Tutorial 3

Problem 1

For items A-K that follow, draw a graph that best represents the cost behavior pattern described. The x-axis represents the level of activity and the y-axis represents the total cost.

A. Monthly property taxes for manufacturing plant

B. Pay as you go phone voice service. The rate is $0.35 per minute for the first 100 minutes and $0.25 per minute thereafter

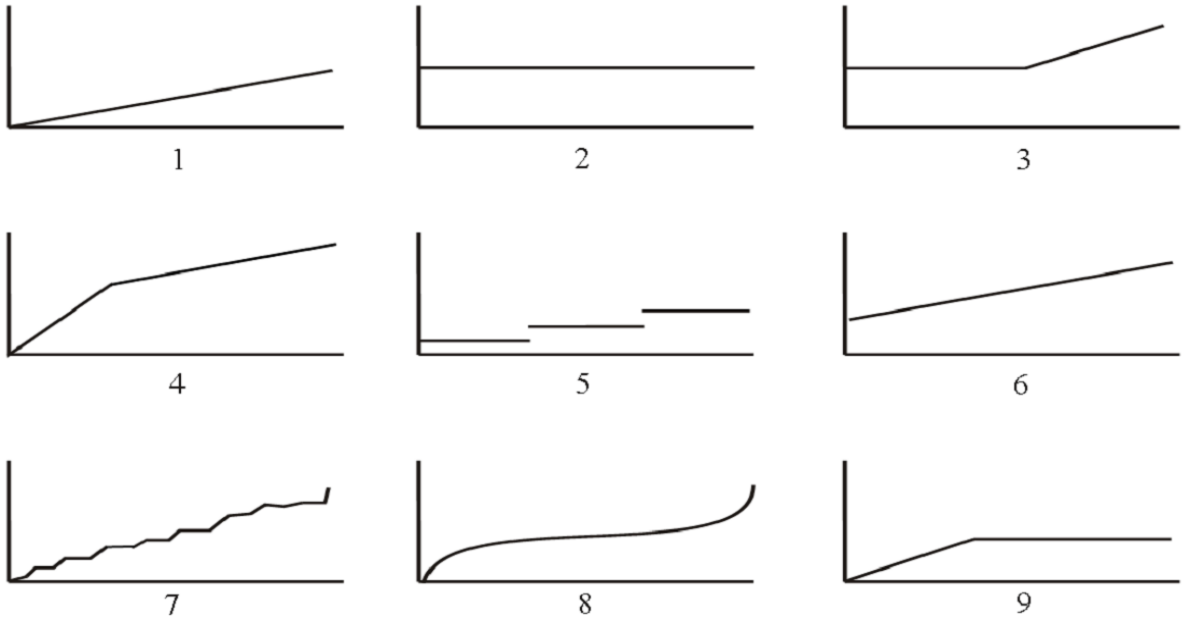
C. Monthly salaries of production supervisors. One supervisor is required for every batch of 1,000 units produced

D. Cost of wood planks used in the production of furniture

E. Sales commissions to sales persons that are paid at a rate of 10% of sales up to a maximum of $10,000 per month

F. Compensation for sales supervisors who are paid an annual salary of $50,000 and an additional commission at 1% of sales

G. Pay as you go phone voice service. The rate is a minimum fixed fee of $20 for the first 100 minutes and $0.25 per minute thereafter



Statement	A	B	C	D	E	F	G		
Graph #									

MCQ

1. The following three data points appear to be:

Units	Costs($)
100	400
110	420
120	440

a. Mixed costs
b. Variable costs
c. Fixed costs
d. Step costs
e. None of the above

2. When using the high-low method, the denominator in the equation that determines the slope is the:

a. Dependent variable
b. Independent variable
c. Difference between the high and low observation of the cost driver
d. Difference between the high and low observation of the dependent variables
e. None of the above

Use the information below to answer the following two question(s).

The Barnett Company has assembled the following data pertaining to certain costs that cannot be easily identified as either fixed or variable. Barnett Company has heard about a method of measuring cost functions called the high-low method and has decided to use it in this situation.

Cost	Hours
$24,900	5,250
24,000	5,500
36,400	7,500
44,160	9,750
45,000	9,500

3. What is the cost function derived from using the high-low method?

A) y = $43,191 + $0.19x
B) y = $4,875 + $4.28x
C) y = $41,900 + $0.23x
D) y = $2,430 + $4.28x
E) y = -$4,875 + $5.25x

4. What is the estimated total cost at an operating level of 8,000 hours?

A) $39,115
B) $36,670
C) $44,711
D) $43,470
E) $37,125

5. Which of the following statements is/are **true**:

A. A cost is said to be a step-function cost when it varies with the cost driver, but in discrete steps.
B. All non-manufacturing expenditures, for managing the firm and selling the product, are period costs.
C. Cost of goods manufactured is the cost of goods that were finished and transferred out of work-in-process this period.
D. Small materials used in the production process such as glue and nails which become part of the finished good can be classified as either a direct material or indirect material depending on how easy it is to calculate the amount used up by each unit produced from these items .
E. All of the above statements are true

Use the following information to answer the next 2 questions:

Prime Cost	$ 30,000
Variable factory overhead	$ 7,000
Fixed factory overhead	$ 3,000
Variable selling & Administrative expenses	$ 23,000
Fixed selling & Administrative expenses	$ 27,000

6. Under Absorption Costing system, the amount of product and period costs respectively:

a. $37,000 and $53,000
b. $40,000 and $50,000
c. $50,000 and $40,000
d. $53,000 and $37,000
e. None of the above

7. Under Variable Costing system, the amount of product and period costs respectively:

a. $37,000 and $53,000
b. $40,000 and $50,000
c. $50,000 and $40,000
d. $53,000 and $37,000
e. None of the above

8. This year, Roberts Company's income under absorption costing was $2,000 lower than its income under variable costing. The company sold 8,000 units during the year, and its variable costs were $8 per unit, of which $2 was variable selling expense. If production cost was $10 per unit under absorption costing, then how many units did the company produce during the year?

a. 8,500 units
b. 7,000 units
c. 9,000 units
d. 7,500 units