

# **Solutions Manual for Fundamental Accounting Principles 2025 Release 1st Wild**

# Chapter 1

## Accounting in Business

### 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. <b>External user</b> | Customers         | g. <b>External user</b> | Shareholders   |
| b. <b>External user</b> | Suppliers         | h. <b>External user</b> | Lenders        |
| c. <b>External user</b> | External auditors | i. <b>Internal user</b> | Controllers    |
| d. <b>External user</b> | Business press    | j. <b>External user</b> | FBI and IRS    |
| e. <b>Internal user</b> | Managers          | k. <b>External user</b> | Consumer group |
| f. <b>External user</b> | District attorney | l. <b>External user</b> | Voters         |

#### Quick Study 1-3 (10 minutes)

- |                           |                           |
|---------------------------|---------------------------|
| 1. <b>Opportunity</b>     | 4. <b>Opportunity</b>     |
| 2. <b>Pressure</b>        | 5. <b>Pressure</b>        |
| 3. <b>Rationalization</b> | 6. <b>Rationalization</b> |

#### Quick Study 1-4 (5 minutes)

- |                      |                      |
|----------------------|----------------------|
| 1. <b>Principle</b>  | 3. <b>Assumption</b> |
| 2. <b>Assumption</b> | 4. <b>Principle</b>  |

**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 | + | Owner, Capital | - | Owner, Withdrawals | +                   | 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**                      Owner invested cash in the company
- b. **Decrease**                     Incurred maintenance expenses
- c. **Increase**                      Performed services for a client
- d. **Decrease**                     Incurred employee wage expenses

**Quick Study 1-10 (15 minutes)**

| Assets |         |                  | =       | Liabilities +    |   |                | Equity |                    |   |          |   |            |
|--------|---------|------------------|---------|------------------|---|----------------|--------|--------------------|---|----------|---|------------|
| Cash   | +       | Accounts Recble. | =       | Accounts Payable | + | Owner, Capital | -      | Owner, Withdrawals | + | 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. | + | Owner, Capital | - Owner, With-drawals | + 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           | Assets                             |
| b. Statement of cash flows | Cash from operating activities     |
| c. Balance sheet           | Equipment                          |
| d. Income statement        | Expenses                           |
| e. Balance sheet           | Liabilities                        |
| f. Statement of cash flows | Net decrease (or increase) in cash |
| g. Income statement        | Revenues                           |
| h. Balance sheet           | Total liabilities and equity       |

### Quick Study 1-13 (5 minutes)

- |                       |                    |
|-----------------------|--------------------|
| <b>1. Expenses</b>    | Utilities expense  |
| <b>2. Revenues</b>    | Services revenue   |
| <b>3. Expenses</b>    | Wages expense      |
| <b>4. Withdrawals</b> | Owner withdrawals  |
| <b>5. Expenses</b>    | Rent expense       |
| <b>6. Revenues</b>    | Rental revenue     |
| <b>7. Expenses</b>    | Insurance expense  |
| <b>8. Revenues</b>    | Consulting revenue |

### Quick Study 1-14 (5 minutes)

- |                       |                     |
|-----------------------|---------------------|
| <b>1. Assets</b>      | Land                |
| <b>2. Liabilities</b> | Wages payable       |
| <b>3. Assets</b>      | Equipment           |
| <b>4. Liabilities</b> | Accounts payable    |
| <b>5. Assets</b>      | Accounts receivable |
| <b>6. Assets</b>      | Supplies            |

**Quick Study 1-15 (15 minutes)**

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

**Quick Study 1-16 (15 minutes)**

| <b>HAWKIN</b>                      |  |                        |
|------------------------------------|--|------------------------|
| <b>Statement of Owner's Equity</b> |  |                        |
| <b>For Month Ended December 31</b> |  |                        |
| Hawkin, Capital, December 1 .....  |  | <b>\$10,900</b>        |
| Add: Investments by owner.....     |  | <b>0</b>               |
| Net income .....                   |  | <b><u>5,800</u></b>    |
|                                    |  | <b>16,700</b>          |
| Less: Withdrawals by owner .....   |  | <b><u>(1,000)</u></b>  |
| Hawkin, Capital, December 31 ..... |  | <b><u>\$15,700</u></b> |

## Quick Study 1-17 (15 minutes)

| HAWKIN<br>Balance Sheet<br>December 31 |                 |                                   |                 |
|----------------------------------------|-----------------|-----------------------------------|-----------------|
| <i>Assets</i>                          |                 | <i>Liabilities</i>                |                 |
| Cash.....                              | \$ 5,100        | Accounts payable .....            | \$ 6,000        |
| Accounts receivable ....               | 600             |                                   |                 |
| Supplies .....                         | 2,000           | <i>Equity</i>                     |                 |
| Equipment.....                         | <u>14,000</u>   | Hawkin, Capital .....             | <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<br>Statement of Cash Flows<br>For Month Ended December 31 |                 |
|----------------------------------------------------------------------|-----------------|
| <b>Cash flows from operating activities</b>                          |                 |
| Cash received from customers .....                                   | \$23,500        |
| Cash paid for expenditures .....                                     | <u>(6,000)</u>  |
| Net cash provided by operating activities .....                      | 17,500          |
| <b>Cash flows from investing activities</b>                          |                 |
| Cash paid for equipment .....                                        | (3,000)         |
| Cash paid for truck.....                                             | <u>(22,000)</u> |
| Net cash used by investing activities .....                          | (25,000)        |
| <b>Cash flows from financing activities</b>                          |                 |
| Cash investments by owner.....                                       | 11,000          |
| Cash withdrawals by owner .....                                      | <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)**

- |                                |                                          |
|--------------------------------|------------------------------------------|
| <b>1. Investing activities</b> | Cash purchase of equipment               |
| <b>2. Investing activities</b> | Cash paid for land                       |
| <b>3. Operating activities</b> | Cash paid for advertising                |
| <b>4. Operating activities</b> | Cash paid for wages                      |
| <b>5. Operating activities</b> | Cash paid on account payable to supplier |
| <b>6. Operating activities</b> | Cash received from clients               |
| <b>7. Operating activities</b> | Cash paid for rent                       |
| <b>8. Financing activities</b> | Cash investment by owner                 |

**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:** The company's 19.0% return on assets exceeds the 11.0% return of its competitor. This is a positive result. It suggests the company is more effectively using its assets to generate net income in comparison to its competitor.

## EXERCISES

### Exercise 1-1 (10 minutes)

- |                                                                                                                                          |                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. Communicating</li> <li>2. Communicating</li> <li>3. Recording</li> <li>4. Recording</li> </ol> | <ol style="list-style-type: none"> <li>5. Communicating</li> <li>6. Identifying</li> <li>7. Identifying</li> <li>8. Recording</li> </ol> |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|

### Exercise 1-2 (20 minutes)

#### Part A.

- |                                                                                                                                                  |                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. Internal user</li> <li>2. External user</li> <li>3. Internal user</li> <li>4. External user</li> </ol> | <ol style="list-style-type: none"> <li>5. Internal user</li> <li>6. External user</li> <li>7. Internal user</li> </ol> |
|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|

#### Part B.

- |                                                                                                                                                  |                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. Internal user</li> <li>2. Internal user</li> <li>3. External user</li> <li>4. External user</li> </ol> | <ol style="list-style-type: none"> <li>5. Internal user</li> <li>6. External user</li> <li>7. Internal user</li> <li>8. Internal user</li> </ol> |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|

### Exercise 1-3 (10 minutes)

- |                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. Managerial accounting</li> <li>2. Financial accounting</li> <li>3. Managerial accounting</li> <li>4. Managerial accounting</li> <li>5. Tax accounting</li> <li>6. Tax accounting</li> <li>7. Financial accounting</li> <li>8. Financial accounting</li> </ol> | <ol style="list-style-type: none"> <li>Internal auditing</li> <li>External auditing</li> <li>Cost accounting</li> <li>Budgeting</li> <li>Enforcing tax laws</li> <li>Planning transactions to minimize taxes</li> <li>Preparing external financial statements</li> <li>Analyzing external financial reports</li> </ol> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**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)**

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

**Exercise 1-7 (10 minutes)****Principle or Assumption**

- a. Full disclosure principle
- b. Going-concern assumption
- c. Expense recognition (matching) principle
- d. Business entity assumption
- e. Revenue recognition principle
- f. Measurement (cost) principle

**Exercise 1-8 (15 minutes)**

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

**Explanation:** Accounting information is based on the measurement (cost) principle. This means for recording the asset's amount, 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 recognition principle dictates that 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 in May. Therefore, the revenue for this work is recorded in May.

**Exercise 1-9 (10 minutes)**

| <b>Assets</b>        | <b>=</b> | <b>Liabilities</b>   | <b>+</b> | <b>Equity</b>       |
|----------------------|----------|----------------------|----------|---------------------|
| (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 “ $\Delta$ ” refers to “change in.”

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:**

| <b>Assets</b> | <b>=</b> | <b>Liabilities</b> | <b>+</b> | <b>Equity</b> |
|---------------|----------|--------------------|----------|---------------|
| ?             | =        | \$60,000           | +        | \$40,000      |

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

**Using the accounting equation on January 3:**

| <b>Assets</b> | <b>=</b> | <b>Liabilities</b> | <b>+</b> | <b>Equity</b> |
|---------------|----------|--------------------|----------|---------------|
| ?             | =        | \$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:**

| <b>Assets</b> | <b>=</b> | <b>Liabilities</b> | <b>+</b> | <b>Equity</b> |
|---------------|----------|--------------------|----------|---------------|
| \$100,000     | =        | \$30,000           | +        | ?             |

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

**Using the accounting equation on March 5:**

| <b>Assets</b>        | <b>=</b> | <b>Liabilities</b> | <b>+</b> | <b>Equity</b> |
|----------------------|----------|--------------------|----------|---------------|
| \$100,000 - \$15,000 | =        | \$30,000           | +        | ?             |
| \$85,000             | =        | \$30,000           | +        | ?             |

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

**c. Using the accounting equation on August 1:**

| <b>Assets</b> | <b>=</b> | <b>Liabilities</b> | <b>+</b> | <b>Equity</b> |
|---------------|----------|--------------------|----------|---------------|
| \$30,000      | =        | \$10,000           | +        | ?             |

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

**Using the accounting equation on August 5:**

| <b>Assets</b>       | <b>=</b> | <b>Liabilities</b> | <b>+</b> | <b>Equity</b> |
|---------------------|----------|--------------------|----------|---------------|
| \$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.
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 | + M. Chen, Capital | - M. Chen, Withdrawals | + Revenues       | - Expenses                         |
| a.   | +\$60,000       |                       | + \$15,000        | =                  | + \$75,000         |                        |                  |                                    |
| b.   | <u>- 1,500</u>  |                       |                   |                    |                    |                        |                  | - <u>\$1,500</u>                   |
| 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             |                        |                  | - 1,500                            |
| d.   | <u>+ 2,500</u>  |                       |                   |                    |                    |                        | + <u>\$2,500</u> |                                    |
| Bal. | 61,000          | +                     | + 25,000          | =                  | 10,000             |                        | + 2,500          | - 1,500                            |
| e.   |                 | + <u>\$8,000</u>      |                   |                    |                    |                        | + <u>8,000</u>   |                                    |
| Bal. | 61,000          | + 8,000               | + 25,000          | =                  | 10,000             |                        | + 10,500         | - 1,500                            |
| f.   | <u>- 6,000</u>  |                       | + <u>6,000</u>    |                    |                    |                        |                  |                                    |
| Bal. | 55,000          | + 8,000               | + 31,000          | =                  | 10,000             |                        | + 10,500         | - 1,500                            |
| g.   | <u>- 3,000</u>  |                       |                   |                    |                    |                        |                  | - <u>3,000</u>                     |
| Bal. | 52,000          | + 8,000               | + 31,000          | =                  | 10,000             |                        | + 10,500         | - 4,500                            |
| h.   | <u>+ 5,000</u>  | - <u>5,000</u>        |                   |                    |                    |                        |                  |                                    |
| Bal. | 57,000          | + 3,000               | + 31,000          | =                  | 10,000             |                        | + 10,500         | - 4,500                            |
| i.   | <u>- 10,000</u> |                       |                   | <u>- 10,000</u>    |                    |                        |                  |                                    |
| Bal. | 47,000          | + 3,000               | + 31,000          | =                  | 0                  |                        | + 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)**

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

**a. Net income for year:**

|                                               |                        |
|-----------------------------------------------|------------------------|
| <b>Equity, <i>beginning</i> of year .....</b> | <b>\$28,000</b>        |
| <b>Plus owner investments .....</b>           | <b>3,000</b>           |
| <b>Plus net income .....</b>                  | <b>?</b>               |
| <b>Less owner withdrawals .....</b>           | <b><u>(7,000)</u></b>  |
| <b>Equity, <i>end</i> of year .....</b>       | <b><u>\$45,000</u></b> |
| <b>Therefore, net income must have been</b>   | <b><u>\$21,000</u></b> |

**b. Net income for year:**

|                                               |                        |
|-----------------------------------------------|------------------------|
| <b>Equity, <i>beginning</i> of year .....</b> | <b>\$28,000</b>        |
| <b>Plus owner investments .....</b>           | <b>15,000</b>          |
| <b>Plus net income .....</b>                  | <b>?</b>               |
| <b>Less owner withdrawals .....</b>           | <b><u>(0)</u></b>      |
| <b>Equity, <i>end</i> of year .....</b>       | <b><u>\$45,000</u></b> |
| <b>Therefore, net income must have been</b>   | <b><u>\$ 2,000</u></b> |

**c. Net income for year:**

|                                               |                        |
|-----------------------------------------------|------------------------|
| <b>Equity, <i>beginning</i> of year .....</b> | <b>\$28,000</b>        |
| <b>Plus owner investments .....</b>           | <b>0</b>               |
| <b>Plus net income .....</b>                  | <b>?</b>               |
| <b>Less owner withdrawals .....</b>           | <b><u>(12,000)</u></b> |
| <b>Equity, <i>end</i> of year .....</b>       | <b><u>\$45,000</u></b> |
| <b>Therefore, net income must have been</b>   | <b><u>\$29,000</u></b> |

**Exercise 1-17 (20 minutes)**

| <b>a. Statement of Cash Flow Category</b> | <b>b. Cash Inflow/Outflow</b> |
|-------------------------------------------|-------------------------------|
| 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)**

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

**Exercise 1-19 (15 minutes)**

| <b>ERNST CONSULTING</b>                      |                        |          |
|----------------------------------------------|------------------------|----------|
| <b>Statement of Owner's Equity</b>           |                        |          |
| <b>For Month Ended December 31</b>           |                        |          |
| <b>J. Ernst, Capital, December 1 .....</b>   | <b>\$</b>              | <b>0</b> |
| <b>Add: Investments by owner .....</b>       | <b>84,000</b>          |          |
| <b>Net income (from Exercise 1-18) .....</b> | <b><u>2,110</u></b>    |          |
|                                              | <b>86,110</b>          |          |
| <b>Less: Withdrawals by owner .....</b>      | <b><u>2,000</u></b>    |          |
| <b>J. Ernst, Capital, December 31 .....</b>  | <b><u>\$84,110</u></b> |          |

**Exercise 1-20 (15 minutes)**

| ERNST CONSULTING<br>Balance Sheet<br>December 31 |                 |                                   |                 |
|--------------------------------------------------|-----------------|-----------------------------------|-----------------|
| <i>Assets</i>                                    |                 | <i>Liabilities</i>                |                 |
| Cash.....                                        | \$11,360        | Accounts payable .....            | \$ 8,500        |
| Accounts receivable ....                         | 14,000          |                                   |                 |
| Office supplies.....                             | 3,250           |                                   |                 |
| Office equipment .....                           | 18,000          |                                   |                 |
| Land .....                                       | <u>46,000</u>   | <i>Equity</i>                     |                 |
| Total assets.....                                | <u>\$92,610</u> | J. Ernst, Capital* .....          | <u>84,110</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<br>Statement of Cash Flows<br>For Month Ended December 31 |                 |
|----------------------------------------------------------------------------|-----------------|
| <b>Cash flows from operating activities</b>                                |                 |
| Cash received from customers.....                                          | \$ 0            |
| Cash paid to employees <sup>a</sup> .....                                  | (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)         |
| <b>Cash flows from investing activities</b>                                |                 |
| Cash paid for office equipment.....                                        | <u>(18,000)</u> |
| Net cash used by investing activities .....                                | (18,000)        |
| <b>Cash flows from financing activities</b>                                |                 |
| Cash investments by owner .....                                            | 38,000          |
| Cash withdrawals by owner .....                                            | <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> |

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

**Exercise 1-22 (15 minutes)****a.**

| <b>JARVIS</b><br><b>Statement of Owner's Equity</b><br><b>For Year Ended December 31, Year 1</b> |                 |
|--------------------------------------------------------------------------------------------------|-----------------|
| Jarvis, Capital, January 1, Year 1 .....                                                         | \$ 0            |
| Add: Investments by owner.....                                                                   | 10,000          |
| Net income .....                                                                                 | <u>30,000</u>   |
|                                                                                                  | 40,000          |
| Less: Withdrawals by owner .....                                                                 | <u>(8,000)</u>  |
| Jarvis, Capital, December 31, Year 1 .....                                                       | <u>\$32,000</u> |

**b.**

| <b>JARVIS</b><br><b>Statement of Owner's Equity</b><br><b>For Year Ended December 31, Year 2</b> |                 |
|--------------------------------------------------------------------------------------------------|-----------------|
| Jarvis, Capital, December 31, Year 1.....                                                        | \$32,000        |
| Add: Investments by owner.....                                                                   | 0               |
| Net income .....                                                                                 | <u>50,000</u>   |
|                                                                                                  | 82,000          |
| Less: Withdrawals by owner .....                                                                 | <u>(14,000)</u> |
| Jarvis, Capital, December 31, Year 2.....                                                        | <u>\$68,000</u> |

**Exercise 1-23 (25 minutes)****a.**

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

**b.**

| <b>TERRELL CO</b>                   |                |                 |
|-------------------------------------|----------------|-----------------|
| <b>Statement of Owner's Equity</b>  |                |                 |
| <b>For Year Ended December 31</b>   |                |                 |
| Terrell, Capital, January 1.....    | \$             | 0               |
| Add: Investments by owner.....      | 22,000         |                 |
| Net income .....                    | <u>16,000</u>  |                 |
|                                     |                | 38,000          |
| Less: Withdrawals by owner .....    | <u>(5,000)</u> |                 |
| Terrell, Capital, December 31 ..... |                | <u>\$33,000</u> |

**Exercise 1-24 (25 minutes)**

a.

| <b>MAHOMES CO</b><br><b>Statement of Owner's Equity</b><br><b>For Year Ended December 31</b> |                 |
|----------------------------------------------------------------------------------------------|-----------------|
| Mahomes, Capital, January 1 .....                                                            | \$ 0            |
| Add: Investments by owner.....                                                               | 15,000          |
| Net income .....                                                                             | <u>60,000</u>   |
|                                                                                              | 75,000          |
| Less: Withdrawals by owner .....                                                             | <u>(22,000)</u> |
| Mahomes, Capital, December 31 .....                                                          | <u>\$53,000</u> |

b.

| <b>MAHOMES CO</b><br><b>Balance Sheet</b><br><b>December 31</b> |                 |                                   |                 |
|-----------------------------------------------------------------|-----------------|-----------------------------------|-----------------|
| <i>Assets</i>                                                   |                 | <i>Liabilities</i>                |                 |
| Cash.....                                                       | \$ 6,000        | Accounts payable .....            | \$ 3,000        |
| Accounts receivable ....                                        | 7,000           |                                   |                 |
| Equipment.....                                                  | 9,000           |                                   |                 |
| Land .....                                                      | <u>34,000</u>   | <i>Equity</i>                     |                 |
| Total assets.....                                               | <u>\$56,000</u> | Mahomes, Capital .....            | <u>53,000</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)

|             |                                           | a.            |             |                  |            | b.                      |                      |                      |
|-------------|-------------------------------------------|---------------|-------------|------------------|------------|-------------------------|----------------------|----------------------|
|             |                                           | Balance Sheet |             | Income Statement |            | Statement of Cash Flows |                      |                      |
| Transaction |                                           | Total Assets  | Total Liab. | Total Equity     | Net Income | Operating Activities    | Investing Activities | Financing Activities |
| 1           | Owner invests \$900 cash in business      | +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<br>-300  |             |                  |            |                         | -300                 |                      |
| 7           | Pays \$200 on accounts payable            | -200          | -200        |                  |            | -200                    |                      |                      |
| 8           | Provides \$400 services on credit         | +400          |             | +400             | +400       |                         |                      |                      |
| 9           | Owner withdraws \$50 cash                 | -50           |             | -50              |            |                         |                      | -50                  |
| 10          | Collects \$400 cash on account receivable | +400<br>-400  |             |                  |            | +400                    |                      |                      |

**Problem 1-2A (40 minutes)****Part 1****Company A****(a) Equity at *beginning* of year:**

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

**(b) Equity at *end* of year:**

|                                               |                        |
|-----------------------------------------------|------------------------|
| <b>Equity, <i>beginning</i> of year</b> ..... | <b>\$30,500</b>        |
| <b>Plus investments by owner</b> .....        | <b>6,000</b>           |
| <b>Plus net income</b> .....                  | <b>8,500</b>           |
| <b>Less withdrawals by owner</b> .....        | <b><u>(3,500)</u></b>  |
| <b>Equity, <i>end</i> of year</b> .....       | <b><u>\$41,500</u></b> |

**(c) Liabilities at *end* of year:**

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

**Part 2****Company B****(a) and (b)**

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

**(c) Net income for year:**

|                                               |                        |
|-----------------------------------------------|------------------------|
| <b>Equity, <i>beginning</i> of year</b> ..... | <b>\$12,500</b>        |
| <b>Plus investments by owner</b> .....        | <b>1,400</b>           |
| <b>Plus net income</b> .....                  | <b>?</b>               |
| <b>Less withdrawals by owner</b> .....        | <b><u>(2,000)</u></b>  |
| <b>Equity, <i>end</i> of year</b> .....       | <b><u>\$13,500</u></b> |

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

**Problem 1-2A (Continued)****Part 3****Company C**

First, compute the beginning balance of equity:

|                   | <u><i>Beginning of Year</i></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 investments by owner .....        | 9,750           |
| Plus net income .....                  | 8,000           |
| Less withdrawals by owner .....        | <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><i>End of Year</i></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><i>Beginning</i></u> | <u><i>Ending</i></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 owner investments during the year:

|                                        |                 |
|----------------------------------------|-----------------|
| Equity, <i>beginning</i> of year ..... | \$20,000        |
| Plus investments by owner .....        | ?               |
| Plus net income .....                  | 14,000          |
| Less withdrawals by owner .....        | <u>0</u>        |
| Equity, <i>end</i> of year .....       | <u>\$61,000</u> |

Thus, owner investments 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 investments by owner .....        | 6,500           |
| Plus net income .....                  | 20,000          |
| Less withdrawals by owner .....        | <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:

**Beginning of Year**

|                   |                  |
|-------------------|------------------|
| Assets .....      | \$119,000        |
| Equity .....      | <u>(27,500)</u>  |
| Liabilities ..... | <u>\$ 91,500</u> |

**Problem 1-3A (20 minutes)**

| <b>Armani Company</b>                     |               |                 |
|-------------------------------------------|---------------|-----------------|
| <b>Income Statement</b>                   |               |                 |
| <b>For Current Year Ended December 31</b> |               |                 |
| <b>Revenues</b>                           |               |                 |
| Consulting revenue .....                  | \$33,000      |                 |
| Rental revenue .....                      | <u>22,000</u> |                 |
| Total revenues.....                       |               | \$55,000        |
| <b>Expenses</b>                           |               |                 |
| 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)**

| <b>Armani Company</b>                       |               |                 |
|---------------------------------------------|---------------|-----------------|
| <b>Statement of Owner's Equity</b>          |               |                 |
| <b>For Current Year Ended December 31</b>   |               |                 |
| Armani, Capital, Dec. 31, prior year.....   | \$16,000      |                 |
| Add: Investments by owner.....              | 1,000         |                 |
| Net income (from Problem 1-3A).....         | <u>15,000</u> |                 |
|                                             | 32,000        |                 |
| Less: Withdrawals by owner .....            | <u>13,000</u> |                 |
| Armani, Capital, Dec. 31, current year..... |               | <u>\$19,000</u> |

**Problem 1-5A (20 minutes)**

| Armani Company<br>Balance Sheet<br>December 31 |                 |                                   |                 |
|------------------------------------------------|-----------------|-----------------------------------|-----------------|
| <b>Assets</b>                                  |                 | <b>Liabilities</b>                |                 |
| Cash.....                                      | \$10,000        | Accounts payable .....            | <u>\$11,000</u> |
| Accounts receivable ....                       | 9,000           | Total liabilities .....           | 11,000          |
| Supplies .....                                 | 7,000           |                                   |                 |
| Equipment.....                                 | <u>4,000</u>    | <b>Equity</b>                     |                 |
| Total assets.....                              | <u>\$30,000</u> | Armani, Capital* .....            | <u>19,000</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<br>Statement of Cash Flows<br>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 .....                                        | \$ 3,500       |

**Problem 1-7A (60 minutes) Part 1**

| Assets |           |   |                     | = | Liabilities |   | +                | Equity  |                  |   |                      |   |          |           |           |
|--------|-----------|---|---------------------|---|-------------|---|------------------|---------|------------------|---|----------------------|---|----------|-----------|-----------|
| Date   | Cash      | + | Accounts Receivable | + | Equipment   | = | Accounts Payable | +       | G. Gram, Capital | - | G. Gram, Withdrawals | + | 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              |   |          |           |           |
|        | \$42,780  | + | \$ 0                | + | \$1,970     | = | \$ 80            | +       | \$40,000         | - | \$1,400              | + | \$11,100 | -         | \$5,030   |

## Problem 1-7A (Continued)

## Part 2

| The Gram Co.<br>Income Statement<br>For Month Ended May 31 |            |                        |
|------------------------------------------------------------|------------|------------------------|
| <b>Revenues</b>                                            |            |                        |
| Consulting services revenue .....                          |            | \$11,100               |
| <b>Expenses</b>                                            |            |                        |
| 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><u>\$ 6,070</u></u> |

| The Gram Co.<br>Statement of Owner's Equity<br>For Month Ended May 31 |                        |        |
|-----------------------------------------------------------------------|------------------------|--------|
| G. Gram, Capital, May 1 .....                                         | \$                     | 0      |
| Add: Investments by owner .....                                       | 40,000                 |        |
| Net income.....                                                       | <u>6,070</u>           |        |
|                                                                       |                        | 46,070 |
| Less: Withdrawals by owner .....                                      | <u>1,400</u>           |        |
| G. Gram, Capital, May 31 .....                                        | <u><u>\$44,670</u></u> |        |

| The Gram Co.<br>Balance Sheet<br>May 31 |                        |                                    |                        |
|-----------------------------------------|------------------------|------------------------------------|------------------------|
| <b>Assets</b>                           |                        | <b>Liabilities</b>                 |                        |
| Cash.....                               | \$42,780               | Accounts payable.....              | \$ 80                  |
| Equipment.....                          | 1,970                  | <b>Equity</b>                      |                        |
| Total assets.....                       | <u><u>\$44,750</u></u> | G. Gram, Capital .....             | <u>44,670</u>          |
|                                         |                        | Total liabilities and equity ..... | <u><u>\$44,750</u></u> |

**Problem 1-7A (Concluded)****Part 3**

| The Gram Co.<br>Statement of Cash Flows<br>For Month Ended May 31 |                |                 |
|-------------------------------------------------------------------|----------------|-----------------|
| <b>Cash flows from operating activities</b>                       |                |                 |
| 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        |
| <b>Cash flows from investing activities</b>                       |                |                 |
| Cash paid for equipment .....                                     | <u>(1,890)</u> |                 |
| Net cash used by investing activities .....                       |                | (1,890)         |
| <b>Cash flows from financing activities</b>                       |                |                 |
| Cash investment by owner .....                                    | 40,000         |                 |
| Cash withdrawal by owner .....                                    | <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 | + L. Lopez, Capital | - L. Lopez, Withdrawals | + 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 (60 minutes) Part 1

| Date   | Assets    |   |                     |   |          | = | Liabilities      | + | Equity                |          |                  |       |                  |        |                      |        |          |       |          |         |         |   |         |
|--------|-----------|---|---------------------|---|----------|---|------------------|---|-----------------------|----------|------------------|-------|------------------|--------|----------------------|--------|----------|-------|----------|---------|---------|---|---------|
|        | Cash      | + | Accounts Receivable | + | Supplies | + | Office Equipment | + | Electrical Equipme nt | =        | Accounts Payable | +     | S. Sony, Capital | -      | S. Sony, Withdrawals | +      | Revenues | -     | Expenses |         |         |   |         |
| Dec. 1 | +\$65,000 |   |                     |   |          | = |                  | + | \$65,000              |          |                  |       |                  |        |                      |        |          |       |          |         |         |   |         |
| 2      | - 1,000   |   |                     |   |          |   |                  |   |                       |          |                  |       |                  |        |                      |        |          |       | -        | \$1,000 |         |   |         |
| Bal.   | 64,000    |   |                     |   |          | = |                  |   |                       |          |                  |       | 65,000           |        |                      |        |          | -     | 1,000    |         |         |   |         |
| 3      | - 4,800   |   |                     |   |          |   |                  |   | +                     | \$13,000 |                  | +     | \$8,200          |        |                      |        |          |       |          |         |         |   |         |
| Bal.   | 59,200    |   |                     |   |          |   |                  |   | +                     | 13,000   | =                | 8,200 | +                | 65,000 |                      |        |          |       | -        | 1,000   |         |   |         |
| 5      | - 800     |   |                     |   |          |   |                  |   |                       |          |                  |       |                  |        | +                    | \$ 800 |          |       |          |         |         |   |         |
| Bal.   | 58,400    |   |                     |   |          |   |                  |   | +                     | 800      |                  | +     | 13,000           | =      | 8,200                | +      | 65,000   |       |          | -       | 1,000   |   |         |
| 6      | + 1,200   |   |                     |   |          |   |                  |   |                       |          |                  |       |                  |        |                      |        |          | +     | \$1,200  |         |         |   |         |
| Bal.   | 59,600    |   |                     |   |          |   |                  |   | +                     | 800      | =                | 8,200 | +                | 65,000 |                      |        |          | +     | 1,200    | -       | 1,000   |   |         |
| 8      |           |   |                     |   |          |   |                  | + | \$2,530               |          | +                | 2,530 |                  |        |                      |        |          |       |          |         |         |   |         |
| Bal.   | 59,600    |   |                     |   |          |   |                  | + | 800                   | +        | 2,530            | +     | 13,000           | =      | 10,730               | +      | 65,000   |       |          | +       | 1,200   | - | 1,000   |
| 15     |           |   |                     |   |          | + | \$5,000          |   |                       |          |                  |       |                  |        |                      |        | +        | 5,000 |          |         |         |   |         |
| Bal.   | 59,600    |   |                     |   |          | + | 5,000            | + | 800                   | +        | 2,530            | +     | 13,000           | =      | 10,730               | +      | 65,000   |       |          | +       | 6,200   | - | 1,000   |
| 18     |           |   |                     |   |          |   |                  | + | 350                   |          |                  | +     | 350              |        |                      |        |          |       |          |         |         |   |         |
| Bal.   | 59,600    |   |                     |   |          | + | 5,000            | + | 1,150                 | +        | 2,530            | +     | 13,000           | =      | 11,080               | +      | 65,000   |       |          | +       | 6,200   | - | 1,000   |
| 20     | - 2,530   |   |                     |   |          |   |                  |   |                       |          |                  | -     | 2,530            |        |                      |        |          |       |          |         |         |   |         |
| Bal.   | 57,070    |   |                     |   |          | + | 5,000            | + | 1,150                 | +        | 2,530            | +     | 13,000           | =      | 8,550                | +      | 65,000   |       |          | +       | 6,200   | - | 1,000   |
| 24     |           |   |                     |   |          | + | 900              |   |                       |          |                  |       |                  |        |                      |        |          | +     | 900      |         |         |   |         |
| Bal.   | 57,070    |   |                     |   |          | + | 5,900            | + | 1,150                 | +        | 2,530            | +     | 13,000           | =      | 8,550                | +      | 65,000   |       |          | +       | 7,100   | - | 1,000   |
| 28     | + 5,000   |   |                     |   |          | - | 5,000            |   |                       |          |                  |       |                  |        |                      |        |          |       |          |         |         |   |         |
| Bal.   | 62,070    |   |                     |   |          | + | 900              | + | 1,150                 | +        | 2,530            | +     | 13,000           | =      | 8,550                | +      | 65,000   |       |          | +       | 7,100   | - | 1,000   |
| 29     | - 1,400   |   |                     |   |          |   |                  |   |                       |          |                  |       |                  |        |                      |        |          |       |          | -       | 1,400   |   |         |
| Bal.   | 60,670    |   |                     |   |          | + | 900              | + | 1,150                 | +        | 2,530            | +     | 13,000           | =      | 8,550                | +      | 65,000   |       |          | +       | 7,100   | - | 2,400   |
| 30     | - 540     |   |                     |   |          |   |                  |   |                       |          |                  |       |                  |        |                      |        |          |       |          | -       | 540     |   |         |
| Bal.   | 60,130    |   |                     |   |          | + | 900              | + | 1,150                 | +        | 2,530            | +     | 13,000           | =      | 8,550                | +      | 65,000   |       |          | +       | 7,100   | - | 2,940   |
| 31     | - 950     |   |                     |   |          |   |                  |   |                       |          |                  |       |                  |        |                      |        |          |       | -        | \$950   |         |   |         |
| Bal.   | \$59,180  |   |                     |   |          | + | \$ 900           | + | \$1,150               | +        | \$2,530          | +     | \$13,000         | =      | \$8,550              | +      | \$65,000 | -     | \$950    | +       | \$7,100 | - | \$2,940 |

**Problem 1-9A (Continued)****Part 2**

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

|                                   |            |                |
|-----------------------------------|------------|----------------|
| <b>Revenues</b>                   |            |                |
| Electrical services revenue ..... |            | \$7,100        |
| <b>Expenses</b>                   |            |                |
| 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 Owner's Equity  
For Month Ended December 31**

|                                     |                 |
|-------------------------------------|-----------------|
| S. Sony, Capital, December 1 .....  | \$ 0            |
| Add: Investments by owner .....     | 65,000          |
| Net income.....                     | <u>4,160</u>    |
|                                     | 69,160          |
| Less: Withdrawals by owner .....    | <u>950</u>      |
| S. Sony, Capital, December 31 ..... | <u>\$68,210</u> |

**Sony Electric  
Balance Sheet  
December 31**

| <b>Assets</b>              |                 | <b>Liabilities</b>                 |                 |
|----------------------------|-----------------|------------------------------------|-----------------|
| Cash.....                  | \$59,180        | Accounts payable.....              | \$ 8,550        |
| Accounts receivable .....  | 900             |                                    |                 |
| Supplies .....             | 1,150           |                                    |                 |
| Office equipment .....     | 2,530           |                                    |                 |
| Electrical equipment ..... | 13,000          | <b>Equity</b>                      |                 |
| Total assets.....          | <u>\$76,760</u> | S. Sony, Capital .....             | 68,210          |
|                            |                 | Total liabilities and equity ..... | <u>\$76,760</u> |

**Problem 1-9A (Concluded)****Part 3**

| Sony Electric<br>Statement of Cash Flows<br>For Month Ended December 31 |                |                 |
|-------------------------------------------------------------------------|----------------|-----------------|
| <b>Cash flows from operating activities</b>                             |                |                 |
| Cash received from customers <sup>1</sup> .....                         | \$ 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        |
| <b>Cash flows from investing activities</b>                             |                |                 |
| Cash paid for office equipment .....                                    | (2,530)        |                 |
| Cash paid for electrical equipment .....                                | <u>(4,800)</u> |                 |
| Net cash used by investing activities .....                             |                | (7,330)         |
| <b>Cash flows from financing activities</b>                             |                |                 |
| Cash investments by owner .....                                         | 65,000         |                 |
| Cash withdrawals by owner .....                                         | <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> |

<sup>1</sup>\$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:  $\$10,714 / \$95,233 = 0.113$  or 11.3%.
  - b. PepsiCo return:  $\$9,074 / \$96,341 = 0.094$  or 9.4%.
2. PepsiCo. Solely on the amount of sales to consumers, PepsiCo's sales of \$91,471 are greater than Coca-Cola's sales of \$45,754.
3. Coca-Cola. 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 9.4% return.

|                      |
|----------------------|
| <b>PROBLEM SET B</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        | +800          |             | +800             |            |                         |                      | +800                 |
| 2 Purchases \$100 supplies on credit          | +100          | +100        |                  |            |                         |                      |                      |
| 3 Buys equipment for \$400 cash               | +400<br>-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 Owner withdraws \$50 cash                   | -50           |             | -50              |            |                         |                      | -50                  |
| 9 Provide \$600 services on credit            | +600          |             | +600             | +600       |                         |                      |                      |
| 10 Collects \$600 cash on accounts receivable | +600<br>-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 .....      | (25,000)         | (36,000)        |
| 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 investments by owner .....        | 5,000              |
| Plus net income .....                  | ?                  |
| Less withdrawals by owner .....        | <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 investments by owner .....        | 20,000          |
| Plus net income .....                  | 40,000          |
| Less withdrawals by owner .....        | <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><i>Beginning</i></u> | <u><i>Ending</i></u> |
|-------------------|-------------------------|----------------------|
| Assets .....      | \$141,500               | \$186,500            |
| Liabilities ..... | <u>(68,500)</u>         | <u>(65,800)</u>      |
| Equity .....      | <u>\$ 73,000</u>        | <u>\$120,700</u>     |

Then, find the amount of owner investments during the year:

|                                 |                  |
|---------------------------------|------------------|
| Equity, beginning of year ..... | \$ 73,000        |
| Plus investments by owner ..... | ?                |
| Plus net income .....           | 18,500           |
| Less withdrawals by owner ..... | <u>0</u>         |
| Equity, end of year .....       | <u>\$120,700</u> |

Thus, the owner investments must have been.. \$ 29,200

**Part 4****Company Y**

First, compute the beginning balance of equity:

|                   | <u><i>Beginning</i></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 investments by owner ..... | 48,100          |
| Plus net income .....           | 24,000          |
| Less withdrawals by owner ..... | <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><i>Ending</i></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 investments by owner ..... | 60,000           |
| Plus net income .....           | 32,000           |
| Less withdrawals by owner ..... | <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:

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

**Problem 1-3B (20 minutes)**

| <b>Audi Company</b>                       |              |                 |
|-------------------------------------------|--------------|-----------------|
| <b>Income Statement</b>                   |              |                 |
| <b>For Current Year Ended December 31</b> |              |                 |
| <b>Revenues</b>                           |              |                 |
| Consulting revenue .....                  | \$6,600      |                 |
| Rental revenue .....                      | <u>4,400</u> |                 |
| Total revenues.....                       |              | \$11,000        |
| <b>Expenses</b>                           |              |                 |
| 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)**

| <b>Audi Company</b>                               |                     |                       |
|---------------------------------------------------|---------------------|-----------------------|
| <b>Statement of Owner's Equity</b>                |                     |                       |
| <b>For Current Year Ended December 31</b>         |                     |                       |
| <b>Audi, Capital, Dec. 31, prior year .....</b>   | <b>\$1,900</b>      |                       |
| <b>Add: Investments by owner.....</b>             | <b>100</b>          |                       |
| <b>Net income (from Problem 1-3B).....</b>        | <b><u>3,000</u></b> |                       |
|                                                   | <b>5,000</b>        |                       |
| <b>Less: Withdrawals by owner .....</b>           | <b><u>2,600</u></b> |                       |
| <b>Audi, Capital, Dec. 31, current year .....</b> |                     | <b><u>\$2,400</u></b> |

**Problem 1-5B (20 minutes)**

| Audi Company<br>Balance Sheet<br>December 31 |                |                                   |                |
|----------------------------------------------|----------------|-----------------------------------|----------------|
| <b>Assets</b>                                |                | <b>Liabilities</b>                |                |
| Cash.....                                    | \$2,000        | Accounts payable .....            | <u>\$3,600</u> |
| Accounts receivable ....                     | 1,800          | Total liabilities .....           | 3,600          |
| Supplies .....                               | 1,200          | <b>Equity</b>                     |                |
| Equipment.....                               | <u>1,000</u>   | Audi, Capital* .....              | <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<br>Statement of Cash Flows<br>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>\$ 1,700</u> |

## Problem 1-7B (60 minutes) Part 1

| Assets |            |       |                     |   | =         | Liabilities | +                | Equity  |                  |           |                      |   |          |           |             |
|--------|------------|-------|---------------------|---|-----------|-------------|------------------|---------|------------------|-----------|----------------------|---|----------|-----------|-------------|
| Date   | Cash       | +     | Accounts Receivable | + | Equipment | =           | Accounts Payable | +       | N. Niko, Capital | -         | N. Niko, Withdrawals | + | 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   |
|        | \$130,060  | +     | \$ 675              | + | \$2,400   | =           | \$ 0             | +       | \$130,000        | -         | \$4,000              | + | \$16,925 | -         | \$9,790     |

## Problem 1-7B (Continued)

## Part 2

|                                                                                            |
|--------------------------------------------------------------------------------------------|
| <b>Niko's Maintenance Co.</b><br><b>Income Statement</b><br><b>For Month Ended June 30</b> |
|--------------------------------------------------------------------------------------------|

|                                    |                 |
|------------------------------------|-----------------|
| <b>Revenues</b>                    |                 |
| Maintenance services revenue ..... | \$16,925        |
| <b>Expenses</b>                    |                 |
| 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> |

|                                                                                                       |
|-------------------------------------------------------------------------------------------------------|
| <b>Niko's Maintenance Co.</b><br><b>Statement of Owner's Equity</b><br><b>For Month Ended June 30</b> |
|-------------------------------------------------------------------------------------------------------|

|                                  |                  |
|----------------------------------|------------------|
| N. Niko, Capital, June 1.....    | \$ 0             |
| Add: Investments by owner .....  | 130,000          |
| Net income.....                  | <u>7,135</u>     |
|                                  | 137,135          |
| Less: Withdrawals by owner ..... | <u>4,000</u>     |
| N. Niko, Capital, June 30.....   | <u>\$133,135</u> |

|                                                                         |
|-------------------------------------------------------------------------|
| <b>Niko's Maintenance Co.</b><br><b>Balance Sheet</b><br><b>June 30</b> |
|-------------------------------------------------------------------------|

| <b>Assets</b>             |                  | <b>Liabilities</b>               |                  |
|---------------------------|------------------|----------------------------------|------------------|
| Cash .....                | \$130,060        | Accounts payable.....            | \$ 0             |
| Accounts receivable ..... | 675              | <b>Equity</b>                    |                  |
| Equipment .....           | <u>2,400</u>     | N. Niko, Capital .....           | <u>133,135</u>   |
| Total assets .....        | <u>\$133,135</u> | Total liabilities and equity ... | <u>\$133,135</u> |

**Problem 1-7B (Concluded)****Part 3**

| <b>Niko's Maintenance Co.<br/>Statement of Cash Flows<br/>For Month Ended June 30</b> |                |                  |
|---------------------------------------------------------------------------------------|----------------|------------------|
| <b>Cash flows from operating activities</b>                                           |                |                  |
| Cash received from customers <sup>1</sup> .....                                       | \$ 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         |
| <b>Cash flows from investing activities</b>                                           |                |                  |
| Cash paid for equipment .....                                                         | <u>(2,400)</u> |                  |
| Net cash used by investing activities.....                                            |                | (2,400)          |
| <b>Cash flows from financing activities</b>                                           |                |                  |
| Cash investments by owner.....                                                        | 130,000        |                  |
| Cash withdrawals by owner .....                                                       | <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> |

<sup>1</sup>\$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 | + | N. Nadal, Capital | - N. Nadal, Withdrawals | + 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. - 3,000     |                       |            |             |            |   |                  |   |                   | - \$3,000               |            |            |
| Bal. 15,250    | + 2,800               | + 1,200    | + 36,700    | + 50,000   | = | 2,900            | + | 100,000           | - 3,000                 | + 6,800    | - 750      |
| i. + 1,800     | - 1,800               |            |             |            |   |                  |   |                   |                         |            |            |
| Bal. 17,050    | + 1,000               | + 1,200    | + 36,700    | + 50,000   | = | 2,900            | + | 100,000           | - 3,000                 | + 6,800    | - 750      |
| j. - 700       |                       |            |             |            |   | - 700            |   |                   |                         |            |            |
| Bal. 16,350    | + 1,000               | + 1,200    | + 36,700    | + 50,000   | = | 2,200            | + | 100,000           | - 3,000                 | + 6,800    | - 750      |
| k. - 2,500     |                       |            |             |            |   |                  |   |                   |                         |            | - 2,500    |
| Bal. \$ 13,850 | + \$1,000             | + \$1,200  | + \$36,700  | + \$50,000 | = | \$2,200          | + | \$100,000         | - \$3,000               | + \$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**

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

**Problem 1-9B (Continued)****Part 2**

|                                                                                            |
|--------------------------------------------------------------------------------------------|
| <b>Rivera Roofing Company</b><br><b>Income Statement</b><br><b>For Month Ended July 31</b> |
|--------------------------------------------------------------------------------------------|

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

|                                                                                                       |
|-------------------------------------------------------------------------------------------------------|
| <b>Rivera Roofing Company</b><br><b>Statement of Owner's Equity</b><br><b>For Month Ended July 31</b> |
|-------------------------------------------------------------------------------------------------------|

|                                   |                        |
|-----------------------------------|------------------------|
| R. Rivera, Capital, July 1 .....  | \$ 0                   |
| Add: Investments by owner .....   | 80,000                 |
| Net income .....                  | <u>18,245</u>          |
|                                   | 98,245                 |
| Less: Withdrawals by owner .....  | <u>1,800</u>           |
| R. Rivera, Capital, July 31 ..... | <b><u>\$96,445</u></b> |

|                                                                         |
|-------------------------------------------------------------------------|
| <b>Rivera Roofing Company</b><br><b>Balance Sheet</b><br><b>July 31</b> |
|-------------------------------------------------------------------------|

| <b>Assets</b>             |                         | <b>Liabilities</b>                          |                         |
|---------------------------|-------------------------|---------------------------------------------|-------------------------|
| Cash .....                | \$ 87,545               | Accounts payable .....                      | \$ 7,100                |
| Accounts receivable ..... | 5,000                   |                                             |                         |
| Supplies .....            | 3,700                   |                                             |                         |
| Office equipment .....    | 2,300                   |                                             |                         |
|                           |                         | <b>Equity</b>                               |                         |
| Roofing equipment .....   | 5,000                   | R. Rivera, Capital .....                    | 96,445                  |
| <b>Total assets .....</b> | <b><u>\$103,545</u></b> | <b>Total liabilities &amp; equity .....</b> | <b><u>\$103,545</u></b> |

**Problem 1-9B (Concluded)****Part 3**

| Rivera Roofing Company<br>Statement of Cash Flows<br>For Month Ended July 31 |                |                        |
|------------------------------------------------------------------------------|----------------|------------------------|
| <b>Cash flows from operating activities</b>                                  |                |                        |
| Cash received from customers <sup>1</sup> .....                              | \$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               |
| <b>Cash flows from investing activities</b>                                  |                |                        |
| Cash paid for roofing equipment .....                                        | (1,000)        |                        |
| Cash paid for office equipment .....                                         | <u>(2,300)</u> |                        |
| Net cash used by investing activities .....                                  |                | (3,300)                |
| <b>Cash flows from financing activities</b>                                  |                |                        |
| Cash investments by owner .....                                              | 80,000         |                        |
| Cash withdrawals by owner .....                                              | <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><u>\$87,545</u></u> |

<sup>1</sup>\$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:  $\$14,192 / \$404,957 = 0.035$  or 3.5%
  - b. Verizon return:  $\$11,614 / \$379,968 = 0.031$  or 3.1%
2. Verizon. On strictly the amount of sales to consumers, Verizon's sales of \$133,974 are greater than AT&T's sales of \$122,428.
3. AT&T. 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 higher return on assets of 3.5% versus Verizon with a 3.1% return on assets.
4. The reported figures, particularly the ROA, suggest AT&T is more successful in generating income from its assets. Based on this information alone, we would be better advised to invest in AT&T than Verizon.

Nevertheless, we would look for additional information in financial statements and other sources for further guidance. For example, if Verizon 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, AT&T 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

|      |    | Assets   |   |                     |   |                   |         | =               | Liabilities | +                | Equity |                  |         |                 |   |                     |   |          |          |          |
|------|----|----------|---|---------------------|---|-------------------|---------|-----------------|-------------|------------------|--------|------------------|---------|-----------------|---|---------------------|---|----------|----------|----------|
|      |    | Cash     | + | Accounts Receivable | + | Computer Supplies | +       | Computer System | +           | Office Equipment | =      | Accounts Payable | +       | S. Rey, Capital | - | S. Rey, Withdrawals | + | 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  |   |                     |   |                   |         |                 |             |                  |        |                  |         |                 |   |                     |   |          |          |          |
| Bal. |    | \$42,772 | + | \$5,208             | + | \$1,420           | +       | \$20,000        | +           | \$8,000          | =      | \$ 0             | +       | \$73,000        | - | \$3,600             | + | \$11,408 | -        | \$3,408  |

**Company Analysis — AA 1-1**

1. \$352,583 (\$ 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. 27.5%

**Explanation:** Return on assets is net income divided by the average total assets invested.

For Apple this return is (\$ millions):

$$\$96,995 / [(\$352,583 + \$352,755)/2] = 0.275 \text{ or } 27.5\%.$$

3. \$286,290 (\$ millions)

**Explanation:** We know that net income equals total revenues less total expenses.

For Apple, we are told net income is \$96,995 and revenues are \$383,285. Thus, Apple's total expenses are computed as:  $\$383,285 - \text{Expenses} = \$96,995$ . Total expenses must equal \$286,290.

4. Better

**Explanation:** Apple's return on assets of 27.5% is good given that it exceeds its competitors' return on assets of 10% for this period.

## Comparative Analysis — AA 1-2

| (\$ millions)                             | Apple                                                         | Google                                                        |
|-------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| 1. Total Assets =<br>Liabilities + Equity | <u>\$352,583</u>                                              | <u>\$402,392</u>                                              |
| 2. Return on assets                       | <u>\$96,995</u><br>$[(\$352,583 + \$352,755)/2]$ <u>27.5%</u> | <u>\$73,795</u><br>$[(\$402,392 + \$365,264)/2]$ <u>19.2%</u> |
| 3. Revenues-Expenses<br>= Net income      | \$383,285 – Expenses<br>= \$96,995                            | \$307,394 – Expenses<br>= \$73,795                            |
| → Expenses =                              | Expenses = <u>\$286,290</u>                                   | Expenses = <u>\$233,599</u>                                   |

### 4. (a) Better

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

### (b) Better

**Explanation:** Google's 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, we would invest in Apple.

**Extended Analysis — AA 1-3 (20 minutes)****1. (a) 3.4%**

**Explanation:** Return on assets is net income divided by the average total assets invested.

For Samsung this return is (\$ millions):  $\$11,857 / \$346,190 = 0.034$  or 3.4%.

**(b) 12.6%**

**Explanation:** Return on assets is net income divided by the average total assets invested.

For Samsung this return is (\$ millions):  $\$42,610 / \$336,873 = 0.126\%$  or 12.6%.

**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:  $\$96,995 / \$352,669 = 0.275$  or 27.5%.

**(b) Worse**

**Explanation:** Samsung's return on assets of is worse than Google's return on assets.

Google's return on assets is:  $\$73,795 / \$383,828 = 0.192$  or 19.2%.

## 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) employees and labor unions, to judge the fairness of wages and assess future employment opportunities; and (d) 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: Uber, Lyft, Standard & Poor's, Dun & Bradstreet, Merrill Lynch, Southwest Airlines, Citigroup, Humana, Charles Schwab, and Prudential.  
Businesses offering products include: Costco, Kroger, Target, Nike, Adidas, Gap, Apple, Ford Motor, Philip Morris, Coca-Cola, Best Buy, Walmart, and Dollar General.
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.

|                   | Proprietorship | Partnership | Corporation | LLC |
|-------------------|----------------|-------------|-------------|-----|
| 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 from the owner(s) and by net income (which is the excess of revenues over expenses). It is decreased by owner withdrawals 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 owner's equity, 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 owner's equity explains the changes in owner capital from net income or loss, and from any owner investments and withdrawals 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.

### **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, 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.

### Teamwork in Action — BTN 1-3

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 1-4

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.

## CHAPTER 1

### ACCOUNTING IN BUSINESS

#### Related Assignment Materials

| <i>Student Learning Objectives</i>                                                    | <i>Questions</i>                  | <i>Quick Studies*</i>                          | <i>Exercises*</i>                                      | <i>Problems*</i>                  | <i>AA, BTN, DA</i>                                      |
|---------------------------------------------------------------------------------------|-----------------------------------|------------------------------------------------|--------------------------------------------------------|-----------------------------------|---------------------------------------------------------|
| <b>Conceptual objectives:</b>                                                         |                                   |                                                |                                                        |                                   |                                                         |
| 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 1-3                                        |
| 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                               |
| <b>Analytical objectives:</b>                                                         |                                   |                                                |                                                        |                                   |                                                         |
| A1. Define and interpret the accounting equation and each of its components.          | 16, 17, 20, 24                    | 1-7, 1-8                                       | 1-9, 1-10<br>1-11                                      | 1-2, 1-10                         | AA 1-1, AA 1-2, AA 1-3, BTN 1-4, 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                        | AA 1-1, AA 1-2, AA 1-3, BTN 1-4                         |
| <b>Procedural objectives:</b>                                                         |                                   |                                                |                                                        |                                   |                                                         |
| P1. Analyze business transactions using the accounting equation.                      | 18                                | 1-9, 1-10, 1-11                                | 1-12, 1-13, 1-14, 1-15                                 | 1-1, 1-7, 1-8, 1-9, SP            |                                                         |
| P2. Identify and prepare basic financial statements and explain how they interrelate. | 21, 22, 23, 24, 25, 26, 27        | 1-12, 1-13, 1-14, 1-15, 1-16, 1-17, 1-18, 1-19 | 1-16, 1-17<br>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*

*AA refers to Accounting Analysis*

*BTN refers to Beyond the Numbers*

*DA refers to Tableau Dashboard Activities*

*ESG Reporting and Analysis*

*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.

### **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 Assignments
- SmartBook
- Data Analytics and Visualization Assignments

### **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.

### **NEW! Bite-Size Cases**

Ethical and strategic decision-making are keys to student success in their careers. Building on the insight offered by our popular Decision Ethics and Decision Maker boxes, we introduce Ethics in Action and Strategic Decision Making mini-cases. Designed to be comprehensive yet concise, these role-playing scenarios have students tackle ethical dilemmas and strategic opportunities. Our new Cross-Chapter Connection cases are crafted to bridge learning objectives across different chapters, promoting a holistic grasp of accounting. These cases enable students to better "see the big picture." Available only in Connect, all three new Bite-Size Case styles are auto-gradable.

### **ESG Assignments**

These assignments analyze ESG reporting activities and compare ESG reports across companies to foster practical experience and analytical skills. These auto-gradable assignments are available in Connect only.

### **Summary of Excel Resources:**

Note: The following assignments are located in Connect within the Question Bank, under the Excel Resources bank located above Chapter 1.

**Integrated Excel Chapter Exercises:** These assignments are integrated with Excel Online within Connect. Separate Excel software is not needed by the student. These auto-graded static and algo assignments are based on Quick Studies and Exercises featured in each chapter. These assignments include cell messaging to guide students, as well as optional Guided Example and Excel Formula Hint Videos which can be activated by the Instructor Policy setting. These assignments will directly feed your gradebook.

**Applying Integrated Excel:** These assignments are based on the original Applying Excel assignments and have been integrated with Excel Online within Connect. Separate Excel software is not needed by the student. These auto-graded static and algo assignments are based on training students how to apply Excel formulas to complete many accounting calculations. These assignments include cell messaging to guide students, as well as optional Guided Example and Excel Formula Hint Videos which can be activated by the Instructor Policy setting.

Some assignments are identified as Projects, which allow students to work with datasets. The auto-graded Applying Integrated Excel Project assignments include optional Hint Videos recorded by author John Wild which can be activated by the Instructor Policy setting. Both the Applying Integrated Excel and Applying Integrated Excel Project assignments will directly feed your gradebook.

**Accounting Integrated Excel Problems (formerly Excel Sims):** These assignments are based on the original Excel Sims and have integrated with Excel Online within Connect. Separate Excel software is not needed by the student. These auto-graded static assignments (not available in Algo) are based on training students how to use Excel formulas to complete accounting statements. These assignments include cell messaging to guide students but do not contain videos. These assignments will directly feed your gradebook.

**Applying Excel (Excel required):** These original version assignments require that students have their own copy of Excel software. These assignments are based on training students how to apply Excel formulas to complete many accounting calculations. Videos are included. The auto-graded portion of the assignments utilize multiple choice questions only. However, the Excel file portion of the assignment must be submitted to the instructor as a file attachment, will display a grade, but the instructor must manually enter these grades into the gradebook.

### **SmartBook:**

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.

### **Summary of Data Analytics and Visualization Resources:**

Note: The following assignments are located in Connect within the Question Bank, under the **Data Analytics and Visualizations** bank located above Chapter 1. Please refer to the Connect Asset Map for a listing of assignments.

**Tableau Dashboard Activities:** For our Tableau Dashboard Activities (TDAs) the Tableau software does not need to be installed by the student. The Tableau dashboards in these assignments are served up in Connect. These are three levels of TDAs available for assignment in each chapter of the text. There are TDA, at the quick study, exercise, and mini-project levels. The assignments utilize live Tableau dashboards, are auto graded, and are available in either static or algorithmic formats. Students simply navigate and analyze the Tableau dashboard visualizations to answer related accounting questions. The student results of these assignments will directly feed your gradebook and are an easy way to incorporate Data Analytics into your introductory accounting course.

**Applying Tableau:** For these assignments students will need to download and install the Tableau software. The Tableau software is free with a student educational license and is compatible with both Windows and MAC. These applying tableau assignments include step-by-step instructions as well as video walking the student through creating a data visualization in Tableau. No prior experience in tableau is needed by the student. After creating the data visualization in Tableau, students are directed into Connect to answer questions based on the analysis of their Tableau visualization. Applying Tableau assignments are only available in a static format. The question students answer are auto-graded and the results will directly feed your gradebook.

## 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 1,500 videos to ensure student success. There are also instructor resources to add a personal touch to these learning aids.

## 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                                                             |
|---------------|--------------|-------------------------------------------------------------------|
| C1            | 1-1          | Accounting Users                                                  |
| C2            | 1-2          | Accounting Guidance                                               |
| A1            | 1-3          | Accounting Equation                                               |
| P1            | 1-4          | Transaction Analysis                                              |
| P2            | 1-5          | Financial Statements                                              |
| COMPREHENSIVE | 1-6          | Transaction Analysis, Statement Preparation, and Return on Assets |
|               |              | Req. 1                                                            |
|               |              | Req 2-6                                                           |

## 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 approximately 1-2 minutes and is paired with a Knowledge Check question.

| LO | Title                                                                    |
|----|--------------------------------------------------------------------------|
| C1 | Explain the importance of accounting and identify its users.             |
|    | Importance of Accounting                                                 |
|    | Definition of Accounting                                                 |
|    | Accounting Versus Recordkeeping                                          |
|    | Information Users                                                        |
|    | Opportunities in Accounting                                              |
|    | Public versus Private Accounting Opportunities in Accounting             |
|    | Opportunities for Accounting Professionals                               |
| C2 | Describe the importance of ethics and GAAP.                              |
|    | Ethical Decision Making                                                  |
|    | Fraud Triangle                                                           |
|    | Generally Accepted Accounting Principles                                 |
|    | Internal Standards                                                       |
|    | Principles of Accounting                                                 |
|    | Assumptions and Constraint                                               |
| A1 | Define and interpret the accounting equation and each of its components. |

|    |                                                                                   |
|----|-----------------------------------------------------------------------------------|
|    | Accounting Equation                                                               |
|    | The Expanded Accounting Equation                                                  |
| A2 | Compute and interpret return on assets.                                           |
|    | Financial Statement Analysis                                                      |
|    | Return on Assets                                                                  |
|    | Return on Assets Illustration                                                     |
| P1 | Analyze business transactions using the accounting equation.                      |
|    | Transaction Analysis                                                              |
|    | Illustration                                                                      |
|    | Transaction Summary                                                               |
| P2 | Identify and prepare basic financial statements and explain how they interrelate. |
|    | Financial Statements                                                              |
|    | Income Statement                                                                  |
|    | Statement of Owner's Equity                                                       |
|    | Balance Sheet                                                                     |
|    | Statement of Cash Flows                                                           |
|    | Environmental, social and governance                                              |

### 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.**

### NEW! Trending Take Videos

Jonathan Wild inspires a new generation of accounting majors with dynamic, energetic videos that bring key topics and core accounting concepts to life. This innovative video series is a valuable resource for online, hybrid, and traditional courses. Assignable in Connect for all financial chapters, these videos seamlessly integrate with your course content to enrich your curriculum with cutting-edge material.

### NEW! Accounting Cycle Review

New active Accounting Cycle Review videos include an auto-graded assignment for each step of the cycle. There is an optional comprehensive problem available for students to complete the accounting cycle in a single auto-graded assignment.

### Synopsis of Chapter Revisions

Enhanced section on Data Analytics and Data Visualization.

New coverage of Data Analytics types: Descriptive, Diagnostic, Predictive, Prescriptive, Cognitive.

New box on CPA Evolution.

New coverage of Environmental, Social, and Governance (ESG) Reporting.

Updated return on assets analysis using **Nike** and **Under Armour**.

Updated analysis assignments: Company Analysis, Comparative Analysis, and Extended 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, 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 or CGMA, and certified internal auditors, CIA. Specialists include certified bookkeeper, CB, certified payroll professional, CPP, certified financial planner, CFP, 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. Includes four basic types of analytics: 1) Descriptive: summarizes and describes events from the past; 2) Diagnostic: reveals causes of events from the past; 3) Predictive: predicts likely events for the future; and 4) Prescriptive: creates action plans to achieve a desired future.
  - 7. Data visualization is a graphical presentation of data to help people understand their significance. They help people 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—accounting is guided by principles. *General principles* (assumptions, concepts, and guidelines for preparing financial statements) 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 notes 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. Four common business entities include sole proprietorship, partnership, corporation and limited liability company.
    - 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 owner withdrawals and expenses. Equity consists of:
  - a. Owner, Capital —owner investments are inflows of cash and other net assets from owner contributions, 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. Owner, Withdrawals—outflows of cash and other assets to owners for personal use which decrease equity.
  - d. Expenses—cost of assets or services used to earn revenues Expenses decrease equity.
  - e. Expanded Accounting Equation:  
Assets = Liabilities + Owner, Capital – Owner, Withdrawals + 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:

$$\begin{array}{lcl} \text{ASSET} & = & \text{LIABILITIES} + \text{EQUITY} \\ + \text{Cash} & & + \text{Owner, Capital} \end{array}$$

Increase on both sides of equation keeps equation in balance.

2. Purchase supplies for cash:

$$\begin{array}{lcl} \text{ASSET} & = & \text{LIABILITIES} + \text{EQUITY} \\ + \text{Supplies} & & \\ - \text{Cash} & & \end{array}$$

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

3. Purchase equipment for cash:

$$\begin{array}{lcl} \text{ASSET} & = & \text{LIABILITIES} + \text{EQUITY} \\ + \text{Equipment} & & \\ - \text{Cash} & & \end{array}$$

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

4. Purchase supplies on credit:

$$\begin{array}{lcl} \text{ASSET} & = & \text{LIABILITIES} + \text{EQUITY} \\ + \text{Supplies} & + & \text{Accounts Payable} \end{array}$$

Increase on both sides of equation keeps equation in balance.

5. Provide services for cash:

$$\begin{array}{lcl} \text{ASSET} & = & \text{LIABILITIES} + \text{EQUITY} \\ + \text{Cash} & & + \text{Revenue Earned} \end{array}$$

Increase on both sides of equation keeps equation in balance.

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

$$\begin{array}{lcl} \text{ASSET} & = & \text{LIABILITIES} + \text{EQUITY} \\ - \text{Cash} & & - \text{Expense} \end{array}$$

Decrease on both sides of equation keeps equation in balance.

8. Provided services and facilities for credit:

$$\begin{array}{lcl} \text{ASSET} & = & \text{LIABILITIES} + \text{EQUITY} \\ + \text{Accts. Receivable} & + & \text{Revenue Earned} \end{array}$$

Increase on both sides of equation keeps equation in balance.

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

$$\begin{array}{lcl} \text{ASSET} & = & \text{LIABILITIES} + \text{EQUITY} \\ + \text{Cash} & & \\ - \text{Accts. Receivable} & & \end{array}$$

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

10. Payment of accounts payable:

$$\begin{array}{lcl} \text{ASSET} & = & \text{LIABILITIES} + \text{EQUITY} \\ - \text{Cash} & - & \text{Accounts Payable} \end{array}$$

Decrease on both sides of equation keeps equation in balance.

11. Withdrawal of cash by owner for personal use:

$$\begin{array}{lcl} \text{ASSET} & = & \text{LIABILITIES} + \text{EQUITY} \\ - \text{Cash} & & - (+ \text{Owner, Withdrawals}) \end{array}$$

Decrease on both sides of equation keeps equation in balance. (Note: since withdrawals 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 Owner's Equity*—explains changes in equity from net income (or loss), owner investments, and owner withdrawals 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 Owner's Equity—reports equity changes over the reporting period. Shows beginning capital balance, owner investments, withdrawals and net income, (or net loss) from the income statement, Ending owner's capital balance 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 owner's capital balance. Note that the owner's capital balance is taken from the statement of owner's equity, 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. **ESG Reporting and Analysis. ESG is Environmental, social, and governance** which is a framework that depicts how companies behave as responsible stewards of the environment, principled members of society, and accountable leaders. Includes sustainable practices, socially responsible activities and many related areas of mission-driven business practices.

VI. **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.