

Foundations for College Algebra

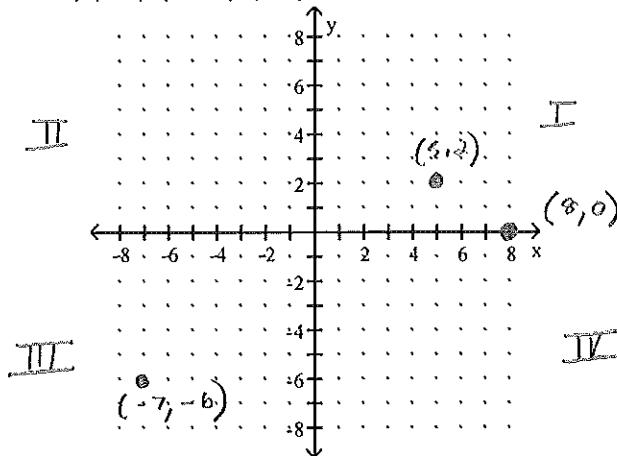
Spring 2017 - M. Goodroe

Quiz #6

Name Key

Plot and label the ordered pairs and label the quadrants of the graph.

1) $(5, 2), (-7, -6), (8, 0)$



Determine whether the ordered pair is a solution of the given linear equation.

2) $2x + 5y = -8; (1, -2)$

$$\begin{aligned}
 2(1) + 5(-2) &= -8 \\
 2 - 10 &= -8 \\
 -8 &= -8
 \end{aligned}
 \quad \text{Yes}$$

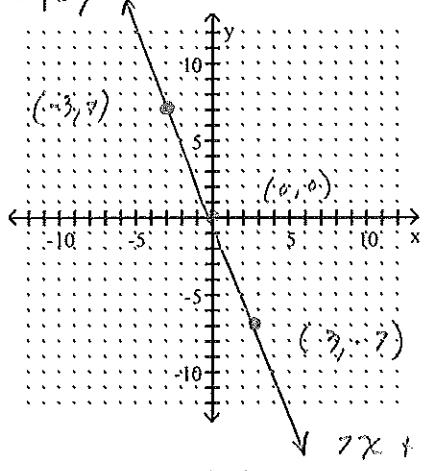
3) $2x + 6y = -4; (0, -2)$

$$\begin{aligned}
 2(0) + 6(-2) &= -4 \\
 0 - 12 &\neq -4
 \end{aligned}
 \quad \text{No}$$

Find three ordered pair solutions by completing the table. Then use the ordered pairs to graph the equation.

4) $7x + 3y = 0$

x	y
-3	7
0	0
3	-7

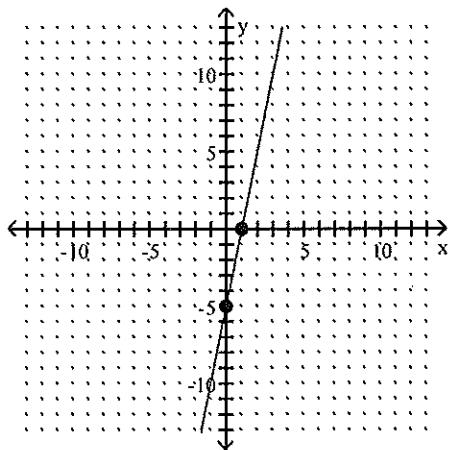


$$\begin{aligned} 7(-3) + 3y &= 0 \\ -21 + 3y &= 0 \\ 3y &= 21 \\ y &= 7 \end{aligned}$$

$$\begin{aligned} 7(0) + 3y &= 0 \\ 3y &= 0 \\ y &= 0 \end{aligned} \quad \left| \begin{array}{l} 7(3) + 3y = 0 \\ 21 + 3y = 0 \\ 3y = -21 \\ y = -7 \end{array} \right.$$

Identify and label the x and y intercepts.

5)

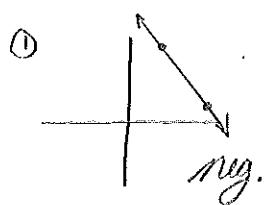


$$x\text{-int: } (1, 0)$$

$$y\text{-int: } (0, -5)$$

Find the slope of the line that passes through the given points and find a point above and below (5, 8).

6) (9, 1) and (5, 8)



$$\textcircled{1} \quad \textcircled{2} \quad m = \frac{(8) - (1)}{(5) - (9)} = \frac{7}{-4} = -\frac{7}{4}$$

$$\textcircled{1} \quad (5 - 4, 8 + 1) = (1, 15)$$

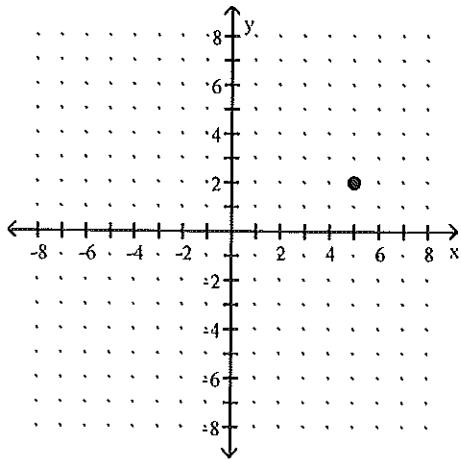
$$\textcircled{2} \quad (5, 8)$$

$$(9 + 4, 8 - 2) = (9, 6)$$

Answer Key

Testname: Q6(02-28-2017)

1) quadrant I

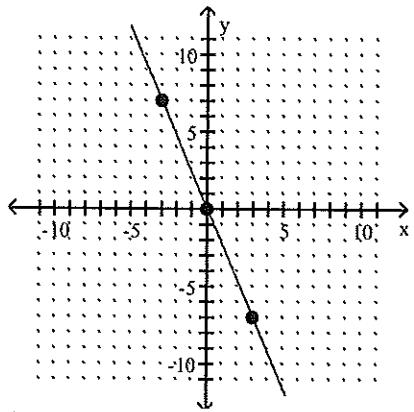


2) yes

3) no

4)

$$\begin{array}{c|c} x & y \\ \hline -3 & 7 \\ 0 & 0 \\ 3 & -7 \end{array}$$



5) (1, 0), (0, -5)

6) $-\frac{7}{4}$