

GNB 12e Practice Exam – Chapter 7

1. Piscopo Company produces mint chocolate candies. The chocolates sell for \$12 per box. During its first year of operations, the company produced 10,000 boxes of chocolates and sold 9,000 boxes of the candies. The company's cost information includes the following:

Direct materials	\$ 2.00 per unit
Direct labor	\$ 3.00 per unit
Fixed manufacturing overhead	\$20,000
Fixed selling and administrative expenses	\$ 5,000
Variable manufacturing overhead	\$ 1.00 pr unit
Variable selling and administrative expenses	\$ 3.00 per unit

Part (a) Compute the unit product cost under absorption costing.

Direct materials	\$2.00
Direct labor	3.00
Variable manufacturing overhead	1.00
Fixed manufacturing overhead (\$20,000 divided by 10,000 units)	<u>2.00</u>
Product cost using absorption costing	<u>\$8.00</u>

Part (b) Compute the unit product cost under variable costing.

Direct materials	\$2.00
Direct labor	\$3.00
Variable manufacturing overhead	\$1.00
Product cost using variable costing	<u>\$6.00</u>

Part (c) Prepare an income statement using absorption costing.

Sales (9,000 units @ \$12)		\$108,000
Cost of goods sold:		
Beginning inventory	\$ 0	
Cost of goods manufactured (10,000 @ \$8 per unit)	80,000	
Less: ending inventory (1,000 @ \$8 per unit)	<u>(8,000)</u>	<u>72,000</u>
Gross margin		36,000
Less fixed manufacturing overhead		
Less selling & administrative expenses (variable of 9,000 @ \$3 per unit + fixed of \$5,000)		<u>32,000</u>
Net operating income		<u>\$ 4,000</u>

Part (d) Prepare an income statement using variable costing.

Sales (9,000 units @ \$12)		\$108,000
Variable cost of goods sold (9,000 @ \$6 per unit)		54,000
Less variable selling & administrative expenses (9,000 @ \$3 per unit)		<u>27,000</u>
Contribution margin		27,000
Fixed manufacturing overhead	20,000	
Fixed selling & administrative expenses	<u>5,000</u>	<u>25,000</u>

Net operating income		\$ 2,000
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Part (e) Explain the difference of \$2,000 in the net operating income determined under the absorption and variable costing methods.

Note that there was no beginning inventory. As such, the difference in net operating income of \$2,000 can be explained by looking at the amount of ending inventory reported using the two methods. The difference is due to the fixed manufacturing overhead costs (1,000 units in ending inventory @ \$2 of fixed manufacturing overhead cost per unit = \$2,000) is included in inventory (rather than expensed) when absorption costing is used, but is expensed immediately (rather than being included in inventory) when variable costing is used.

2. Describe the major advantages of the absorption costing method.

Advantages of absorption costing include:

- Method is required by GAAP and tax authorities, and
- Method reflects the full costs of manufacturing a product.

3. Describe the major advantages of the variable costing method.

Advantages of variable costing include:

- Method is compatible with CVP and TOC analysis,
- Method does not cause fluctuations in profit due to changing production and inventory levels, unlike the absorption method,
- Method show only variable product costs so it avoids the problem under absorption method where managers mistakenly think fixed manufacturing costs are variable product costs,
- Variable costing allows total fixed manufacturing overhead costs to be visible on the income statement, rather than being “buried” in the cost of goods sold and inventory figures,
- Variable costing avoids some of the problems with overhead costs allocations, and
- Variable costs are more easily used with standard costing and flexible budgeting.