

Chapter 1

Introducing Financial Statements

QUICK STUDIES

Quick Study 1-1 (10 minutes)

1. f Artificial Intelligence
2. c Recording
3. h Recordkeeping (bookkeeping)

Quick Study 1-2 (10 minutes)

- | | |
|------------------|------------------|
| a. External user | g. External user |
| b. External user | h. External user |
| c. External user | i. Internal user |
| d. External user | j. External user |
| e. Internal user | k. External user |
| f. External user | l. External user |

Quick Study 1-3 (10 minutes)

- | | |
|--------------------|--------------------|
| 1. Opportunity | 4. Opportunity |
| 2. Pressure | 5. Pressure |
| 3. Rationalization | 6. Rationalization |

Quick Study 1-4 (5 minutes)

- | | |
|---------------|---------------|
| 1. Principle | 3. Assumption |
| 2. Assumption | 4. Principle |

Quick Study 1-5 (10 minutes)

	Attribute Present	Proprietorship	Partnership	Corporation	LLC
1. Business taxed		no	no	yes	no
2. Limited liability		no	no	yes	yes
3. Legal entity		no	no	yes	yes

Quick Study 1-6 (10 minutes)

1. Revenue recognition principle
2. Measurement (cost) principle
3. Business entity assumption

Quick Study 1-7 (5 minutes)

Assets	=	Liabilities	+	Equity
\$700,000		(a) <u>\$280,000</u>		\$420,000
\$500,000		(b) <u>\$250,000</u>		(b) <u>\$250,000</u>

Quick Study 1-8 (10 minutes)

1.

Assets	=	Liabilities	+	Equity
\$75,000		(a) <u>\$35,000</u>		\$40,000
(b) <u>\$95,000</u>		\$25,000		\$70,000
\$85,000		\$20,000		(c) <u>\$65,000</u>

2.

Assets	=	Liabilities	+ Common Stock	- Dividends	+ Revenues	- Expenses
\$40,000		\$16,000	\$20,000	\$ 0	(a) <u>\$12,000</u>	\$ 8,000
\$80,000		\$32,000	\$44,000	(b) <u>\$2,000</u>	\$24,000	\$18,000

Quick Study 1-9 (5 minutes)

- a. Increase
- b. Decrease
- c. Increase
- d. Decrease

Quick Study 1-10 (15 minutes)

Assets		=	Liabilities +		Equity							
Cash	+	Accounts Recble.	=	Accounts Payable	+	Common Stock	-	Dividends	+	Revenues	-	Expenses
(a)	\$5,500		=							\$5,500		
										Consulting		
(b)		+	\$4,000	=					+	4,000		
										Commission		
Bal.	5,500	+	4,000	=					+	9,500		
(c)	-1,400			=							-	\$1,400
												Wages
Bal.	4,100	+	4,000	=					+	9,500	-	1,400
(d)	+1,000	+	- 1,000	=							-	
Bal.	5,100	+	3,000	=					+	9,500	-	1,400
(e)	-700	+		=							-	700
												Cleaning
Bal.	\$4,400	+	\$3,000	=					+	\$9,500	-	\$2,100

Quick Study 1-11 (15 minutes)

	Assets				=	Liabilities	+	Equity			
	Cash	+ Supplies	+ Equip.	+ Land	=	Accts. Pay.	+ Common Stock	- Dividends	+ Rev.	- Exp.	
(a)	\$15,000				=		\$15,000				
(b)	-500	+ \$500			=						
Bal.	14,500	+ 500			=		+ 15,000				
(c)			+ \$10,000		=		10,000				
Bal.	14,500	+ 500	+ 10,000		=		+ 25,000				
(d)		+ 200			=	+\$200					
Bal.	14,500	+ 700	+ 10,000		=	200	+ 25,000				
(e)	-9,000			+ \$9,000	=						
Bal.	\$5,500	+ \$700	+ \$10,000	+ \$9,000	=	\$200	+ \$25,000				

Quick Study 1-12 (10 minutes)

- | | |
|----------------------------|----------------------------|
| a. Balance sheet | e. Balance sheet |
| b. Statement of cash flows | f. Statement of cash flows |
| c. Balance sheet | g. Income statement |
| d. Income statement | h. Balance sheet |

Quick Study 1-13 (5 minutes)

- | | | |
|-------------|--------------|-------------|
| 1. Expenses | 4. Dividends | 7. Expenses |
| 2. Revenues | 5. Expenses | 8. Revenues |
| 3. Expenses | 6. Revenues | |

Quick study 1-14 (5 minutes)

- | | | |
|-----------|----------------|-----------|
| 1. Assets | 3. Assets | 5. Assets |
| 2. Equity | 4. Liabilities | 6. Assets |

Quick Study 1-15 (15 minutes)

HAWKIN Income Statement For Month Ended December 31		
Revenues		
Services revenue		\$16,000
Expenses		
Wages expense	\$8,000	
Rent expense.....	1,500	
Utilities expense.....	<u>700</u>	
Total expenses		<u>10,200</u>
Net income		<u>\$ 5,800</u>

Quick Study 1-16 (15 minutes)

HAWKIN Statement of Retained Earnings For Month Ended December 31	
Retained earnings, December 1	\$4,000
Add: Net income	<u>5,800</u>
	9,800
Less: Dividends	<u>(1,000)</u>
Retained earnings, December 31	<u>\$8,800</u>

Quick Study 1-17 (15 minutes)

HAWKIN			
Balance Sheet			
December 31			
Assets		Liabilities	
Cash.....	\$ 5,100	Accounts payable	\$ 6,000
Accounts receivable	600	Equity	
Supplies	2,000	Common stock.....	6,900
Equipment.....	14,000	Retained earnings.....	<u>8,800</u>
		Total equity.....	<u>15,700</u>
Total assets.....	<u>\$21,700</u>	Total liabilities and equity	<u>\$21,700</u>

Quick Study 1-18 (15 minutes)

STUDIO ONE	
Statement of Cash Flows	
For Month Ended December 31	
Cash flows from operating activities	
Cash received from customers.....	\$23,500
Cash paid for expenditures	<u>(6,000)</u>
Net cash provided by operating activities	17,500
Cash flows from investing activities	
Cash paid for equipment	(3,000)
Cash paid for truck.....	<u>(22,000)</u>
Net cash used by investing activities	(25,000)
Cash flows from financing activities	
Cash investments from shareholders.....	11,000
Cash dividends to shareholders.....	<u>(2,000)</u>
Net cash provided by financing activities	<u>9,000</u>
Net increase in cash.....	\$ 1,500
Cash balance, December 1	<u>1,000</u>
Cash balance, December 31	<u>\$ 2,500</u>

Quick Study 1-19 (10 minutes)

- | | |
|-------------------------|-------------------------|
| 1. Investing activities | 5. Operating activities |
| 2. Financing activities | 6. Operating activities |
| 3. Operating activities | 7. Operating activities |
| 4. Operating activities | 8. Financing activities |

Quick Study 1-20 (5 minutes)

Improve

Explanation: Deutsche Auto's return on assets increased in each of the years shown, which is a positive result. It suggests the company is more effectively using its assets to generate net income.

Quick Study 1-21 (10 minutes)

a.

$$\text{Return on assets} = \frac{\text{Net income}}{\text{Average total assets}} = \frac{\$8 \text{ billion}}{\$42 \text{ billion}} = \underline{19.0\%}$$

b. Better

Explanation: Home Depot's return on assets exceeds that of Lowe's, which is a positive result for Home Depot. It suggests Home Depot is more effectively using its assets to generate net income.

EXERCISES

Exercise 1-1 (10 minutes)

- | | |
|------------------|------------------|
| 1. Communicating | 5. Communicating |
| 2. Communicating | 6. Identifying |
| 3. Recording | 7. Identifying |
| 4. Recording | 8. Recording |

Exercise 1-2 (20 minutes)

Part A.

- | | |
|------------------|------------------|
| 1. Internal user | 5. Internal user |
| 2. External user | 6. External user |
| 3. Internal user | 7. Internal user |
| 4. External user | |

Part B.

- | | |
|------------------|------------------|
| 1. Internal user | 5. Internal user |
| 2. Internal user | 6. External user |
| 3. External user | 7. Internal user |
| 4. External user | 8. Internal user |

Exercise 1-3 (10 minutes)

- | | |
|--------------------------|-------------------------|
| 1. Managerial accounting | 5. Tax accounting |
| 2. Financial accounting | 6. Tax accounting |
| 3. Managerial accounting | 7. Financial accounting |
| 4. Managerial accounting | 8. Financial accounting |

Exercise 1-4 (10 minutes)

1. A. Audit
2. G. Net income
3. D. FASB
4. F. Public accountants
5. C. Ethics

Exercise 1-5 (20 minutes)

1. E. Audit
2. D. Internal controls
3. C. Prevention
4. B. Fraud triangle
5. A. Ethics

Exercise 1-6 (10 minutes)

- | | |
|------------------------|------------------------------|
| a. Corporation | e. Corporation |
| b. Partnership | f. Sole proprietorship |
| c. Sole proprietorship | g. Corporation |
| d. Sole proprietorship | h. Limited liability company |

Exercise 1-7 (10 minutes)

Principle or Assumption

1. Full disclosure principle
2. Going-concern assumption
3. Expense recognition (matching) principle
4. Business entity assumption
5. Revenue recognition principle
6. Measurement (cost) principle

Exercise 1-8 (15 minutes)

- a. \$10,000 recorded for truck.

Explanation: Accounting information is based on actual cost. Therefore, it makes no difference that the seller was asking a higher price or that the owner believes the vehicle is worth more.

- b. Revenue recorded by month:

May: \$1,000

June: \$0

July: \$0

Explanation: Revenue is recognized when services are provided to customers, and not necessarily when customers pay for the services. In this case, all work was performed and the customer was billed in May. Therefore, the revenue for this work is recorded in May.

Exercise 1-9 (10 minutes)

Assets	=	Liabilities	+	Equity
(a) <u>\$ 65,000</u>	=	\$ 20,000	+	\$45,000
\$100,000	=	\$ 34,000	+	(b) <u>\$66,000</u>
\$154,000	=	(c) <u>\$114,000</u>	+	\$40,000

Exercise 1-10 (20 minutes)

a. Using the accounting equation at the *beginning* of the year:

Assets	=	Liabilities	+	Equity
\$300,000	=	?	+	\$100,000

Thus, *beginning* liabilities = \$200,000

Using the accounting equation at the *end* of the year:

Assets	=	Liabilities	+	Equity
\$300,000 + \$80,000	=	\$200,000 + \$50,000	+	?
\$380,000	=	\$250,000	+	?

Thus, *ending* equity = \$130,000

Alternative approach to solving part (b):

$$\Delta \text{Assets}(\$80,000) = \Delta \text{Liabilities}(\$50,000) + \Delta \text{Equity}(?)$$

where “ Δ ” refers to “change in.”

$$\text{Thus: Ending Equity} = \$100,000 + \$30,000 = \$130,000$$

b. Using the accounting equation:

Assets	=	Liabilities	+	Equity
\$123,000	=	\$47,000	+	?

Thus, equity = \$76,000

c. Using the accounting equation at the *end* of the year:

Assets	=	Liabilities	+	Equity
\$190,000	=	\$70,000 - \$5,000	+	?
\$190,000	=	\$65,000	+	\$125,000

Using the accounting equation at the *beginning* of the year:

Assets	=	Liabilities	+	Equity
\$190,000 - \$60,000	=	\$70,000	+	?
\$130,000	=	\$70,000	+	?

Thus: *Beginning* Equity = \$60,000

Exercise 1-11 (15 minutes)

a. Using the accounting equation on January 1:

Assets	=	Liabilities	+	Equity
?	=	\$60,000	+	\$40,000

Thus, *beginning* assets = \$100,000

Using the accounting equation on January 3:

Assets	=	Liabilities	+	Equity
?	=	\$60,000 + \$6,000	+	\$40,000
?	=	\$66,000	+	\$40,000

Thus, *January 3* assets = \$106,000

Alternatively, we begin with \$100,000 in assets, then add \$10,000 in solar panels, then subtract \$4,000 in cash→resulting in \$106,000 in ending assets.

b. Using the accounting equation on March 1:

Assets	=	Liabilities	+	Equity
\$100,000	=	\$30,000	+	?

Thus, *beginning* equity = \$70,000

Using the accounting equation on March 5:

Assets	=	Liabilities	+	Equity
\$100,000 - \$15,000	=	\$30,000	+	?
\$85,000	=	\$30,000	+	?

Thus, *March 5* equity = \$55,000

c. Using the accounting equation on August 1:

Assets	=	Liabilities	+	Equity
\$30,000	=	\$10,000	+	?

Thus, *beginning* equity = \$20,000

Using the accounting equation on August 5:

Assets	=	Liabilities	+	Equity
\$30,000 + \$10,000	=	\$10,000	+	?
\$40,000	=	\$10,000	+	?

Thus, *August 5* equity = \$30,000

Exercise 1-12 (20 minutes)

1. d. The owner invested \$40,000 cash in the business in exchange for its common stock.
2. e. The company purchased supplies for \$3,000 by paying \$2,000 cash and putting \$1,000 on credit.
3. a. The company purchased equipment for \$8,000 cash.
4. f. The company billed a customer \$6,000 for services provided.
5. h. The company provided services for \$1,000 cash.

Exercise 1-13 (20 minutes)

1. f. The company purchased land for \$4,000 cash.
2. a. The company purchased \$1,000 of supplies on credit.
3. g. The company billed a client \$1,900 for services provided.
4. h. The company paid \$1,000 cash toward an account payable.
5. b. The company collected \$1,900 cash from an account receivable.

Exercise 1-14 (15 minutes)

- a. 3. Decreases an asset and decreases a liability.
- b. 2. Increases an asset and increases a liability.
- c. 5. Increases an asset and increases equity.
- d. 1. Decreases an asset and decreases equity.
- e. 4. Increases an asset and decreases an asset.
- f. 5. Increases an asset and increases equity.

Exercise 1-15 (30 minutes)

	Assets			=	Liabilities	+	Equity		
	Cash	+ Accounts Receivable	+ Equip-ment	=	Accounts Payable	+	Common Stock	- Divi-dends	+ Revenues - Expenses
a.	+\$60,000		+ \$15,000	=		+	\$75,000		
b.	<u>- 1,500</u>								- \$1,500
Bal.	58,500	+	+ 15,000	=		+	75,000		- 1,500
c.			+ <u>10,000</u>		<u>+\$10,000</u>				
Bal.	58,500	+	+ 25,000	=	10,000	+	75,000		- 1,500
d.	<u>+ 2,500</u>							+ <u>\$2,500</u>	
Bal.	61,000	+	+ 25,000	=	10,000	+	75,000	+ 2,500	- 1,500
e.		+ <u>\$8,000</u>						+ <u>8,000</u>	
Bal.	61,000	+ 8,000	+ 25,000	=	10,000	+ 75,000		+ 10,500	- 1,500
f.	<u>- 6,000</u>		+ <u>6,000</u>						
Bal.	55,000	+ 8,000	+ 31,000	=	10,000	+ 75,000		+ 10,500	- 1,500
g.	<u>- 3,000</u>								- <u>3,000</u>
Bal.	52,000	+ 8,000	+ 31,000	=	10,000	+ 75,000		+ 10,500	- 4,500
h.	<u>+ 5,000</u>	- <u>5,000</u>							
Bal.	57,000	+ 3,000	+ 31,000	=	10,000	+ 75,000		+ 10,500	- 4,500
i.	<u>- 10,000</u>				<u>- 10,000</u>				
Bal.	47,000	+ 3,000	+ 31,000	=	0	+ 75,000		+ 10,500	- 4,500
j.	<u>- 1,000</u>						- <u>\$1,000</u>		
Bal.	<u>\$46,000</u>	+ <u>\$3,000</u>	+ <u>\$31,000</u>	=	<u>\$ 0</u>	+ <u>\$75,000</u>	- <u>\$1,000</u>	+ <u>\$10,500</u>	- <u>\$4,500</u>

Exercise 1-16 (20 minutes)

Equity:	<u>Beginning</u>	<u>Ending</u>
Assets.....	\$50,000	\$80,000
Liabilities.....	(22,000)	(35,000)
Equity	<u>\$28,000</u>	<u>\$45,000</u>

(a) Net income for year:

Equity, <i>beginning</i> of year	\$28,000
Plus stock issuances	3,000
Plus net income	?
Less cash dividends	<u>(7,000)</u>
Equity, <i>end</i> of year	<u>\$45,000</u>

Therefore, net income must have been \$21,000

(b) Net income for year:

Equity, <i>beginning</i> of year	\$28,000
Plus stock issuances	15,000
Plus net income	?
Less cash dividends	<u>(0)</u>
Equity, <i>end</i> of year	<u>\$45,000</u>

Therefore, net income must have been \$ 2,000

(c) Net income for year:

Equity, <i>beginning</i> of year	\$28,000
Plus stock issuances	0
Plus net income	?
Less cash dividends	<u>(12,000)</u>
Equity, <i>end</i> of year	<u>\$45,000</u>

Therefore, net income must have been \$29,000

Exercise 1-17 (20 minutes)

a. Statement of Cash Flow Category	b. Cash Inflow/Outflow
1. Cash flows from Operating Activities	Cash Inflow
2. Cash flows from Financing Activities	Cash Inflow
3. Cash flows from Operating Activities	Cash Outflow
4. Cash flows from Investing Activities	Cash Outflow
5. Cash flows from Operating Activities	Cash Outflow
6. Cash flows from Financing Activities	Cash Outflow

Exercise 1-18 (15 minutes)

ERNST CONSULTING	
Income Statement	
For Month Ended December 31	
Revenues	
Consulting revenue	\$14,000
Expenses	
Salaries expense	\$7,000
Rent expense.....	3,550
Telephone expense.....	760
Miscellaneous expenses	<u>580</u>
Total expenses	<u>11,890</u>
Net income	<u>\$ 2,110</u>

Exercise 1-19 (15 minutes)

ERNST CONSULTING	
Statement of Retained Earnings	
For Month Ended December 31	
Retained earnings, December 1	\$ 0
Add: Net income (from Exercise 1-18)	<u>2,110</u>
	2,110
Less: Dividends	<u>2,000</u>
Retained earnings, December 31	<u>\$ 110</u>

Exercise 1-20 (15 minutes)

ERNST CONSULTING			
Balance Sheet			
December 31			
Assets		Liabilities	
Cash.....	\$11,360	Accounts payable	\$ 8,500
Accounts receivable	14,000	Equity	
Office supplies.....	3,250	Common stock.....	84,000
Office equipment	18,000	Retained earnings*	<u>110</u>
Land	<u>46,000</u>	Total equity.....	<u>84,110</u>
Total assets.....	<u>\$92,610</u>	Total liabilities and equity	<u>\$92,610</u>

* For computation of this amount see Exercise 1-19.

Exercise 1-21 (20 minutes)

ERNST CONSULTING	
Statement of Cash Flows	
For Month Ended December 31	
Cash flows from operating activities	
Cash received from customers.....	\$ 0
Cash paid to employees ^a	(1,750)
Cash paid for rent.....	(3,550)
Cash paid for telephone expenses	(760)
Cash paid for miscellaneous expenses	<u>(580)</u>
Net cash used by operating activities	(6,640)
Cash flows from investing activities	
Cash paid for office equipment.....	<u>(18,000)</u>
Net cash used by investing activities	(18,000)
Cash flows from financing activities	
Cash investments from shareholders	38,000
Cash dividends to shareholders.....	<u>(2,000)</u>
Net cash provided by financing activities	<u>36,000</u>
Net increase in cash.....	\$11,360
Cash balance, December 1	<u>0</u>
Cash balance, December 31	<u>\$11,360</u>

^a \$7,000 Salaries Expense - \$5,250 still owed = \$1,750 paid to employees.

Exercise 1-22 (15 minutes)

a.

JARVIS	
Statement of Retained Earnings	
For Year Ended December 31, Year 1	
Retained earnings, January 1, Year 1.....	\$ 0
Add: Net income	<u>30,000</u>
	30,000
Less: Dividends	<u>(8,000)</u>
Retained earnings, December 31, Year 1	<u>\$22,000</u>

b.

JARVIS	
Statement of Retained Earnings	
For Year Ended December 31, Year 2	
Retained earnings, December 31, Year 1	\$22,000
Add: Net income	<u>50,000</u>
	72,000
Less: Dividends	<u>(14,000)</u>
Retained earnings, December 31, Year 2	<u>\$58,000</u>

Exercise 1-23 (25 minutes)

a.

TERRELL CO		
Income Statement		
For Year Ended December 31		
Revenues		
Services revenue	\$48,000	
Rent revenue	<u>9,000</u>	
Total revenue.....		\$57,000
Expenses		
Salaries expense.....	37,000	
Advertising expense.....	3,000	
Utilities expenses.....	<u>1,000</u>	
Total expenses		<u>41,000</u>
Net income		<u>\$16,000</u>

b.

TERRELL CO		
Statement of Retained Earnings		
For Year Ended December 31		
Retained earnings, January 1	\$	0
Add: Net income		<u>16,000</u>
		16,000
Less: Dividends		<u>(5,000)</u>
Retained earnings, December 31		<u>\$11,000</u>

Exercise 1-24 (25 minutes)

a.

MAHOMES CO Statement of Retained Earnings For Year Ended December 31	
Retained earnings, January 1	\$ 0
Add: Net income	<u>60,000</u>
	60,000
Less: Dividends	<u>(22,000)</u>
Retained earnings, December 31	<u>\$38,000</u>

b.

MAHOMES CO Balance Sheet December 31			
<i>Assets</i>		<i>Liabilities</i>	
Cash.....	\$ 6,000	Accounts payable	\$ 3,000
Accounts receivable	7,000	<i>Equity</i>	
Equipment.....	9,000	Common stock.....	15,000
Land.....	34,000	Retained earnings.....	<u>38,000</u>
		Total equity.....	<u>53,000</u>
Total assets.....	<u>\$56,000</u>	Total liabilities and equity....	<u>\$56,000</u>

Exercise 1-25 (10 minutes)

$$\begin{aligned}
 \text{Return on assets} &= \text{Net income} / \text{Average total assets} \\
 &= \$40,000 / [(\$200,000 + \$300,000)/2] \\
 &= \underline{16.0\%}
 \end{aligned}$$

Better than competitors.

Explanation: Swiss Group's return on assets of 16% is markedly better than the 11% return of its competitors. Accordingly, its performance is assessed as superior to its competitors.

PROBLEM SET A

Problem 1-1A (25 minutes)

Transaction	a.				b.		
	Balance Sheet			Income Statement	Statement of Cash Flows		
	Total Assets	Total Liab.	Total Equity	Net Income	Operating Activities	Investing Activities	Financing Activities
1 Owner invests \$900 cash in business in exchange for stock	+900		+900				+900
2 Receives \$700 cash for services provided	+700		+700	+700	+700		
3 Pays \$500 cash for employee wages	-500		-500	-500	-500		
4 Buys \$100 of equipment on credit	+100	+100					
5 Purchases \$200 supplies on credit	+200	+200					
6 Buys equipment for \$300 cash	+300 -300					-300	
7 Pays \$200 on accounts payable	-200	-200			-200		
8 Provides \$400 services on credit	+400		+400	+400			
9 Pays \$50 cash in dividends	-50		-50				-50
10 Collects \$400 cash on account receivable	+400 -400				+400		

Problem 1-2A (40 minutes)

Part 1

Company A

(a) Equity at *beginning* of year:

Assets.....	\$55,000
Liabilities.....	<u>(24,500)</u>
Equity	<u>\$30,500</u>

(b) Equity at *end* of year:

Equity, <i>beginning</i> of year	\$30,500
Plus stock issuances	6,000
Plus net income	8,500
Less cash dividends	<u>(3,500)</u>
Equity, <i>end</i> of year	<u>\$41,500</u>

(c) Liabilities at *end* of year:

Assets.....	\$58,000
Equity	<u>(41,500)</u>
Liabilities.....	<u>\$16,500</u>

Part 2

Company B

(a) and (b)

Equity:	<u>Beginning</u>	<u>Ending</u>
Assets.....	\$34,000	\$40,000
Liabilities.....	<u>(21,500)</u>	<u>(26,500)</u>
Equity	<u>\$12,500</u>	<u>\$13,500</u>

(c) Net income for year:

Equity, <i>beginning</i> of year	\$12,500
Plus stock issuances	1,400
Plus net income	?
Less cash dividends	<u>(2,000)</u>
Equity, <i>end</i> of year	<u>\$13,500</u>

Therefore, net income must have been \$ 1,600

Problem 1-2A (Continued)

Part 3

Company C

First, compute the beginning balance of equity:

	<u>Beginning of Year</u>
Assets.....	\$24,000
Liabilities.....	<u>(9,000)</u>
Equity	<u>\$15,000</u>

Next, find the ending balance of equity by completing this table:

Equity, <i>beginning</i> of year	\$15,000
Plus stock issuances	9,750
Plus net income	8,000
Less cash dividends	<u>(5,875)</u>
Equity, <i>end</i> of year	<u>\$26,875</u>

Finally, find the ending amount of assets by adding the ending balance of equity to the ending balance of liabilities:

	<u>End of Year</u>
Liabilities.....	\$29,000
Equity	<u>26,875</u>
Assets.....	<u>\$55,875</u>

Part 4

Company D

First, compute the beginning and ending equity balances:

	<u>Beginning</u>	<u>Ending</u>
Assets.....	\$60,000	\$85,000
Liabilities.....	<u>(40,000)</u>	<u>(24,000)</u>
Equity	<u>\$20,000</u>	<u>\$61,000</u>

Then, find the amount of stock issuances during the year:

Equity, <i>beginning</i> of year	\$20,000
Plus stock issuances	?
Plus net income	14,000
Less cash dividends	<u>0</u>
Equity, <i>end</i> of year	<u>\$61,000</u>

Thus, stock issuances must have been..... \$27,000

Problem 1-2A (Concluded)

Part 5

Company E

First, compute the balance of equity at *end* of year:

Assets.....	\$113,000
Liabilities.....	<u>(70,000)</u>
Equity	<u>\$ 43,000</u>

Next, find the beginning balance of equity as follows:

Equity, <i>beginning</i> of year	\$?
Plus stock issuances	6,500
Plus net income	20,000
Less cash dividends	<u>(11,000)</u>
Equity, <i>end</i> of year	<u>\$43,000</u>

Thus, the beginning balance of equity is: \$27,500

Finally, find the beginning amount of liabilities by subtracting the beginning balance of equity from the beginning balance of assets:

	<u><i>Beginning of Year</i></u>
Assets.....	\$119,000
Equity	<u>(27,500)</u>
Liabilities.....	<u>\$ 91,500</u>

Problem 1-3A (20 minutes)

**Armani Company
Income Statement
For Current Year Ended December 31**

Revenues		
Consulting revenue	\$33,000	
Rental revenue	<u>22,000</u>	
Total revenues.....		\$55,000
Expenses		
Salaries expense.....	20,000	
Rent expense.....	12,000	
Selling and administrative expenses..	<u>8,000</u>	
Total expenses		<u>40,000</u>
Net income		<u>\$15,000</u>

Problem 1-4A (20 minutes)

Armani Company Statement of Retained Earnings For Current Year Ended December 31	
Retained earnings, Dec. 31, prior year	\$ 3,000
Add: Net income (from Problem 1-3A).....	<u>15,000</u>
	18,000
Less: Dividends	<u>13,000</u>
Retained earnings, Dec. 31, current year	<u>\$ 5,000</u>

Problem 1-5A (20 minutes)

Armani Company Balance Sheet December 31			
Assets		Liabilities	
Cash.....	\$10,000	Accounts payable	<u>\$11,000</u>
Accounts receivable	9,000	Total liabilities	11,000
Supplies	7,000	Equity	
Equipment.....	4,000	Common stock.....	14,000
		Retained earnings*	<u>5,000</u>
		Total equity.....	<u>19,000</u>
Total assets.....	<u>\$30,000</u>	Total liabilities and equity....	<u>\$30,000</u>

* For computation of this amount see Problem 1-4A.

Problem 1-6A (15 minutes)

Kia Company Statement of Cash Flows For Current Year Ended December 31	
Cash from operating activities	\$ 6,000
Cash used by investing activities.....	(2,000)
Cash used by financing activities.....	<u>(2,800)</u>
Net increase in cash.....	\$ 1,200
Cash, December 31, prior year.....	<u>2,300</u>
Cash, December 31, current year	<u>\$ 3,500</u>

Problem 1-7A (60 minutes) Part 1

Date	Assets			=	Liabilities +		Equity								
	Cash	+	Accounts Receivable	+	Equipment	=	Accounts Payable	+	Common Stock	-	Dividends	+	Revenues	-	Expenses
May 1	+\$40,000					=		+	\$40,000						
1	- 2,200					=								- \$2,200	Rent
3				+	\$1,890	=	+	\$1,890							
5	- 750					=								- 750	Cleaning
8	+ 5,400					=						+	\$5,400		
12		+	\$2,500			=						+	2,500		
15	- 750					=								- 750	Salary
20	+ 2,500	-	2,500			=									
22		+	3,200			=						+	3,200		
25	+ 3,200	-	3,200			=									
26	- 1,890					=	-	1,890							
27				+	80	=	+	80							
28	- 750					=								- 750	Salary
30	- 300					=								- 300	Telephone
30	- 280					=								- 280	Utilities
31	- 1,400					=								- \$1,400	
	<u>\$42,780</u>	+	<u>\$ 0</u>	+	<u>\$1,970</u>	=	<u>\$ 80</u>	+	<u>\$40,000</u>	-	<u>\$1,400</u>	+	<u>\$11,100</u>	-	<u>\$5,030</u>

Problem 1-7A (Continued)
Part 2

The Gram Co. Income Statement For Month Ended May 31		
Revenues		
Consulting services revenue		\$11,100
Expenses		
Rent expense.....	\$2,200	
Salaries expense.....	1,500	
Cleaning expense	750	
Telephone expense.....	300	
Utilities expense.....	<u>280</u>	
Total expenses		<u>5,030</u>
Net income		<u>\$ 6,070</u>

The Gram Co. Statement of Retained Earnings For Month Ended May 31	
Retained earnings, May 1	\$ 0
Add: Net income.....	<u>6,070</u>
	6,070
Less: Dividends	<u>1,400</u>
Retained earnings, May 31	<u>\$ 4,670</u>

The Gram Co. Balance Sheet May 31			
Assets		Liabilities	
Cash.....	\$42,780	Accounts payable.....	\$ 80
Equipment.....	1,970	Equity	
		Common stock	40,000
		Retained earnings	<u>4,670</u>
		Total equity	<u>44,670</u>
Total assets.....	<u>\$44,750</u>	Total liabilities and equity	<u>\$44,750</u>

Problem 1-7A (Concluded)

Part 3

The Gram Co. Statement of Cash Flows For Month Ended May 31		
Cash flows from operating activities		
Cash received from customers	\$11,100	
Cash paid for rent	(2,200)	
Cash paid for cleaning	(750)	
Cash paid for telephone.....	(300)	
Cash paid for utilities	(280)	
Cash paid to employees	<u>(1,500)</u>	
Net cash provided by operating activities		\$ 6,070
Cash flows from investing activities		
Cash paid for equipment	<u>(1,890)</u>	
Net cash used by investing activities		(1,890)
Cash flows from financing activities		
Cash investment from shareholder	40,000	
Cash dividend to shareholder	<u>(1,400)</u>	
Net cash provided by financing activities.....		<u>38,600</u>
Net increase in cash.....		\$42,780
Cash balance, May 1		<u>0</u>
Cash balance, May 31		<u>\$42,780</u>

Problem 1-8A (60 minutes) Part 1

Assets					=	Liabilities	+	Equity		
Cash	+ Accounts Receivable	+ Supplies	+ Equipment	+ Building	=	Accounts Payable	+ Common Stock	- Dividends	+ Revenues	- Expenses
a. +\$70,000			+ \$10,000		=		+ \$80,000			
b. - 40,000				+ \$40,000	=					
Bal. 30,000			+ 10,000	+ 40,000	=		+ 80,000			
c. - 15,000			+ 15,000		=					
Bal. 15,000			+ 25,000	+ 40,000	=		+ 80,000			
d.		+ \$1,200	+ 1,700		=	+ \$2,900				
Bal. 15,000		+ 1,200	+ 26,700	+ 40,000	=	2,900	+ 80,000			
e. - 500					=					- \$ 500
Bal. 14,500		+ 1,200	+ 26,700	+ 40,000	=	2,900	+ 80,000			- 500
f.	+ \$2,800				=				+ \$2,800	
Bal. 14,500	+ 2,800	+ 1,200	+ 26,700	+ 40,000	=	2,900	+ 80,000		+ 2,800	- 500
g. + 4,000					=				+ 4,000	
Bal. 18,500	+ 2,800	+ 1,200	+ 26,700	+ 40,000	=	2,900	+ 80,000		+ 6,800	- 500
h. - 3,275					=			- \$3,275		
Bal. 15,225	+ 2,800	+ 1,200	+ 26,700	+ 40,000	=	2,900	+ 80,000	- 3,275	+ 6,800	- 500
i. + 1,800	- 1,800				=					
Bal. 17,025	+ 1,000	+ 1,200	+ 26,700	+ 40,000	=	2,900	+ 80,000	- 3,275	+ 6,800	- 500
j. - 700					=	- 700				
Bal. 16,325	+ 1,000	+ 1,200	+ 26,700	+ 40,000	=	2,200	+ 80,000	- 3,275	+ 6,800	- 500
k. - 1,800					=					- 1,800
Bal. \$14,525	+ \$1,000	+ \$1,200	+ \$26,700	+ \$40,000	=	\$2,200	+ \$80,000	- \$3,275	+ \$6,800	- \$2,300

Problem 1-8A (Concluded)

Part 2

Biz Consulting's net income = \$6,800 - \$2,300 = \$4,500

Problem 1-9A (Continued)

Part 2

**Sony Electric
Income Statement
For Month Ended December 31**

Revenues		
Electrical services revenue		\$7,100
Expenses		
Rent expense	\$1,000	
Salaries expense	1,400	
Utilities expense	<u>540</u>	
Total expenses		<u>2,940</u>
Net income		<u>\$4,160</u>

**Sony Electric
Statement of Retained Earnings
For Month Ended December 31**

Retained earnings, December 1	\$ 0
Add: Net income.....	<u>4,160</u>
	4,160
Less: Dividends.....	<u>950</u>
Retained earnings, December 31	<u>\$ 3,210</u>

**Sony Electric
Balance Sheet
December 31**

Assets		Liabilities	
Cash.....	\$59,180	Accounts payable.....	\$ 8,550
Accounts receivable	900	Equity	
Supplies	1,150	Common stock	65,000
Office equipment	2,530	Retained earnings	<u>3,210</u>
Electrical equipment	<u>13,000</u>	Total equity	<u>68,210</u>
Total assets.....	<u>\$76,760</u>	Total liabilities and equity	<u>\$76,760</u>

Problem 1-9A (Concluded)

Part 3

Sony Electric Statement of Cash Flows For Month Ended December 31		
Cash flows from operating activities		
Cash received from customers ¹	\$ 6,200	
Cash paid for rent	(1,000)	
Cash paid for supplies	(800)	
Cash paid for utilities	(540)	
Cash paid to employees.....	<u>(1,400)</u>	
Net cash provided by operating activities.....		\$ 2,460
Cash flows from investing activities		
Cash paid for office equipment	(2,530)	
Cash paid for electrical equipment	<u>(4,800)</u>	
Net cash used by investing activities		(7,330)
Cash flows from financing activities		
Cash investment from shareholder	65,000	
Cash dividend to shareholder	<u>(950)</u>	
Net cash provided by financing activities		<u>64,050</u>
Net increase in cash		\$59,180
Cash balance, Dec. 1		<u>0</u>
Cash balance, Dec. 31		<u>\$59,180</u>

¹\$1,200 + \$5,000 = \$6,200

Part 4

If the December 1 investment had been \$49,000 cash instead of \$65,000 and the \$16,000 difference was borrowed by the company from a bank, then:

- (a) Total assets would remain the same.
- (b) Total liabilities would be \$16,000 greater.
- (c) Total equity would be \$16,000 lower (due to less owner investment).

Problem 1-10A (15 minutes)

- 1. Return on assets is net income divided by the average total assets.
Kyzera's return: $\$65,000 / \$250,000 = 0.26$ or 26%.**
- 2. Return on assets seems satisfactory for the risk involved in the manufacturing, marketing, and selling of cellular telephones. Moreover, Kyzera's 26% return is more than twice as high as that of its competitors' 12% return.**
- 3. We know that revenues less expenses equal net income. Taking the revenues and net income numbers for Kyzera we obtain:
 $\$475,000 - \text{Expenses} = \$65,000 \rightarrow \text{Expenses must equal } \underline{\$410,000}$.**
- 4. We know from the accounting equation that total financing (liabilities plus equity) must equal the total for assets (investing). Since average total assets are \$250,000, we know the average total of liabilities plus equity (financing) must equal \$250,000.**

Problem 1-11A (20 minutes)

- 1. Return on assets equals net income divided by average total assets.**
 - a. Coca-Cola return: $\$8,634 / \$76,448 = 0.113$ or 11.3%.**
 - b. PepsiCo return: $\$6,462 / \$70,518 = 0.092$ or 9.2%.**
- 2. Strictly on the amount of sales to consumers, Coca-Cola's sales of \$46,542 are less than PepsiCo's \$66,504.**
- 3. Success in returning net income from the average amount invested is revealed by the return on assets. Part 1 showed that Coca-Cola's 11.3% return is better than PepsiCo's 9.2% return.**

PROBLEM SET B

Problem 1-1B (25 minutes)

Transaction	a.				b.		
	Balance Sheet			Income Statement	Statement of Cash Flows		
	Total Assets	Total Liab.	Total Equity	Net Income	Operating Activities	Investing Activities	Financing Activities
1 Owner invests \$800 cash in business in exchange for stock	+800		+800				+800
2 Purchases \$100 supplies on credit	+100	+100					
3 Buys equipment for \$400 cash	+400 -400					-400	
4 Provide services for \$900 cash	+900		+900	+900	+900		
5 Pays \$400 cash for rent incurred	-400		-400	-400	-400		
6 Buys \$200 of equipment on credit	+200	+200					
7 Pays \$300 cash for wages incurred	-300		-300	-300	-300		
8 Pays \$50 cash in dividends	-50		-50				-50
9 Provide \$600 services on credit	+600		+600	+600			
10 Collects \$600 cash on accounts receivable	+600 -600				+600		

Problem 1-2B (40 minutes)

Part 1

Company V

(a) and (b)

Calculation of equity:	<u>Beginning</u>	<u>Ending</u>
Assets	\$54,000	\$59,000
Liabilities	<u>(25,000)</u>	<u>(36,000)</u>
Equity	<u>\$29,000</u>	<u>\$23,000</u>

(c) Calculation of net income for the year:

Equity, <i>beginning</i> of year	\$29,000
Plus stock issuances	5,000
Plus net income	?
Less cash dividends	<u>(5,500)</u>
Equity, <i>end</i> of year	<u>\$23,000</u>
Therefore, the net loss must have been	<u>\$(5,500).</u>

Part 2

Company W

(a) Calculation of equity at *beginning* of year:

Assets	\$80,000
Liabilities	<u>(60,000)</u>
Equity	<u>\$20,000</u>

(b) Calculation of equity at *end* of year:

Equity, <i>beginning</i> of year	\$20,000
Plus stock issuances	20,000
Plus net income	40,000
Less cash dividends	<u>(2,000)</u>
Equity, <i>end</i> of year	<u>\$78,000</u>

(c) Calculation of the amount of liabilities at *end* of year:

Assets	\$100,000
Equity	<u>(78,000)</u>
Liabilities	<u>\$ 22,000</u>

Problem 1-2B (Continued)

Part 3

Company X

First, compute the beginning and ending equity balances:

	<u>Beginning</u>	<u>Ending</u>
Assets	\$141,500	\$186,500
Liabilities	(68,500)	(65,800)
Equity	<u>\$ 73,000</u>	<u>\$120,700</u>

Then, find the amount of stock issuances during the year:

Equity, beginning of year	\$ 73,000
Plus stock issuances	?
Plus net income	18,500
Less cash dividends	<u>0</u>
Equity, end of year	<u>\$120,700</u>

Thus, the stock issuances must have been ... \$ 29,200

Part 4

Company Y

First, compute the beginning balance of equity:

	<u>Beginning</u>
Assets	\$92,500
Liabilities	<u>51,500</u>
Equity	<u>\$41,000</u>

Next, find the ending balance of equity as follows:

Equity, beginning of year	\$41,000
Plus stock issuances	48,100
Plus net income	24,000
Less cash dividends	<u>(20,000)</u>
Equity, end of year	<u>\$93,100</u>

Finally, find the ending amount of assets by adding the ending balance of equity to the ending balance of liabilities:

	<u>Ending</u>
Liabilities	\$ 42,000
Equity	<u>93,100</u>
Assets	<u>\$135,100</u>

Problem 1-2B (Concluded)

Part 5

Company Z

First, compute the balance of equity at end of year:

Assets.....	\$170,000
Liabilities.....	<u>(42,000)</u>
Equity	<u>\$128,000</u>

Next, find the beginning balance of equity as follows:

Equity, beginning of year	\$?
Plus stock issuances.....	60,000
Plus net income.....	32,000
Less cash dividends	<u>(8,000)</u>
Equity, end of year	<u>\$128,000</u>

Thus, the beginning balance of equity is \$44,000.

Finally, find the beginning amount of liabilities by subtracting the beginning balance of equity from the beginning balance of assets:

	<u>Beginning</u>
Assets.....	\$144,000
Equity	<u>(44,000)</u>
Liabilities.....	<u>\$100,000</u>

Problem 1-3B (20 minutes)

**Audi Company
Income Statement
For Current Year Ended December 31**

Revenues		
Consulting revenue	\$6,600	
Rental revenue	<u>4,400</u>	
Total revenues.....		\$11,000
Expenses		
Salaries expense.....	4,000	
Rent expense.....	2,400	
Selling and administrative expenses..	<u>1,600</u>	
Total expenses		<u>8,000</u>
Net income		<u>\$ 3,000</u>

Problem 1-4B (20 minutes)

Audi Company Statement of Retained Earnings For Current Year Ended December 31	
Retained earnings, Dec. 31, prior year	\$ 900
Add: Net income (from Problem 1-3B).....	<u>3,000</u>
	3,900
Less: Dividends	<u>2,600</u>
Retained earnings, Dec. 31, current year	<u><u>\$1,300</u></u>

Problem 1-5B (20 minutes)

Audi Company Balance Sheet December 31			
Assets		Liabilities	
Cash.....	\$2,000	Accounts payable	<u>\$3,600</u>
Accounts receivable	1,800	Total liabilities	3,600
Supplies	1,200	Equity	
Equipment.....	1,000	Common stock.....	1,100
		Retained earnings*	<u>1,300</u>
		Total equity	<u>2,400</u>
Total assets.....	<u>\$6,000</u>	Total liabilities and equity....	<u>\$6,000</u>

* For computation of this amount see Problem 1-4B.

Problem 1-6B (15 minutes)

Banji Company Statement of Cash Flows For Current Year Ended December 31	
Cash used by operating activities	\$(3,000)
Cash from investing activities	1,600
Cash from financing activities	<u>1,800</u>
Net increase in cash	\$ 400
Cash, December 31, prior year	<u>1,300</u>
Cash, December 31, current year	<u><u>\$ 1,700</u></u>

Problem 1-7B (60 minutes) Part 1

Date	Assets			=	Liabilities	+	Equity								
	Cash	+	Accounts Receivable	+	Equipment	=	Accounts Payable	+	Common Stock	-	Dividends	+	Revenues	-	Expenses
June 1	+\$130,000					=		+	\$130,000						
2	- 6,000					=								- \$6,000	Rent
4				+	\$2,400	=	+	\$2,400							
6	- 1,150					=								- 1,150	Advertising
8	+ 850					=				+	\$ 850				
14		+	\$7,500			=				+	7,500				
16	- 800					=								- 800	Salary
20	+ 7,500	-	7,500			=									
21		+	7,900			=				+	7,900				
24		+	675			=				+	675				
25	+ 7,900	-	7,900			=									
26	- 2,400					=	-	2,400							
28	- 800					=								- 800	Salary
29	- 4,000					=				-	\$4,000				
30	- 150					=								- 150	Telephone
30	- 890					=								- 890	Utilities
	<u>\$130,060</u>	+	<u>\$ 675</u>	+	<u>\$2,400</u>	=	<u>\$ 0</u>	+	<u>\$130,000</u>	-	<u>\$4,000</u>	+	<u>\$16,925</u>	-	<u>\$9,790</u>

Problem 1-7B (Continued)
Part 2

Niko's Maintenance Co.
Income Statement
For Month Ended June 30

Revenues		
Maintenance services revenue		\$16,925
Expenses		
Rent expense	\$6,000	
Salaries expense	1,600	
Advertising expense	1,150	
Utilities expense	890	
Telephone expense	<u>150</u>	
Total expenses		<u>9,790</u>
Net income		<u>\$ 7,135</u>

Niko's Maintenance Co.
Statement of Retained Earnings
For Month Ended June 30

Retained earnings, June 1	\$ 0
Add: Net income	<u>7,135</u>
	7,135
Less: Dividends	<u>4,000</u>
Retained earnings, June 30	<u>\$ 3,135</u>

Niko's Maintenance Co.
Balance Sheet
June 30

Assets		Liabilities	
Cash	\$130,060	Accounts payable	\$ 0
Accounts receivable	675	Equity	
Equipment	2,400	Common stock	130,000
		Retained earnings	<u>3,135</u>
		Total equity	<u>133,135</u>
Total assets	<u>\$133,135</u>	Total liabilities and equity	<u>\$133,135</u>

Problem 1-7B (Concluded)

Part 3

Niko's Maintenance Co. Statement of Cash Flows For Month Ended June 30		
Cash flows from operating activities		
Cash received from customers ¹	\$ 16,250	
Cash paid for rent.....	(6,000)	
Cash paid for advertising	(1,150)	
Cash paid for telephone	(150)	
Cash paid for utilities	(890)	
Cash paid to employees	<u>(1,600)</u>	
Net cash provided by operating activities		\$ 6,460
Cash flows from investing activities		
Cash paid for equipment	<u>(2,400)</u>	
Net cash used by investing activities.....		(2,400)
Cash flows from financing activities		
Cash investments from shareholder	130,000	
Cash dividends to shareholder	<u>(4,000)</u>	
Net cash provided by financing activities		<u>126,000</u>
Net increase in cash.....		\$130,060
Cash balance, June 1		<u>0</u>
Cash balance, June 30.....		<u>\$130,060</u>

¹\$850 + \$7,500 + \$7,900 = \$16,250

Problem 1-8B (60 minutes) Part 1

Assets					=	Liabilities	+	Equity		
Cash	+ Accounts Receivable	+ Supplies	+ Equipment	+ Building	=	Accounts Payable	+ Common Stock	- Dividends	+ Revenues	- Expenses
a. + \$90,000			+ \$10,000				+ \$100,000			
b. - 50,000				+ \$50,000						
Bal. 40,000			+ 10,000	+ 50,000	=		+ 100,000			
c. - 25,000			+ 25,000							
Bal. 15,000			+ 35,000	+ 50,000	=		+ 100,000			
d.		+ \$1,200	+ 1,700			+ \$2,900				
Bal. 15,000		1,200	+ 36,700	+ 50,000	=	2,900	+ 100,000			
e. - 750										- \$ 750
Bal. 14,250		+ 1,200	+ 36,700	+ 50,000	=	2,900	+ 100,000			- 750
f.	+ \$2,800								+ \$2,800	
Bal. 14,250	+ 2,800	+ 1,200	+ 36,700	+ 50,000	=	2,900	+ 100,000		+ 2,800	- 750
g. + 4,000									+ 4,000	
Bal. 18,250	+ 2,800	+ 1,200	+ 36,700	+ 50,000	=	2,900	+ 100,000		+ 6,800	- 750
h. - 11,500								- \$11,500		
Bal. 6,750	+ 2,800	+ 1,200	+ 36,700	+ 50,000	=	2,900	+ 100,000	- 11,500	+ 6,800	- 750
i. + 1,800	- 1,800									
Bal. 8,550	+ 1,000	+ 1,200	+ 36,700	+ 50,000	=	2,900	+ 100,000	- 11,500	+ 6,800	- 750
j. - 700						- 700				
Bal. 7,850	+ 1,000	+ 1,200	+ 36,700	+ 50,000	=	2,200	+ 100,000	- 11,500	+ 6,800	- 750
k. - 2,500										- 2,500
Bal. \$ 5,350	+ \$1,000	+ \$1,200	+ \$36,700	+ \$50,000	=	\$2,200	+ \$100,000	- \$11,500	+ \$6,800	- \$3,250

Problem 1-8B (Concluded)

Part 2

The company's net income = \$6,800 - \$3,250 = \$3,550

Problem 1-9B (60 minutes) Part 1

		Assets					=	Liabilities	+	Equity			
Date		Cash	+ Accounts Receivable	+ Supplies	+ Office Equipment	+ Roofing Equipment	=	Accounts Payable	+	Common Stock	- Dividends	+ Revenues	- Expenses
July	1	+ \$80,000					=		+	\$80,000			
	2	- 700											- 700
Bal.		<u>79,300</u>					=			<u>80,000</u>			- <u>700</u>
	3	- 1,000				+ \$5,000		+ \$4,000					
Bal.		<u>78,300</u>				+ <u>5,000</u>	=	<u>4,000</u>	+	<u>80,000</u>			- <u>700</u>
	6	- 600		+ \$600									
Bal.		<u>77,700</u>		+ <u>600</u>		+ <u>5,000</u>	=	<u>4,000</u>	+	<u>80,000</u>			- <u>700</u>
	8	+ 7,600										+ \$7,600	
Bal.		<u>85,300</u>		+ <u>600</u>		+ <u>5,000</u>	=	<u>4,000</u>	+	<u>80,000</u>		+ <u>7,600</u>	- <u>700</u>
	10				+ \$2,300			+ 2,300					
Bal.		<u>85,300</u>		+ <u>600</u>	+ <u>2,300</u>	+ <u>5,000</u>	=	<u>6,300</u>	+	<u>80,000</u>		+ <u>7,600</u>	- <u>700</u>
	15		+ \$8,200									+ 8,200	
Bal.		<u>85,300</u>	+ <u>8,200</u>	+ <u>600</u>	+ <u>2,300</u>	+ <u>5,000</u>	=	<u>6,300</u>	+	<u>80,000</u>		+ <u>15,800</u>	- <u>700</u>
	17			+ 3,100				+ 3,100					
Bal.		<u>85,300</u>	+ <u>8,200</u>	+ <u>3,700</u>	+ <u>2,300</u>	+ <u>5,000</u>	=	<u>9,400</u>	+	<u>80,000</u>		+ <u>15,800</u>	- <u>700</u>
	23	- 2,300						- 2,300					
Bal.		<u>83,000</u>	+ <u>8,200</u>	+ <u>3,700</u>	+ <u>2,300</u>	+ <u>5,000</u>	=	<u>7,100</u>	+	<u>80,000</u>		+ <u>15,800</u>	- <u>700</u>
	25		+ 5,000									+ 5,000	
Bal.		<u>83,000</u>	+ <u>13,200</u>	+ <u>3,700</u>	+ <u>2,300</u>	+ <u>5,000</u>	=	<u>7,100</u>	+	<u>80,000</u>		+ <u>20,800</u>	- <u>700</u>
	28	+ 8,200	- 8,200										
Bal.		<u>91,200</u>	+ <u>5,000</u>	+ <u>3,700</u>	+ <u>2,300</u>	+ <u>5,000</u>	=	<u>7,100</u>	+	<u>80,000</u>		+ <u>20,800</u>	- <u>700</u>
	30	- 1,560											- 1,560
Bal.		<u>89,640</u>	+ <u>5,000</u>	+ <u>3,700</u>	+ <u>2,300</u>	+ <u>5,000</u>	=	<u>7,100</u>	+	<u>80,000</u>		+ <u>20,800</u>	- <u>2,260</u>
	31	- 295											- 295
Bal.		<u>89,345</u>	+ <u>5,000</u>	+ <u>3,700</u>	+ <u>2,300</u>	+ <u>5,000</u>	=	<u>7,100</u>	+	<u>80,000</u>		+ <u>20,800</u>	- <u>2,555</u>
	31	- 1,800									- \$1,800		
Bal.		<u>\$87,545</u>	+ <u>\$ 5,000</u>	+ <u>\$3,700</u>	+ <u>\$2,300</u>	+ <u>\$5,000</u>	=	<u>\$7,100</u>	+	<u>\$80,000</u>	- <u>\$1,800</u>	+ <u>\$20,800</u>	- <u>\$2,555</u>

Problem 1-9B (Continued)
Part 2

Rivera Roofing Company
Income Statement
For Month Ended July 31

Revenues	
Roofing services revenue	\$20,800
Expenses	
Rent expense	\$ 700
Salaries expense	1,560
Utilities expense	<u>295</u>
Total expenses	2,555
Net income	<u>\$18,245</u>

Rivera Roofing Company
Statement of Retained Earnings
For Month Ended July 31

Retained earnings, July 1	\$ 0
Add: Net income	<u>18,245</u>
	18,245
Less: Dividends	<u>1,800</u>
Retained earnings, July 31	<u>\$16,445</u>

Rivera Roofing Company
Balance Sheet
July 31

<i>Assets</i>	<i>Liabilities</i>
Cash..... \$ 87,545	Accounts payable \$ 7,100
Accounts receivable 5,000	<i>Equity</i>
Supplies 3,700	Common stock..... 80,000
Office equipment 2,300	Retained earnings..... <u>16,445</u>
Roofing equipment..... <u>5,000</u>	Total equity..... <u>96,445</u>
Total assets..... <u>\$103,545</u>	Total liabilities & equity.... <u>\$103,545</u>

Problem 1-9B (Concluded)
Part 3

Rivera Roofing Company Statement of Cash Flows For Month Ended July 31		
Cash flows from operating activities		
Cash received from customers ¹	\$15,800	
Cash paid for rent	(700)	
Cash paid for supplies	(600)	
Cash paid for utilities	(295)	
Cash paid to employees	<u>(1,560)</u>	
Net cash provided by operating activities		\$12,645
Cash flows from investing activities		
Cash paid for roofing equipment	(1,000)	
Cash paid for office equipment	<u>(2,300)</u>	
Net cash used by investing activities		(3,300)
Cash flows from financing activities		
Cash investments from shareholder	80,000	
Cash dividends to shareholder	<u>(1,800)</u>	
Net cash provided by financing activities		<u>78,200</u>
Net increase in cash		\$87,545
Cash balance, July 1		<u>0</u>
Cash balance, July 31		<u>\$87,545</u>

¹\$7,600 + \$8,200 = \$15,800

Part 4

If the \$5,000 purchase on July 3 had been acquired through an additional owner investment of cash, then:

- (a) Total assets would be greater by \$1,000.
- (b) Total liabilities would be \$4,000 less.
- (c) Total equity would be \$5,000 greater.

Problem 1-10B (15 minutes)

1. Return on assets is net income divided by average total assets (the average amount invested). For Ski-Doo Company this return is computed as:

$$\text{\$201,000} / \text{\$3,000,000} = 0.067 \text{ or } \underline{\underline{6.7\%}}$$

2. Return on assets does not seem satisfactory for the risk involved in the manufacturing, marketing, and selling of snowmobile equipment. Ski-Doo Company's 6.7% return is less than the 9.5% return earned by its competitors.
3. We know that revenues less expenses equal net income. Taking the revenues and net income numbers for Ski-Doo Company we obtain:
 $\text{\$1,400,000} - \text{Expenses} = \text{\$201,000} \rightarrow \text{Expenses must equal } \underline{\underline{\text{\$1,199,000}}}$.
4. We know from the accounting equation that the total of liabilities plus equity (financing) must equal the total for assets (investing). Since average total assets are $\text{\$3,000,000}$, we know the average total of liabilities plus equity (financing) must equal $\underline{\underline{\text{\$3,000,000}}}$.

Problem 1-11B (15 minutes)

1. Return on assets equals net income divided by average total assets.
 - a. AT&T return: $\$4,184 / \$269,868 = 0.016$ or 1.6%
 - b. Verizon return: $\$10,198 / \$225,233 = 0.045$ or 4.5%
2. On strictly the amount of sales to consumers, AT&T's sales of \$126,723 are greater than Verizon's sales of \$110,875.
3. Success in returning net income from the amount invested is revealed by the return on assets ratio. Part 1 showed that AT&T has a much lower return on assets of 1.6% versus Verizon with a 4.5% return on assets.
4. The reported figures suggest Verizon is more successful in generating income based on assets. Based on this information alone, we would be better advised to invest in Verizon than AT&T.

Nevertheless, we would look for additional information in financial statements and other sources for further guidance. For example, if AT&T could reduce its expenses, or reduce its assets without reducing income, it could potentially be a more appealing investment given its greater market share; or, Verizon could do the same and make it appear more appealing as an investment. We would also look for consumer trends, market expansion, competition, and product development and promotion plans.

Serial Problem — SP 1 (30 minutes)

Business Solutions

Date	Assets					=	Liabilities	+	Equity																	
	Cash	+	Accounts Receivable	+	Computer Supplies	+	Computer System	+	Office Equipment	=	Accounts Payable	+	Common Stock	-	Dividends	+	Revenues	-	Expenses							
Oct. 1	+\$45,000						\$20,000	+	\$8,000			+	\$73,000													
3				+	\$1,420						+	\$1,420														
Bal.	45,000			+	1,420	+	20,000	+	8,000	=	1,420	+	73,000													
6		+	\$4,800																	+	\$ 4,800					
Bal.	45,000	+	4,800	+	1,420	+	20,000	+	8,000	=	1,420	+	73,000								+	4,800				
8	- 1,420										-	1,420														
Bal.	43,580	+	4,800	+	1,420	+	20,000	+	8,000	=	0	+	73,000								+	4,800				
12		+	1,400																		+	1,400				
Bal.	43,580	+	6,200	+	1,420	+	20,000	+	8,000	=	0	+	73,000								+	6,200				
15	+ 4,800	-	4,800																							
Bal.	48,380	+	1,400	+	1,420	+	20,000	+	8,000	=	0	+	73,000								+	6,200				
17	- 805																					-	\$ 805			
Bal.	47,575	+	1,400	+	1,420	+	20,000	+	8,000	=	0	+	73,000								+	6,200	-	805		
20	- 1,728																						-	1,728		
Bal.	45,847	+	1,400	+	1,420	+	20,000	+	8,000	=	0	+	73,000								+	6,200	-	2,533		
22	+ 1,400	-	1,400																							
Bal.	47,247	+	0	+	1,420	+	20,000	+	8,000	=	0	+	73,000								+	6,200	-	2,533		
28		+	5,208																		+	5,208				
Bal.	47,247	+	5,208	+	1,420	+	20,000	+	8,000	=	0	+	73,000								+	11,408	-	2,533		
31	- 875																						-	875		
Bal.	46,372	+	5,208	+	1,420	+	20,000	+	8,000	=	0	+	73,000								+	11,408	-	3,408		
31	- 3,600																						-	\$3,600		
Bal.	\$42,772	+	\$5,208	+	\$1,420	+	\$20,000	+	\$8,000	=	\$ 0	+	\$73,000								-	\$3,600	+	\$11,408	-	\$3,408

Company Analysis — FSA 1-1

1. \$365,725 (\$ millions)

Explanation: An organization's total assets always equal total liabilities plus total equity. Therefore, Apple's liabilities plus equity equal Apple's total assets.

2. 16.1%

Explanation: Return on assets is net income divided by the average total assets invested. For Apple this return is (\$ millions):
 $\$59,531 / [(\$365,725 + 375,319)/2] = 0.161$ or 16.1%.

3. \$206,064 (\$ millions)

Explanation: We know that net income equals total revenues less total expenses. For Apple, we are told net income is \$59,531 and revenues are \$265,595. Thus, Apple's total expenses are computed as: $\$265,595 - \text{Expenses} = \$59,531$. Total expenses must equal \$206,064 (\$ millions).

4. Better

Explanation: Apple's return on assets of 16.1% is good given that it exceeds its competitors' return on assets of 10% for this period.

Comparative Analysis — FSA 1-2

(\$ millions)	Apple	Google
1. Total Assets = Liabilities + Equity	<u>\$365,725</u>	<u>\$232,792</u>
2. Return on assets	<u>\$59,531</u> [(\$365,725 + \$375,319)/2] <u>16.1%</u>	<u>\$30,736</u> [(\$232,792 + \$197,295)/2] <u>14.3%</u>
3. Revenues-Expenses = Net income	\$265,595 – Expenses = \$59,531	\$136,819 – Expenses = \$30,736
→ Expenses =	Expenses = <u>\$206,064</u>	Expenses = <u>\$106,083</u>

4. (a) Better

Explanation: Apple's 16.1% return is good given the moderate risk Apple confronts and vis-à-vis the 10% return of its competitors.

(b) Better

Explanation: Google's 14.3% return is good given the moderate risk Google confronts and vis-à-vis the 10% return of its competitors.

5. Apple

Explanation: Apple's return on assets is superior to Google's return on assets. Therefore, based only on return on assets, you would invest in Apple.

Global Analysis — FSA 1-3 (20 minutes)

1. (a) 13.8%

Explanation: Return on assets is net income divided by the average total assets invested. For Samsung this return is (~~₩~~ millions): ~~₩~~44,344,857 / ~~₩~~320,554,667 = 0.138 or 13.8%.

(b) 15.0%

Explanation: Return on assets is net income divided by the average total assets invested. For Samsung this return is (~~₩~~ millions): ~~₩~~42,186,747 / ~~₩~~281,963,207 = 0.15 or 15.0%.

2. Unfavorable

Explanation: Samsung's return on assets decreased in the current year versus the prior year.

3. (a) Worse

Explanation: Samsung's return on assets of is worse than Apple's return on assets. Apple's return on assets is computed: \$ 59,531 / \$ 370,522 = 0.161 or 16.1%.

(b) Worse

Explanation: Samsung's return on assets of is worse than Google's return on assets. Google's return on assets is computed: \$30,736 / \$215,044 = 0.143 or 14.3%.

DISCUSSION QUESTIONS

1. The purpose of accounting is to provide decision makers with relevant and reliable information to help them make better decisions. Examples include information for people making investments, loans, and business plans.
2. Technology reduces the time, effort, and cost of recordkeeping. There is still a demand for people who can design accounting systems, supervise their operation, analyze complex transactions, and interpret reports. Demand also exists for people who can effectively use computers to prepare and analyze accounting reports. Technology will never substitute for qualified people with abilities to prepare, use, analyze, and interpret accounting information.
3. External users and their uses of accounting information include: (a) lenders, to measure the risk and return of loans; (b) shareholders, to assess whether to buy, sell, or hold their shares; (c) directors, to oversee the organization; (d) employees and labor unions, to judge the fairness of wages and assess future employment opportunities; and (e) regulators, to determine whether the organization is complying with regulations. Other users are voters, legislators, government officials, contributors to nonprofits, suppliers, and customers.
4. Business owners and managers use accounting information to help answer questions such as: What resources does an organization own? What debts are owed? How much income is earned? Are expenses reasonable for the level of sales? Are customers' accounts being promptly collected?
5. Service businesses include: Standard and Poor's, Dun & Bradstreet, Merrill Lynch, Southwest Airlines, CitiCorp, Humana, Charles Schwab, and Prudential. Businesses offering products include Nike, Reebok, Gap, Apple, Ford Motor Co., Philip Morris, Coca-Cola, Best Buy, and WalMart.
6. The internal role of accounting is to serve the organization's internal operating functions. It does this by providing useful information for internal users in completing their tasks more effectively and efficiently. By providing this information, accounting helps the organization reach its overall goals.
7. Accounting professionals offer many services including auditing, management advice, tax planning, business valuation, and money management.
8. Marketing managers are likely interested in information such as sales volume, advertising costs, promotion costs, salaries of sales personnel, and sales commissions.
9. Accounting is described as a service activity because it serves decision makers by providing information to help them make better business decisions.
10. Some accounting-related professions include consultant, financial analyst, underwriter, financial planner, appraiser, FBI investigator, market researcher, and system designer.
11. Ethics rules require that auditors avoid auditing clients in which they have a direct investment, or if the auditor's fee is dependent on the figures in the client's reports. This will help prevent others from doubting the quality of the auditor's report.

12. In addition to preparing tax returns, tax accountants help companies and individuals plan future transactions to minimize the amount of tax to be paid. They are also actively involved in estate planning and in helping set up organizations. Some tax accountants work for regulatory agencies such as the IRS or the various state departments of revenue. These tax accountants help to enforce tax laws.
13. The objectivity concept means that financial statement information is supported by independent, unbiased evidence other than someone's opinion or imagination.
14. This treatment is justified by both the measurement (cost) principle and the going-concern assumption.
15. The revenue recognition principle provides guidance for managers and auditors so they know when to recognize revenue. If revenue is recognized too early, the business looks more profitable than it is. On the other hand, if revenue is recognized too late the business looks less profitable than it is. This principle demands that revenue be recognized when it is both earned (when service or product is provided) and can be measured reliably. The amount of revenue should equal the value of the assets received or expected to be received from the business's operating activities covering a specific time period.
16. Business organizations can be organized as a sole proprietorship, partnership, corporation, or LLC. These forms have implications for legal entity and liability, business life, taxation, and number of owners as follows.

	<i>Proprietorship</i>	<i>Partnership</i>	<i>Corporation</i>	<i>LLC</i>
Business entity	yes	yes	yes	yes
Legal entity	no	no	yes	yes
Limited liability	no	no	yes	yes
Unlimited life	no	no	yes	yes
Business Taxed	no	no	yes	no
One owner allowed	yes	no	yes	yes

17. (a) Assets are resources owned or controlled by a company that are expected to yield future benefits. (b) Liabilities are creditors' claims on assets that reflect obligations to provide assets, products, or services to others. (c) Equity is the owner's claim on assets and is equal to assets minus liabilities. (d) Net assets refer to equity.
18. Equity is increased by investments (stock issuances) from the owner and by net income (which is the excess of revenues over expenses). It is decreased by dividends and by a net loss (which is the excess of expenses over revenues).
19. Accounting principles consist of (a) *general* and (b) *specific* principles. General principles are the basic assumptions, concepts, and guidelines for preparing financial statements. They stem from long-used accounting practices. Specific principles are detailed rules used in reporting on business transactions and events. They usually arise from the rulings of authoritative and regulatory groups such as the Financial Accounting Standards Board or the Securities and Exchange Commission.

20. Revenue (or sales) is the amount received from selling products and services.
21. Net income (also called income, profit, or earnings) equals revenues minus expenses (if revenues exceed expenses). Net income increases equity. If expenses exceed revenues, the company has a net loss. Net loss decreases equity.
22. The four basic financial statements are: income statement, statement of retained earnings, balance sheet, and statement of cash flows.
23. An income statement reports a company's revenues and expenses along with the resulting net income or loss over a period of time.
24. Rent expense, utilities expense, administrative expenses, advertising and promotion expenses, maintenance expense, and salaries and wages expenses are some examples of business expenses.
25. The statement of retained earnings explains the changes in retained earnings from net income or loss, and from any owner contributions (stock issuances) and dividends over a period of time.
26. The balance sheet describes a company's financial position (types and amounts of assets, liabilities, and equity) at a point in time.
27. The statement of cash flows reports on the cash inflows and outflows from a company's operating, investing, and financing activities.
28. Return on assets, also called return on investment, is a profitability measure that is useful in evaluating management, analyzing and forecasting profits, and planning activities. It is computed as net income divided by the average total assets. For example, if we have an average annual balance of \$100 in a bank account and it earns interest of \$5 for the year, then our return on assets is $\$5 / \100 or 5%. The return on assets is a popular measure for analysis because it allows us to compare companies of different sizes and in different industries.
29. The dollar amounts in Google's financial statements are rounded to the nearest million (\$1,000,000). Google's consolidated statement of income (or income statement) covers the calendar-year ended December 31, 2018. Google also reports comparative income statements for the previous two years.
30. The independent auditor for Apple is Ernst & Young, LLP. The auditor expressly states that "our responsibility is to express an opinion on Apple Inc.'s financial statements based on our audits." The auditor also states that "these financial statements are the responsibility of Apple Inc.'s management."

Ethics Challenge — BTN 1-1

1. There are several parties affected. They include the users of financial statements such as shareholders, lenders, investors, analysts, suppliers, directors, unions, regulators, and others. They also include the accounting firm, which can be sued if deemed a party to misleading statements.
2. A major factor in the value of an auditor's report is the auditor's independence. If an auditor accepted a fee that increases when the client's reported profit increases, the auditor is (or at least is perceived to be) interested in higher profits for the client. This compromises the auditor's independence.
3. Thorne should not accept this fee arrangement. To avoid compromising the auditor's independence, Thorne should reject it. (Further, the AICPA Code of Professional Conduct forbids auditors from accepting contingent fees that depend on amounts reported in a client's financial statements. This AICPA Code has been codified into law in most states and, therefore, this action would also be an illegal act for a CPA.)
4. Ethical considerations guiding this decision include the potential harm to affected parties by allowing such a fee arrangement to exist. The unacceptable nature of such a fee arrangement guards the profession against unethical actions that could undermine its real and perceived value to society.

Communicating in Practice — BTN 1-2

1. Deciding whether Apple is a good loan risk can be difficult because the planned expansion is risky if customer demand does not meet expectations. As a loan officer in this situation you would want information on the company's (1) projections of expected cash receipts and cash payments (best provided on a monthly basis); (2) assessment of the market, the company's plans, and a strategy to achieve success; (3) cash contributions that the owners will make to the business; and (4) a listing of tangible assets (including their price and useful life) necessary to carry out the company's plans.
2. How the company is organized is important to a loan officer. If it is a standard partnership (which it was, and not a LLC), the personal assets of the owners are available to repay the loan. In this case, a loan officer will want information about the owners' financial condition. If it is a corporation, the amounts invested in the business by each shareholder are especially important. The loan officer can also require owners or shareholders to personally guarantee the loan for additional protection for the bank. Careful execution of these steps should minimize the bank's risk of taking on a bad loan.

Taking It to the Net — BTN 1-3

1.

\$ thousands	2018	2017	2016	2015	2014
Revenues	\$38,075	\$38,296	\$40,457	\$41,508	\$39,185
Net income.....	2,964	3,450	4,426	3,938	4,392

Its revenues grew from 2014 to 2015, and then slightly regressed from 2016 through 2018. Management must work to pursue policies that grow revenues.

2. RMCF has been profitable each of the last 5 years as exhibited by its positive net income. Management must work to increase and sustain higher profitability levels for long-run success.

Teamwork in Action — BTN 1-4

Suggestions for forming support/learning teams are in the Instructor's Resource Manual (IRM). The IRM provides the master of a Student Data Form that can be duplicated and used to gather information as a basis for forming these teams. The IRM also includes other administrative materials helpful in creating an active learning environment for studying accounting.

[Note: Instructors often have students use the copy function in e-mail to keep them advised of meeting times and other important team activities. This also encourages students to use and explore additional features of e-mail.]

Entrepreneurial Decision — BTN 1-5

1. (a) AccountApp's total amount of liabilities and equity consists of the bank loan and the owner investments. Specifically:

Total assets	=	Bank Loan	+	Owner investment
	=	Liabilities	+	Equity
\$750,000	=	\$500,000	+	\$250,000

- (b) AccountApp's total amount of assets equals its total amount of liabilities plus equity, which is \$750,000.

2. Return on assets = $\$80,250 / \$750,000 = 0.107 = \underline{10.7\%}$

AccountApp's 10.7% return slightly exceeds its competitors' average return of 10%. Assuming the company can continue to earn 10.7% or more, the owners should consider further investment in the new company.

Hitting the Road — BTN 1-6

Check each student's report for the following content:

- (a) Identification of the form of business organization for the business interviewed.
(b) Identification of the main business activities for the business interviewed.
- Identification of the reasons why the owner(s) chose this particular form of business organization.
- Identification of advantages or disadvantages of the form of business organization chosen.

Note: Many instructors have students complete this assignment in teams.

Chapter 1 – Introducing Financial Statements

		Click on links	
Exercise 1-9 page 28	Using the Accounting Equation	Exercise 1-9	Exercise 1-9 Alt
Exercise 1-10 page 28	Using the Accounting Equation	Exercise 1-10	Exercise 1-10 Alt
Exercise 1-18 page 30	Prepare an Income Statement	Exercise 1-18	Exercise 1-18 Alt
Exercise 1-19 page 30	Prepare a Statement of Retained Earnings	Exercise 1-19	Exercise 1-19 Alt
Exercise 1-20 page 31	Prepare a Balance Sheet	Exercise 1-20	Exercise 1-20 Alt
Exercise 1-21 page 31	Prepare a Statement of Cash Flows	Exercise 1-21	Exercise 1-21 Alt
Exercise 1-25 page 31	Return on Assets	Exercise 1-25	Exercise 1-25 Alt

Exercise 1-9 page 28

Determine the missing amount from each of the separate situations given below.

	Assets	=	Liabilities	+	Equity
a.	\$65,000	=	\$20,000	+	\$45,000
b.	100,000	=	34,000	+	66,000
c.	154,000	=	114,000	+	40,000

Determine the missing amount from each of the separate situations given below.

	Assets	=	Liabilities	+	Equity
a.	\$192,000	=	\$145,000	+	\$47,000
b.	120,000	=	58,000	+	62,000
c.	226,000	=	151,000	+	75,000

Exercise 1-10 page 28

Answer the following questions. (Hint: Use the accounting equation.)

- a. At the beginning of the year, Addison Company's assets are \$300,000 and its equity is \$100,000. During the year, assets increase \$80,000 and liabilities increase \$50,000. What is the equity at the year-end?
- b. Office Store Co. has assets equal to \$123,000 and liabilities equal to \$47,000 at year-end. What is the total equity for Office Store Co. at year-end?
- c. At the beginning of the year, Quaker Company's liabilities equal \$70,000. During the year, assets increase by \$60,000, and at year-end assets equal \$190,000. Liabilities decrease \$5,000 during the year. What are the beginning and ending amounts of equity?

a. At the beginning of the year, Addison Company's assets are \$300,000 and its equity is \$100,000. During the year, assets increase \$80,000 and liabilities increase \$50,000. What is the equity at year-end?

	Assets	=	Liabilities	+	Equity
Beginning	\$300,000	=	\$200,000	+	\$100,000
Change	80,000	=	50,000	+	30,000
Ending	\$380,000	=	\$250,000	+	\$130,000

b. Office Store Co. has assets equal to \$123,000 and liabilities equal to \$47,000 at year-end. What is the total equity for Office Store Co. at year-end?

Assets	=	Liabilities	+	Equity
\$123,000	=	\$47,000	+	\$ 76,000

c. At the beginning of the year, Quaker Company's liabilities equal \$70,000. During the year, assets increase by \$60,000, and at year-end assets equal \$190,000. Liabilities decrease \$5,000 during the year. What are the beginning and ending amounts of equity?

	Assets	=	Liabilities	+	Equity
Beginning	\$130,000	=	\$70,000	+	\$60,000
Change	60,000	=	(5,000)	+	65,000
Ending	\$190,000	=	\$65,000	+	\$125,000

Answer the following questions. (Hint: Use the accounting equation.)

- a. At the beginning of the year, Addison Company's assets are \$600,000 and its equity is \$150,000. During the year, assets increase \$90,000 and liabilities increase \$40,000. What is the equity at the end of the year?
- b. Office Store Co. has assets equal to \$160,000 and liabilities equal to \$40,000 at year-end. What is the total equity for Office Store Co. at year-end?
- c. At the beginning of the year, Quaker Company's liabilities equal \$100,000. During the year, assets increase by \$40,000, and at year-end assets equal \$230,000. Liabilities decrease \$25,000 during the year. What are the beginning and ending amounts of equity?

a. At the beginning of the year, Addison Company's assets are \$600,000 and its equity is \$150,000. During the year, assets increase \$90,000 and liabilities increase \$40,000. What is the equity at the end of the year?

	Assets	=	Liabilities	+	Equity
Beginning	\$600,000	=	\$450,000	+	\$150,000
Change	90,000	=	40,000	+	50,000
Ending	\$690,000	=	\$490,000	+	\$200,000

b. Office Store Co. has assets equal to \$160,000 and liabilities equal to \$40,000 at year-end. What is the total equity for Office Store Co. at year-end?

Assets	=	Liabilities	+	Equity
\$160,000	=	\$40,000	+	\$120,000

c. At the beginning of the year, Quaker Company's liabilities equal \$100,000. During the year, assets increase by \$40,000, and at year-end assets equal \$230,000. Liabilities decrease \$25,000 during the year. What are the beginning and ending amounts of equity?

	Assets	=	Liabilities	+	Equity
Beginning	\$190,000	=	\$100,000	+	\$90,000
Change	40,000	=	(25,000)	+	65,000
Ending	\$230,000	=	\$75,000	+	\$155,000

Exercise 1-18 page 30

On December 1, Jasmin Ernst organized Ernst Consulting; on December 3, the owner contributed \$84,000 in assets in exchange for common stock to launch the business. On December 31, the company's records show the following items and amounts. Use this information to prepare a December income statement for the business.

Cash	\$11,360	Cash dividends	\$2,000
Accounts receivable	14,000	Consulting revenues	14,000
Office supplies	3,250	Rent expense	3,550
Land	46,000	Salaries expense	7,000
Office equipment	18,000	Telephone expense	760
Accounts payable	8,500	Miscellaneous expenses	580
Common stock	84,000		

Ernst Consulting		
Income Statement		
For Month Ended December 31		
Revenues:		
Consulting revenues		\$14,000
Expenses:		
Rent expense	\$3,550	
Salaries expense	7,000	
Telephone expense	760	
Miscellaneous expenses	580	
Total expenses		11,890
Net income (loss)		<u>\$2,110</u>

To Statement of
Retained Earnings



On December 1, Jasmin Ernst organized Ernst Consulting; on December 3, the owner contributed \$71,500 in assets in exchange for common stock to launch the business. On December 31, the company's records show the following items and amounts. Use this information to prepare a December income statement for the business.

Cash	\$11,250	Cash dividends	\$2,000
Accounts receivable	25,000	Consulting revenues	25,000
Office supplies	1,200	Rent expense	4,500
Land	28,000	Salaries expense	10,000
Office equipment	18,000	Telephone expense	850
Accounts payable	5,000	Miscellaneous expenses	700
Common stock	71,500		

Ernst Consulting		
Income Statement		
For Month Ended December 31		
Revenues:		
Consulting revenues		\$ 25,000
Expenses:		
Rent expense	\$ 4,500	
Salaries expense	10,000	
Telephone expense	850	
Miscellaneous expenses	700	
Total expenses		16,050
Net income (loss)		<u>\$ 8,950</u>

To Statement of
Retained Earnings



Exercise 1-19 page 30

On December 1, Jasmin Ernst organized Ernst Consulting; on December 3, the owner contributed \$84,000 in assets in exchange for common stock to launch the business. On December 31, the company's records show the following items and amounts. Use this information to prepare a December statement of retained earnings for the business.

Cash	\$11,360
Accounts receivable	14,000
Office supplies	3,250
Land	46,000
Office equipment	18,000
Accounts payable	8,500
Common stock	84,000

Cash dividends	\$2,000
Consulting revenues	14,000
Rent expense	3,550
Salaries expense	7,000
Telephone expense	760
Miscellaneous expenses	580



Ernst Consulting		
Statement of Retained Earnings		
For Month Ended December 31		
Retained earnings, December 1		\$0
Add: Net income		2,110
Less: Dividends		2,000
Retained earnings, December 31		<u>\$110</u>



On December 1, Jasmin Ernst organized Ernst Consulting; on December 3, the owner contributed \$71,500 in assets in exchange for common stock to launch the business. On December 31, the company's records show the following items and amounts. Use this information to prepare a December statement of retained earnings for the business.

Cash	\$11,250
Accounts receivable	25,000
Office supplies	1,200
Land	28,000
Office equipment	18,000
Accounts payable	5,000
Common stock	71,500

Cash dividends	\$2,000
Consulting revenues	25,000
Rent expense	4,500
Salaries expense	10,000
Telephone expense	850
Miscellaneous expenses	700



Ernst Consulting		
Statement of Retained Earnings		
For Month Ended December 31		
Retained earnings, December 1		\$0
Add: Net income		8,950
Less: Dividends		2,000
Retained earnings, December 31		<u>\$6,950</u>



Exercise 1-20 page 31

On December 1, Jasmin Ernst organized Ernst Consulting; on December 3, the owner contributed \$84,000 in assets in exchange for common stock to launch the business. On December 31, the company's records show the following items and amounts. Use this information to prepare a December 31 balance sheet for Ernst Consulting.

Cash	\$11,360
Accounts receivable	14,000
Office supplies	3,250
Land	46,000
Office equipment	18,000
Accounts payable	8,500
Common stock	84,000

Cash dividends	\$2,000
Consulting revenues	14,000
Rent expense	3,550
Salaries expense	7,000
Telephone expense	760
Miscellaneous expenses	580

Statement
of
Retained
Earnings

Ernst Consulting Balance Sheet December 31			
Assets		Liabilities	
Cash	\$11,360	Accounts payable	\$8,500
Accounts receivable	14,000		
Office supplies	3,250		
Land	46,000	Equity	
Office equipment	18,000	Common stock	84,000
		Retained earnings	110
Total Assets	<u>\$92,610</u>	Total Liabilities and Equity	<u>\$92,610</u>

On December 1, Jasmin Ernst organized Ernst Consulting; on December 3, the owner contributed \$71,500 in assets in exchange for common stock to launch the business. On December 31, the company's records show the following items and amounts. Use this information to prepare a December 31 balance sheet for Ernst Consulting.

Cash	\$11,250
Accounts receivable	25,000
Office supplies	1,200
Land	28,000
Office equipment	18,000
Accounts payable	5,000
Common stock	71,500

Cash dividends	\$2,000
Consulting revenues	25,000
Rent expense	4,500
Salaries expense	10,000
Telephone expense	850
Miscellaneous expenses	700

Statement
of
Retained
Earnings

Ernst Consulting Balance Sheet December 31			
Assets		Liabilities	
Cash	\$11,250	Accounts payable	\$5,000
Accounts receivable	25,000		
Office supplies	1,200		
Land	28,000	Equity	
Office equipment	18,000	Common stock	71,500
		Retained earnings	6,950
Total Assets	<u>\$83,450</u>	Total Liabilities and Equity	<u>\$83,450</u>

Exercise 1-21 page 31

On December 1, Jasmin Ernst organized Ernst Consulting; on December 3, the owner contributed \$84,000 in assets in exchange for common stock to launch the business. On December 31, the company's records show the following items and amounts. Use this information to prepare the December statement of cash flows for the business.

Cash	\$11,360	Dividends	\$2,000
Accounts receivable	14,000	Consulting revenues	14,000
Office supplies	3,250	Rent expense	3,550
Land	46,000	Salaries expense	7,000
Office equipment	18,000	Telephone expense	760
Accounts payable	8,500	Miscellaneous expenses	580
Common stock	84,000		

Also assume the following:

- The owner's initial investment consists of \$38,000 cash and \$46,000 in land.
- The company's \$18,000 equipment purchase is paid in cash.
- The accounts payable balance of \$8,500 consists of the \$3,250 office supplies purchase and \$5,250 in employee salaries yet to be paid.
- The company's rent, telephone and miscellaneous expenses are paid in cash.
- No cash has been collected on the \$14,000 consulting revenues.

Cash	\$11,360
Accounts receivable	14,000
Office supplies	3,250
Land	46,000
Office equipment	18,000
Accounts payable	8,500
Common stock	84,000
Dividends	\$2,000
Consulting revenues	14,000
Rent expense	3,550
Salaries expense	7,000
Telephone expense	760
Miscellaneous expenses	580

Ernst Consulting		
Statement of Cash Flows		
For Month Ended December 31		
Cash flows from operating activities		
Cash received from customers	\$0	
Cash paid to employees	(1,750)	
Cash paid for rent	(3,550)	
Cash paid for telephone expenses	(760)	
Cash paid for miscellaneous expenses	<u>(580)</u>	
Net cash used by operating activities		(\$6,640)
Cash flows from investing activities		
Cash paid for office equipment	<u>(18,000)</u>	
Net cash used by investing activities		(18,000)
Cash flows from financing activities		
Cash received – issuance of common stock	38,000	
Dividends	<u>(2,000)</u>	
Net cash provided by financing activities		<u>36,000</u>
Net increase in cash		\$11,360
Cash balance, December 1		0
Cash balance, December 31		<u>\$11,360</u>

- The owner's initial investment consists of \$38,000 cash and \$46,000 in land.
- The company's \$18,000 equipment purchase is paid in cash.
- The accounts payable balance of \$8,500 consists of the \$3,250 office supplies purchase and \$5,250 in employee salaries yet to be paid.
- The company's rent, telephone and miscellaneous expenses are paid in cash.
- No cash has been collected on the \$14,000 consulting revenues.

On December 1, Jasmin Ernst organized Ernst Consulting; on December 3, the owner contributed \$71,500 in assets in exchange for common stock to launch the business. On December 31, the company's records show the following items and amounts. Use this information to prepare the December statement of cash flows for the business.

Cash	\$11,250	Cash dividends	\$2,000
Accounts receivable	25,000	Consulting revenues	25,000
Office supplies	1,200	Rent expense	4,500
Land	28,000	Salaries expense	10,000
Office equipment	18,000	Telephone expense	850
Accounts payable	5,000	Miscellaneous expenses	700
Common stock	71,500		

Also assume the following:

- The owner's initial investment consists of \$43,500 cash and \$28,000 in land.
- The company's \$18,000 equipment purchase is paid in cash.
- The accounts payable balance of \$5,000 consists of the \$1,200 office supplies purchase and \$3,800 in employee salaries yet to be paid.
- The company's rent, telephone and miscellaneous expenses are paid in cash.
- No cash has been collected on the \$25,000 consulting revenues.

Cash	\$11,250
Accounts receivable	25,000
Office supplies	1,200
Land	28,000
Office equipment	18,000
Accounts payable	5,000
Common stock	71,500
Dividends	2,000
Consulting revenues	25,000
Rent expense	4,500
Salaries expense	10,000
Telephone expense	850
Miscellaneous expenses	700

Ernst Consulting		
Statement of Cash Flows		
For Month Ended December 31		
Cash flows from operating activities:		
Cash received from customers	\$0	
Cash paid to employees	(6,200)	
Cash paid for rent	(4,500)	
Cash paid for telephone expenses	(850)	
Cash paid for miscellaneous expenses	<u>(700)</u>	
Net cash used by operating activities		(\$12,250)
Cash flows from investing activities:		
Cash paid for office equipment	<u>(18,000)</u>	
Net cash used by investing activities		(18,000)
Cash flows from financing activities:		
Cash received – issuance of common stock	43,500	
Dividends	<u>(2,000)</u>	
Net cash provided by financing activities		<u>41,500</u>
Net increase in cash		\$11,250
Cash balance, December 1		0
Cash balance, December 31		<u>\$11,250</u>

Also assume the following:

- The owner's initial investment consists of \$43,500 cash and \$28,000 in land.
- The company's \$18,000 equipment purchase is paid in cash.
- The accounts payable balance of \$5,000 consists of the \$1,200 office supplies purchase and \$3,800 in employee salaries yet to be paid.
- The company's rent, telephone and miscellaneous expenses are paid in cash.
- No cash has been collected on the \$25,000 consulting revenues.

Exercise 1-25 page 31

Swiss Group reports net income of \$40,000 for the current year. At the beginning of the year, Swiss Group had \$200,000 in assets. By the end of the year, assets had grown to \$300,000. What is Swiss Group's return on assets?

Net Income	÷	Average Total Assets	=	Return on Assets
\$40,000	÷	\$250,000	=	16.0%

Average Total Assets			
\$200,000	+	\$300,000	= \$250,000
2			

Return on assets is useful in evaluating management, analyzing and forecasting profits, and planning activities. **Return on assets (ROA)**, also called *return on investment (ROI)*.

Swiss Group reports net income of \$70,000 for the current year. At the beginning of the year, Swiss Group had \$300,000 in assets. By the end of the year, assets had grown to \$400,000. What is Swiss Group's return on assets?

Net Income	÷	Average Total Assets	=	Return on Assets
\$70,000	÷	\$350,000	=	20.0%

Average Total Assets			
\$300,000	+	\$400,000	= \$350,000
		2	

Return on assets is useful in evaluating management, analyzing and forecasting profits, and planning activities. **Return on assets (ROA)**, also called *return on investment (ROI)*.

CHAPTER 1

INTRODUCING FINANCIAL STATEMENTS

<u>Related Assignment Materials</u>					
<i>Student Learning Objectives</i>	<i>Questions</i>	<i>Quick Studies*</i>	<i>Exercises*</i>	<i>Problems*</i>	<i>FSA, BTN, DA</i>
Conceptual objectives:					
C1. Explain the importance of accounting and identify its users.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12	1-1, 1-2	1-1, 1-2, 1-3, 1-4, 1-6		BTN 1-2, BTN 1-4
C2. Describe the importance of ethics and GAAP.	11, 13, 14, 15, 19	1-3, 1-4, 1-5, 1-6	1-4, 1-5, 1-6, 1-7, 1-8		BTN 1-1, BTN 1-2, BTN 1-6
Analytical objectives:					
A1. Define and interpret the accounting equation and each of its components.	17, 20, 24	1-7, 1-8	1-9, 1-10 1-11	1-2, 1-10	FSA 1-1, FSA 1-2, FSA 1-3, BTN 1-5, DA 1-1, DA 1-2, DA 1-3
A2. Compute and interpret return on assets.	28	1-20, 1-21	1-25	1-10, 1-11	FSA 1-1, FSA 1-2, FSA 1-3, BTN 1-3, BTN 1-5
				1-12	
Procedural objectives:					
P1. Analyze business transactions using the accounting equation.	18	1-9, 1-10, 1-11	1-10, 1-12, 1-13, 1-14, 1-15	1-1, 1-7, 1-8, 1-9, SP	BTN 5
P2. Identify and prepare basic financial statements and explain how they interrelate.	21, 22, 23, 24, 25, 26, 27, 29, 30	1-12, 1-13, 1-14, 1-15, 1-16, 1-17, 1-18, 1-19	1-16, 1-17 1-18, 1-19, 1-20, 1-21, 1-22, 1-23, 1-24	1-3, 1-4, 1-5, 1-6, 1-7, 1-8, 1-9	DA 1-2, DA 1-3

**See additional information on next page that pertains to these quick studies, exercises, and problems.*

SP refers to the Serial Problem

FSA refers to Financial Statement Analysis

BTN refers to Beyond the Numbers

DA refers to Tableau Dashboard Activities

Questions with Guided Example videos

Additional Information on Related Assignment Material available in Connect®

Available on the instructor's course-specific website, Connect repeats all numerical Quick Studies, all Exercises, and Problem Set A. Connect also provides algorithmic versions for Quick Study, Exercises, and Problems. It allows instructors to monitor, promote, and assess student learning. It can be used in practice, homework, or exam mode.

We have a variety of tools available to make updating your course as painless as possible. Our latest tool is the Connect Pre-Built Course Package. The package includes three tools to get you started with Connect for the new edition. You can use the pre-built course as is or customize it to meet your needs.

Connect Pre-Built Course Package (formerly called Library course)

- Connect course: Pre-built courses include reading, homework, and assessment for each chapter. Pre-built courses are designed and created by a digital faculty consultant that uses the product in the course.
- Key: a spreadsheet that lists all the assignments (organized by type and learning objective) and policy settings to make it quick and easy to see what is included in the pre-built course.
- Sample syllabi: customizable document that highlights the assignments and policy settings in the pre-built course.

The Connect Orientation Videos provide an introduction for your students for using Connect to complete assignments to help get your students up and running in the system. There are videos covering:

- End-of-Chapter Assignments
- General Ledger
- Concept Overview Videos
- Excel Simulations
- LearnSmart and Smartbook

General Ledger Problems

Assignable within Connect, General Ledger (GL) problems offer students the ability to see how transactions post from the general journal all the way through the financial statements. Critical thinking and analysis components are added to each GL problem to ensure understanding of the entire process. GL problems are auto-graded and provide instant feedback to the student.

Excel Simulations

Assignable within Connect, Excel Simulations allow students to practice their Excel skills—such as basic formulas and formatting—within the context of accounting. These questions feature animated, narrated Help and Show Me tutorials (when enabled). Excel Simulations are auto-graded and provide instant feedback to the student.

Smartbook 2.0

Available within Connect, **SmartBook** makes study time as productive and efficient as possible. SmartBook identifies and closes knowledge gaps through a continually adapting reading experience that provides personalized learning resources at the precise moment of need. This ensures that every minute spent with SmartBook is returned to the student as the most value-added minute possible. The result? More confidence, better grades, and greater success.

Chapter Videos

A growing number of students now learn accounting online. To aid instructors and students completing their accounting courses in person, fully online, and in hybrid formats, we offer a large set of learning resource including nearly 500 videos to ensure student success. There are also instructor resources to add a personal touch to these learning aids.

Tableau Dashboard Activities

These activities expose students to accounting analytics using visual displays. These assignments do not require instructors to know Tableau, are accessible to introductory students, do not require Tableau software, and run in Connect. All are auto-gradable.

Need-to-Know

Need-to-Know demonstrations are located at key junctures in each chapter. These demonstrations pose questions about the material just presented—content that students “need to know” to learn accounting. Accompanying solutions walk students through key procedures and analysis necessary to be successful with homework and test materials. Need-to-Know demonstrations are supplemented with narrated, animated, step-by-step walk-through videos led by an instructor and available via Connect. Select chapters also include Comprehensive Need-to-Knows that draw on materials from the entire chapter.

LO	Need-to-Know	Title	Time
C1	1-1	Accounting Users	1:29
C2	1-2	Accounting Guidance	3:59
A1	1-3	Accounting Equation	1:51
P1	1-4	Transaction Analysis	3:11
P2	1-5	Financial Statements	4:26
COMPREHENSIVE	1-6	Transaction Analysis, Statement Preparation, and Return on Assets	
		Req. 1	5:53
		Req 2-6	5:38

Concept Overview

The Concept Overview Videos (COVs) provide engaging narratives of all chapter learning objectives in an assignable and interactive online format. The concept overview videos replace the previous edition interactive presentations. They follow the structure of the text and are organized to match the specific learning objectives within each chapter. The concept overview videos provide additional explanation and enhancement of material from the chapter, allowing students to learn, study, and practice with instant feedback, at their own pace. Each video is paired with a Knowledge Check question.

LO	Title	Time
C1	Explain the importance of accounting and identify its users.	
	Importance of Accounting	0:50
	Definition of Accounting	0:41
	Accounting Versus Recordkeeping	0:58
	Information Users	1:34
	Opportunities in Accounting	0:45
	Public versus Private Accounting Opportunities in Accounting	0:45
	Opportunities for Accounting Professionals	1:04
C2	Describe the importance of ethics and GAAP.	
	Ethical Decision Making	0:50
	Fraud Triangle	0:32
	Generally Accepted Accounting Principles	1:02
	Internal Standards	1:03
	Principles of Accounting	1:33
	Assumptions and Constraint	1:06
A1	Define and interpret the accounting equation and each of its components.	
	Accounting Equation	1:02
	The Expanded Accounting Equation	1:07
A2	Compute and interpret return on assets.	

	Financial Statement Analysis	1:15
	Return on Assets	2:07
	Return on Assets Illustration	1:56
P1	Analyze business transactions using the accounting equation.	
	Transaction Analysis	0:52
	Illustration	0:55
	Transaction Summary	2:30
P2	Identify and prepare basic financial statements and explain how they interrelate.	0:17
	Financial Statements	0:42
	Income Statement	1:05
	Statement of Retained Earnings	1:38
	Balance Sheet	1:49
	Statement of Cash Flows	0:55

Hints/Guided Examples

The Guided Examples in Connect provide a narrated, animated, step-by-step walk-through of select quick studies, exercises, and general ledger problems similar to those assigned. These short presentations can be turned on or off by instructors and provide reinforcement when students need it most. Please note that they are labeled as “Hints” in Connect assignments. The animated PowerPoints without the video and audio functions for the Guided Examples are also available in the Connect Instructor Library and Exercise Presentations. **These are indicated in the Related Assignment Materials grid on page 1 in blue bold font.**

Synopsis of Chapter Revisions

New opener—**Netflix** and entrepreneurial assignment.
 Streamlined conceptual learning objectives.
 New sections on AI and analytics in accounting.
 Coverage of SOX Act moved to Chapter 6.
 Revised business entity section and added LLC.
 New and improved NTK 1-2.
 New layout for the expanded accounting equation.
 New and simplified NTK 1-5.
 New Cheat Sheet reinforces chapter content.
 Updated return on assets analysis using **Nike** and **Under Armour**.
 Added six new Quick Studies.
 Added seven new Exercises.
 New Tableau Dashboard Activities: Quick Study, Exercise, and Mini-Case.
 Updated analysis assignments: Company Analysis, Comparative Analysis, and Global Analysis.

Chapter Outline

I. Importance of Accounting—we live in the information age in which information, and its reliability, impacts the financial well-being of us all.

Accounting is an information and measurement system that identifies, records, and communicates an organization's business activities.

- A. Users of Accounting Information – accounting is called the language of business because it communicates data that helps users make better decisions. People using accounting information are divided into two groups:
 - 1. External Users—those *not* directly involved with running the company. They have limited access to the company's accounting information. Examples: shareholders (investors), lenders, directors, external auditors, nonmanagerial and nonexecutive employees, labor unions, regulators, voters, legislators, government officials, customers, suppliers, etc.
 - a. Financial Accounting—area of accounting aimed at serving external users by providing them with *general-purpose financial statements*.
 - 2. Internal Users—those directly involved in managing and operating an organization. Internal users include research and development, purchasing, human resource, production, distribution, marketing, and service managers.
 - a. Managerial Accounting—area of accounting that serves the decision-making needs of internal users.
 - b. Internal Reports—are designed for the special needs of internal users.
- B. Opportunities in Accounting—four broad areas of opportunities are financial, managerial, taxation, and accounting-related.
 - 1. Private accounting, which are employees working for businesses, offers the most opportunities.
 - 2. Public accounting offers the next largest number of opportunities. Opportunities include auditing and taxation.
 - 3. Government (and not-for-profit) agencies, including business regulation and investigation of law violations, also offer opportunities.
 - 4. Accounting specialists include certified public accountants, CPAs. Certifications include certified management accounting, CMA, and certified internal auditors, CIA. Specialists include certified bookkeeper, CB, certified payroll professional, CPP, certified fraud examiner, CFE, and certified forensic accountant, CrFA.
 - 5. Artificial Intelligence (AI) in Accounting – repetitive tasks such as entering invoice and transaction data could be done by AI software. AI systems analyze reports and graphics.
 - 6. Data Analytics and Visualization in Accounting – among the top skills sought by employers. Data analytics is a process of analyzing data to identify meaningful relations and trends. Data visualization is a graphical presentation of data to help people understand its significance. They help individuals make informed business decisions.

II. Fundamentals of Accounting

- A. Ethics—A Key concept—Ethics are beliefs that separate right from wrong.
 - 1. Fraud Triangle: Ethics under Attack—model that asserts three factors must exist for a person to commit fraud: opportunity, pressure, and rationalization.
 - a. Internal Controls—procedures to protect assets, ensure reliable accounting, promote efficiency, and uphold company policies.

- B. Generally Accepted Accounting Principles (GAAP)—concepts and rules that govern financial accounting. The purpose of GAAP is to make information in accounting statements relevant, reliable, and comparable.
1. The Financial Accounting Standards Board (FASB) is given the task of setting GAAP from the Securities and Exchange Commission (SEC). The SEC oversees proper use of GAAP.
 2. International Standards—The International Accounting Standards Board (IASB) issues standards (International Financial Reporting Standards, or IFRS) that identify preferred accounting practices in the global economy. IFRS are similar but sometimes different from U.S. GAAP.
- C. Conceptual Framework—FASB Conceptual Framework consists of:
1. Objectives—to provide information useful to investors, creditors, and others.
 2. Qualitative Characteristics—to require information that has relevance and faithful representation.
 3. Elements—to define items in financial statements.
 4. Recognition and Measurement—to set criteria that an item must meet for it to be recognized as an element; and how to measure that element.
 5. Principles, Assumptions and Constraint—two types are *general principles* (assumptions, concepts, and guidelines for preparing financial statements; stem from long-used accounting practices) and *specific principles* (detailed rules used in reporting transactions and events).
 - a. Accounting Principles—General principles consist of four general principles:
 - i. *Measurement principle (cost principle)*—accounting information is based on actual costs incurred in business transactions. Cost is measured on a cash or equal-to-cash basis. Information based on cost is considered objective. *Objectivity* means information is supported by independent, unbiased evidence.
 - ii. *Revenue recognition principle*—revenue is recognized (recorded) (1) when goods or services are provided to customers and (2) at the amount expected to be received from the customer.
 - iii. *Expense recognition principle (matching principle)*—a company record expenses it incurred to generate revenues it reported.
 - iv. *Full disclosure principle*—a company records the details behind financial statements that would impact users’ decisions; often in footnotes to the statements.
 - b. Accounting Assumptions -
 - i. *Going-concern assumption*—accounting information presumes that the business will continue operating instead of being closed or sold.
 - ii. *Monetary unit assumption*—transactions and events are expressed in monetary, or money, units. Generally, this is the currency of the country in which it operates, but today some companies express reports in more than one monetary unit.
 - iii. *Time period assumption*—the life of the company can be divided into time periods, such as months and years, and useful reports can be prepared for those periods.
 - iv. *Business entity assumption*—a business is accounted for separately from other business entities and its owner. Necessary for good decisions.
 - c. Exhibit 1.8: Types and Attributes of Businesses
 - i. *Sole proprietorship* is a business owned by one person that has unlimited liability. It is not a separate legal entity. The owner has unlimited liability and is, therefore, personally liable for the business debts.
 - ii. *Partnership* is a business owned by two or more people, called partners, who are

subject to unlimited liability. The business is not subject to an income tax, but the owners are responsible for personal income tax on their individual share of the net income of entity.

iii. *Limited Liability Company (LLC)* is a business owned by one or more members. It offers limited liability to the members who are not personally liable for the debts of the LLC, and is a separate entity with the same rights and responsibilities as a person.

iv. *Corporation* is a business that is a separate legal entity whose owners are called shareholders or stockholders. These owners have limited liability. The entity is responsible for a business income tax, and the owners are responsible for personal income tax on profits that are distributed to them in the form of dividends.

d. Accounting Constraints -there are basic constraints on financial reporting.

i. The *cost-benefit* constraint says that information disclosed by the entity must have benefits to the user that are greater than the costs of providing it.

ii. The *materiality* constraint is the ability of information to influence decisions.

iii. *Conservatism* and *industry practices* are sometimes referred to as constraints as well.

III. Business Transactions and Accounting

A. Accounting Equation (Assets = Liabilities + Equity)—elements of the equation include:

1. Assets—resources a company owns or controls that are expected to carry future benefits. Examples: cash, accounts receivable, supplies, equipment, and land).
2. Liabilities—creditors' claims on assets. These claims reflect obligations to transfer assets or provide products or services to others. Examples: wages payable, accounts payable, notes payable, and taxes payable.
3. Equity—owner's claim on assets; assets minus liabilities. Also called *net assets* or *residual equity*. Increases in equity result from owner investments and revenues. Decreases results from dividends and expenses. Equity consists of:
 - a. Common Stock —owner investments are inflows of cash and other net assets from shareholders, which increase equity.
 - b. Revenues —increase equity from sales of products and services to customers. Revenues increase equity (via net income) and result from a company's earnings activities.
 - c. Dividends—outflows of cash and other assets to shareholders.
 - d. Expenses—cost of assets or services used to earn revenues Expenses decrease equity.
 - e. Expanded Accounting Equation:

Assets = Liabilities + Common Stock - Dividends + Revenues – Expenses. Net income occurs when revenues exceed expenses. Net income increases equity. A net loss occurs when expenses exceed revenues, which decreases equity.

B. Transaction Analysis—each transaction and event always leaves the equation in balance. (Assets = Liabilities + Equity)

1. Investment by owner in exchange for common stock:

ASSET	=	LIABILITIES	+	EQUITY
+ Cash			+	Common Stock

Increase on both sides of equation keeps equation in balance.

2. Purchase supplies for cash:

$$\text{ASSET} = \text{LIABILITIES} + \text{EQUITY}$$

+ **Supplies**

– **Cash**

Increase and decrease on one side of the equation keeps equation in balance.

3. Purchase equipment for cash:

$$\text{ASSET} = \text{LIABILITIES} + \text{EQUITY}$$

+ **Equipment**

– **Cash**

Increase and decrease on one side of the equation keeps equation in balance.

4. Purchase supplies on credit:

$$\text{ASSET} = \text{LIABILITIES} + \text{EQUITY}$$

+ **Supplies** + **Accounts Payable**

Increase on both sides of equation keeps equation in balance.

5. Provide services for cash:

$$\text{ASSET} = \text{LIABILITIES} + \text{EQUITY}$$

+ **Cash** + **Revenue Earned**

Increase on both sides of equation keeps equation in balance.

- 6, 7. Payment of expenses in cash (salaries, rent, etc.):

$$\text{ASSET} = \text{LIABILITIES} + \text{EQUITY}$$

– **Cash** – **Expense**

Decrease on both sides of equation keeps equation in balance.

8. Provided services and facilities for credit:

$$\text{ASSET} = \text{LIABILITIES} + \text{EQUITY}$$

+ **Accts. Receivable** + **Revenue Earned**

Increase on both sides of equation keeps equation in balance.

9. Receipt of cash from accounts receivable (customers paying on their accounts):

$$\text{ASSET} = \text{LIABILITIES} + \text{EQUITY}$$

+ **Cash**

– **Accts. Receivable**

Increase and decrease on one side of the equation keeps equation in balance.

10. Payment of accounts payable:

$$\text{ASSET} = \text{LIABILITIES} + \text{EQUITY}$$

– **Cash** – **Accounts Payable**

Decrease on both sides of equation keeps equation in balance.

11. Dividends paid to stockholder:

$$\text{ASSET} = \text{LIABILITIES} + \text{EQUITY}$$

– **Cash** – **(+ Dividends)**

Decrease on both sides of equation keeps equation in balance. (Note: since dividends are not expenses, they are not used in computing net income.)

IV. Communicating with Users

The four financial statements and their purposes are:

- A. *Income Statement*—describes a company's revenues and expenses along with the resulting net income or loss over a period of time. (Net income occurs when revenues exceed expenses. Net loss occurs when expenses exceed revenues.)

- B. *Statement of Retained Earnings*—explains changes in equity from net income (or loss), owner investments, and dividends over a period of time.
- C. *Balance Sheet*—describes a company's financial position (types and amounts of assets, liabilities, and equity) at a point in time.
- D. *Statement of Cash Flows*—identifies cash inflows (receipts) and cash outflows (payments) over a period of time.

Statement Preparation from Transaction Analysis—prepared in the following order using the *procedure* indicated below.

- A. *Income Statement*—information about revenues and expenses is conveniently taken from the owner's equity column. Total revenues minus total expenses equals net income or loss. Net income (or net loss) is transferred to the *Statement of Retained Earnings*.
- B. *Statement of Retained Earnings*—reports equity changes over the reporting period. Shows beginning retained earnings balance, dividends and net income, (or net loss) from the income statement, Ending retained earnings is added to *Balance Sheet*.
- C. *Balance Sheet*—shows the financial position as of the date of the statement. Includes the balance of each asset, liability and the ending retained earnings balance (note that this is taken from the statement of retained earnings), is listed along with common stock and added to total liabilities to get total liabilities and equity. This total must agree with total assets to prove the accounting equation. Either the *account form* or the *report form* may be used to prepare the balance sheet.
- D. *Statement of Cash Flows*—the cash column must be carefully analyzed to organize and report cash flows in categories of operating, investing, and financing. The net change in cash is determined by combining the net cash flow in each of the three categories. This change is combined with the beginning cash. The resulting figure should be the ending cash that was shown on the balance sheet.

- V. **Decision Analysis—Return on Assets (ROA)**—a profitability measure. Also called Return on Investment (ROI).
- A. Useful in evaluating management, analyzing and forecasting profits, and planning activities.
 - B. The return on assets is calculated by dividing net income for a period by average total assets. (Average total assets is determined by adding the beginning and ending assets and dividing by 2.)
 - C. As with all analysis tools, results should be compared to previous business results as well as competitor's results and industry norms.