

# Sample Solution

## Exam – Managerial Accounting

### Case 1 (18 points)

#### 1) 3 point

Variable cost per hour =  $(\$390,000/5,000) = \$78$

#### 2) 3 point

$$y = \$110,000 + \$78 X$$

Fixed costs are given at \$110,000 based on 8,000 hours of labor; variable costs are \$390,000 during the period divided by 5,000 labor hours during the period = \$78.00 variable cost per labor hour.

#### 3) 3 point

$$\text{Total cost} = \$110,000 + [(\$390,000/5,000) \times 7,000] = \$656,000$$

#### 4) 9 Points

- High-low method uses only two (extreme) data points
- The least-squares regression use all available data points.
- High/Low - quick, easy to use, can be very inaccurate if outlier is used
- Regression: more time consuming, but more accurate

### Case 2 (22 points)

#### 1) 6 point

	<b>Absorption</b>	<b>Variable</b>
Direct Material	50	50
Direct Labour	32	32
Variable material overhead	16	16
Fixed material overhead	24	0
<b>TOTAL</b>	<b>122</b>	<b>98</b>

Fixed material overhead:  $(\$600,000 \div 25,000) = \$24$

**2) 14 points**

Absorption costing:

	<b>Absorption</b>
Sales revenue (at 150 / unit)	3,300,000
- COGS (122 / unit)	2,684,000
Gross margin	616,000
- Selling & admin expenses:	
Variable (at 2 / unit)	44,000
Fixed	60,000
<b>OPERATING INCOME</b>	<b>512,000</b>

Variable costing:

	<b>Variable</b>
Sales revenue (at 150 / unit)	3,300,000
- Variable expenses:	
Variable manufacturing costs (at 98 / unit)	2,156,000
Variable selling & admin costs (at 2 / unit)	44,000
Contribution margin	1,100,000
- Fixed expenses:	
Fixed manufacturing overhead	600,000
Fixed selling & admin costs	60,000
<b>OPERATING INCOME</b>	<b>440,000</b>

3)

Change in inventory (in units) \* predetermined fixed overhead rate

= absorption-costing income minus variable-costing income

→ Increase by 3,000 units \* \$24 = **\$72,000**