

CHAPTER 1
INTRODUCTION TO MANAGERIAL ACCOUNTING

Student Learning Objectives and Related Assignment Materials

| <i>Student Learning Objectives</i> | <i>Mini Exercises</i> | <i>Exercises</i> | <i>Problems</i> | <i>Skills Development Cases</i> |
|---|-------------------------------------|----------------------------------|----------------------------|---------------------------------|
| 1. Describe the key differences between financial accounting and managerial accounting. | 1, 2, 3 | 1 | A1 | None |
| 2. Describe how managerial accounting is used in different types of organizations to support the key functions of management. | 2, 3, 4, 12 | 2 | A2 B2 | 3 |
| 3. Describe the importance of sustainability and decision analytics in managerial accounting. | None | 3 | None | 4, 5 |
| 4. Define and give examples of different types of costs. | 2, 3, 5, 6, 7, 8, 9, 10, 11, 13, 14 | 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 | A3, A4, A5, B1, B3, B4, B5 | 1, 2 |
| 5. S1. Describe the Sarbanes-Oxley Act and the importance of ethics in the accounting profession. | 15, 16 | 14 | None | None |

PowerPoint Slides

| <i>Student Learning Objectives</i> | <i>PowerPoint® Slides</i> |
|---|---------------------------|
| 1. Describe the key differences between financial accounting and managerial accounting. | 2–5 |
| 2. Describe how managerial accounting is used in different types of organizations to support the key functions of management. | 6–8 |
| 3. Describe the importance of sustainability, ESG, and decision analytics in managerial accounting. | 9–11 |
| 4. Define and give examples of different types of costs. | 12–27 |
| 5. S1. Describe the Sarbanes-Oxley Act and the importance of ethics in the accounting profession. | 28–32 |

Chapter Summary

LO 1-1 Describe the key differences between financial accounting and managerial accounting. p. 5

- Financial accounting information is used by external stakeholders, such as investors, creditors, and bankers.
- Managerial accounting information is used by managers inside the organization.
- Financial accounting information tends to be reliable, objective, and historical in nature.
- Managerial accounting information tends to be relevant, timely, and future oriented.
- Financial accounting is reported through the income statement, balance sheet, statement of stockholders' equity, and cash flow statement.
- Managerial accounting relies on a variety of reports targeted at specific decisions, including budgets, cost reports, and performance evaluations.
- Financial accounting reports are prepared on a monthly, quarterly, or annual basis.
- Managerial accounting reports are prepared as needed.
- Financial accounting reports are prepared at the company level.
- Managerial accounting reports are prepared at the divisional or departmental level appropriate to the decision being made.

LO 1-2 Describe how managerial accounting is used in different types of organizations to support the key functions of management. p. 8

- Managerial accounting is used in all types of organizations, including manufacturing, merchandising, and service firms.
- Although managerial accounting often focused on manufacturing firms, it is becoming increasingly important for service and merchandisers, which are gaining importance in today's economy. It is also useful for non-profit organizations such as universities, charities, and hospitals.
- Regardless of the type of organization, all managers perform the same basic functions:
 - Planning or setting long-term objectives along with the short-term tactics needed to achieve them.
 - Implementing or putting the plan into action.
 - Controlling or monitoring actual results against the plan and making any necessary adjustments.

LO 1-3 Describe the importance of sustainability, ESG Reporting, and decision analytics in managerial accounting. p. 11

- Sustainability is an emerging field that allows organizations to achieve economic results while fulfilling their obligations to society and protecting the environment for future generations. The triple bottom line measures a company's performance towards its sustainability goals by including measures of economic success (profit), social impact (people), and environmental impact (planet).
- Decision analytics involves the use of analytical tools and techniques to provide valuable and actionable insights from data so that managers can make more intelligent business decisions. It is referred to as "big data" when the data is so large or complex that it cannot be analyzed using traditional spreadsheets and data bases. Managers can use decision analytics for descriptive, predictive, or prescriptive purposes.

LO 1-4 Define and give examples of different types of costs. p. 14

- Costs can be classified in a variety of ways, depending on how the information will be used:
- **Direct** costs can be directly and conveniently traced to a specific cost object.
- **Indirect** costs either cannot be traced to a specific cost object or are not worth the effort of tracing.
- **Variable** costs change, in total, in direct proportion to changes in activity.
- **Fixed** costs remain the same, in total, regardless of activity.
- **Manufacturing** costs are associated with making a physical product. They can be classified as direct materials, direct labor, or manufacturing overhead.
- **Nonmanufacturing** costs are associated with selling a product or service or running the overall business.
- GAAP requires manufacturing costs to be treated as product costs and nonmanufacturing costs to be treated as period costs.
- **Product** costs are assigned to a product as it is being produced; they accumulate in inventory accounts until the product is sold.
- **Period** costs are reported as expenses as they are incurred.
- **Relevant** costs are future-oriented costs that differ among decision alternatives.
- **Irrelevant** costs are those that remain the same regardless of the alternatives and thus will not affect the decision.

LO 1-S1 Describe the Sarbanes-Oxley Act and the importance of ethics in the accounting profession. p. 20

- Accounting knowledge can benefit all majors (see Exhibit 1S-1).
- Ethics refers to the standards for judging right from wrong, honest from dishonest, and fair from unfair. Managers confront ethical dilemmas that do not have clear-cut answers. They must apply their own personal judgment and values to weigh the pros and cons of alternative courses of action.
- The Sarbanes-Oxley (SOX) Act of 2002 increases managers' responsibility for creating and maintaining an ethical business and reporting environment. It attempts to reduce fraudulent reporting in three key ways:
 - **Opportunity.** SOX requires managers to issue a report that indicates whether the company's internal controls are effective in preventing fraud and inaccurate reporting. The act also places increased responsibility on the board of directors, audit committee, and external auditor.
 - **Incentives.** SOX imposes stiffer penalties, including jail time and monetary fines, for those who commit fraud.
 - **Character.** SOX emphasizes the importance of individual character in preventing fraudulent reporting and requires public companies to implement anonymous tip lines, whistleblower protection, and codes of ethics.

| Chapter Outline | Teaching Notes |
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| I. <u>Role of Managerial Accounting in Organizations</u> <ul style="list-style-type: none"> A. Decision-Making Orientation <ul style="list-style-type: none"> 1. The primary goal of accounting is to provide information for decision making. 2. The key difference between financial accounting and managerial accounting is the intended user of the information. | Exhibit 1-1 Financial accounting is for external users. Managerial |

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| <ul style="list-style-type: none"> a. Financial accounting information is used by external parties, such as investors, creditors, and regulators. b. Managerial accounting information is used by internal business owners, managers, and employees. | <p>accounting is for internal users.</p> |
| <p>LO 1-1 Describe the key differences between financial accounting and managerial accounting.</p> | <p>Handout 1-1</p> |
| <p>B. Comparison of Financial and Managerial Accounting</p> <ol style="list-style-type: none"> 1. Financial accounting information <ul style="list-style-type: none"> a. Used by external parties, such as investors, creditors, and regulators. b. Classified financial statements prepared according to GAAP. c. Objective, reliable, historical. d. Prepared periodically (monthly, quarterly, annually). e. Information reported for the company as a whole. 2. Managerial Accounting Information <ul style="list-style-type: none"> a. Used by internal parties, such as managers and employees. b. Various internal reports, such as budgets, performance evaluations, and cost reports. c. Subjective, relevant, future oriented. d. Prepared as needed, perhaps day-to-day or even in real time. e. Information reported at the decision-making level (by product, region, customer, or other business segment). | <p>(see <i>Supplemental Enrichment Activities in this IM</i>)</p> |
| <p>LO 1-2 Describe how managerial accounting is used in different types of organizations to support the key functions of management.</p> | <p></p> |
| <p>C. Types of Organizations</p> <ol style="list-style-type: none"> 1. There are three types of business organizations based on the type of goods or services offered: <ul style="list-style-type: none"> a. Manufacturing firms purchase raw materials from suppliers and use them to create a finished product. b. Merchandising companies sell the goods that manufacturers produce. c. Service firms provide a service to customers or clients. d. Nonprofit organizations (hospitals, universities, charitable organizations) also require useful information to operate. 2. Historically, managerial accounting focuses heavily on manufacturing firms. In today's economy, nonmanufacturing firms are becoming increasingly important. Therefore, managerial accounting must meet the needs of both manufacturing and nonmanufacturing firms. | <p><u>Examples:</u> Ford trucks, Apple iPods Walmart, Macy's Expedia.com, Federal Express</p> |
| <p>D. Functions of Management</p> <ol style="list-style-type: none"> 1. Regardless of the type and size of the organization they manage, all managers perform the same basic functions as | <p></p> |

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| <p>follows.</p> <ol style="list-style-type: none"> a. Planning involves setting short-term and long-term goals, along with the tactics that will be used to achieve those goals. b. Implementing involves putting the plan into action and motivating others to work toward the plan's success. c. Controlling involves comparing actual results to planned results to see if objectives are being met. <ol style="list-style-type: none"> 2. The manager of Bombas performs the following basic functions. <ol style="list-style-type: none"> a. The planning stage lays out what managers hope to achieve. Managers should state the plan in terms of specific and measurable objectives and then identify the tactics to use for achieving the objectives. A key part of this process is the development of a budget. b. Implementing occurs when managers actually begin to execute the plan. Managers must take all the detailed actions to implement the plan, including buying raw materials, hiring workers, and purchasing new equipment. c. Controlling involves measuring and monitoring actual results to see whether the objectives set in the planning stage are being met. <p>LO 1-3 Describe the importance of sustainability, ESG Reporting, and decision analytics in managerial accounting.</p> <p>E. Sustainability Accounting</p> <p>Sustainability accounting is an emerging area of accounting that is aimed at providing managers with a broader set of information to meet the needs of multiple stakeholders, with the goal of ensuring the company's long-term survival in an uncertain and resource-constrained world.</p> <ol style="list-style-type: none"> 1. Society, economy, and the environment are the three pillars of sustainability. They are called the triple bottom line and are often represented by 3 Ps: People, Profit, and Planet. 2. Many organizations are building sustainable business practices into their business strategies and including sustainability accounting methods into their performance management systems. <p>F. Decision Analytics</p> <p>Big data analytics involves the use of analytical techniques to gain insights from data that is so large or complex that it cannot be analyzed using traditional data bases and spreadsheets.</p> <ol style="list-style-type: none"> 1. Big data relates to the volume, velocity, and variety of data. 2. Analytics is the process of discovering and communicating meaningful patterns and insights from data. | <p>Exhibit 1-2</p> <p>Handout 1-2</p> <p>Examples: State specific and measurable objectives such as sales volume, market share, or profitability</p> <p>Hire workers, purchase equipment, buy new raw materials</p> <p>Compare actual results to plan</p> <p><i>Urge students to complete the Self-Study Practice for LO 1-2.</i></p> |
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| <p>3. There are three common types of analytics: descriptive, predictive, and prescriptive.</p> | |
| <p>II. The Role of Cost in Managerial Accounting</p> | |
| <p>LO 1-4 Define and give examples of different types of costs.</p> | |
| <p>A. The goal of managerial accounting is to provide managers with the information they need to plan, implement, and control.</p> <ol style="list-style-type: none"> 1. Much of the information that managers need to make decisions is based on cost data. 2. The first half of the text will focus on how to develop and utilize meaningful cost data. 3. It is important that we treat costs differently, depending on how the information will be used. | |
| <p>B. Cost Terminology</p> | |
| <p>Cost is the value of what is given up during an exchange. When you incur a cost, you give up one thing, such as money or time, in exchange for something else.</p> | |
| <p>1. Direct versus Indirect Costs</p> <ol style="list-style-type: none"> a. The specific item for which managers are trying to determine the cost is the cost object. b. Costs that can be directly and easily traced to a specific cost object are direct costs. c. Costs that cannot be directly traced to a specific cost object, or that are not worth the effort of tracing, are indirect costs. <p>2. Manufacturing versus Nonmanufacturing Costs</p> <ol style="list-style-type: none"> a. Manufacturing costs include all costs incurred to produce the physical product. They are generally classified into one of three categories: <ul style="list-style-type: none"> ● Direct materials are the major material inputs that can be directly and conveniently traced to the final product. ● Direct labor is the “hands on” labor that can be directly and conveniently traced to the product. ● Manufacturing overhead includes all manufacturing costs other than direct materials and direct labor. | <p>Examples: Cotton used in shirt, Wages of workers</p> |
| <ol style="list-style-type: none"> b. Direct materials and direct labor are called prime costs because they are used to represent the primary costs of manufacturing a product. c. Direct labor and manufacturing overhead are called conversion costs because they are required to convert direct materials into a finished product. d. Nonmanufacturing costs are the costs associated with running the business and selling the product as opposed to | <p>Property tax on factory Salary of security guard.</p> <p>Examples: Cotton and wool to make socks</p> <p>Wages of employees in the sewing and packing department</p> <p>Store rent, insurance, utilities, supervision</p> |

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| <p>manufacturing the product. They are generally classified into one of two groups:</p> <ul style="list-style-type: none"> ● Marketing or selling costs are incurred to get the final product to the customer. ● Administrative costs are associated with running the overall organization. <p>3. Product versus Period Costs</p> <ol style="list-style-type: none"> Whether a cost is product or period determines how and when it will be matched against revenue on the income statement. For external reporting, GAAP requires that all manufacturing costs be treated as product costs. Product costs are also called inventoriable costs because they are counted as inventory (an asset) until the product is sold. In contrast, period costs are never counted as inventory but are expensed during the period they are incurred. Product costs follow the flow of the physical product as it moves through the manufacturing process. <ul style="list-style-type: none"> ● As the product is being manufactured, the manufacturing costs are recorded as Work in Process Inventory, which is counted as an asset on the balance sheet. ● Once the product is completed (but not sold), the manufacturing costs are transferred out of Work in Process Inventory and into Finished Goods Inventory. ● They will remain on the balance sheet until the product is sold, at which point they will be recorded as Cost of Goods Sold. Nonmanufacturing costs do not relate specifically to the product that is being manufactured, so they are expensed during the period incurred. <p>4. Variable versus Fixed Costs</p> <ol style="list-style-type: none"> For internal decision making, managers are sometimes interested in how costs will change if something else changes, such as the number of units produced or the number of customers served. Variable costs are those that change, in total, in direct proportion to changes in activity levels. Although total direct costs vary in direct proportion to change in activity, per unit or average variable costs remain the same. Fixed costs are those that stay the same, in total, regardless of activity level, at least within some range of activity. Although total costs remain the same, unit fixed costs vary | <p><u>Examples:</u> Advertising, sales salaries Human resources, IT, accounting</p> <p>Exhibit 1-3</p> <p>Handout 1-3 <i>Ensure that students can read/understand the graphs for total and fixed costs.</i></p> <p><u>Examples:</u> Direct materials, direct labor, some additional manufacturing overhead (e.g., power to operate machines)</p> <p>Supervisor salaries,</p> |
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| <p>inversely with the number of units produced.</p> <p>5. Relevant versus Irrelevant Costs</p> <ol style="list-style-type: none"> For information to be useful, it must be relevant to a particular decision. A relevant cost is one that has the potential to influence a decision. An irrelevant cost will not influence a decision. For a cost to be relevant, it must meet both of the following two criteria: <ul style="list-style-type: none"> ● It must differ between the decision alternatives. ● It must occur in the future. Costs that differ between the decision alternatives are called differential costs. The second criterion, that costs must occur in the future, eliminates costs that have already been incurred, which are called sunk costs. It is often difficult for managers to ignore what happened in the past and focus only on the future. Out-of-pocket cost involves an actual outlay of cash. For example, these are costs you pay out of your pocket for things such as food, clothing, and entertainment. Opportunity cost is the cost of not doing something. For example, if you are going to school full-time, you are giving up the opportunity to earn money by working full-time. It is the foregone benefit of the path not taken. | <p>depreciation on machinery, factory rent, and most general and administrative expense for Bombas</p> |
| <p>III. Ethics and the Sarbanes-Oxley Act</p> <p>LO 1-S1 Describe the Sarbanes-Oxley Act and the importance of ethics in the accounting profession.</p> <p>Accounting knowledge can benefit all majors (see Exhibit 1S-1). Ethics refers to the standards of conduct for judging right from wrong, honest from dishonest, and fair from unfair.</p> <ol style="list-style-type: none"> Although some accounting and business issues have clear right or wrong answers, many situations require accountants and managers to weigh the pros and cons of alternatives before making decisions. The reputation of business managers and accountants was tarnished in the late 1990s and early 2000s due to high-profile scandals at companies such as Enron and WorldCom. Congress enacted the Sarbanes-Oxley Act of 2002, which was primarily aimed at renewing investor confidence in external financial reporting. The Sarbanes-Oxley Act focuses on three factors that affect the accounting reporting environment: opportunity, incentives, and character. | <p>Exhibit 1-4</p> <p>Handout 1-4</p> <p><i>Urge students to complete the Self-Study Practice for LO 1-4, study the terms in the chapter, and complete the Demonstration Case at the end of the chapter.</i></p> <p>Exhibit 1S-1</p> <p>Example: Mandatory internal control reviews</p> |

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| <p>5. SOX attempts to reduce the opportunity for error and fraud.</p> <ul style="list-style-type: none">a. Management must conduct a review of the company's internal control system and issue a report that indicates whether the controls are effective at preventing errors and fraud.b. SOX places additional responsibility on the board of directors and external auditors to reduce the opportunity for errors and fraud. <p>6. SOX attempts to counteract the incentive to commit fraud by providing stiff penalties, such as monetary fines and jail time.</p> <p>7. SOX emphasizes the importance of the character of managers and employees by introducing new rules that should help employees of good character make a right decision.</p> <ul style="list-style-type: none">a. Audit committees are now required to create anonymous hotlines that allow employees to secretly submit concerns regarding suspicious accounting or audit practices. SOX also provides federal "whistle blowers" legal protection from retaliation.b. Companies must adopt a code of ethics for senior financial officers.c. | <p><i>Urge students to complete the Self-Study Practice for LO 1-S1.</i></p> |
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Supplemental Enrichment Activities

Note: These activities would be suitable for individual or group activities in class.

- **Handout 1-1** (LO 1-1) is designed to contrast the functions of management accounting and financial accounting.
- **Handout 1-2** (LOs 1-1 and 1-2) is designed to reinforce vocabulary concerning business organizations, accounting, and management functions.
- **Handout 1-3** (LO 1-4) is designed to compare and contrast variable and fixed costs per unit and in total.
- **Handout 1-4** (LO 1-4) is designed to test students' understanding of the different types of costs.

Handout 1-1 (LO 1-1)

Enter the letter (X) next to the descriptions under the column for either managerial accounting or financial accounting.

| Descriptions | Managerial Accounting | Financial Accounting |
|---|-----------------------|----------------------|
| A. Primarily used by internal parties | | |
| B. Prepared for use by creditors and investors | | |
| C. Prepared according to GAAP | | |
| D. Future-oriented | | |
| E. Historical focus | | |
| F. Includes budgets and cost reports | | |
| G. Prepared periodically (monthly, quarterly, annually) | | |
| H. Prepared when/as needed | | |
| I. Prepared by product, region, or other business segment | | |
| J. Prepared for the company as a whole | | |

Solution:

| Descriptions | Managerial Accounting | Financial Accounting |
|---|-----------------------|----------------------|
| A. Primarily used by internal parties | X | |
| B. Prepared for use by creditors and investors | | X |
| C. Prepared according to GAAP | | X |
| D. Future-oriented | X | |
| E. Historical focus | | X |
| F. Includes budgets and cost reports | X | |
| G. Prepared periodically (monthly, quarterly, annually) | | X |
| H. Prepared when/as needed | X | |
| I. Prepared by product, region, or other business segment | X | |
| J. Prepared for the company as a whole | | X |

Handout 1-2 (LOs 1-1 and 1-2)

Fill in the blanks using the following words.

| | | |
|-----------------------|---------------|----------------------|
| Controlling | Implementing | Financial accounting |
| Managerial accounting | Manufacturers | Merchandisers |
| Planning | Organizing | Retailers |
| Service firms | Wholesalers | |

1. The type of information used by external parties, such as investors, creditors, and regulators is called _____.
2. The types of merchandisers that sell exclusively to other businesses are called _____.
3. All the actions that managers must take to implement the plan are called _____.
4. The types of organizations that purchase raw materials from suppliers and use them to create a finished product are called _____.
5. A key function of management that involves monitoring actual results to see whether the objectives set in the planning stage are being met is _____.
6. The types of organizations that provide services to other businesses or consumers are known as _____.
7. The type of information used by internal business owners and managers is called _____.
8. The types of merchandisers that sell to the general public are called _____.
9. The aspect of the management process that involves setting goals along with the tactics that will be used to achieve those goals is called _____.
10. The types of organizations that purchase goods and sell them to other businesses or consumers are called _____.

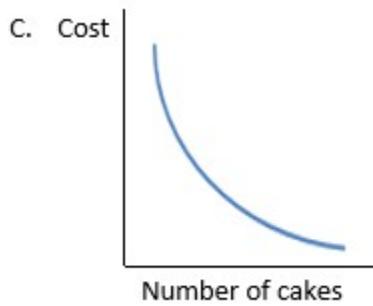
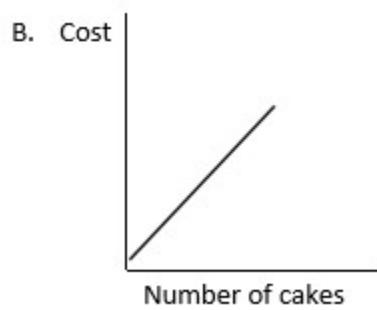
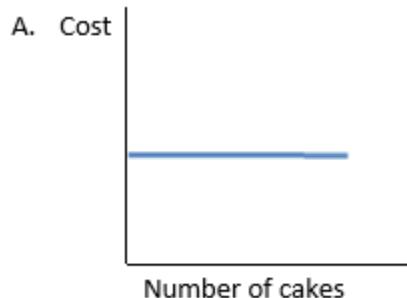
Solution:

1. The type of information used by external parties, such as investors, creditors, and regulators is called **financial accounting**.
2. The types of merchandisers that sell exclusively to other businesses are called **wholesalers**.
3. All the actions that managers must take to implement the plan are called **implementing**.
4. The types of organizations that purchase raw materials from suppliers and use them to create a finished product are called **manufacturers**.
5. A key function of management that involves monitoring actual results to see whether the objectives set in the planning stage are being met is **controlling**.
6. The types of organizations that provide services to other businesses or consumers are known as **service firms**.
7. The type of information used by internal business owners and managers is called **managerial accounting**.
8. The types of merchandisers that sell to the general public are called **retailers**.
9. The aspect of the management process that involves setting goals along with the tactics that will be used to achieve those goals is called **planning**.
10. The types of organizations that purchase goods and sell them to other businesses or consumers are called **merchandisers**.

Handout 1-3 (LO 1-4)

Which graph describes the following costs? (One letter is used twice.)

1. _____ Cost of flour for one cake – variable cost per unit
2. _____ A portion of the manager's salary allocated to each cake – fixed cost per unit
3. _____ Cost of all butter used to make cakes for the day – variable cost in total
4. _____ Monthly rent on the bakery – fixed cost in total



Solution:

1. A 2. C 3. B 4. A

Handout 1-4 (LO 1-4)

Answer as true or false. If the answer is false, change the statement to make it true.

1. A product cost is a manufacturing cost.
2. Advertising expense is a product cost.
3. There are three types of product cost: direct material, direct labor, and administrative expenses
4. Prime costs are direct material and direct labor.
5. Conversion costs are manufacturing overhead and direct material.
6. A relevant cost differs between decision alternatives.
7. A sunk cost must be incurred in the future.
8. Direct material is a period cost.
9. Product costs can be variable costs.
10. Direct costs can be traced conveniently to a specific product.
11. An opportunity cost is expensed in the period incurred.
12. Cost is the value given up in an exchange of goods or services.

Solution:

1. T A product cost is a manufacturing cost.

2. F Advertising expense is a product cost.

Correct Statement:

Advertising expense is a period cost.

3. F There are three types of product cost: direct material, direct labor, and administrative expenses

Correct Statement:

There are three types of product cost: direct material, direct labor, and manufacturing overhead.

4. T Prime costs are direct material and direct labor.

5. F Conversion costs are manufacturing overhead and direct material.

Correct Statement:

Conversion costs are direct labor and manufacturing overhead.

6. T A relevant cost differs between decision alternatives.

7. F A sunk cost must be incurred in the future.

Correct Statement:

A sunk cost was incurred in the past.

8. F Direct material is a period cost.

Correct Statement:

Direct material is a product cost.

9. T Product costs can be variable costs.

10. T Direct costs can be traced conveniently to a specific product.

11. F An opportunity cost is expensed in the period incurred.

Correct Statement:

Opportunity costs are not expensed—opportunity costs are the foregone benefit when choosing one alternative over another.

12. T Cost is the value given up in an exchange of goods or services.