

1. A unique solution to a system of two linear equations is represented graphically by their _____.

A. x -intercept

B. y -intercept

C. point of intersection

2. Even when no units are produced there are costs for rent, electricity, and so on. These costs are called _____ costs.

A. overhead

B. break-even

C. marginal

D. maintenance

3. An ordered pair that satisfies each equation in a system of linear equations is called a _____ of the system of linear equations.

A. none of the above

B. solution

C. x -intercept

D. y -intercept

4. Ren Hoek is considering two lease options for a high-speed motorcycle. Option A requires an initial payment of \$1500 followed by monthly payments of \$900. Option B requires an initial payment of \$2000 followed by monthly payments of \$500. Write a system of equations which models the total amount of money paid after x months for Option A and Option B.

A. $\left\{ \begin{array}{l} \text{Option A: } f(x) = 900x + 1500 \\ \text{Option B: } f(x) = 2000x + 500 \end{array} \right\}$

B. $\left\{ \begin{array}{l} \text{Option A: } f(x) = 1500x + 900 \\ \text{Option B: } f(x) = 2000x + 500 \end{array} \right\}$

C. $\left\{ \begin{array}{l} \text{Option A: } f(x) = 900x + 1500 \\ \text{Option B: } f(x) = 500x + 2000 \end{array} \right\}$

D. $\left\{ \begin{array}{l} \text{Option A: } f(x) = 2000x + 500 \\ \text{Option B: } f(x) = 1500x + 900 \end{array} \right\}$

E. $\left\{ \begin{array}{l} \text{Option A: } f(x) = 500x + 2000 \\ \text{Option B: } f(x) = 900x + 1500 \end{array} \right\}$

F. $\left\{ \begin{array}{l} \text{Option A: } f(x) = 1500x + 900 \\ \text{Option B: } f(x) = 500x + 2000 \end{array} \right\}$

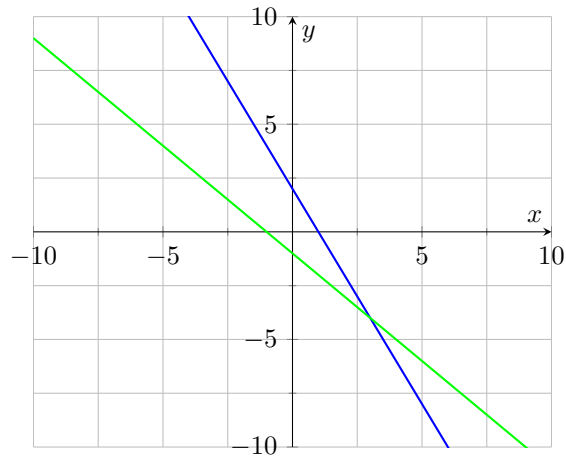
G. $\left\{ \begin{array}{l} \text{Option A: } f(x) = 500x + 2000 \\ \text{Option B: } f(x) = 1500x + 900 \end{array} \right\}$

H. $\left\{ \begin{array}{l} \text{Option A: } f(x) = 2000x + 500 \\ \text{Option B: } f(x) = 900x + 1500 \end{array} \right\}$

5. A linear equation of the form $y = mx + b$ has _____ solution(s).

- A. at most 1
- B. at most 3
- C. infinitely many
- D. no
- E. at most 2

6. Determine the point of intersection of the two lines below.



- A. The two graphs intersect at $(5, -2)$.
- B. The two graphs intersect at $(0, -7)$.
- C. The two graphs intersect at $(2, -5)$.
- D. The two graphs intersect at $(3, -4)$.
- E. The two graphs intersect at $(4, -3)$.
- F. The two graphs intersect at $(1, -6)$.

7. Which ordered pair below is a solution of $y = -7x - 3$.

A. $(2, -17)$

B. $(4, -34)$

C. $(-3, 22)$

D. $(-1, 5)$

8. A solution of a linear equation $y = mx + b$ is an ordered pair (x, y) that makes the equation a(n) _____ statement.

A. certain

B. false

C. absolute

D. true