

Chapter 8

Production of Goods

Answer Key

Part 1: Content Review

Matching

1. J
2. F
3. E
4. H
5. A
6. B
7. G
8. C
9. D
10. I

Multiple Choice

1. D
2. B
3. C
4. A
5. B
6. D
7. A
8. C
9. A
10. B

Completion

1. operations management
2. Utility
3. productivity
4. custom manufacturing
5. production process
6. Work in process
7. perpetual
8. inventory shrinkage
9. prototype
10. trade show

Part 2: Concept Review

Open Response

1. Productivity is a measure of a worker's production in a specific amount of time. Productivity can be improved through the division of labor, which is the specialization of individuals who perform specific tasks. Workers who perform repetitive tasks generally become fast and accurate because of the repetition. Productivity can also be improved in mass production with factory automation.
2. Inventory management is the area of management involved in ordering goods, receiving them into stock on arrival, and paying vendors. It also includes managing the cost of shipping, storage, and other activities to keep inventory-related costs low. Carrying too much inventory can reduce the profitability of a company. Carrying too little inventory can result in lost sales.
3. Inventory shrinkage is the difference between the perpetual inventory and the physical inventory. There are three main causes for inventory shrinkage. Data input errors can occur during receiving, stocking, or selling. Product damage or breakage may occur when products are moved from the receiving dock to storage to store shelves. Theft can occur by employees or outsiders, such as customers or burglars.
4. The product life cycle is the series of stages a product goes through from its beginning to the end. When a product is at the end of its life cycle, a company can (1) develop a new product to replace it, (2) reposition it to create a new opinion or view of the product in the minds of customers, or (3) repackage it to make it more efficient or attractive.
5. Student responses will vary. Consider the following in their responses. The life of cycles of products can be much different. The life cycle of Quaker Oatmeal has been much longer than VHS movie tapes. Quaker Oats has lengthened the life cycle of its product in many ways over the years. Examples include (1) new variations of the product such as instant oatmeal, oatcakes, and snack bars; (2) new flavors of oatmeal; (3) new packaging; and (4) new recipes to include oatmeal, such as different cookies.

Part 3: Math Skills

Estimating

1. Round each segment to the nearest 100 miles and then add them:
Estimated total distance = $300 + 300 + 400 = 1,100$ miles
2. Round each segment to the nearest thousand dollars and add them:
Estimated total purchase = $\$12,000 + \$29,000 + \$21,000 + \$15,000 = \$77,000$
These purchases will exceed the \$70,000 limit by approximately \$7,000.
3. Round last week's sales to the nearest thousand dollars and multiply by four to estimate monthly sales.
Estimated monthly sales = $\$5,000 \times 4 = \$20,000$
4. Round the two prices to the nearest \$100 and add them.
Approximate price = $\$2,800 + \$600 = \$3,400$
5. Round the square footage to the nearest hundred. Then, round the carpet price to the nearest dollar. Multiply the two figures.
Estimated cost = $900 \times \$2 = \$1,800$

Part 4: Communication Skills

Writing

Each November we close the warehouse for ten business days to take our annual inventory. This year, we will close from Monday, November 4, through Friday, November 15. As always, we will notify all customers by enclosing a flyer with their October statements. We also notify all our employees so the warehouse closing does not adversely affect business operations. If you need any supplies or products, we urge you to note the above dates and submit your requisitions as early as possible to avoid the end-of-October rush. Please try to anticipate your needs as best you can.