

Ch. 7 Practice Quiz

Use the following to answer questions 1-2:

Abrams Company uses activity-based costing. The company has two products: A and B. The annual production and sales of Product A is 300 units and of Product B is 1,000 units. There are three activity cost pools, with estimated costs and expected activity as follows:

<i>Activity Cost Pool</i>	<i>Expected Activity</i>			
	<i>Estimated Cost</i>	<i>Product A</i>	<i>Product B</i>	<i>Total</i>
Activity 1	\$7,356	200	200	400
Activity 2	\$30,555	1,400	700	2,100
Activity 3	\$16,169	90	300	390

1. The activity rate for Activity 3 is closest to:
 - A) \$53.906
 - B) \$138.67
 - C) \$41.46
 - D) \$18.71

2. The cost per unit of Product A is closest to:
 - A) \$41.60
 - B) \$92.60
 - C) \$12.44
 - D) \$68.00

Use the following to answer questions 3-5:

Carsten Wedding Fantasy Company makes very elaborate wedding cakes to order. The owner of the company has provided the following data concerning the activity rates in its activity-based costing system:

<u>Activity Cost Pools</u>	<u>Activity Rate</u>	
Size-related	\$0.75	per guest
Complexity-related	\$34.41	per tier
Order-related	\$84.03	per order

The measure of activity for the size-related activity cost pool is the number of planned guests at the wedding reception. The greater the number of guests, the larger the cake. The measure of complexity is the number of tiers in the cake. The activity measure for the order-related cost pool is the number of orders. (Each wedding involves one order.) The activity rates include the costs of raw ingredients such as flour, sugar, eggs, and shortening. The activity rates do not include the costs of purchased decorations such as miniature statues and wedding bells, which are accounted for separately. Data concerning two recent orders appear below:

	<u>Ruise</u> <u>Wedding</u>	<u>Karmo</u> <u>Wedding</u>
Number of reception guests	79	164
Number of tiers on the cake	2	4
Cost of purchased decorations for cake	\$17.30	\$56.86

3. Assuming that all of the costs listed above are avoidable costs in the event that an order is turned down, what amount would the company have to charge for the Ruise wedding cake to just break even?
- A) \$229.40
 B) \$84.03
 C) \$277.57
 D) \$17.30

4. Assuming that the company charges \$485.85 for the Karmo wedding cake, what would be the overall margin on the order?
- A) \$84.32
 - B) \$141.18
 - C) \$401.53
 - D) \$168.35
5. Suppose that the company decides that the present activity-based costing system is too complex and that all costs (except for the costs of purchased decorations) should be allocated on the basis of the number of guests. In that event, what would you expect to happen to the costs of cakes?
- A) The cost of cakes for receptions with more than the average number of guests would go down.
 - B) The cost of cakes for receptions with fewer than the average number of guests would go down.
 - C) The costs of all cakes would go down.
 - D) The costs of all cakes would go up.

6. Cosgrove Company manufactures two products, Product K-7 and Product L-15. Product L-15 is of fairly recent origin, having been developed as an attempt to enter a market closely related to that of Product K-7. Product L-15 is the more complex of the two products, requiring 2.0 hours of direct labor time per unit to manufacture compared to 1.0 hour of direct labor time for Product K-7. Product L-15 is produced on an automated production line.

Overhead currently is applied to the products on the basis of direct labor-hours. The company estimated it would incur \$510,000 in manufacturing overhead costs and produce 10,000 units of Product L-15 and 40,000 units of Product K-7 during the current year.

Unit costs for materials and labor are:

	Product K-7	Product L-15
Direct material	\$11	\$24
Direct labor	\$6	\$12

Required:

a. Compute the predetermined overhead rate under the current method, and determine the unit product cost of each product for the current year.

b. The company is considering the use of activity-based costing as an alternative to its traditional costing method for manufacturing overhead. Data relating to the company's activity cost pools for the current year are given below:

Activity Cost Pool	Total Cost	Total Activity		
		Product K-7	Product L-15	Total
Machine setups required	\$204,000	800	1,600	2,400
Purchase orders issued.....	43,500	500	100	600
Machine-hours required.....	105,000	7,000	10,500	17,500
Maintenance requests issued.....	<u>157,500</u>	650	850	1,500
	<u>\$510,000</u>			

Using the data above, determine the unit product cost of each product for the current year.

c. What items of overhead cost make Product L-15 so costly to produce according to the activity-based costing system? What influence might the activity-based costing data have on management's opinions regarding the profitability of Product L-15?