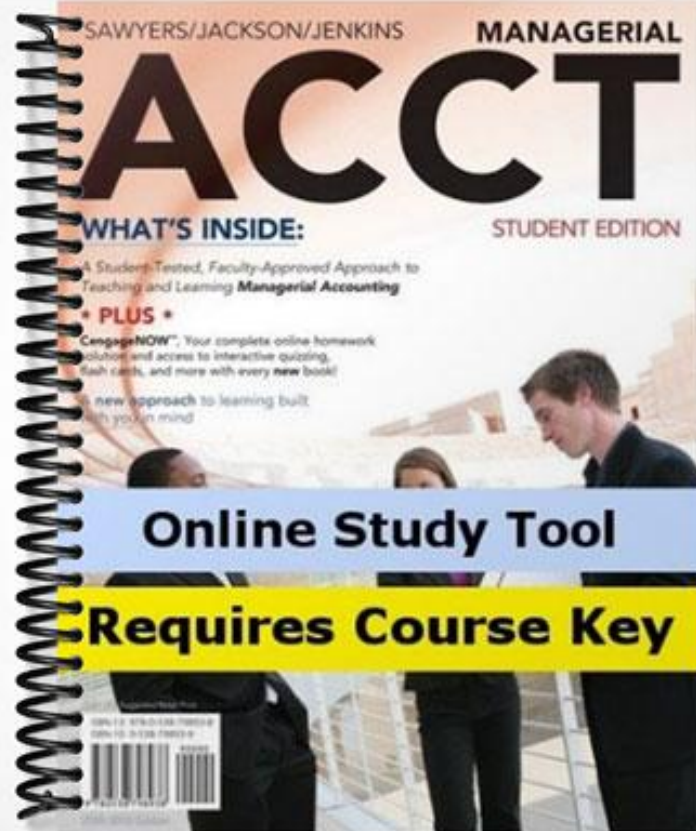


SOLUTIONS MANUAL



Chapter 2

Product Costing: Manufacturing Processes, Cost Terminology, and Cost Flows

Multiple Choice

1. (LO 1—Characteristics of traditional manufacturing environment)

Answer: C

2. (LO 1—Characteristics of traditional manufacturing environment)

Answer: A

3. (LO 2—JIT environment)

Answer: C

4. (LO 2—Lean manufacturing)

Answer: F

5. (LO 2—Lean production and JIT)

Answer: D

6. (LO 2—Manufacturing cells)

Answer: B

7. (LO 3—Manufacturing costs: indirect labor)

Answer: B

Indirect labor includes \$100,000 for quality control supervisors and \$18,000 for the factory janitor.

8. (LO 3—Manufacturing costs)

Answer: C

9. (LO 3—Product cost per unit)

Answer: B

Solutions to Multiple Choice

Product costs include \$31,000 of direct materials used, \$18,000 of direct labor, and \$14,000 of manufacturing overhead (\$12,000 of rent and \$2,000 of equipment depreciation in the factory). The product cost per unit is \$1.80 (\$63,000/35,000 units).

10. (LO 4 and 5—Basic cost flows, income statement)

Answer: C

Sales (30,000 units × \$3.50 per unit)	\$105,000
Less: Cost of goods sold (30,000 units × \$1.80 per unit)	<u>54,000</u>
Gross Margin	\$ 51,000
Less: Marketing and administrative costs	<u>43,250</u>
Net income	<u>\$ 7,750</u>

11. (LO 4—Basic cost flows: cost of goods manufactured)

Answer: C

12. (LO 4—Basic cost flows)

Answer: A

13. (LO2 and 4—Cost flows in a JIT environment)

Answer: A

With no WIP or finished goods inventory, the cost of goods sold is equal to the cost of goods manufactured (the sum of direct materials used, direct labor and factory overhead).

Sales	\$800,000
Less: Cost of goods sold	<u>420,000</u>
Gross margin	\$380,000
Less: Selling & administrative expenses	<u>120,000</u>
Net operating Income	<u>\$260,000</u>

14. (LO 4—Basic cost flows: raw materials used)

Answer: B

Beginning inventory of raw materials	\$110,000
Plus: Raw materials purchased	<u>121,000</u>
Raw materials available for use	\$231,000
Less: Ending inventory of raw materials	<u>(115,000)</u>
Raw materials used in production	<u>\$116,000</u>

15. (LO 4 and 5—Basic cost flows: Cost of goods manufactured)

Answer: A

Beginning inventory of work-in-process	\$ 55,000
Plus: Total manufacturing costs (\$116,000 + \$30,000 + \$53,000)	199,000
Subtotal	<u>\$254,000</u>
Less: Ending inventory work-in-process	<u>(58,000)</u>
Cost of goods manufactured	<u><u>\$196,000</u></u>

16. (LO 4 and 5—Cost of goods sold)

Answer: D

Beginning inventory of finished goods	\$ 41,000
Plus: Cost of goods manufactured	<u>196,000</u>
Cost of goods available for sale	\$237,000
Less: Ending inventory of finished goods	<u>(37,000)</u>
Cost of goods sold	<u><u>\$200,000</u></u>

17. (LO 5—Product versus period costs)

Answer: B