

Similar to consolidating statements, *combined financial statements* aggregate the accounts of commonly-controlled companies that do not share a corporate parent. For example, an individual Zoe Zendejas may own both X Corp. and Y Corp. In this situation, accountants and business people sometimes refer to X Corp. and Y Corp. as *brother-sister* corporations. *Combining financial statements* present not only combined statements but also the separate financial statements for each member of the combined group plus a separate column for any eliminations. A combining balance sheet for X and Y might appear as follows:

X Corp. and Y Corp.
Combined Balance Sheet

	X Corp.	Y Corp.	Eliminations	Consolidated
Assets				
Cash	$100,000	$ 50,000	–0–	$150,000
Investment	50,000	–0–	($50,000)	–0–
Plant	400,000	150,000	–0–	550,000
Totals	$550,000	$200,000	($50,000)	$700,000
Liabilities & Equity				
Liabilities	$150,000	–0–	–0–	$150,000
Common Stock	300,000	$200,000	($50,000)	450,000
Retained Earnings	100,000	–0–	–0–	100,000
Totals	$550,000	$200,000	($50,000)	$700,000

J. ILLUSTRATIVE FINANCIAL STATEMENTS

Appendix A includes the Form 10-K for Starbucks Corporation for its fiscal year ended October 2, 2005 to illustrate the financial statements for a publicly-traded corporation. The company's consolidated financial statements appear on pages 40 to 75 of the Form 10-K at pages 1008 to 1043, *infra*. At different times, this text will also refer to the financial reports of Amazon.com, Google, and UPS, which you can access via the websites for those companies, to illustrate various financial accounting principles and related concepts. Although these consolidated financial statements contain numerous complexities not present in E. Tutt's financial statements, the same principles that we discussed in this chapter determined their preparation and presentation. The most important difference lies in the many difficult judgment questions that Starbucks, Amazon.com, Google, and UPS had to resolve when preparing their financial statements.

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