

## Assignment: Linear equation in two variable

Date \_\_\_\_\_

**Solve each system by elimination.**

$$\begin{aligned} 1) \quad & 7x - 9y = -16 \\ & 9x + 3y = -6 \end{aligned}$$

- A)  $(-1, -9)$       B)  $(-6, 9)$   
 C)  $(-1, 1)$       D)  $(1, 1)$

$$\begin{aligned} 2) \quad & x + 12y = -5 \\ & -5x + 4y = 25 \end{aligned}$$

- A)  $(0, -5)$   
 B)  $(2, 0)$   
 C)  $(-5, 0)$   
 D) Infinite number of solutions

$$\begin{aligned} 3) \quad & 4x - 5y = 7 \\ & -3x + 8y = -18 \end{aligned}$$

- A)  $(-6, -3)$       B)  $(-3, 6)$   
 C)  $(3, 6)$       D)  $(-2, -3)$

$$\begin{aligned} 4) \quad & -8x - 7y = -5 \\ & -6x - 8y = 10 \end{aligned}$$

- A)  $(9, -5)$       B)  $(-10, -5)$   
 C)  $(5, -5)$       D) No solution

**Solve each system by substitution.**

$$\begin{aligned} 5) \quad & y = 6x + 10 \\ & -6x - 7y = -22 \end{aligned}$$

- A)  $(-1, -3)$       B)  $(1, 3)$   
 C)  $(-1, 3)$       D)  $(-1, 4)$

$$\begin{aligned} 6) \quad & -2x - 2y = -6 \\ & y = -3x - 3 \end{aligned}$$

- A) No solution      B)  $(6, 3)$   
 C)  $(-3, 6)$       D)  $(3, 6)$

$$\begin{aligned} 7) \quad & x + 5y = 2 \\ & -6x - 8y = 10 \end{aligned}$$

- A)  $(-3, 3)$       B)  $(-3, 1)$   
 C)  $(-5, 3)$       D)  $(-3, -5)$

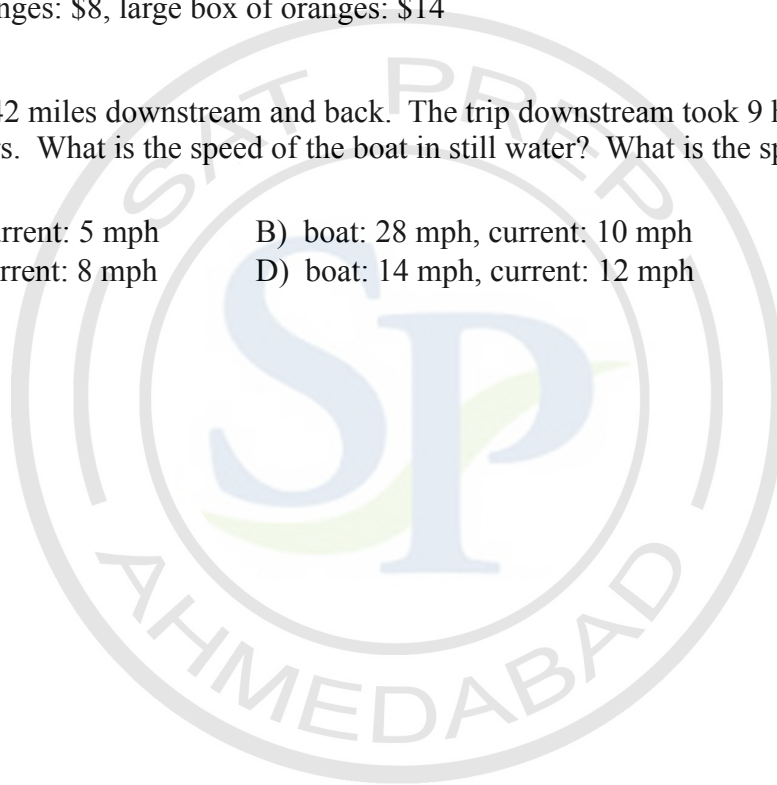
$$\begin{aligned} 8) \quad & -2x + y = 1 \\ & -3x - 2y = 12 \end{aligned}$$

- A) Infinite number of solutions  
 B)  $(-2, -4)$   
 C)  $(-2, -3)$   
 D)  $(-4, 2)$

- 9) Shayna and Arjun are selling flower bulbs for a school fundraiser. Customers can buy packages of tulip bulbs and bags of daffodil bulbs. Shayna sold 3 packages of tulip bulbs and 12 bags of daffodil bulbs for a total of \$114. Arjun sold 8 packages of tulip bulbs and 6 bags of daffodil bulbs for a total of \$96. Find the cost each of one package of tulips bulbs and one bag of daffodil bulbs.

- A) package of tulips bulbs: \$6, bag of daffodil bulbs: \$8  
 B) package of tulips bulbs: \$5, bag of daffodil bulbs: \$11  
 C) package of tulips bulbs: \$8, bag of daffodil bulbs: \$6  
 D) package of tulips bulbs: \$7, bag of daffodil bulbs: \$10

- 10) The school that Julio goes to is selling tickets to a play. On the first day of ticket sales the school sold 14 senior citizen tickets and 2 child tickets for a total of \$58. The school took in \$45 on the second day by selling 7 senior citizen tickets and 3 child tickets. Find the price of a senior citizen ticket and the price of a child ticket.
- A) senior citizen ticket: \$3, child ticket: \$8      B) senior citizen ticket: \$1, child ticket: \$6  
C) senior citizen ticket: \$2, child ticket: \$4      D) senior citizen ticket: \$2, child ticket: \$13
- 11) Kathryn and Joe are selling fruit for a school fundraiser. Customers can buy small boxes of oranges and large boxes of oranges. Kathryn sold 5 small boxes of oranges and 13 large boxes of oranges for a total of \$222. Joe sold 6 small boxes of oranges and 7 large boxes of oranges for a total of \$146. Find the cost each of one small box of oranges and one large box of oranges.
- A) small box of oranges: \$6, large box of oranges: \$13  
B) small box of oranges: \$9, large box of oranges: \$6  
C) small box of oranges: \$14, large box of oranges: \$8  
D) small box of oranges: \$8, large box of oranges: \$14
- 12) A boat traveled 342 miles downstream and back. The trip downstream took 9 hours. The trip back took 19 hours. What is the speed of the boat in still water? What is the speed of the current?
- A) boat: 40 mph, current: 5 mph      B) boat: 28 mph, current: 10 mph  
C) boat: 41 mph, current: 8 mph      D) boat: 14 mph, current: 12 mph



## Answers to Assignment: Linear equation in two variable

1) C  
5) D  
9) A

2) C  
6) C  
10) A

3) D  
7) B  
11) D

4) C  
8) C  
12) B

