1. The following data pertains to activity and costs for two months:

|  | June | July |
|---|---|---|
| Activity level in units | 10,000 | 20,000 |
| Variable costs | $20,000 | $ ? |
| Fixed costs | 15,000 | ? |
| Mixed costs | 10,000 | ? |
| Total costs | $45,000 | $70,000 |

Assuming that these activity levels are within the relevant range, the mixed costs for July were:
A) $10,000.
B) $35,000.
C) $15,000.
D) $40,000.


2. An analysis of past maintenance costs indicates that maintenance cost is an average of $0.20 per machine-hour at an activity level of 10,000 machine-hours and $0.25 per machine-hour at an activity level of 8,000 machine-hours. Assuming that this activity is within the relevant range, what is the total expected maintenance cost if the activity level is 8,700 machine-hours?
A) $2,000
B) $400
C) $2,250
D) $1,740


3. The controller of JoyCo has requested a quick estimate of the manufacturing supplies needed for the month of July when production is expected to be 470,000 units. Below are actual data from the prior three months of operations.

|  | Production in units | Manufacturing supplies |
|---|---|---|
| March | 450,000 | $723,060 |
| April | 540,000 | 853,560 |
| May | 480,000 | 766,560 |

Using these data and the high-low method, what is the best estimate of the cost of manufacturing supplies that would be needed for July? (Assume that this activity is within the relevant range.)
A) $805,284
B) $1,188,756
C) $755,196
D) $752,060

4. Buckeye Company has provided the following data for maintenance cost:

|  | Prior Year | Current Year |
|---|---|---|
| Machine hours | 12,500 | 15,000 |
| Maintenance cost | $27,000 | $31,000 |

The best estimate of the cost formula for maintenance would be:
A) $21,625 per year plus $0.625 per machine hour.
B) $7,000 per year plus $0.625 per machine hour.
C) $7,000 per year plus $1.60 per machine hour.
D) $27,000 per year plus $1.60 per machine hour.


Use the following to answer questions 5-6:

Wilson Company's activity for the first six of the current year is as follows:

| Month | Machine Hours | Electrical Cost |
|---|---|---|
| January | 2,000 | $1,560 |
| February | 3,000 | $2,200 |
| March | 2,400 | $1,750 |
| April | 1,900 | $1,520 |
| May | 1,800 | $1,480 |
| June | 2,100 | $1,600 |


5. Using the high-low method, the variable cost per machine hour would be:
A) $0.67.
B) $0.64.
C) $0.40.
D) $0.60.


6. Using the high-low method, the fixed portion of the electrical cost each month would be:
A) $400.
B) $760.
C) $280.
D) $190.

Use the following to answer questions 7-10:

Gasson Company is a merchandising firm. Next month the company expects to sell 800 units. The following data describe the company's revenue and cost structure:

| | |
|---|---|
| Selling price per unit | $40 |
| Sales commission | 5% |
| Purchase price (cost) per unit | $18 |
| Advertising expense | $4,000 per month |
| Administrative expense | $4,500 per month plus 15% of sales |

Assume that all activity mentioned in this problem is within the relevant range.

7. The expected gross margin next month is:
A) $17,600.
B) $11,200.
C) $14,400.
D) $16,000.

8. The expected total administrative expense next month is:
A) $ 4,800.
B) $13,300.
C) $ 9,300.
D) $14,900.

9. The expected contribution margin next month is:
A) $17,600.
B) $11,200.
C) $14,400.
D) $16,000.

10. The expected net income next month is:
A) $ 7,500.
B) $ 5,100.
C) $ 2,700.
D) $11,200.

**Answer Key -- Quiz Chapter 5 Fall 1999**

1. C     $15,000.
   Format: Multiple Choice
   Difficulty: Medium
   Type: *(None)*
   Origin:  Chapter 5, Cost Behavior: Analysis .......31

2. A     $2,000
   Format: Multiple Choice
   Difficulty: Medium
   Type: *(None)*
   Origin:  Chapter 5, Cost Behavior: Analysis .......34

3. D     $752,060
   Format: Multiple Choice
   Difficulty: Medium
   Type: CMA adapted
   Origin:  Chapter 5, Cost Behavior: Analysis .......37

4. C     $7,000 per year plus $1.60 per machine hour.
   Format: Multiple Choice
   Difficulty: Medium
   Type: *(None)*
   Origin:  Chapter 5, Cost Behavior: Analysis .......47

5. D     $0.60.
   Format: Multiple Choice
   Difficulty: Medium
   Type: *(None)*
   Origin:  Chapter 5, Cost Behavior: Analysis .......73
   Refer To:  Ref. 5-8

6. A     $400.
   Format: Multiple Choice
   Difficulty: Medium
   Type: *(None)*
   Origin:  Chapter 5, Cost Behavior: Analysis .......74
   Refer To:  Ref. 5-8

7. A     $17,600.
   Format: Multiple Choice
   Difficulty: Medium
   Type: *(None)*
   Origin:  Chapter 5, Cost Behavior: Analysis .......57
   Refer To:  Ref. 5-3

8. C     $ 9,300.
   Format: Multiple Choice
   Difficulty: Easy
   Type: *(None)*
   Origin:  Chapter 5, Cost Behavior: Analysis .......58
   Refer To:  Ref. 5-3

9. B     $11,200.
   Format: Multiple Choice
   Difficulty: Medium
   Type: *(None)*
   Origin:  Chapter 5, Cost Behavior: Analysis .......59
   Refer To:  Ref. 5-3

10. C     $ 2,700.
    Format: Multiple Choice
    Difficulty: Medium
    Type: *(None)*
    Origin:  Chapter 5, Cost Behavior: Analysis .......60
    Refer To:  Ref. 5-3