

Warm-Up

March 28, 2017

Complete the table of values for each of the following. Show three calculations.

x	y
-2	10
-1	9
0	8

A. $2x + y = 4$

$x = -2, 0, 2$

x	y
-2	8
0	4
2	0

$x = -2$

$2x + y = 4$
 $2(-2) + y = 4$
 $-4 + y = 4$
 $4 + y = 4 + 4$
 $y = 8$

$x = 0$

$2x + y = 4$
 $2(0) + y = 4$
 $0 + y = 4$
 $y = 4$

$x = 2$

$2x + y = 4$
 $2(2) + y = 4$
 $4 + y = 4$
 $4 + y = 4 - 4$
 $y = 0$

B. $x + y = 8$

$x = -2, -1, 0$

$x = -2$

$x + y = 8$
 $-2 + y = 8$
 $-2 + y = 8 + 2$
 $y = 10$

$x = -1$

$x + y = 8$
 $-1 + y = 8$
 $-1 + y = 8 + 1$
 $y = 9$

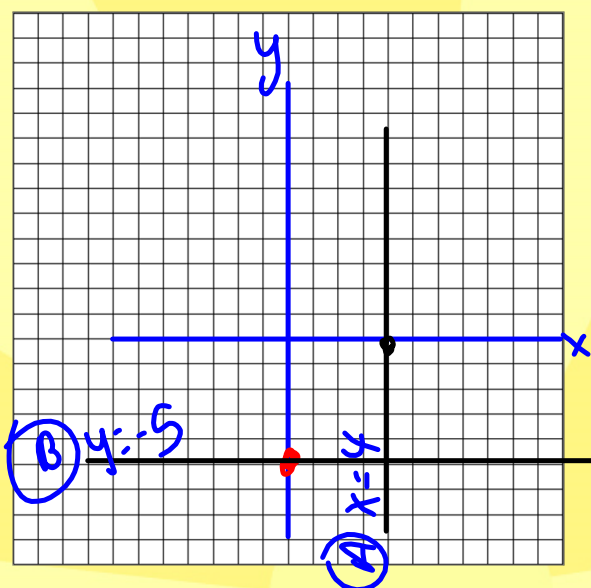
$x = 0$

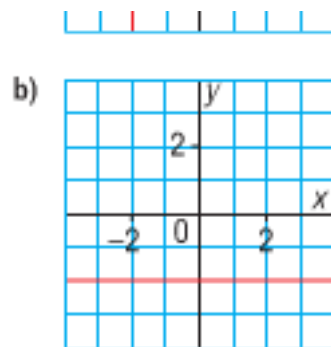
$x + y = 8$
 $0 + y = 8$
 $y = 8$

1. Identify type of line
2. Graph.

A. $2x - 3 = 5$
 Vertical $2x - 3 + 3 = 5 + 3$
 $\frac{2x}{2} = \frac{8}{2}$
 $x = 4$

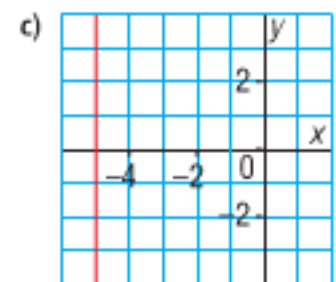
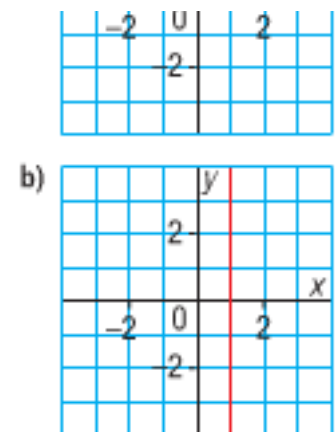
B. $\frac{2y}{2} = \frac{-10}{2}$
 $y = -5$





5. Does each equation describe a vertical line, a horizontal line, or an oblique line? Describe each horizontal and vertical line.

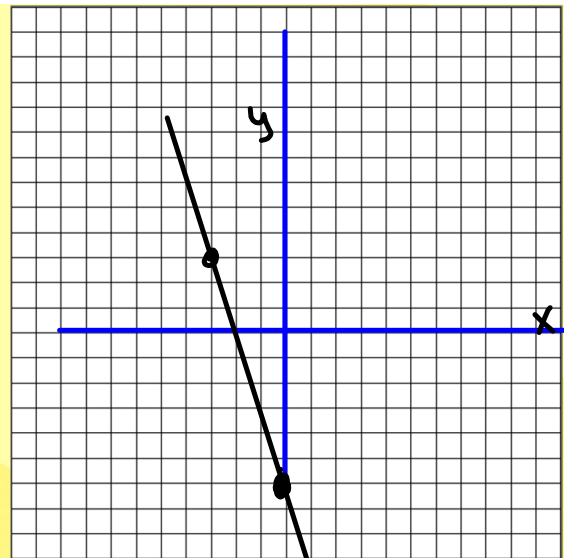
- | | |
|-------------|-----------------|
| a) $y = 7$ | b) $x - y = 3$ |
| c) $x = -5$ | d) $x + 9 = 0$ |
| e) $2y = 5$ | f) $y = 6 - 2x$ |



Graph the following:

$$3x + y = -6, \quad x = -3, 0, 3$$

x	y
-3	3
0	-6
3	-15



$$x = -3$$

$$\begin{aligned} 3x + y &= -6 \\ 3(-3) + y &= -6 \\ -9 + y &= -6 \\ -9 + 9 + y &= -6 + 9 \\ y &= 3 \end{aligned}$$

$$x = 0$$

$$\begin{aligned} 3x + y &= -6 \\ 3(0) + y &= -6 \\ 0 + y &= -6 \\ y &= -6 \end{aligned}$$

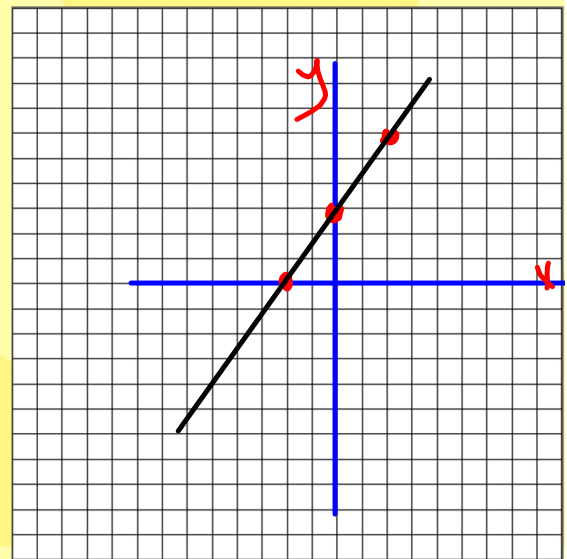
$$x = 3$$

$$\begin{aligned} 3x + y &= -6 \\ 3(3) + y &= -6 \\ 9 + y &= -6 \\ \boxed{9-9} + y &= -6 - 9 \\ y &= -15 \end{aligned}$$

$$3x - 2y = -6$$

$$x = -2, 0, 2$$

x	y
-2	0
0	3
2	6



$$x = -2$$

$$3x - 2y = -6$$

$$3(-2) - 2y = -6$$

$$-6 - 2y = -6$$

$$\boxed{-6 + 6} - 2y = -6 + 6$$

$$-2y = 0$$

$$y = 0$$

$$x = 0$$

$$3x - 2y = -6$$

$$3(0) - 2y = -6$$

$$-2y = \frac{-6}{-2}$$

$$y = 3$$

$$x = 2$$

$$3x - 2y = -6$$

$$3(2) - 2y = -6$$

$$6 - 2y = -6$$

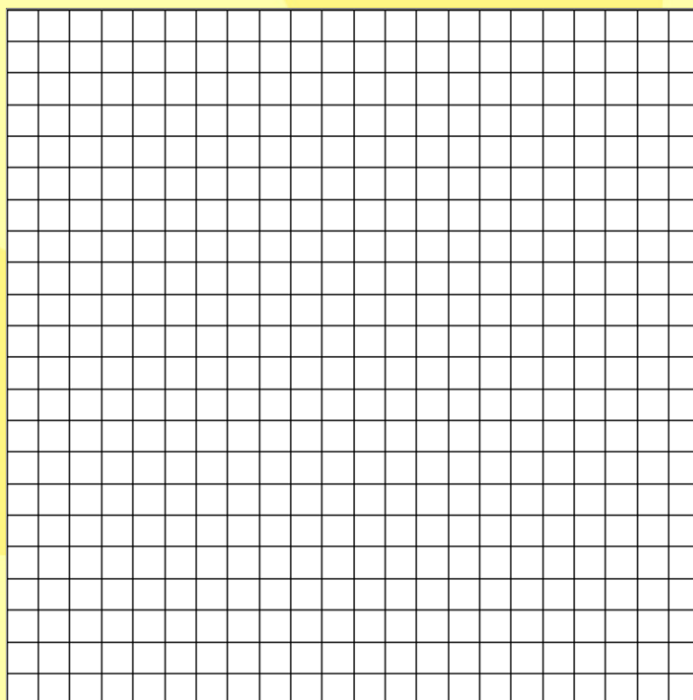
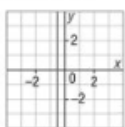
$$\boxed{6 - 6} - 2y = -6 - 6$$

$$-2y = \frac{-12}{-2}$$

$$y = 6$$

8. Which equation best describes the graph below? Explain your choice.

- a) $x - 2 = 0$
- b) $2x + 1 = 0$
- c) $2y - 1 = 0$
- d) $2x - 1 = 0$



11. Graph each line. Explain your work.

- a) $y + 3 = -2$
- b) $2x = 7$
- c) $3x + 1 = -5$
- d) $2y - 2 = 10$

Quiz Tomorrow!!!

Section 4.3

Page 180 7,8, 10, 11, 15 [a, c], #18

Answers
← Page 492

Review worksheet section 4.3 [with answers]

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