

SCHAUM'S OUTLINE SERIES

THEORY AND PROBLEMS OF

FINANCIAL ACCOUNTING

**JOEL G. SIEGEL
JAE K. SHIM**

INCLUDING 495 SOLVED PROBLEMS

SCHAUM'S OUTLINE SERIES IN ACCOUNTING

McGRAW-HILL BOOK COMPANY

SCHAUM'S OUTLINE OF

THEORY AND PROBLEMS

FINANCIAL ACCOUNTING

JOEL G. SIEGEL, Ph.D., CPA

*Associate Professor of Accounting
Queens College
City University of New York*

and

JAE K. SHIM, Ph.D.

*Professor of Accounting
California State University*

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JOEL G. SIEGEL is Professor of Accounting at Queens College of the City University of New York. He received his Ph.D. in accounting from Bernard M. Baruch College and is a Certified Public Accountant. In 1972, Dr. Siegel received the Outstanding Educator of America Award. He is the author of five publications in continuing professional education published by the AICPA and has written on numerous financial accounting topics in professional journals. Dr. Siegel is the author of *How To Analyze Businesses, Financial Statements and the Quality of Earnings* and is a coauthor of the forthcoming Schaum's Outlines of *Managerial Accounting* and *Managerial Finance*.

JAE K. SHIM is Professor of Accounting at California State University at Long Beach. He received his M.B.A. and Ph.D. degrees from the University of California at Berkeley. Professor Shim has published over forty articles in accounting, finance, economics, and operations research journals. He is a coeditor of *Readings in Cost and Managerial Accounting*. Dr. Shim is also a coauthor of the forthcoming Schaum's Outlines of *Managerial Accounting* and *Managerial Finance*, and of the AICPA's *Variance Analysis for Cost Control and Profit Maximization and Accounting for and Evaluation of Process Cost Systems*.

Schaum's Outline of Theory and Problems of
FINANCIAL ACCOUNTING

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Preface

Schaum's Outline of Financial Accounting presents all important financial accounting topics in a clear, concise manner, thereby enabling students to significantly enhance their understanding of this discipline. Primarily intended for students enrolled in an introductory financial accounting course at the undergraduate or graduate level, the book is also highly recommended for individuals in private study, those seeking college credit by examination, and students requiring a review of the subject before proceeding to more advanced accounting courses. Because the emphasis of the Outline is on developing the student's ability to solve problems, this book is useful for those individuals who are preparing to take the CPA examination.

This Outline should prove invaluable to students of financial accounting for the following reasons:

1. The presentation of financial accounting theory is straightforward, logical, and intelligible, permitting students to comprehend the subject.
2. Examples are used to illustrate all important procedures and concepts.
3. Solved problems, with detailed step-by-step solutions, enable students to succeed in the practical application of the concepts learned.
4. Review questions and answers are provided so that students can check their comprehension of the material.
5. Typical examination questions and their solutions are given for each three chapters covered so that students can measure their progress.

We wish to acknowledge our gratitude to several colleagues who provided valuable suggestions for the book's content, especially Professors Louis Geller, Marc Levine, and Abraham Simon. Students who assisted in evaluating the clarity of problems were Gary Gittler, Carl Guzman, Steven Honig, Marjorie Levine, Jerry Resnick, and Matthew Rubin. Most of all we would like to thank our wives for their assistance with the typing of the manuscript.

JOEL G. SIEGEL
JAE K. SHIM

Contents

Chapter 1	INTRODUCTION TO FINANCIAL ACCOUNTING	1
1.1	Scope and Purpose of Accounting.....	1
1.2	Branches of Accounting	1
1.3	Purposes of a Business Entity.....	1
1.4	Principles and Assumptions of Financial Accounting	2
1.5	The Accounting Equation	3
<hr/>		
Chapter 2	FINANCIAL STATEMENTS.....	15
2.1	Introduction.....	15
2.2	Cash Basis Versus Accrual Basis of Accounting	15
2.3	Income Statement	16
2.4	Balance Sheet	17
2.5	Classified Financial Statements	18
<hr/>		
Chapter 3	ANALYZING AND RECORDING FINANCIAL TRANSACTIONS	35
3.1	Introduction.....	35
3.2	Accounts for Recording Transactions.....	35
3.3	Ledger.....	36
3.4	A Chart of Accounts	36
3.5	Reflecting Debits and Credits in the Accounts.....	36
3.6	The Journal	38
3.7	Journal Entries	39
3.8	Posting	40
3.9	Preparing the Trial Balance.....	41
<hr/>		
Examination I: Chapters 1-3		58
<hr/>		
Chapter 4	ADJUSTING AND CLOSING ENTRIES.....	64
4.1	Introduction.....	64
4.2	Prepaid Expenses.....	64
4.3	Unearned Revenue	65
4.4	Accrued Expenses	66
4.5	Accrued Revenue	66
4.6	Depreciation	66
4.7	Dividends.....	67
4.8	Closing Entries	67
4.9	Post-Closing Trial Balance	69

CONTENTS

Chapter 5	THE PREPARATION OF THE WORKSHEET	83
5.1	Introduction.....	83
5.2	Worksheet for a Service-Oriented Business.....	83
5.3	Financial Statement Preparation.....	86
5.4	After the Financial Statements Are Prepared.....	88
5.5	The Accounting Cycle.....	88
<hr/>		
Chapter 6	ACCOUNTING FOR A MERCHANDISING BUSINESS	100
6.1	Introduction.....	100
6.2	Accounting for Sales of Merchandise.....	100
6.3	Accounting for Purchases	101
6.4	Cost of Goods Sold	102
6.5	Condensed Income Statement.....	103
6.6	The Worksheet for a Merchandising Business	103
6.7	An Income Statement for a Merchandising Business	106
<hr/>		
Examination II: Chapters 4–6.....		121
<hr/>		
Chapter 7	CASH AND SHORT-TERM INVESTMENTS	127
7.1	Introduction	127
7.2	What is Cash?	127
7.3	The Control of Cash	127
7.4	The Bank Statement	127
7.5	Bank Reconciliation.....	128
7.6	Cash Shortage and Overage	130
7.7	Petty Cash.....	131
7.8	Short-Term Investments.....	132
7.9	Valuation of Marketable Equity Securities	132
7.10	Lower of Cost or Market Value	133
7.11	Realized Gains and Losses	135
7.12	Marketable Debt Securities	135
<hr/>		
Chapter 8	INVENTORIES.....	152
8.1	Introduction.....	152
8.2	Perpetual and Periodic Inventory Methods	152
8.3	Inventory and Valuation Methods	153
<hr/>		
Chapter 9	RECEIVABLES AND PAYABLES.....	163
9.1	Accounts Receivable	163
9.2	Computing the Provision for Uncollectible Accounts.....	164
9.3	Writing Off a Customer's Account	165

CONTENTS

9.4	Subsequent Recovery of Written-Off Receivable.....	165
9.5	Promissory Notes	166
9.6	Interest Computation	166
9.7	Determining the Maturity Date.....	166
9.8	Notes Receivable.....	166
9.9	Discounting a Note Receivable.....	167
9.10	Default on a Note Receivable	168
9.11	Notes Payable.....	169
<hr/>		
Examination III: Chapters 7–9.....		178
<hr/>		
Chapter 10	FIXED ASSETS, DEPRECIATION, AND INTANGIBLE ASSETS	185
10.1	Property, Plant, and Equipment	185
10.2	Depreciation	185
10.3	Depreciation Methods.....	185
10.4	Disposal of Plant and Equipment.....	189
10.5	Intangible Assets	192
10.6	Accounting for Intangible Assets.....	192
10.7	Deferred Charges	193
10.8	Other Assets	193
<hr/>		
Chapter 11	LIABILITIES	204
11.1	Introduction.....	204
11.2	Current Liabilities.....	204
11.3	Noncurrent Liabilities.....	205
11.4	Types of Bonds	205
11.5	Accounting for Bonds.....	205
11.6	Bonds Sold at Face Value Between Interest Dates.....	208
11.7	Bonds Sold at a Premium or Discount Between Interest Dates	210
11.8	Early Extinguishment of Bonds	211
11.9	Bond Conversion.....	212
11.10	Contingent Liabilities.....	212
<hr/>		
Chapter 12	CORPORATIONS.....	221
12.1	Introduction.....	221
12.2	Terminology	221
12.3	Types of Stock	222
12.4	Stockholders' Equity	222
12.5	Issuance of Stock.....	222
12.6	Subscribed Stock.....	223
12.7	Treasury Stock	224
12.8	Dividends.....	226
12.9	Stock Split	229

CONTENTS

12.10 Retained Earnings.....	229
12.11 Comprehensive Stockholders' Equity Section	230
<hr/>	
Examination IV: Chapters 10–12.....	245
<hr/>	
Chapter 13 PARTNERSHIPS	251
13.1 Features of the Partnership.....	251
13.2 Initial Partnership Investments.....	251
13.3 Partner Drawing Accounts.....	252
13.4 Allocating Net Income or Loss to Partners	253
13.5 Admitting a New Partner	255
13.6 Liquidating a Partnership	256
<hr/>	
Chapter 14 FINANCIAL STATEMENT ANALYSIS	263
14.1 Introduction.....	263
14.2 Horizontal Analysis.....	263
14.3 Vertical Analysis	265
14.4 Ratio Analysis	266
14.5 Liquidity Ratios	266
14.6 Solvency Ratios	268
14.7 Profitability Ratios	269
14.8 Summary	270
<hr/>	
Chapter 15 STATEMENT OF CHANGES IN FINANCIAL POSITION.....	281
15.1 Introduction.....	281
15.2 Sources of Funds	281
15.3 Applications of Funds	282
15.4 Material Noncurrent Transactions	282
15.5 Schedule of Changes in Working Capital Accounts.....	283
15.6 Statement of Changes in Financial Position	284
<hr/>	
Examination V: Chapters 13–15.....	296
<hr/>	
INDEX	305

Chapter 1

Introduction to Financial Accounting

1.1 SCOPE AND PURPOSE OF ACCOUNTING

Financial accounting is the language of business. It is concerned with assisting individuals, businesses, and nonprofit organizations in recording financial transactions (events which have occurred), in preparing performance reports and reports that reflect the current financial position, and in assisting in the decision-making processes of financial statement users. Thus, *financial accounting may be defined as the recording, classifying, summarizing, and reporting of transactions with the aim of showing the financial health of an entity.*

Financial information generated by the accounting process is used by many diverse parties. Business owners use it primarily in evaluating the return they are receiving on their investment, while management's interest is in determining the financial strengths and weaknesses of the business so that performance may be improved. Potential investors and their advisors are concerned with whether a firm represents a sound avenue for investment, while creditors use financial information to determine a firm's financial capacity to meet its obligations when they become due. The Internal Revenue Service is interested in determining tax revenues based on an entity's profitability, while customers are concerned with a firm's continuing ability to supply their needs and employees need to evaluate the firm's financial ability to meet wage demands. Other users of financial information are attorneys, security exchanges, regulatory agencies, and trade associations.

1.2 BRANCHES OF ACCOUNTING

The major branches of accounting are private, public, and governmental accounting.

Private accounting refers primarily to the private business sector, either sole proprietors, partnerships, or corporations. Private accountants generally work for the controller's (the chief accounting officer) office and prepare budget reports and departmental performance reports, among others, that management uses for evaluation and decision making.

Public accounting refers to work done by independent firms that audit the books of companies to ensure that corporate financial data are properly stated. To work as a public accountant a license, called the "Certified Public Accountant," is required. The license is given to those who pass an examination and meet specified minimum experience requirements.

Governmental accounting refers primarily to federal, state, and local governmental institutions, although some nonprofit organizations, such as charitable organizations and hospitals, also fall in this category.

1.3 PURPOSES OF A BUSINESS ENTITY

There are different types of business entities, such as a sole proprietorship, a partnership, and a corporation. In the *sole proprietorship* there is only *one* owner. In the event the business fails, the owner is *personally* liable for all debts incurred. A *partnership* has more than one owner. The partnership contract spells out the rights of each partner in such matters as profit distribution and withdrawal of funds; personal liability exists in partnerships. In a *corporation*, the equity interest belongs to investors who have purchased shares of stock in the business. Only *limited* liability exists for stockholders if the corporation fails, in that they will lose only what they have invested. No personal liability exists.

A business entity provides goods or services or both to customers in order to generate a profit (net income) for its owners. *Profit* is the excess of *revenue* (resources received for the goods or services) over

expenses (resources used to produce the goods or services). For a manufacturing or retail business revenue consists of the sales price charged, while for a service business (e.g., an accountant) revenue is the fee charged for services rendered. Expenses are incurred in order to obtain that revenue. Examples of expenses are wages, rent, and telephone. The profit-generating activities of a business over a period of time are shown in the *income statement*.

An entity must be financially sound in order to satisfy its debts at maturity. A measure of financial health is the degree to which assets (economic resources) exceed liabilities (obligations due). A picture of a company's financial status at the end of an accounting period is shown in the *balance sheet* (statement of financial position).

A business entity is also expected to have sufficient funds in order to carry out its business activities. The flow of funds into and out of the entity is described in the statement of changes in financial position (funds statement).

1.4 PRINCIPLES AND ASSUMPTIONS OF FINANCIAL ACCOUNTING

Financial accounting requirements are promulgated by the Financial Accounting Standards Board (FASB), which is the principal rule-making body. The requirements are in the form of FASB *Statements* and *Interpretations*. Also, the Securities and Exchange Commission (SEC) issues *Accounting Series Releases*, which dictate accounting requirements for companies required to file with the SEC because they issue stock. The American Institute of Certified Public Accountants (AICPA) issues *Statements on Auditing Standards* to be followed by independent CPAs who audit their clients' accounting records.

In order for financial data generated to be useful in economic decision making financial accounting is based on the following principles, assumptions, and definitions:

Relevance. Information provided by the accounting system must be pertinent to the financial status and performance of the entity.

Understandability. To be useful, accounting data must be understandable to users. Proper means of communication, including use of appropriate, standard terminology, must be employed.

Verifiability. Accounting data must be verifiable. A report is verifiable when two accountants arrive at *close* answers when given the same financial data.

Objectivity. Accounting information provided should be *neutral* in the sense that data are not manipulated to favor one party over another. It should satisfy the common needs of diverse users.

Matching. For any period in which revenue is recognized, expenses incurred in obtaining that revenue should also be recognized. An example is the sales price of merchandise being matched with its cost.

Timeliness. For information generated by the accounting system to be useful for decision making, it must be received *shortly* after the entity's accounting period.

Consistency. This principle refers to the use of the *same accounting method* from reporting period to reporting period so that proper evaluation can be made of an entity's progress over time.

Comparability. Financial reports must be in a form that permits comparison of one company with other companies in the industry. Comparability is facilitated when companies use similar accounting methods, terminology, and financial statement format.

Disclosure. All data which would *influence* the assessment of the company's health by outsiders should be disclosed in the financial statements.

Conservatism. It is better to *understate* rather than overstate a company's financial position in order to reduce the possibility of outsiders being hurt by viewing the company as being better than it really is. Thus, it is better to understate assets than overstate them.

Entity. This is an *accounting unit* that is separate and apart from the owner or owners.

Continuity (going concern). The business is assumed to continue in operation *indefinitely*.

Stable dollar. It is assumed that prices remain *constant* over time. Thus, historical cost (the price originally paid for an item) is used to value assets. Rapid inflation in recent years makes this once generally accepted assumption dubious, however. Many now advocate the use of current values to record assets.

Accounting period. This concept refers to the time span over which accounting data are recorded and reported in the financial statements. Although any time period may be used to assemble data, *quarterly* (interim) and *annual* financial statements are the ones most commonly prepared for external parties.

1.5 THE ACCOUNTING EQUATION

An entity's financial position is reflected by the relationship between its assets and its liabilities and capital.

Assets are resources which are *owned* by the business and which can be expressed in monetary terms. Assets which will be converted into cash within one year are classified as *current*. Examples are cash, receivables (amounts owed to the business by customers), and inventory. Assets having a life exceeding one year are classified as *noncurrent*. Examples are land, buildings, and machinery.

Liabilities are obligations in the form of money to be paid or services to be rendered by the business to outside parties. Liabilities payable within one year are classified as *current*, such as accounts payable (amounts owed to creditors and suppliers), notes payable (maturity of one year or less), and taxes payable. Obligations payable in a period longer than one year, for example, bonds payable, are termed *noncurrent*.

Capital is the *equity interest* of the owner in the business which constitutes the difference between assets and liabilities. In a sole proprietorship, there is only one capital account since there is only one owner. In a partnership, a capital account exists for each owner. In a corporation, capital represents the *stockholders' equity*, which equals the capital stock issued plus the accumulated earnings of the business (called retained earnings). There are two types of capital stock—*common stock* and *preferred stock*. Common stock entitles its owners to voting rights, while preferred stock does not. Preferred stock entitles its owners to priority in the receipt of dividends and in repayment of capital in the event of corporate dissolution.

The *accounting equation* reflects these elements by expressing the equality of assets to creditors' claims and owners' equity as follows:

$$\text{Assets} = \text{Liabilities} + \text{Capital}$$

The equation in effect says that a company's assets are subject to the rights of debt holders and owners.

The accounting equation is the basis for *double entry accounting*, which means that each transaction has a dual effect. A transaction affects either both sides of the equation by the same amount or one side of the equation only, by both increasing and decreasing it by identical amounts and thus netting to zero.

EXAMPLE 1 If a business has assets of \$500,000, obligations of \$300,000, and owners' equity of \$200,000, the accounting equation is

ASSETS	=	LIABILITIES	+	CAPITAL
\$500,000	=	\$300,000	+	\$200,000

If at the end of the reporting period, the business derived net income of \$50,000, the accounting equation becomes

ASSETS	=	LIABILITIES	+	CAPITAL
\$550,000	=	\$300,000	+	\$250,000

If \$10,000 was then used to pay creditors, the accounting equation becomes

ASSETS	=	LIABILITIES	+	CAPITAL
\$540,000	=	\$290,000	+	\$250,000

In the next example, we will illustrate how the *transactions* of a business are recorded and what effect they have on the accounting equation.

EXAMPLE 2 Mark Jones, an accountant, experienced the following events in the month of September 19XX:

1. Started his accounting practice with a cash investment of \$10,000 and office equipment worth \$5,000
2. Purchased office supplies of \$800 by paying cash
3. Bought a typewriter for \$500 on account from IBM
4. Paid \$400 in salary to his staff
5. Received an electric bill for \$300

6. Earned professional fees of \$20,000, of which \$12,000 was received in cash and \$8,000 was owed by clients
7. Paid \$300 to IBM
8. Withdrew \$100 from the business for personal use
9. Received \$1,000 from one of the clients who owed him money
10. Worth of office supplies on hand at month's end, \$600

The transactions will now be analyzed.

Transaction 1. Jones started his practice by investing \$10,000 in cash and \$5,000 in office equipment.

The assets Cash and Office Equipment are increased, and the capital is also increased for the total investment of the owner.

ASSETS (A)		=	LIABILITIES (L)	+	CAPITAL (C)
Cash	Office Equipment (OE)				M. Jones, Capital (C)
\$10,000	\$5,000				\$15,000

Transaction 2. Acquired office supplies for cash, \$800.

The asset Office Supplies goes up by \$800 with a corresponding reduction in the asset Cash. This is an example of one asset being used to acquire another one.

A		=	L	+	C
Cash	OE		Office Supplies (OS)		
\$10,000	\$5,000				\$15,000
- 800			\$800		
\$ 9,200	\$5,000		\$800		\$15,000

Transaction 3. Purchased a typewriter on account, \$500.

An asset, Office Equipment, is being acquired on credit, thereby creating a *liability* for future payment called Accounts Payable. Accounts payable is defined as the amount owed to suppliers.

A			=	L	+	C
Cash	OE	OS		Accounts Payable (AP)		
\$9,200	\$5,000	\$800				\$15,000
	+ 500			\$500		
\$9,200	\$5,500	\$800		\$500		\$15,000

Transaction 4. Paid salary, \$400.

Cash and capital are both being reduced because of the wage expense. Capital is reduced because expenses of the business decrease the equity of the owner.

A			=	L	+	C
Cash	OE	OS		AP		
\$9,200	\$5,500	\$800		\$500		\$15,000
- 400						- 400
\$8,800	\$5,500	\$800		\$500		\$14,600

Transaction 5. Received an electric bill for \$300 (not paid).

Liabilities are increased by \$300 since the business *owes* the utility money for electricity supplied. Capital is reduced for the expense.

A			=	L	+	C
Cash	OE	OS		AP		
\$8,800	\$5,500	\$800		\$ 500		\$14,600
				+ 300		- 300
\$8,800	\$5,500	\$800		\$ 800		\$14,300

Transaction 6. Earned fees of \$20,000, of which \$12,000 was received in cash and \$8,000 was owed by clients.

Cash goes up by \$12,000 and the account Accounts Receivable (amounts owed to the business from customers) is created. Professional fees earned is *revenue* to the business and hence increases the owner's equity. Thus, capital is increased by \$20,000.

A				=	L	+	C
Cash	OE	OS	Accounts Receivable (AR)		AP		
\$ 8,800	\$5,500	\$800			\$800		\$ 14,300
+ 12,000			\$8,000				+ 20,000
\$ 20,800	\$5,500	\$800	\$8,000		\$800		\$ 34,300

Transaction 7. Paid \$300 to IBM (in partial payment of the amount owed to them).

The payment lowers the asset Cash and reduces the liability Accounts Payable.

A				=	L	+	C
Cash	OE	OS	AR		AP		
\$20,800	\$5,500	\$800	\$8,000		\$ 800		\$34,300
- 300					- 300		
\$20,500	\$5,500	\$800	\$8,000		\$ 500		\$34,300

Transaction 8. Withdrew \$100 for *personal* use.

Cash is reduced and so is capital. The personal withdrawal is, in effect, a disinvestment in the business and hence reduces capital. It is *not* an expense in running the business.

A				=	L	+	C
Cash	OE	OS	AR		AP		
\$20,500	\$5,500	\$800	\$8,000		\$500		\$34,300
- 100							- 100
\$20,400	\$5,500	\$800	\$8,000		\$500		\$34,200

Transaction 9. Received \$1,000 from one of the clients who owed him money.

This increases Cash and reduces Accounts Receivable since the client now owes the business less money. One asset is being substituted for another one.

A				=	L	+	C
Cash	OE	OS	AR		AP		
\$20,400	\$5,500	\$800	\$ 8,000		\$500		\$34,200
+ 1,000			- 1,000				
\$21,400	\$5,500	\$800	\$ 7,000		\$500		\$34,200

Transaction 10. Worth (determined by an inventory count) of office supplies on hand at month's end, \$600.

Since the worth of office supplies originally acquired was \$800 and \$600 is left on hand, the business used \$200 in supplies. This reduces the asset Office Supplies and correspondingly reduces capital. The supplies used up represent office supplies expense.

A				=	L	+	C
Cash	OE	OS	AR		AP		
\$21,400	\$5,500	\$ 800	\$7,000		\$500		\$34,200
		- 200					- 200
\$21,400	\$5,500	\$ 600	\$7,000		\$500		\$34,000

**Summary of Transactions
September 19XX**

	A			=	L	+	C
	Cash	OE	OS	AR	AP		
1.	\$10,000	\$5,000					\$15,000
2.	<u>- 800</u>		<u>\$800</u>				
	\$ 9,200	\$5,000	\$800				\$15,000
3.		<u>+ 500</u>			\$ 500		
	\$ 9,200	\$5,500	\$800		\$ 500		\$15,000
4.	<u>- 400</u>						<u>- 400</u>
	\$ 8,800	\$5,500	\$800		\$ 500		\$14,600
5.					<u>+ 300</u>		<u>- 300</u>
	\$ 8,800	\$5,500	\$800		\$ 800		\$14,300
6.	<u>+12,000</u>			<u>\$8,000</u>			<u>+20,000</u>
	\$20,800	\$5,500	\$800	\$8,000	\$ 800		\$34,300
7.	<u>- 300</u>				<u>- 300</u>		
	\$20,500	\$5,500	\$800	\$8,000	\$ 500		\$34,300
8.	<u>- 100</u>						<u>- 100</u>
	\$20,400	\$5,500	\$800	\$8,000	\$ 500		\$34,200
9.	<u>+1,000</u>			<u>-1,000</u>			
	\$21,400	\$5,500	\$800	\$7,000	\$ 500		\$34,200
10.			<u>- 200</u>				<u>- 200</u>
	<u>\$21,400</u>	<u>\$5,500</u>	<u>\$600</u>	<u>\$7,000</u>	<u>\$ 500</u>		<u>\$34,000</u>

By looking at the capital column, we can determine the firm's *net income*, which is equal to revenue less expenses.

EXAMPLE 3

Income Statement

Professional Fee Revenue		\$20,000
Less: Expenses		
Wage Expense	\$400	
Utilities Expense	300	
Office Supplies Expense	<u>200</u>	
Total Expenses		<u>900</u>
Net Income		<u>\$19,100</u>

Note: As mentioned earlier, the Drawing account is not an expense, but rather a withdrawal of money for personal use by the owner and therefore a disinvestment in the business.

Summary

- (1) _____ accounting refers to working for an independent firm that audits the books of companies.
- (2) Economic resources owned by a business are referred to as _____.
- (3) _____ are obligations of a business to others.

- (4) According to the accounting equation, assets equal liabilities plus _____.
- (5) Resources received for goods or services are referred to as _____.
- (6) Resources used up in producing goods or services are called _____.
- (7) If revenue exceeds expenses, the difference is called _____.
- (8) Rent is an example of _____.
- (9) Using the same accounting method over a period of years is referred to as the _____ principle.
- (10) Understating assets rather than overstating them is an example of the _____ principle.
- (11) The purchase of an auto on account increases _____ and _____.
- (12) The payment of telephone expense reduces _____ and _____.
- (13) Receiving cash for professional fees rendered increases _____ and _____.
- (14) Paying a creditor reduces _____ and _____.
- (15) Assets which will be converted into cash within one year are classified as _____.
- (16) The principal rule-making body in financial accounting is the _____.
- (17) The accumulated earnings of a corporation are called _____.
- (18) The two types of stock that a corporation can issue are _____ and _____.

Answers: (1) public; (2) assets; (3) liabilities; (4) capital; (5) revenue; (6) expenses; (7) net income (or profit); (8) an expense; (9) consistency; (10) conservatism; (11) assets, liabilities; (12) assets, capital; (13) assets, capital; (14) liabilities, assets; (15) current; (16) Financial Accounting Standards Board (FASB); (17) retained earnings; (18) common stock and preferred stock.

Solved Problems

- 1.1** For each of the items listed below, place the symbol in the space provided to indicate the major category of the item in the accounting equation. *Symbols:* Asset, A; Liability, L; Capital, C.

Example: Cash

- (a) Taxes Payable
- (b) Smith, Capital
- (c) Land
- (d) Accounts Receivable
- (e) Supplies

Answers

 A

(f) Bonds Payable	_____
(g) Merchandise Inventory	_____
(h) Accounts Payable	_____
(i) Smith, Withdrawal	_____
(j) Salaries	_____
(k) Professional Fees	_____

SOLUTION

(a) L; (b) C; (c) A; (d) A; (e) A; (f) L; (g) A; (h) L; (i) C; (j) C; (k) C

- 1.2** Answer in the space provided whether each of the following represents a *recordable* transaction.

Yes or No

(a) Collected cash for services	_____
(b) Paid salaries	_____
(c) Paid off a note plus interest	_____
(d) Hired an employee who will start next month	_____
(e) Used up part of supplies	_____
(f) Purchased delivery truck, payment to be made next year	_____
(g) Withdrawal of cash by owner for personal use	_____
(h) Agreed to supply a company with a product for the next few years	_____

SOLUTION

(a) Yes; (b) Yes; (c) Yes; (d) No; (e) Yes; (f) Yes; (g) Yes; (h) No

- 1.3** Show the effect (increase = +; decrease = -; no effect = 0) on assets of the following transactions.

+, -, 0

(a) Owner withdraws cash.	_____
(b) Business purchases land on credit.	_____
(c) There is a cash sale.	_____
(d) Business purchases delivery truck for cash.	_____
(e) Business pays for telephone bill.	_____
(f) Business pays off a note to the bank.	_____
(g) Business sells merchandise on account.	_____
(h) Business enters into an agreement with the bank for a future loan.	_____

SOLUTION

(a) -; (b) +; (c) +; (d) +, - [One asset (cash) is exchanged for another (equipment); see also Transaction 2 of Example 2]; (e) -; (f) -; (g) +, - [Accounts receivable is increased, while merchandise is decreased; unless the merchandise was sold at or below cost, the total effect of this transaction would be to increase assets (and capital) by the excess of sales price over the cost of the merchandise]; (h) 0.

- 1.4** Supply the missing amount for each of the following cases:

	ASSETS	LIABILITIES	CAPITAL
(a)	\$ 4,000	\$ 2,500	\$ _____
(b)	12,800	_____	5,700
(c)	_____	2,800	3,900
(d)	5,560	_____	2,820
(e)	57,000	28,000	_____

SOLUTION

Calculations are based on the accounting equation:

$$\text{Assets} = \text{Liabilities} + \text{Capital}$$

- (a) \$1,500 (\$4,000 – \$2,500)
- (b) \$7,100 (\$12,800 – \$5,700)
- (c) \$6,700 (\$2,800 + \$3,900)
- (d) \$2,740 (\$5,560 – \$2,820)
- (e) \$29,000 (\$57,000 – \$28,000)

1.5 Compute the missing amount for each of the following cases:

	A	B	C
Accounts Payable	\$ _____	\$ 5,000	\$ 2,000
Accounts Receivable	15,500	30,000	13,000
Office Supplies	2,700	5,000	2,500
Cash	5,970	5,500	8,000
Capital	49,000	57,500	_____
Office Equipment	30,000	_____	12,000
Land	14,000	2,500	10,000

SOLUTION

We can list the entries in the accounting equation according to category as follows:

$$\begin{array}{l} \text{ASSETS} \\ \text{Cash} + \text{Accounts Receivable} + \text{Office Supplies} \\ \quad + \text{Office Equipment} + \text{Land} \end{array} = \begin{array}{l} \text{LIABILITIES} \\ \text{Accounts Payable} \end{array} + \begin{array}{l} \text{CAPITAL} \\ \text{Capital} \end{array}$$

By inserting the amounts for each entry, we can solve for the missing element.

Case A

$$\begin{aligned} \$5,970 + \$15,500 + \$2,700 + \$30,000 + \$14,000 &= \text{Accounts Payable} + \$49,000 \\ \$68,170 &= \text{Accounts Payable} + \$49,000 \\ \text{Accounts Payable} &= \underline{\underline{\$19,170}} \end{aligned}$$

Case B

$$\begin{aligned} \$5,500 + \$30,000 + \$5,000 + \text{Office Equipment} + \$2,500 &= \$5,000 + \$57,500 \\ \$43,000 + \text{Office Equipment} &= \$62,500 \\ \text{Office Equipment} &= \underline{\underline{\$19,500}} \end{aligned}$$

Case C

$$\begin{aligned} \$8,000 + \$13,000 + \$2,500 + \$12,000 + \$10,000 &= \$2,000 + \text{Capital} \\ \$45,500 &= \$2,000 + \text{Capital} \\ \text{Capital} &= \underline{\underline{\$43,500}} \end{aligned}$$

1.6 Transactions completed by Brian Koppelman, CPA, appear below. In the following table, indicate the effects of the transactions on each part of the accounting equation by writing +, –, or 0 to denote increase, decrease, or no effect, respectively.