

**Exercise 2-1** (15 minutes)

1. The wages of employees who build the sailboats: direct labor cost.
2. The cost of advertising in the local newspapers: marketing and selling cost.
3. The cost of an aluminum mast installed in a sailboat: direct materials cost.
4. The wages of the assembly shop's supervisor: manufacturing overhead cost.
5. Rent on the boathouse: a combination of manufacturing overhead, administrative, and marketing and selling cost. The rent would most likely be prorated on the basis of the amount of space occupied by manufacturing, administrative, and marketing operations.
6. The wages of the company's bookkeeper: administrative cost.
7. Sales commissions paid to the company's salespeople: marketing and selling cost.
8. Depreciation on power tools: manufacturing overhead cost.

**Exercise 2-2** (15 minutes)

|                                                                           | <i>Product<br/>(Inventoriable)<br/>Cost</i> | <i>Period<br/>Cost</i> |
|---------------------------------------------------------------------------|---------------------------------------------|------------------------|
| 1. The cost of the memory chips used in a radar set.....                  | X                                           |                        |
| 2. Factory heating costs .....                                            | X                                           |                        |
| 3. Factory equipment maintenance costs .....                              | X                                           |                        |
| 4. Training costs for new administrative employees .....                  |                                             | X                      |
| 5. The cost of the solder that is used in assembling the radar sets ..... | X                                           |                        |
| 6. The travel costs of the company's salespersons .....                   |                                             | X                      |
| 7. Wages and salaries of factory security personnel .....                 | X                                           |                        |
| 8. The cost of air-conditioning executive offices .....                   |                                             | X                      |
| 9. Wages and salaries in the department that                              |                                             | X                      |

|                                                                                       |   |   |
|---------------------------------------------------------------------------------------|---|---|
| handles billing customers.....                                                        |   |   |
| 10. Depreciation on the equipment in the<br>fitness room used by factory workers..... | X |   |
| 11. Telephone expenses incurred by factory<br>management .....                        | X |   |
| 12. The costs of shipping completed radar sets<br>to customers.....                   |   | X |
| 13. The wages of the workers who assemble<br>the radar sets .....                     | X |   |
| 14. The president's salary .....                                                      |   | X |
| 15. Health insurance premiums for factory<br>personnel .....                          | X |   |

**Exercise 2-4** (15 minutes)

Mannerman Fabrication  
Schedule of Cost of Goods Manufactured

Direct materials:

|                                            |                |                   |
|--------------------------------------------|----------------|-------------------|
| Beginning raw materials inventory.....     | \$ 55,000      |                   |
| Add: Purchases of raw materials .....      | <u>440,000</u> |                   |
| Raw materials available for use.....       | 495,000        |                   |
| Deduct: Ending raw materials inventory .   | <u>65,000</u>  |                   |
| Raw materials used in production.....      |                | \$ 430,000        |
| Direct labor .....                         |                | 215,000           |
| Manufacturing overhead .....               |                | <u>380,000</u>    |
| Total manufacturing costs.....             |                | 1,025,000         |
| Add: Beginning work in process inventory . |                | <u>190,000</u>    |
|                                            |                | 1,215,000         |
| Deduct: Ending work in process inventory . |                | <u>220,000</u>    |
| Cost of goods manufactured.....            |                | <u>\$ 995,000</u> |

**Exercise 2-5** (15 minutes)

| <i>Cost (Measure of Activity)</i>                                                                                                                                | <i>Cost Behavior</i> |              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------|
|                                                                                                                                                                  | <i>Variable</i>      | <i>Fixed</i> |
| 1. The cost of small glass plates used for lab tests in a hospital (Number of lab tests performed) .....                                                         | X                    |              |
| 2. A boutique jewelry store's cost of leasing retail space in a mall (Dollar sales) .....                                                                        |                      | X            |
| 3. Top management salaries at FedEx (Total sales) ....                                                                                                           |                      | X            |
| 4. Electrical costs of running production equipment at a Toyota factory (Number of vehicles produced) .....                                                      | X                    |              |
| 5. The cost of insuring a dentist's office against fire (Patient-visits) .....                                                                                   |                      | X            |
| 6. The cost of commissions paid to salespersons at a Honda dealer (Total sales) .....                                                                            | X                    |              |
| 7. The cost of heating the intensive care unit at Swedish Hospital (Patient-days) .....                                                                          |                      | X            |
| 8. The cost of batteries installed in trucks produced at a GM factory (Number of trucks produced) .....                                                          | X                    |              |
| 9. The salary of a university professor (Number of students taught by the professor) .....                                                                       |                      | X            |
| 10. The costs of cleaning supplies used at a fast-food restaurant to clean the kitchen and dining areas at the end of the day (Number of customers served) ..... | *                    | X            |

\*May include a small variable element.

### Exercise 2-6 (15 minutes)

|    | <i>Cost</i>                          | <i>Cost Object</i>               | <i>Direct Cost</i> | <i>Indirect Cost</i> |
|----|--------------------------------------|----------------------------------|--------------------|----------------------|
| 1. | The salary of the head chef          | The hotel's restaurant           | X                  |                      |
| 2. | The salary of the head chef          | A particular restaurant customer |                    | X                    |
| 3. | Room cleaning supplies               | A particular hotel guest         |                    | X                    |
| 4. | Flowers for the reception desk       | A particular hotel guest         |                    | X                    |
| 5. | The wages of the doorman             | A particular hotel guest         |                    | X                    |
| 6. | Room cleaning supplies               | The housecleaning department     | X                  |                      |
| 7. | Fire insurance on the hotel building | The hotel's gym                  |                    | X                    |
| 8. | Towels used in the gym               | The hotel's gym                  | X                  |                      |

Note: The room cleaning supplies would most likely be considered an indirect cost of a particular hotel guest because it would not be practical to keep track of exactly how much of each cleaning supply was used in the guest's room.

### Exercise 2-7 (15 minutes)

|                                                             | <i>Differential Cost</i> | <i>Opportunity Cost</i> | <i>Sunk Cost</i> |
|-------------------------------------------------------------|--------------------------|-------------------------|------------------|
| 1. Cost of the new flat-panel displays .....                | X                        |                         |                  |
| 2. Cost of the old computer terminals .....                 |                          |                         | X                |
| 3. Rent on the space occupied by the registration desk..... |                          |                         |                  |
| 4. Wages of registration desk personnel.....                |                          |                         |                  |
| 5. Benefits from a new freezer ....                         |                          | X                       |                  |
| 6. Costs of maintaining the old computer terminals.....     | X                        |                         |                  |
| 7. Cost of removing the old computer terminals.....         | X                        |                         |                  |
| 8. Cost of existing registration desk wiring .....          |                          |                         | X                |

Note: The costs of the rent on the space occupied by the registration desk

and the wages of registration desk personnel are neither differential costs, opportunity costs, nor sunk costs. These are costs that do not differ between the alternatives and are therefore irrelevant in the decision, but they are not sunk costs since they occur in the future.