Module 14 – Financial & Managerial Accounting for MBAs, 4th Edition
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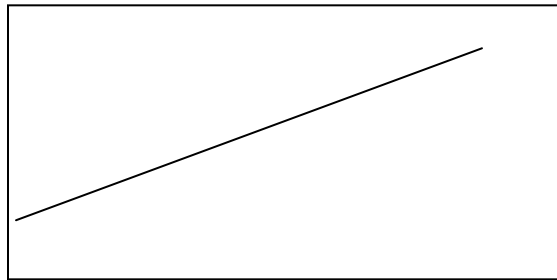
Solutions to Practice Quiz

1.   A graph of the Blaze Pizza's total cost of annual deprecation and property taxes most closely resembles this total cost behavior pattern:

   a. Variable cost
   b. Fixed cost
   c. Mixed cost
   d. Step cost

   Answer: *b*
   Rationale: While fixed costs respond to structural and organizational cost drivers over time, they do not respond to short-run changes in activity cost drivers. Hence, they are fixed costs.

2.   Presented is a graph of total costs for a fast food restaurant:

   If management makes a decision to more fully automate food preparation, purchasing additional equipment will lower unit operating costs by reducing the labor force, the impact on the graph for total costs will most likely be:

   a. An increase in the vertical axis intercept and an increase in the slope of the total cost line
   b. A decrease in the vertical axis intercept and an increase in the slope of the total cost line
   c. An increase in the vertical axis intercept and a decrease in the slope of the total cost line
   d. A decrease in the vertical axis intercept and a decrease in the slope of the total cost line

   Answer: *c*
   Rationale: Depreciation and other fixed expenses will increase the vertical axis intercept while the lower unit operating costs will reduce the slope of the total cost line.

3.   At a sales volume of 75 units the average cost is $350 per unit and the variable cost is $ 5 per unit. Assuming a linear cost behavior patter, if sales double to 150 units the average cost will be:

a. $182.50
b. $172.50
c. $175.00
d. $177.50

Answer: *d*
Rationale: Total cost at 75 units ($350 x 75) $26,250
                    Total variable cost at 75 units ($5 x 75)   (375)
                    Fixed cost $25,875

Total cost at 150 units $25,875 + ($5 x 150) = $26,625
Average cost ($26,625/150) = $177.50

4.   Amy's Ice Cream Shop had the following activity costs during May and June:

	Number of Cones Served	Total Cost
May	2,000	$8,000
June	4,000	$10,500

Using the high-low method, the predicted total cost for July when expected sales of 5,500 are:

a. $ 6,875
b. $18,500
c. $12,375
d. $10,500

Answer: *c*
Rationale: Variable costs = ($10,500 - $8,000)/(4,000 - 2,000) = $1.25
                    Fixed costs = $10,500 – ($1.25 x 4,000) = $5,500
                    Predicted costs = $5,500 + ($1.25 x 5,500) = $12,375

5.   When compared to the high-low method of cost estimation, an advantage of the scatter diagram method is its:

a. Ability to assist in identifying outlier observations
b. Lack of reliance on professional judgment
c. Limited data requirements
d. Provision of information to assist in determining how well the cost estimating equation fits the historical data

Answer: *a*
Rationale: Its ability to assist in identifying outlier observations is a major advantage of the scatter diagram method. The scatter diagram method relies on professional judgment, and to use professional judgment requires more observations than the high-low method. The scatter diagram method does not provide information on how well the cost estimation equation fits the historical data.

6. Increasing the length of the time period included in each observation of activity and cost will assist in overcoming this possible problem in cost estimation:

    a. Data not based on normal operations
    b. Nonlinear relationship between total costs and activity
    c. Changes in technology or prices
    d. Failure to match activity and costs within each observation

Answer: *d*
Rationale: The longer the time period the more likely it is that activity and cost are matched within each observation.

7. The cost of depreciation on specialized equipment is best classified as a:

    a. Unit level cost
    b. Batch level cost
    c. Product level cost
    d. Facility level cost

Answer: *c*
Rationale: If the product produced with specialized equipment did not exist the specialized equipment would not be needed.

8. Hudson manufactures a product with the following manufacturing cost hierarchy for its only current product:

	Cost
Unit	$10/unit
Batch	$500/batch
Product	$12,000/year
Facility	$40,000/year

Next year Hudson plans to manufacture 30,000 units of product in batches of 200 units. Hudson's predicted manufacturing costs for next year are:

    a. $387,000
    b. $427,000
    c. $375,000
    d. $452,000

Answer: *b*
Rationale: Required number of batches = (30,000 units/200 units per batch) = 150
Predicted costs = $40,000 + $12,000 + ($500 x 150) + ($10 x 30,000) = $427,000

9. Watt sells specialized products produced by computer companies to 200 engineering firms at a selling price based on Watt's purchase price. Watt's customer cost hierarchy is as follows:

	Cost
Unit	75 percent of selling price
Batch	$100 per sales order
Customer	$800 per customer per year
Facility	$100,000 per year

Next year Watt plans to sell $3,000,000 of product to the 200 engineering firms they serve. They anticipate that each firm will place an average of 5 orders. West's predicted customer costs for next year are:

a. $100,000
b. $2,530,000
c. $2,250,000
d. $2,610,000

Answer: *d*
Rationale: Anticipated number of batches = (5 per firm x 200 firms) = 1,000
Predicted costs = $100,000 + ($800 x 200) + ($100 x 1,000) + ($3,000,000 x 0.75) = $2,610,000