

CHAPTER 2

BASIC FINANCIAL STATEMENTS

OVERVIEW OF BRIEF EXERCISES, EXERCISES, AND CRITICAL THINKING CASES

Brief Exercises	Topic	Learning Objectives	Skills
B. Ex. 2.1	Recording transactions	3	Analysis, communication
B. Ex. 2.2	Recording transactions	3	Analysis, communication
B. Ex. 2.3	Computing retained earnings	4	Analysis
B. Ex. 2.4	Computing total liabilities	4	Analysis
B. Ex. 2.5	Computing net income	5	Analysis
B. Ex. 2.6	Computing net income	5	Analysis
B. Ex. 2.7	Computing change in cash	6	Analysis
B. Ex. 2.8	Alternative forms of equity	8	Analysis
B. Ex. 2.9	Alternative forms of equity	8	Analysis
B. Ex. 2.10	Articulation of financial statements	7	Analysis

Exercises	Topic	Learning Objectives	Skills
2.1	Real World: American Airlines, Boston Celtics Nature of assets and liabilities	3	Communication
2.2	Preparing a balance sheet	4	Analysis
2.3	Preparing a balance sheet	4	Analysis
2.4	Accounting principles and asset valuation	2	Communication, judgment
2.5	Using the accounting equation	3	Analysis
2.6	Accounting equation	3	Analysis
2.7	Effects of business transactions	3	Analysis
2.8	Forms of business organizations	8	Analysis
2.9	Factors contributing to solvency	9	Analysis, judgment
2.10	Professional judgment	2	Communication
2.11	Statement of cash flows	6	Analysis
2.12	Income statement	5	Analysis
2.13	Income statement	5	Analysis
2.14	Statement of cash flows	6	Analysis
2.15	Window dressing financial statement	9	Analysis
2.16	Real World: Home Depot Home Depot financial statements	4–6	Analysis, communication
2.17	Real World: Intel Assessing financial results	5	Analysis, communication

Problems Sets A, B	Topic	Learning Objectives	Skills
2.1 A,B	Preparing and evaluating a balance sheet	4	Analysis, communication
2.2 A,B	Effects of transactions	3	Analysis
2.3 A,B	Effects of transactions	3	Analysis
2.4 A,B	Effects of transactions	3	Analysis
2.5 A,B	Preparing a balance sheet, effects of transactions	4	Communication, judgment
2.6 A,B	Preparing a balance sheet, effects of transactions	4	Analysis, communication
2.7 A,B	Preparing a balance sheet and statement of cash flows, effects of transactions	3, 4, 6	Analysis, communication
2.8 A,B	Preparing financial statements, effects of transactions, evaluating solvency	4–6	Analysis, communication
2.9 A,B	Preparing a balance sheet, discussion of GAAP	4, 8	Analysis, communication, judgment
2.10 A,B	Preparing a balance sheet, discussion of GAAP	2, 4	Analysis, communication, judgment

Critical Thinking Cases

2.1	Prepare a realistic balance sheet for a hypothetical entity	4	Judgment
2.2	Real World: Company of student choice Locate and evaluate the financial statements of a publicly owned company	4–6	Analysis, communication, research
2.3	Using a balance sheet	4	Analysis, communication judgment
2.4	Using a statement of cash flows	6	Analysis, communication, judgment
2.5	Window dressing	4	Analysis, communication, judgment
2.6	Real World: Public Company Accounting Oversight Board (Ethics, fraud & corporate governance)	4	Communication, research, technology
2.7	Real World: Cisco Systems Introduction to EDGAR (Internet)	4-5	Technology

Note: Additional Internet assignments for this chapter are available both in Appendix B and on our home page: www.magpie.org/cyberlab

DESCRIPTIONS OF PROBLEMS AND CRITICAL THINKING CASES

Shown below are brief descriptions of each problem and case. These descriptions are accompanied by the estimated time (in minutes) required for completion and by a difficulty rating. The time estimates assume use of the partially filled-in working papers.

Problems (Sets A and B)

2.1 A,B	Smokey Mountain Lodge/Deep River Lodge Prepare a balance sheet from a list of balance sheet items in random order. Determine the amount of one item as a plug figure. Also evaluate the company's solvency.	15	Easy
2.2 A,B	Ajax Moving Company/Brigal Company Effects of transactions upon the accounting equation are illustrated in tabular form. Students are asked to write a sentence or two explaining the nature of each transaction.	15	Easy
2.3 A,B	Goldstar Communications/Delta Corporation Show in tabular form the effects of various business transactions upon the accounting equation. (Problem 2–4 is an alternate.)	15	Medium
2.4 A,B	Rankin Truck Rental/Smith Trucking Show in tabular form the effects of various business transactions upon the accounting equation. (Alternate to Problem 2–3.)	15	Medium

- 2.3 Using a Balance Sheet** **30 Medium**
A tried-and-true case in which students are to evaluate the financial position of two similar companies first from the viewpoint of a short-term creditor and then from the viewpoint of a buyer of the business. We *always* use this one.
- 2.4 Using Statements of Cash Flow** **30 Medium**
Students are presented with abbreviated cash flow information and asked to decide which is in a stronger position. An excellent way to show that how a company generates its cash is equally important to how much cash it has on hand.
- 2.5 Ethics and Window Dressing** **35 Medium**
Students are to distinguish between legitimate window dressing and fraudulent misrepresentation. Allows introduction of ethics, securities laws, and the role of independent audits.
- 2.6 Public Company Accounting Oversight Board
Ethics, Fraud & Corporate Governance** **30 Easy**
Students locate the PCAOB and state the mission, identify the members, and describe the authority and responsibility of the PCAOB.
- 2.7 Gathering Financial Information** **25 Easy**
Internet
Visit EDGAR, the SEC's database, and gather financial information about Cisco Systems. A user-friendly "meet EDGAR" type of problem.

SUGGESTED ANSWERS TO DISCUSSION QUESTIONS

Many of these questions are well suited to classroom discussions. These discussions can stimulate students' interest, help develop verbal skills, and provide instructors with an opportunity to introduce ideas and situations not discussed in the text. If class size permits, we also encourage instructors to review and evaluate selected written assignments throughout the course.

1. The basic *purpose of accounting* is to provide decision makers with information useful in making economic decisions.
2. A knowledge of accounting terms and concepts is useful to persons other than professional accountants because nearly everyone working in business, government, or the professions will encounter these terms and concepts. Supervisors and managers at every level will use financial statements, budgets, or other forms of accounting reports. Investment in securities or real estate also calls for the use of accounting information. In every election, propositions on the ballot and in the platforms of candidates can be much better understood by voters who are familiar with accounting. Accounting information is also useful to individuals in handling their personal financial affairs. In short, all economic activity is supported by accounting information.
3. Revenues result from transactions in which goods or services are transferred (i.e., sold) to customers. Expenses are costs associated with earning revenues. Revenues already have resulted in or will result in positive cash flows, while expenses have resulted in, or will result in, negative cash flows. An enterprise's net income is determined as the excess of revenues over expenses for a period of time. If expenses exceed revenues, however, the difference is called a net loss.
4. Business transactions affect a company's financial position, and as a result, they change the statement of financial position or balance sheet. The other financial statements—the income statement and the statement of cash flows—are detailed expansions of certain aspects of the statement of financial position and help explain in greater detail how the company's financial position changed over time.
5. The basic accounting equation indicates that $\text{assets} = \text{liabilities} + \text{owners' equity}$. Assets are resources owned by the company that are used in carrying out its business activities. Liabilities are debts owed by the enterprise, and owners' equity is the interest of the owners in the enterprise's assets.
6. The going concern assumption states that in the absence of evidence to the contrary (i.e., bankruptcy proceedings), an enterprise is expected to continue to operate in the foreseeable future. This means, for example, that it will continue to use the assets it has in its financial statements for the purpose for which they were acquired.

7. No, a business transaction could not affect only a single asset. There must be an offsetting change elsewhere in the accounting equation. If the transaction increases an asset, for example, it must reduce another asset, increase a liability, or increase owners' equity (or some combination of these). On the other hand, if the transaction decreases an asset, it must increase another asset, decrease a liability, or decrease owners' equity (or some combination of these).
8.
 - a. An example of a transaction that would cause one asset to increase and another asset to decrease without any effect on the liabilities or owners' equity is the receipt of cash in collection of an account receivable. Another common example is the payment of cash to buy land, a building, office equipment, or other assets.
 - b. An example of a transaction that would cause both total assets and total liabilities to increase without any effect on the owners' equity is the purchase of an asset on credit. The acquisition of the asset could be entirely on credit or could involve a partial cash payment with the balance on credit. Another example is an increase in cash by borrowing from a bank.
9. Positive cash flows means that cash increases. Negative cash flows means that cash decreases. Generally, revenues result in positive cash flows—either at the time of the revenue transaction, earlier, or later. Expenses result in negative cash flows—either at the time the expense is incurred, earlier, or later.
10. The three categories and the information included in each are:
 - Operating activities—Cash provided by and used in revenue and expense transactions.
 - Investing activities—Cash provided by and used as a result of investments in assets, such as machinery, equipment, land, and buildings.
 - Financing activities—Cash provided by and used in debt and equity financing, such as borrowing and repaying loans, and new capital received from and dividends paid to the enterprise's owners.
11. Financial statements—the balance sheet, income statement, statement of cash flows—are all based on the same underlying transactions. They reflect different aspects of the enterprise's activities. Their relationship is referred to as “articulation.” For example, the revenues and expenses in the income statement result from changes in the assets and liabilities in the balance sheet and their cash effects are presented in the operating activities section of the statement of cash flows.
12. Adequate disclosure refers to the requirement that financial statements, including accompanying notes, must include information necessary for reasonably informed users of financial statements to understand the company's financial activities. This requirement is met, in part, by the addition of notes to the financial statements. Financial statement notes include both quantitative and qualitative information that is not included in the body of the financial statements.

12. Adequate disclosure refers to the requirement that financial statements, including accompanying notes, must include information necessary for reasonably informed users of financial statements to understand the company's financial activities. This requirement is met, in part, by the addition of notes to the financial statements. Financial statement notes include both quantitative and qualitative information that is not included in the body of the financial statements.
13. The term "window dressing" refers to enhancing the appearance of the enterprise's financial statements by taking certain steps near the end of the financial reporting period. While some steps that may be taken, or delayed, are appropriate, care must be taken that steps taken are not unethical or illegal.
14. A strong income statement is one that has significantly more dollars of revenue than expenses, resulting in net income that is a relatively high percentage of the revenue figure. A trend of relatively high income numbers over several accounting periods signals a particularly strong income situation.
15. A strong statement of cash flows is one that shows significant amounts of cash generated from operating activities. This means that the enterprise is generating cash from its ongoing activities and is not required to rely heavily on debt and equity financing, or the sale of its major assets, to finance its daily operations. A trend of relatively high cash flows provided by operations numbers over several accounting periods signals a particularly strong cash flow situation.

SOLUTIONS TO BRIEF EXERCISES

B. Ex. 2.1

Green Company's assets (machinery) will increase by \$10,000. The company's liabilities will also increase by \$10,000 to include the new obligation the company has assumed.

B. Ex. 2.2

Foster Inc.'s assets will increase by a net amount of \$25,000. Cash will decrease by \$5,000 and the truck account will increase by \$30,000, a net increase of \$25,000. The company's liabilities will also increase by \$25,000 to reflect the new obligation that has been assumed.

B. Ex. 2.3

$\$150,000$ (assets) - $\$85,000$ (liabilities) = $\$65,000$ (total equity)

$\$65,000$ (total equity) - $\$50,000$ (capital stock) = $\$15,000$ (retained earnings)

B. Ex. 2.4

Yes, the company has liabilities because its assets exceed its capital stock and its retained earnings. $\$780,000$ (assets - [$\$500,000$ + $150,000$])(equity) = $\$130,000$ (liabilities)

B. Ex. 2.5

$\$300,000$ (revenues) - $\$205,000$ (expenses) = $\$95,000$ (net income)

Note: The purchase of land for \$45,000 does not affect net income.

B. Ex. 2.6

$\$125,000$ (revenues) - $\$50,000$ (expenses) = $\$75,000$ net income

Note: The year-end cash balance of \$35,000 does not affect the amount of net income.

B. Ex. 2.7

Increases in cash:

Revenues	\$100,000	
Sale of land	10,000	
Borrowing from bank	15,000	\$125,000

Decreases in cash:

Expenses	56,000	
Purchase of truck	20,000	(76,000)

Net increase in cash	49,000	

B. Ex. 2.8

Joe Solway, Capital	\$25,000	
Tom Solway, Capital	25,000	\$50,000

B. Ex. 2.9

Capital stock	\$40,000	
Retained earnings	10,000	\$50,000

B. Ex. 2.10

John Franklin, owner's equity:

Balance, January 1, 2011.....	\$	50,000
Add: Investment during 2011.....		10,000
Net income for 2011.....		25,000
Balance, December 31, 2011.....	\$	<u>85,000</u>

The end-of-year balance of owner's equity in the balance sheet is \$85,000. This amount articulates with the amount of net income in the income statement because net income is added to the amount of beginning owner's equity, plus additional investment, to determine the ending balance that appears in the December 31, balance sheet. The accounting equation stays in balance because the amount of net income is reflected in changes in the balances of various assets and liabilities that are also presented in the balance sheet.

SOLUTIONS TO EXERCISES

- Ex. 2.1** **a.** Assets are economic resources owned by the business entity.
- 1.** Among the assets of American Airlines we might expect to find investments, accounts receivable (say, from travel agents), fuel (in storage), maintenance supplies, aircraft, and various types of equipment. The company also owns land and buildings—as, for example, its corporate headquarters.
 - 2.** Among the assets of a professional sports team are investments (in stocks and bonds), notes receivable (often from players), training equipment, supplies, and office furniture. (The balance sheet of a professional sports team may not include land or buildings, as they generally do not own the stadiums in which they play.)

Note to instructor: You may wish to expand this solution to include intangible assets, such as the team’s league franchise, and player contracts, the right to receive the future services of a given player. (Player contracts only appear as an asset if they have a cost—that is, if they were purchased from other teams. Advance payments to players usually are shown as prepaid expenses.) We address intangible assets in Chapter 9, but the concept is consistent with the discussion of assets in Chapter 2.

- b.** Liabilities are existing debts and other obligations of the entity.
- 1.** Among the liabilities of American Airlines, we might expect to find accounts payable, notes payable (or mortgages or bonds payable) stemming from purchases of aircraft, salaries payable, interest payable, rent payable (for space in airports), and income taxes payable.
 - 2.** The balance sheet of a professional sports team might include accounts payable, rent payable (for the stadium), salaries payable, interest payable, and income taxes payable.

Note to instructor: In a classroom discussion, you might want to point out that both an airline and a professional sports team may have liabilities for unearned revenue. The airline sells many tickets in advance, thus incurring an obligation to render services (flights) or to refund the customers’ money. A sports team has a similar obligation with respect to advance sales of season tickets. We discuss unearned revenue in Chapter 4, but the concept can be introduced earlier at the instructor’s discretion.

Ex. 2.2

DIXIE TRANSPORTATION SERVICE

Balance Sheet

February 28, 2011

Assets		Liabilities & Owners' Equity	
		Liabilities:	
Cash	\$69,000	Notes payable	\$288,000
Accounts receivable	70,000	Accounts payable	<u>26,000</u>
Supplies	14,000	Total liabilities	\$314,000
Land	70,000	Owners' equity:	
Building	80,000	Capital stock.....	92,000
Automobiles	<u>165,000</u>	Retained earnings.....	<u>62,000</u>
Total	<u>\$468,000</u>	Total	<u>\$468,000</u>

Ex. 2.3

MERCER COMPANY
Balance Sheet
December 31, 2011

Assets		Liabilities & Owners' Equity	
Cash	\$36,300	Liabilities:	
Accounts receivable	56,700	Notes payable	\$207,000
Land	90,000	Accounts payable	<u>43,800</u>
Building	210,000	Total liabilities.....	\$250,800
Office equipment.....	<u>12,400</u>	Owners' equity:	
		Capital stock	75,000
		Retained earnings	<u>79,600</u>
Total	<u>\$405,400</u>	Total.....	<u>\$405,400</u>

The amount of retained earnings is calculated as the difference between total assets and liabilities plus capital stock: $\$405,400 - (\$250,800 + \$75,000) = \$79,600$

- Ex. 2.4
- a. The supplies should be presented at \$1,700 in World-Wide's balance sheet. Presenting the supplies at their estimated *liquidation value* violates the assumption that World-Wide is a *going concern*, and will use these supplies in business operations, rather than sell them on the open market. The \$500 amount also violates the *objectivity principle*, as it is largely a matter of personal opinion, and also the *cost principle*.
 - b. The presentation of the two land parcels at a combined value of \$320,000 in the 2011 balance sheet conforms to generally accepted accounting principles. This treatment illustrates both the *cost principle* and the *stable-dollar assumption*.
 - c. The presentation of the computer system at \$14,000 in the December 31, 2011 balance sheet conforms to generally accepted accounting principles, as this is the cost of the system, and at the balance sheet date, it was an *asset* owned by the company. The retail value of \$20,000 is *not presented in the balance sheet*, as this amount is not the cost incurred by the entity, nor is it an objective measurement.

However, the company's failure to disclose the loss of the equipment subsequent to the balance sheet date may violate the principle of *adequate disclosure*. To properly interpret the company's balance sheet, users may need to be aware that this asset no longer exists. Several issues must be considered in deciding whether or not disclosure of the burglary loss is necessary. For example, was the asset insured? And is a \$14,000 asset significant (material) in relation to the assets and operations of this business? Is this amount large enough that it might impact investors' and creditors' decisions regarding the company?

- Ex. 2.5
- a. \$236,000: Assets \$578,000 – liabilities \$342,000 = owners' equity \$236,000
 - b. \$1,132,500: Liabilities \$562,500 + owners' equity \$570,000 = assets \$1,132,500
 - c. \$120,300: Assets \$307,500 – owners' equity \$187,200 = liabilities \$120,300

Ex. 2.6	Transaction	Assets	=	Liabilities	+	Owners'
	a	I		I		NE
	b	NE*		NE		NE
	c	D		D		NE
	d	D		D		NE
	e	I		NE		I
	f	I		I		NE
	g	I		NE		I
	h	NE*		NE		NE
	i	NE*		NE		NE

*Could be I/D offsetting

Ex. 2.7 *Note to instructor:* These are examples, but many others exist.

- The purchase of office equipment (or any other asset) on credit will cause an increase in the asset (office equipment) and an increase in a liability.
- The cash payment of an account payable or note payable will cause a decrease in the asset cash and a decrease in the liability paid.
- The collection of an account receivable will cause an increase in one asset (cash) and a decrease in another asset (accounts receivable). Other examples include the purchase of land for cash, and the sale of land for cash.
- The investment of cash in the business by the owners will cause an increase in an asset (cash) and an increase in the owners' equity.
- The purchase of an automobile (or other asset) paying part of the cost in cash and promising to pay the remainder at a later time would cause an increase in one asset (automobile), a decrease in another asset (cash), and an increase in a liability by the amount of the unpaid portion.

Ex. 2.8 a. (1) Owner's equity

Johanna Small, capital	<u>\$ 390,000</u>
*\$850,000 in assets – \$460,000 in liabilities = \$390,000.	

(2) Partners' equity:

Johanna Small, capital	\$ 240,000
Mikki Yato, capital	<u>150,000</u>
Total	<u>\$ 390,000</u>
*Yato's capital = \$390,000 – Small's capital, \$240,000 = \$150,000.	

(3) Stockholders' equity:

Capital Stock	\$ 250,000
Retained earnings	<u>140,000</u>
Total stockholders' equity	<u>\$ 390,000</u>

*Capital stock = 25 x \$10,000 = \$250,000. Retained earnings = \$390,000 – \$250,000 capital stock = \$140,000.

- b. Yes; the form of Fellingham's organization is relevant to a lender. If the company is not incorporated, the owner or owners are *personally liable* for the debts of the business organization. Thus, if the business is organized as a sole proprietorship, it is actually Small's personal debt-paying ability that determines the collectibility of loans to the business. If the business is a partnership, all of the partners are personally liable for the company's debts.

If Fellingham is organized as a corporation, however, a lender may look only to the corporate entity for payment.

Note to instructor: You may wish to point out that some lenders would not make sizable loans to a small corporation unless one or more of the stockholders *personally guaranteed* the loan. This is accomplished by having the stockholder(s) cosign the note.

- Ex. 2.9
- a. Cash is the most liquid of all assets. In fact, companies *must* use cash in paying most bills. Therefore, cash contributes more to a company's liquidity than any other asset.
 - b. Accounts payable is a liability that requires payment, usually in the near future and usually by paying cash. Thus, existing accounts payable *detract* from liquidity.
 - c. Accounts receivable are assets that will shortly convert into cash. Therefore, they contribute to the company's liquidity.
 - d. The capital stock account is the owners' equity in the business. It represents amounts originally invested in the business by the owners, but says nothing about the form in which the company now holds these resources—nor even whether the resources are still on hand. Thus, the capital stock account has *no direct effect* upon liquidity. On the other hand, the amount of the owners' equity, related to the amount of the liabilities is an important factor in evaluating liquidity.
- Ex. 2.10
- a. The situations encountered in the practice of accounting and auditing are too complex and too varied for all specific answers to be set forth in a body of official rules. Therefore, individual accountants must resolve many situations based upon their general knowledge of accounting, their experience, and their ethical standards—in short, their *professional judgment*.
 - b. Accountants must rely on their professional judgment in such matters as determining (three required) (1) how to record an unusual transaction that is not discussed in accounting literature, (2) whether or not a specific situation requires disclosure, (3) what information will be most useful to specific decision makers, (4) how an accounting system should be designed to operate most efficiently, (5) the audit procedures necessary in a given situation, (6) what constitutes a fair presentation, (7) whether specific actions are ethical and are in keeping with the accountants' responsibilities to serve the public interests.

Ex. 2.11

MILLER COMPANY		
Statement of Cash Flows		
For the Month Ended October 31, 2011		
Cash flows from operating activities:		
Cash received from revenues	\$ 10,000	
Cash paid for expenses	<u>(7,200)</u>	
Net cash provided by operating activities		2,800
Cash flows from investing activities:		
Cash paid for equipment		(2,500)
Cash flows from financing activities:		
Cash received from sale of capital stock	\$ 6,000	
Cash used to repay bank loans	<u>(2,000)</u>	
Net cash provided by financing activities		<u>4,000</u>
Increase in cash	\$ 4,300	
Cash balance, October 1, 2011		<u>7,450</u>
Cash balance, October 31, 2011		<u>\$ 11,750</u>

Ex. 2.12

HERNANDEZ, INC.	
Income Statement	
For the Month Ended March 31, 2011	
Revenues	\$ 9,500
Expenses	<u>5,465</u>
Net income	<u>\$ 4,035</u>

The cash received from bank loans is a positive cash flow—financing activity—in the statement of cash flows, but is not included in the income statement. Dividends paid to stockholders are a negative cash flow—financing activity—in the statement of cash flows, but are not included in the income statement.

Ex. 2.13

YARNELL COMPANY	
Income Statement	
For the Month Ended August 31, 2011	
Service revenues	\$ 15,000
Expenses	<u>7,800</u>
Net income	<u>\$ 7,200</u>

The following four items represent cash flows, but are not revenues or expenses that should be included in the income statement:

- Investment by stockholders
- Loan from bank
- Payments to long-term creditors
- Purchase of land

Ex. 2.14

YARNELL COMPANY
Statement of Cash Flows
For the Month Ended August 31, 2011

Cash flows from operating activities:		
Cash received from revenues	\$ 15,000	
Cash paid for expenses	<u>(7,800)</u>	
Net cash provided by operating activities		7,200
Cash flows from investing activities:		
Cash paid for purchase of land		(16,000)
Cash flows from financing activities:		
Cash received from bank loan	\$ 15,000	
Cash received from investment by stockholders	5,000	
Cash paid to long-term creditors	<u>(11,700)</u>	
		<u>8,300</u>
Decrease in cash		\$ (500)
Cash balance, August 1, 2011		<u>7,200</u>
Cash balance, August 31, 2011		<u><u>6,700</u></u>

Ex. 2.15 *Note to instructor:* Many examples of steps to improve the financial statements could be cited. The ones listed below are those that the authors believe are most likely to be identified by students.

Steps to Window Dress	Impact on Financial Statements*
Delay cash payment of expenses at year-end (assume expense already incurred)	BS—Higher cash balance IS—No impact SCF—Higher cash from operating activities
Accelerate payment of liabilities at year-end	BS—Reduced cash and liability balances IS—No impact SCF—Lower cash balance
Delay purchase of equipment (or other noncurrent asset)	BS—Higher cash balance IS—No impact SCF—Lower cash used in investing activities
Year-end investment by owner	BS—Higher cash and owners' equity balances IS—No impact SCF—Higher cash flow from financing activities
Year-end borrowing	BS—Higher cash and liability balances IS—No impact SCF—Higher cash flow from financing activities
Acceleration of credit sales at year-end	BS—Higher receivables and owners' equity balances IS—Higher sales and net income SCF—No impact (assuming receivables not

*BS = Balance sheet; IS = Income statement; SCF = Statement of cash flows

- Ex. 2.16**
- a. The company has a net income (earnings) of \$2,661 million for the year ended January 31, 2010.
 - b. Cash balances at the beginning and end of the year were:
End \$1,421 million
Beginning \$519 million

The two largest causes of decreases in cash during the year were repayment of long-term debt (\$1774 million) and cash dividends to stockholders (\$1525 million).

- c. The largest asset is buildings (\$17,391 million before depreciation) followed by merchandise inventory (\$10,188 million). The largest liability is long-term debt (\$8,662 million), followed by accounts payable (\$4,863 million).

Ex. 2.17 Net income as a percentage of revenue for each year is as follows:

2007: $\$913/\$92,977 = .98\%$

2008: $\$990/\$101,703 = .97\%$

2009: $\$823/\$106,632 = .77\%$

The trend is negative. In all three years, the percentage of net income to revenues is less than 1%. It declines from just below 1% (.98) in 2007 to .77% in 2009, a decline of between 21% and 22%. Despite this negative trend in the percentage of net income to revenue, the absolute dollar amounts of net income--\$913 million in 2007, \$990 million in 2008, and \$823 million in 2009--are quite large.

SOLUTIONS TO PROBLEMS SET A

PROBLEM 2.1A

SMOKEY MOUNTAIN LODGE

15 Minutes, Easy

a.

SMOKEY MOUNTAIN LODGE			
Balance Sheet			
December 31, 2011			
Assets		Liabilities & Owners' Equity	
Cash	\$ 31,400	Liabilities:	
Accounts receivable	10,600	Accounts payable	\$ 54,800
Land	425,000	Salaries payable	33,500
Buildings	450,000	Interest payable	12,000
Furnishings	58,700	Notes payable	620,000
Equipment	39,200		\$ 720,300
Snowmobiles	15,400	Owners' equity:	
		Capital stock	135,000
		Retained earnings (1)	175,000
Total	\$ 1,030,300	Total	\$ 1,030,300
(1) Computed as total assets, \$1,030,300, less total liabilities, \$720,300, less capital stock, \$ 135,000.			

- b. The balance sheet indicates that Smokey Mountain Lodge is in a weak financial position. The highly liquid assets—cash and receivables—total only \$42,000, but the company has \$100,300 of debts due in the near future (accounts payable, salaries payable, and interest payable).

Note to instructor: Students were asked to base their answers to part *b* on the balance sheet alone. Students may correctly point out that a balance sheet does not indicate the rate at which cash flows into a business. Perhaps the company can generate enough cash from daily operations to pay its debts. A recent statement of cash flows would be useful in making a more complete analysis of the company's financial position.

15 Minutes, Easy

PROBLEM 2.2A AJAX MOVING COMPANY

Description of transactions:

- a. Purchased equipment for cash at a cost of \$3,200.
- b. Received \$900 cash from collection of accounts receivable.
- c. Purchased equipment at a cost of \$13,500; paid \$3,500 cash as down payment and incurred a liability (account payable) for the remaining \$10,000.
- d. Paid \$14,500 of accounts payable.
- e. \$15,000 cash was received from the sale of capital stock.
- f. Purchased equipment on account for \$7,500.

PROBLEM 2.5A HERE COME THE CLOWNS!

a.

HERE COME THE CLOWNS!			
Balance Sheet			
June 30, 2011			
Assets		Liabilities & Owners' Equity	
Cash *	\$ 32,520	Liabilities:	
Notes receivable	9,500	Notes payable	\$ 180,000
Accounts receivable	7,450	Accounts payable	26,100
Animals	189,060	Salaries payable	9,750
Cages	24,630	Total liabilities	\$ 215,850
Costumes	31,500	Owners' equity:	
Props and equipment	89,580	Capital stock	310,000
Tents	63,000	Retained earnings	27,230
Trucks & wagons	105,840		
Total	\$ 553,080	Total	\$ 553,080

* Total liabilities and owners' equity, \$553,080, minus total of all other assets, \$520,560 (\$9,500 + \$7,450 + \$189,060 + \$24,630 + \$31,500 + \$89,580 + \$63,000 + \$105,840).

- b. The loss of an asset, Tents, from a fire would require a revised balance sheet that reflects a decrease in total assets. When total assets are decreased, the other balance sheet total (that is, the total of liabilities and owners' equity) must also decrease. Since there is no change in liabilities as a result of the destruction of an asset, the decrease on the right-hand side of the balance sheet must be in owners' equity---specifically, the retained earnings account. The amount of the decrease in the assets Tents, in Retained earnings, and in both balance sheet totals, is \$14,300.

PROBLEM 2.6A WILSON FARMS, INC.

a.

WILSON FARMS, INC.			
Balance Sheet			
September 30, 2011			
Assets		Liabilities & Owners' Equity	
Cash	\$ 16,710	Liabilities:	
Accounts receivable	22,365	Notes payable	\$ 330,000
Land	490,000	Accounts payable	77,095
Barns and sheds	78,300	Property taxes payable	9,135
Citrus trees	76,650	Wages payable	5,820
Livestock	120,780	Total liabilities	\$ 422,050
Irrigation system	20,125	Owners' equity:	
Farm machinery	42,970	Capital stock	290,000
Fences & gates	33,570	Retained earnings *	189,420
Total	\$ 901,470	Total	\$ 901,470

*Total assets, \$901,470, minus total liabilities, \$422,050, less capital stock, \$290,000.

- b. The loss of an asset, Barns and Sheds, from a tornado would cause a decrease in total assets. When total assets are decreased, the balance sheet total of liabilities and owners' equity must also decrease. Since there is no change in liabilities as a result of the destruction of an asset, the decrease on the right-hand side of the balance sheet must be in the retained earnings account. The amount of the decrease in Barns and Sheds, in the owners' equity, and in both balance sheet totals, is \$13,700.

PROBLEM 2.7A THE OVEN BAKERY

a.

THE OVEN BAKERY			
Balance Sheet			
August 1, 2011			
Assets		Liabilities & Owners' Equity	
Cash	\$ 6,940	Liabilities:	
Accounts receivable	11,260	Notes payable	\$ 74,900
Supplies	7,000	Accounts payable	16,200
Land	67,000	Salaries payable	8,900
Building	84,000	Total liabilities	\$ 100,000
Equipment & fixtures	44,500	Owners' equity:	
		Capital stock	80,000
		Retained earnings *	40,700
Total	\$ 220,700	Total	\$ 220,700

*Retained earnings (\$40,700) = Total assets (\$220,700), less total liabilities (\$100,000) and capital stock (\$80,000).

b.

THE OVEN BAKERY			
Balance Sheet			
August 3, 2011			
Assets		Liabilities & Owners' Equity	
Cash	\$ 14,490	Liabilities:	
Accounts receivable	11,260	Notes payable	\$ 74,900
Supplies	8,250	Accounts payable	7,200
Land	67,000	Salaries payable	8,900
Building	84,000	Total liabilities	\$ 91,000
Equipment & fixtures	51,700	Owners' equity:	
		Capital stock	105,000
		Retained earnings	40,700
Total	\$ 236,700	Total	\$ 236,700

PROBLEM 2.7A THE OVEN BAKERY (concluded)

THE OVEN BAKERY		
Statement of Cash Flows		
For the Period August 1-3, 2011		
Cash flows from operating activities:		
Cash payment of accounts payable	\$ (16,200)	
Cash purchase of supplies	(1,250)	
Cash used in operating activities:		\$ (17,450)
Cash flows from investing activities:		
None		
Cash flows from financing activities:		
Sale of capital stock		\$ 25,000
Increase in cash		\$ 7,550
Cash balance, August 1, 2011		6,940
Cash balance, August 3, 2011		\$ 14,490

c. The Oven Bakery is in a stronger financial position on August 3 than it was on August 1.

On August 1, the highly liquid assets (cash and accounts receivable) total only \$18,200, but the company has \$25,100 in debts due in the near future (accounts payable plus salaries payable).

On August 3, after additional infusion of cash from the sale of stock, the liquid assets total \$25,750, and debts due in the near future amount to \$16,100.

Note to instructor: The analysis of financial position strength in part c is based solely upon the balance sheets at August 1 and August 3. Students may raise the issue regarding necessity of information about operations, and the rate at which cash flows into the business, etc. In this problem, the improvement in financial position results solely from the sale of capital stock.

PROBLEM 2.8A THE SWEET SODA SHOP

a.

THE SWEET SODA SHOP			
Balance Sheet			
September 30, 2011			
Assets		Liabilities & Owners' Equity	
Cash	\$ 7,400	Liabilities:	
Accounts receivable	1,250	Notes payable *	\$ 70,000
Supplies	3,440	Accounts payable	8,500
Land	55,000	Total liabilities	\$ 78,500
Building	45,500	Owners' equity:	
Furniture and fixtures	20,000	Capital stock	50,000
		Retained earnings	4,090
Total	\$ 132,590	Total	\$ 132,590

*Total assets, \$132,590 less owners' equity, \$54,090 less accounts payable, \$8,500, equals notes payable.

b.

THE SWEET SODA SHOP			
Balance Sheet			
October 6, 2011			
Assets		Liabilities & Owners' Equity	
Cash	\$ 29,400	Liabilities:	
Accounts receivable	1,250	Notes payable	\$ 70,000
Supplies	4,440	Accounts payable	18,000
Land	55,000	Total liabilities	\$ 88,000
Building	45,500	Owners' equity:	
Furniture and fixtures	38,000	Capital stock	80,000
		Retained earnings	5,590
Total	\$ 173,590	Total	\$ 173,590

THE SWEET SODA SHOP	
Income Statement	
For the Period October 1-6, 2011	
Revenues	\$ 5,500
Expenses	(4,000)
Net income	\$ 1,500

PROBLEM 2.8A
THE SWEET SODA SHOP (concluded)

THE SWEET SODA SHOP		
Statement of Cash Flows		
For the Period October 1-6, 2011		
Cash flows from operating activities:		
Cash received from revenues	\$ 5,500	
Cash paid for expenses	(4,000)	
Cash paid for accounts payable	(8,500)	
Cash paid for supplies	(1,000)	
Cash used in operating activities		\$ (8,000)
Cash flows from investing activities:		
None		
Cash flows from financing activities:		
Cash received from sale of capital stock		\$ 30,000
Increase in cash		\$ 22,000
Cash balance, October 1, 2011		7,400
Cash balance, October 6, 2011		\$ 29,400

- c. The Sweet Soda Shop is in a *stronger* financial position on October 6 than on September 30. On September 30, the company had highly liquid assets (cash and accounts receivable) of \$8,650, which barely exceeded the \$8,500 in liabilities (accounts payable) due in the near future. On October 6, after the additional investment of cash by stockholders, the company's cash alone exceeded its short-term obligations.

PROBLEM 2.9A BERKELEY PLAYHOUSE

a.

BERKELEY PLAYHOUSE			
Balance Sheet			
September 30, 2011			
Assets		Liabilities & Owner's Equity	
Cash	\$ 16,900	Liabilities:	
Accounts receivable	7,200	Notes payable	\$ 15,000
Props and costumes	18,000	Accounts payable	3,900
Lighting equipment	9,400	Salaries payable	\$ 4,200
		Total liabilities	\$ 23,100
		Owner's equity:	
		Helen Berkeley, capital	28,400
Total	\$ 51,500	Total	\$ 51,500

- b. (1) The cash in Berkeley's personal savings account is not an asset of the business entity Berkeley Playhouse. Therefore, it should not appear in the balance sheet of the business. The money on deposit in the business bank account (\$15,000) and in the company safe (\$1,900) constitute cash owned by the business. It is not necessary to state separately in the balance sheet amounts of cash at different locations; thus, the cash owned by the business at September 30 totals \$16,900.
- (2) Only the amount receivable from Artistic Tours (\$7,200) should be included in the company's accounts receivable as of September 30. The amounts expected from future tickets sales do not relate to completed transactions and are not yet assets of the business.
- (3) The props and costumes should be shown in the balance sheet at their cost, \$18,000, not at just the portion of the cost that was paid in cash. The \$15,000 note payable is a debt of the business arising from a completed purchase transaction. Therefore, it should be included among the company's liabilities. The date at which this liability must be paid is not relevant.
- (4) The theater building is not owned by Berkeley Playhouse. Therefore, it is not an asset of this business entity and should not appear in the balance sheet.
- (5) The lighting equipment is an asset of the business and should be presented in the balance sheet at its cost, \$9,400.
- (6) As the automobile is not used in the business, it appears to be Berkeley's personal asset rather than an asset of the business entity. Therefore, it should not be included in the balance sheet of the business. (Note: The advertised sales price of a similar automobile is not an appropriate valuation figure even if the automobile were to be included.)
- (7) The accounts payable should be limited to the debts of the business, \$3,900, and should not include Berkeley's personal liabilities.

PROBLEM 2.9A

BERKELEY PLAYHOUSE (concluded)

- (8) The amount owed to stagehands for work done through September 30 is the result of completed transactions and should be included among the liabilities of the business. Even if agreement has been reached with Mario Dane for him to perform in a future play, he has not yet performed and therefore, is not yet owed any money. Thus, this \$25,000 is not yet a liability of the business.
- (9) Owner's equity is not valued at either the original amount invested or at the estimated market value of the business. In fact, owner's equity cannot be valued independently of the amounts assigned to assets and liabilities. Rather, it is a residual figure—the excess of total assets over total liabilities. (If liabilities exceed assets, owner's equity would be a negative amount.) Thus, the amount of Berkeley's capital should be determined by subtracting the corrected figure for total liabilities (\$23,100) from the corrected amount of total assets (\$51,500). This indicates owner's equity of \$28,400.

a.

BIG SCREEN SCRIPTS			
Balance Sheet			
November 30, 2011			
Assets		Liabilities & Owner's Equity	
Cash	\$ 3,940	Liabilities:	
Notes receivable	2,200	Notes payable	\$ 73,500
Accounts receivable	2,450	Accounts payable	32,700
Land	39,000	Total liabilities	\$ 106,200
Building	54,320	Owner's equity:	
Office furniture*	12,825	Capital stock	5,000
		Retained earnings *	3,535
Total	\$ 114,735	Total	\$ 114,735
* \$8,850 + \$6,500 - \$2,525.			

* Total assets (\$114,735), Less (Total Liabilities, \$106,200, + Capital Stock, \$5,000)

- b. (1) The cash in Pippin's personal savings account is not an asset of the business entity Big Screen Scripts and should not appear in the balance sheet of the business. The money on deposit in the business bank account (\$3,400) and in the company safe (\$540) constitute cash owned by the business. Thus, the cash owned by the business at November 30 is \$3,940.
- (2) The years-old IOU does not qualify as a business asset for two reasons. First, it does not belong to the business entity. Second, it appears to be uncollectible. A receivable that cannot be collected is not viewed as an asset, as it represents no future economic benefit.
- (3) The total amount to be included in "Office furniture" for the rug is \$9,400, the total cost, regardless of whether this amount was paid in cash. Consequently, "Office furniture" should be increased by \$6,500. The \$6,500 liability arising from the purchase of the rug came into existence prior to the balance sheet date and must be added to the "Notes payable" amount.
- (4) The computer is no longer owned by Big Screen Scripts and therefore cannot be included in the assets. To do so would cause an overstatement of both assets and owner's equity. The "Office furniture" amount must be reduced by \$2,525.
- (5) The \$22,400 described as "Other assets" is not an asset, because there is no valid legal claim or any reasonable expectation of recovering the income taxes paid. Also, the payment of federal income taxes by Pippin was not a business transaction by Big Screen Scripts. If a refund were obtained from the government, it would come to Pippin personally, not to the business entity.
- (6) The proper valuation for the land is its historical cost of \$39,000, the amount established by the transaction in which the land was purchased. Although the land may have a current fair value in excess of its cost, the offer by the friend to buy the land if Pippin would move the building appears to be mere conversation rather than solid, verifiable evidence of the fair value of the land. The "cost principle," although less than perfect, produces far more reliable financial statements than would result if the owners could "pull figures out of the air" in recording asset values.
- (7) The accounts payable should be limited to the debts of the business, \$32,700, and should not include Pippin's personal liabilities.

SOLUTIONS TO PROBLEMS SET B

15 Minutes, Easy

PROBLEM 2.1B DEEP RIVER LODGE

a.

DEEP RIVER LODGE			
Balance Sheet			
December 31, 2011			
Assets		Liabilities & Owners' Equity	
Cash	\$ 9,100	Liabilities:	
Accounts receivable	3,300	Accounts payable	\$ 27,400
Land	140,000	Salaries payable	13,200
Buildings	430,000	Interest payable	4,000
Furnishings	22,600	Notes payable	217,000
Equipment	9,000		\$ 261,600
		Owners' equity:	
		Capital stock (1)	150,000
		Retained earnings	202,400
Total	\$ 614,000	Total	\$ 614,000
(1) Computed as total assets, \$614,000, less total liabilities, \$261,600, less retained earnings,			
\$202,400			

b. The balance sheet indicates that Deep River Lodge is in a weak financial position. The highly liquid assets—cash and receivables—total only \$12,400, but the company has \$44,600 of debts due in the near future (accounts payable, salaries payable, and interest payable). Based upon this balance sheet, the company appears to be insolvent.

Note to instructor: Students were asked to base their answers to part *b* on the balance sheet alone. Students may correctly point out that a balance sheet does not indicate the rate at which cash flows into a business. Perhaps the company can generate enough cash from daily operations to pay its debts. A recent statement of cash flows would be useful in making a more complete analysis of the company's financial position.

15 Minutes, Easy

PROBLEM 2.2B BRIGAL COMPANY

Description of transactions:

- a. Purchased furniture for cash at a cost of \$800.**
- b. Received \$500 cash from collection of accounts receivable.**
- c. Purchased furniture at a cost of \$5,000; paid \$3,000 cash as down payment and incurred a liability (account payable) for the remaining \$2,000.**
- d. Paid \$2,000 of accounts payable.**
- e. \$10,000 cash was received from the sale of capital stock.**
- f. Purchased furniture on account for \$3,000.**

PROBLEM 2.5B CIRCUS WORLD

a.

CIRCUS WORLD			
Balance Sheet			
June 30, 2011			
Assets		Liabilities & Owners' Equity	
Cash *	\$ 9,150	Liabilities:	
Notes receivable	1,200	Notes payable	\$ 115,000
Accounts receivable	5,600	Accounts payable	25,000
Animals	310,000	Salaries payable	1,250
Cages	15,000	Total liabilities	\$ 141,250
Costumes	16,000	Owners' equity:	
Props and equipment	108,000	Capital stock	400,000
Tents	40,000	Retained earnings	89,000
Trucks & wagons	125,300		
Total	\$ 630,250	Total	\$ 630,250

* Total liabilities and owners' equity, \$630,250, minus total of all other assets, \$621,100.

- b. The loss of an asset, Tents, from a fire would require a revised balance sheet that reflects a decrease in total assets. When total assets are decreased, the other balance sheet total (that is, the total of liabilities and owners' equity) must also decrease. Since there is no change in liabilities as a result of the destruction of an asset, the decrease on the right-hand side of the balance sheet must be in owners' equity—specifically, the retained earnings account. The amount of the decrease in the assets Tents, in Retained earnings, and in both balance sheet totals, is \$10,000.

PROBLEM 2.6B APPLE VALLEY FARMS

a.

APPLE VALLEY FARMS			
Balance Sheet			
September 30, 2011			
Assets		Liabilities & Owners' Equity	
Cash	\$ 9,300	Liabilities:	
Accounts receivable	15,000	Notes payable	\$ 65,000
Land	50,000	Accounts payable	8,100
Barns and sheds	19,100	Property taxes payable	4,700
Apple trees	84,000	Wages payable	1,200
Livestock	5,000	Total liabilities	\$ 79,000
Irrigation system	10,200	Owners' equity:	
Farm machinery	20,000	Capital stock	100,000
Fences & gates	14,100	Retained earnings *	47,700
Total	\$ 226,700	Total	\$ 226,700

*Total assets, \$226,700, minus total liabilities, \$79,000, less capital stock, \$100,000.

- b. The loss of an asset, Barns and Sheds, from a tornado would cause a decrease in total assets. When total assets are decreased, the balance sheet total of liabilities and owners' equity must also decrease. Since there is no change in liabilities as a result of the destruction of an asset, the decrease on the right-hand side of the balance sheet must be in the retained earnings account. The amount of the decrease in Barns and sheds, in the owners' equity, and in both balance sheet totals, is \$4,500.

PROBLEM 2.7B THE CITY BUTCHER

a.

THE CITY BUTCHER			
Balance Sheet			
July 1, 2011			
Assets		Liabilities & Owners' Equity	
Cash	\$ 4,100	Liabilities:	
Accounts receivable	8,200	Notes payable	\$ 40,000
Supplies	7,000	Accounts payable	7,000
Land	50,000	Salaries payable	3,700
Building	90,000	Total liabilities	\$ 50,700
Equipment & fixtures	25,000	Owners' equity:	
		Capital stock	100,000
		Retained earnings *	33,600
Total	\$ 184,300	Total	\$ 184,300

*Retained earnings (\$33,600) = Total assets (\$184,300), less total liabilities (\$50,700) + capital stock (\$100,000).

b.

THE CITY BUTCHER			
Balance Sheet			
July 5, 2011			
Assets		Liabilities & Owners' Equity	
Cash	\$ 26,100	Liabilities:	
Accounts receivable	8,200	Notes payable	\$ 40,000
Supplies	8,000	Accounts payable	6,000
Land	50,000	Salaries payable	3,700
Building	90,000	Total liabilities	\$ 49,700
Equipment & fixtures	31,000	Owners' equity:	
		Capital stock	130,000
		Retained earnings	33,600
Total	\$ 213,300	Total	\$ 213,300

PROBLEM 2.7B THE CITY BUTCHER (concluded)

THE CITY BUTCHER		
Statement of Cash Flows		
For the Period July 1-5, 2011		
Cash flows from operating activities:		
Cash payment of accounts payable	\$ (7,000)	
Cash purchase of supplies	(1,000)	
Cash used in operating activities		\$ (8,000)
Cash flows from investing activities:		
None		
Cash flows from financing activities:		
Sale of capital stock		\$ 30,000
Increase in cash		\$ 22,000
Cash balance, July 1, 2011		4,100
Cash balance, July 5, 2011		\$ 26,100

- c. The City Butcher is in a stronger financial position on July 5 than it was on July 1.

On July 1, the highly liquid assets (cash and accounts receivable) total only \$12,300, but the company has \$10,700 in debts due in the near future (accounts payable plus salaries payable).

On July 5, after additional infusion of cash from the sale of stock, the liquid assets total \$34,300, and debts due in the near future amount to \$9,700.

Note to instructor: The analysis of financial position strength in part c is based solely upon the balance sheets at July 1 and July 5. Hopefully, students will raise the issue regarding necessity of information about operations, and the rate at which cash flows into the business, etc. In this problem, the improvement in financial position results solely from the sale of capital stock.

PROBLEM 2.8B THE CANDY SHOP

a.

THE CANDY SHOP			
Balance Sheet			
September 30, 2011			
Assets		Liabilities & Owners' Equity	
Cash	\$ 6,900	Liabilities:	
Accounts receivable	5,000	Notes payable *	\$ 50,000
Supplies	3,000	Accounts payable	6,800
Land	72,000	Total liabilities	\$ 56,800
Building	80,000	Owners' equity:	
Furniture and fixtures	9,000	Capital stock	100,000
		Retained earnings	19,100
Total	\$ 175,900	Total	\$ 175,900

*Total assets, \$175,900 less owners' equity, \$119,100 less accounts payable, \$6,800, equals notes payable.

b.

THE CANDY SHOP			
Balance Sheet			
October 6, 2011			
Assets		Liabilities & Owners' Equity	
Cash	\$ 34,000	Liabilities:	
Accounts receivable	5,000	Notes payable	\$ 50,000
Supplies	3,900	Accounts payable	8,000
Land	72,000	Total liabilities	\$ 58,000
Building	80,000	Owners' equity:	
Furniture and fixtures	17,000	Capital stock	130,000
		Retained earnings	23,900
Total	\$ 211,900	Total	\$ 211,900

THE CANDY SHOP	
Income Statement	
For the Period October 1-6, 2011	
Revenues	\$ 8,000
Expenses	(3,200)
Net income	\$ 4,800

PROBLEM 2.8B
THE CANDY SHOP (concluded)

THE CANDY SHOP		
Statement of Cash Flows		
For the Period October 1-6, 2011		
Cash flows from operating activities:		
Cash received from revenues	\$ 8,000	
Cash paid for expenses	(3,200)	
Cash paid for accounts payable	(6,800)	
Cash paid for supplies	(900)	
Cash used in operating activities		\$ (2,900)
Cash flows from investing activities:		
None		
Cash flows from financing activities:		
Cash received from sale of capital stock		\$ 30,000
Increase in cash		\$ 27,100
Cash balance, October 1, 2011		6,900
Cash balance, October 6, 2011		\$ 34,000

- c. The Candy Shop is in a *stronger* financial position on October 6 than on September 30. On September 30, the company had highly liquid assets (cash and accounts receivable) of \$11,900, compared to \$6,800 in liabilities (accounts payable) due in the near future. On October 6, after the additional investment of cash by stockholders, the company's cash alone exceeded its short-term obligations by a substantial amount.

PROBLEM 2.9B OLD TOWN PLAYHOUSE

a.

OLD TOWN PLAYHOUSE			
Balance Sheet			
September 30, 2011			
Assets		Liabilities & Owner's Equity	
Cash	\$ 18,400	Liabilities:	
Accounts receivable	10,000	Notes payable	\$ 15,000
Props and costumes	18,000	Accounts payable	6,000
Lighting equipment	10,000	Salaries payable	\$ 2,000
		Total liabilities	\$ 23,000
		Owner's equity:	
		Howard Jaffe, capital	33,400
Total	\$ 56,400	Total	\$ 56,400

- b. (1) The cash in Jaffe's personal savings account is not an asset of the business entity Old Town Playhouse. Therefore, it should not appear in the balance sheet of the business. The money on deposit in the business bank account (\$16,000) and in the company safe (\$2,400) constitute cash owned by the business. It is not necessary to state separately in the balance sheet amounts of cash at different locations; thus, the cash owned by the business at September 30 totals \$18,400.
- (2) Only the amount receivable from Dell, Inc. (\$10,000) should be included in the company's accounts receivable as of September 30. The amounts expected from future tickets sales do not relate to completed transactions and are not yet assets of the business.
- (3) The props and costumes should be shown in the balance sheet at their cost, \$18,000, not at just the portion of the cost that was paid in cash. The \$15,000 note payable is a debt of the business arising from a completed purchase transaction. Therefore, it should be included among the company's liabilities. The date at which this liability must be paid is not relevant.
- (4) The theater building is not owned by Old Town Playhouse. Therefore, it is not an asset of this business entity and should not appear in the balance sheet.
- (5) The lighting equipment is an asset of the business and should be valued in the balance sheet at its cost, \$10,000.
- (6) As the automobile is not used in the business, it appears to be Jaffe's personal asset rather than an asset of the business entity. Therefore, it should not be included in the balance sheet of the business. (Note: The advertised sales price of a similar automobile would not be an appropriate valuation figure even if the automobile were to be included.)
- (7) The accounts payable should be limited to the debts of the business, \$6,000, and should not include Jaffe's personal liabilities.

PROBLEM 2.9B

OLD TOWN PLAYHOUSE (concluded)

- (8) The amount owed to stagehands for work done through September 30 is the result of completed transactions and should be included among the liabilities of the business. Even if agreement has been reached with Robin Needelman for her to perform in a future play, she has not yet performed and, therefore, is not yet owed any money. Thus, this \$30,000 is not yet a liability of the business.
- (9) Owner's equity is not valued at either the original amount invested or at the estimated market value of the business. In fact, owner's equity cannot be valued independently of the values assigned to assets and liabilities. Rather, it is a residual figure—the excess of total assets over total liabilities. (If liabilities exceed assets, owner's equity would be a negative amount.) Thus, the amount of Jaffe's capital should be determined by subtracting the corrected figure for total liabilities (\$23,000) from the corrected amount of total assets (\$56,400). This indicates owner's equity of \$33,400.

a.

HIT SCRIPTS			
Balance Sheet			
November 30, 2011			
Assets		Liabilities & Owner's Equity	
Cash	\$ 3,200	Liabilities:	
Notes receivable	3,400	Notes payable	\$ 72,500
Accounts receivable	3,000	Accounts payable	30,000
Land	15,000	Total liabilities	\$ 102,500
Building	75,000	Owner's equity:	
Office furniture *	16,300	Capital stock	10,000
		Retained earnings	3,400
Total	\$ 115,900	Total	\$ 115,900
* \$9,600 + \$7,500 - \$800.			

- b. (1) The cash in Joe's personal savings account is not an asset of the business entity Hit Scripts and should not appear in the balance sheet of the business. The money on deposit in the business bank account (\$2,000) and in the company safe (\$1,200) constitute cash owned by the business. Thus, the cash owned by the business at November 30 totals \$3,200.
- (2) The years-old IOU does not qualify as a business asset for two reasons. First, it does not belong to the business entity. Second, it appears to be uncollectible. A receivable that cannot be collected is not viewed as an asset, as it represents no future economic benefit.
- (3) The total amount to be included in "Office furniture" for the rug is \$10,000, the total cost, regardless of whether this amount was paid in cash. Consequently, "Office furniture" should be increased by \$7,500. The \$7,500 liability arising from the purchase of the rug came into existence prior to the balance sheet date and must be added to the "Notes payable" amount.
- (4) The computer is no longer owned by Hit Scripts and therefore cannot be included in the assets. To do so would cause an overstatement of both assets and owner's equity. The "Office furniture" amount must be reduced by \$800.
- (5) The \$25,000 described as "Other assets" is not an asset, because there is no valid legal claim or any reasonable expectation of recovering the income taxes paid. Also, the payment of federal income taxes by Debit was not a business transaction by Hit Scripts. If a refund were obtained from the government, it would come to Joe personally, not to the business entity.
- (6) The proper valuation for the land is its historical cost of \$15,000, the amount established by the transaction in which the land was purchased. Although the land may have a current fair value in excess of its cost, the offer by the friend to buy the land if Joe would move the building appears to be mere conversation rather than solid, verifiable evidence of the fair value of the land. The "cost principle," although less than perfect, produces far more reliable financial statements than would result if owners could "pull figures out of the air" in recording asset values.
- (7) The accounts payable should be limited to the debts of the business, \$30,000, and should not include Joe's personal liabilities.

SOLUTIONS TO CRITICAL THINKING CASES

30 Minutes, Medium

CASE 2.1 CONTENT OF A BALANCE SHEET

This case requires students to prepare a hypothetical balance sheet for an entity to be specified by the instructor. Therefore, we cannot provide a “solution.”

The purpose of the case is to challenge students to think about the types of assets *necessary* to the operation of a specific type of business entity and also about the liabilities that are likely to exist. We find this case is very useful, but it requires reasonably sophisticated students. The case also lends itself well to classroom discussion.

We recommend assigning an entity that is either unusual in nature (such as a circus, a zoo, or a riverboat cruise company), or one that is prominent in the local economy. Service-type companies are most appropriate, as students have not yet been introduced to inventories.

It is helpful if the instructor has an annual report for the type of entity selected. However, students are *not* to locate an actual annual report prior to preparing their solutions; they are to develop their *own thoughts* as to a realistic asset mix and capital structure.

30 Minutes, Strong

CASE 2.2 USING FINANCIAL STATEMENTS

This case is intended to acquaint students with the financial statements and annual report of a publicly held company of their (or your) choice. As students will select various reports, we cannot provide a solution. Although this case is unstructured, most students find it very interesting. It makes the introduction to the financial reporting process real.

Note to instructor: From a practical point of view, the usefulness of this case is dependent upon the ready availability to students of annual reports. Most large libraries have a substantial file of annual reports. Also, many companies' financial statements are readily available on the Internet. In our classes, we hand out annual reports from our own collection. (The reports need not be current—most any will do.) After students have completed the case, we discuss in class various features of the reports and the financial reporting process. (If you use your own reports, remember to retrieve them quickly.)

Our 30-minute time estimate is adequate for answering the questions raised in the case, but it does not provide for time that a student may spend in locating an annual report.

- a. Bankers considering a loan application are particularly interested in the ability of the company to pay its debts. They want to make loans that will be repaid promptly and in full at the agreed maturity date. Therefore, they give close attention to the amount of cash and other assets (such as accounts receivable) that will soon become cash. They compare these assets with the amount of existing liabilities of the company that become due in the near future. On this criterion, Moon Corporation appears superior to Star Corporation; its cash and receivables total \$44,000, which is two times the \$22,000 of notes payable and accounts payable combined. Star Corporation, on the other hand, has only \$14,400 of cash and accounts receivable compared with notes and accounts payable of \$65,600. Star Corporation may be insolvent or close to it. Certainly Moon Corporation would appear to have greater debt-paying ability in the near future.

A banker is also interested in the amount of owners' equity, since this ownership capital serves as a protecting buffer between the banker and any losses that may befall the business. Although Star Corporation has greater owners' equity than Moon Corporation, the difference is relatively small. Relating the owners' equity of the businesses to their total liabilities shows that Moon Corporation has owners' equity over four times the \$22,000 owed to creditors of the business. Star Corporation shows \$116,800 of owners' equity compared to \$65,600 of liabilities, or almost two times the creditors' claims. Since the two companies were recently organized, the balances in the retained earnings accounts indicate that both companies are off to a profitable start. On balance, a banker would probably consider Moon Corporation to be the better prospect for a loan.

- b. As an investor, you would probably be willing to pay a higher price to buy the capital stock of Star Corporation. Since both companies are newly organized and the cost of assets shown on the balance sheet approximates fair market value, we can assume in this case that total stockholders' equity is a reasonable indication of the fair market value of the capital stock. The total stockholders' equity you would acquire by buying the capital stock of Star Corporation is \$18,400 greater than the equity you would acquire by buying the capital stock of Moon Corporation ($\$116,800 - \$98,400 = \$18,400$).

An important consideration for an investor interested in Star Corporation is that it may be necessary to invest a *significant additional amount of cash in the business in the near future* to enable the company to pay the large note payable due in 60 days. Unless the investor has the resources to make any necessary additional investments in the business, he or she should not buy the capital stock of Star Corporation.

An investor would be interested in the earnings prospects of the companies, but no income statements or other information on income potential are provided in the case. Profitability of the two companies cannot really be compared by the balances in the retained earnings accounts, because either company may have earned profits that were distributed to the stockholders as dividends rather than being retained in the business.

CASE 2.4 USING STATEMENTS OF CASH FLOW

- a. John's preliminary evaluation is focusing too much on the "bottom line" and not looking at the details of the cash flow information. The most important difference between the cash flows of the two companies is the fact that Morris, Inc. has strong operating cash flows while Walker Company has declining operating cash flows that are even negative in 2011. This indicates considerable weakness for Walker Company in terms of being able to generate cash flows on an ongoing basis in the future.

Another important difference is that Morris, Inc. is building its investment in assets each year, which probably bodes well for that company's future. Walker Company, on the other hand, invested in assets in 2009 and 2010, but in 2011, the company sold assets in order to maintain its current level of cash.

- b. One possibility is that Walker Company ran out of financing in 2011. We do not know the source of its positive cash flows from financing activities in 2009 and 2010, but most likely it was from loans or investments by owner(s). One reasonable interpretation is that these sources were no longer available in 2011, requiring the company to sell assets.
- c. General recommendations to John should include the following:
- Look at the underlying details of financial statements, not just the final figures or bottom line.
 - There are important differences in the various sources of cash. Generally, strong cash from operations is important to sustain business activity in the future.
 - Negative cash flows from investing and financing activities are not necessarily bad. In the case of investing activities, this means that the company is building a strong asset base for the future. In the case of financing activities, this means the company is reducing its debt (possibly but less likely its equity) and thereby relieving future cash flows from those payments.

CASE 2.5
ETHICS AND WINDOW DRESSING

1. Postponing the cash purchase of WordMaster would indeed leave Omega Software with an additional \$8 million in cash at year-end, which would make the company appear more liquid. There is nothing illegal or unethical about postponing this transaction. However, the fact that Omega makes a major cash expenditure of this nature shortly after the balance sheet date would have to be *disclosed* in notes accompanying the financial statements. Users of the statements would need to be aware both of Omega's cash outlay and of its acquisition of WordMaster in order to interpret the year-end statements properly.
2. The deliberate omission of liabilities from the balance sheet would be unethical and illegal. This action would be in direct violation of the federal securities laws, and the responsible officers would probably face criminal charges. Further, the idea that no one would know is incorrect. The company's independent auditors would definitely discover a misrepresentation of this magnitude and would insist upon the statements being corrected. Otherwise, the auditor's report would alert the SEC as well as users of the financial statements to the misrepresentation.
3. There is nothing unethical or illegal about renegotiating the due date of a liability. In fact, as Omega needs to borrow money anyway, extending this obligation to Delta at a 12% interest rate may be a good idea. The due date of this liability may require disclosure in notes to the financial statements, but creditors will consider Omega more solvent if this liability is due in one year rather than due within 90 days.
4. The intentional violation of generally accepted accounting principles with the intent to mislead financial statement users is both unethical and illegal. According to generally accepted accounting principles, corporations prepare their financial statements in conformity with those principles which do not permit the valuation of assets such as land at market values above cost.* Also, the auditors would take exception to this valuation.

**Note to instructor:* Investments in some *marketable securities*, however, are presented in the balance sheet at market value. We discuss this valuation (called "mark-to-market") in Chapter 7. But at present, the cost principle still applies to land and other plant assets.

**PUBLIC COMPANY ACCOUNTING OVERSIGHT BOARD
ETHICS, FRAUD & CORPORATE GOVERNANCE**

a. The mission of the PCAOB is stated as follows: "The PCAOB is a private-sector non-profit corporation created by the Sarbanes-Oxley Act of 2002, to oversee the auditors of public companies in order to protect the interests of investors and further the public interest in the preparation of informative, fair, and independent audit reports."

b. The members of the PCAOB are:

- Danile L. Goelzer (Acting Chairman)
- Bill Gradison
- Steven B. Harris
- Charles D. Niemeier

c. The enforcement authority of the PCAOB is a broad investigative and disciplinary authority over registered public accounting firms and persons associated with such firms. The PCAOB is directed to implement this authority by establishing by rule fair procedures for the investigation and discipline of registered public accounting firms and persons associated with these firms. The PCAOB may conduct investigations concerning any acts or practices, or omissions, that may violate any provision of the Sarbanes-Oxley Act of 2002 related to the preparation and issuance of audit reports and the obligations and liabilities of accountants with respect to those reports.

d. Sarbanes-Oxley directs the PCAOB to establish auditing and related attestation standards, quality control standards, and ethics and independence standards to be used by registered public accounting firms in the preparation and issuance of audit reports.

25 Minutes, Easy

CASE 2.7 GATHERING FINANCIAL INFORMATION INTERNET

- a. The business address of Cisco Systems is:

170 West Tasman Drive
San Jose, CA 95134

Note: We cannot supply quantitative answers to parts *b* through *e*, because they vary from quarter to quarter. Our answers indicate only where the data are found in Cisco System's latest financial statements.

- b. Cash and Cash Equivalents is the first item in the balance sheet. The end-of-quarter balance appears in the left column, and the end of the preceding year on the right. It may increase or decrease between any two dates.
- c. The most recent figure is in the far left column. The next column to the right shows income for the same quarter of the prior year.
- d. Cash provided by operations for the year to date appears in the left column of the Condensed Consolidated Statement of Cash Flows.
- e. There is no "answer" to part *e*. It merely encourages students to explore. You might ask them to explain in class what they found.