

## Example 3:

Graph an equation.

## Example 4:

Graph horizontal & vertical lines.

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## Example 1:

Determine whether an ordered pair lies on the graph of a line.

## Example 2:

Solve an equation for  $y$ .

### Example 1:

Determine which ordered pair lies on the graph of the line  $7x - y = 10$ .

a)  $(2, 4)$

b)  $(2, -4)$

### Example 2:

Solve the equations for  $y$ .

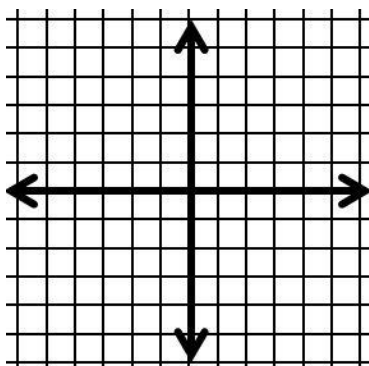
a)  $-9x + 3y = 15$

b)  $5x - 10y = 20$

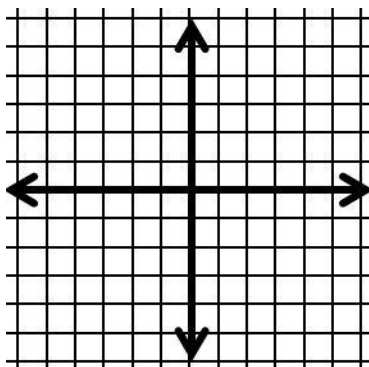
c)  $2x + \frac{1}{3}y = 4$

### Example 3:

a) Graph the equation  $3x - y = 1$ .

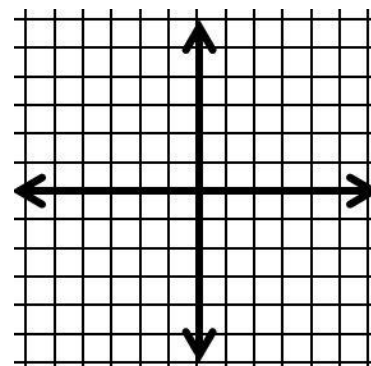


b) Graph the equation  $8x - 4y = -4$ .

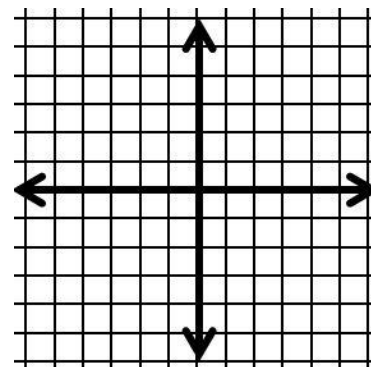


### Example 4:

a) Graph  $y = 3$ .



b) Graph  $x = -4$ .



## Example 3:

Graph an equation.

## Example 4:

Graph horizontal & vertical lines.

# Answer Key!

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## Example 1:

Determine whether an ordered pair lies on the graph of a line.

## Example 2:

Solve an equation for  $y$ .

### Example 1:

Determine which ordered pair lies on the graph of the line  $7x - y = 10$ .

c)  $(2, 4)$

$\uparrow \uparrow$   
 $(x, y)$

$$\begin{aligned}7x - y &= 10 \\7(2) - 4 &= 10 \\14 - 4 &= 10 \\10 &= 10\end{aligned}$$

YES, this point lies on the graph of the line  $7x - y = 10$ .

d)  $(2, -4)$

$\uparrow \uparrow$   
 $(x, y)$

$$\begin{aligned}7x - y &= 10 \\7(2) - (-4) &= 10 \\14 + 4 &= 10 \\18 &= 10\end{aligned}$$

NO, this point does not lie on the graph of the line  $7x - y = 10$ .

### Example 2:

Solve the equations for y.

a)  $-9x + 3y = 15$

$$\begin{array}{r} -9x + 3y = 15 \\ +9x \qquad +9x \\ \hline 3y = 9x + 15 \\ \frac{3y}{3} = \frac{9x}{3} + \frac{15}{3} \\ y = 3x + 5 \end{array}$$

b)  $5x - 10y = 20$

$$\begin{array}{r} 5x - 10y = 20 \\ -5x \qquad -5x \\ \hline -10y = -5x + 20 \\ \frac{-10y}{-10} = \frac{-5x}{-10} + \frac{20}{-10} \\ y = \frac{1}{2}x - 2 \end{array}$$

c)  $2x + \frac{1}{3}y = 4$

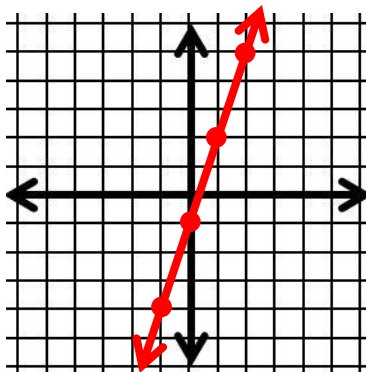
$$\begin{array}{r} 2x + \frac{1}{3}y = 4 \\ -2x \qquad -2x \\ \hline 3 \cdot \frac{1}{3}y = (-2x + 4) \cdot 3 \\ y = -6x + 12 \end{array}$$

### Example 3:

a) Graph the equation  $3x - y = 1$ .

Rewrite as  $y = 3x - 1$

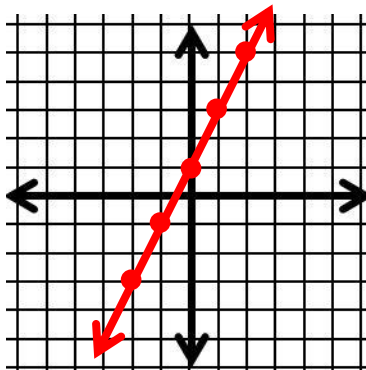
x	y
-2	-7
-1	-4
0	-1
1	2
2	5



b) Graph the equation  $8x - 4y = -4$ .

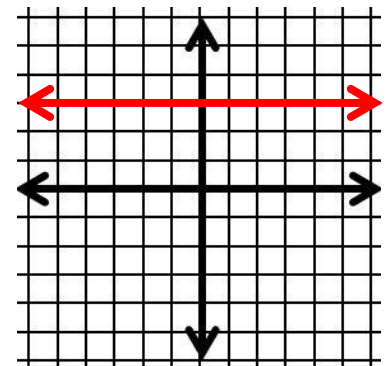
Rewrite as  $y = 2x + 1$

x	y
-2	-3
-1	-1
0	1
1	3
2	5

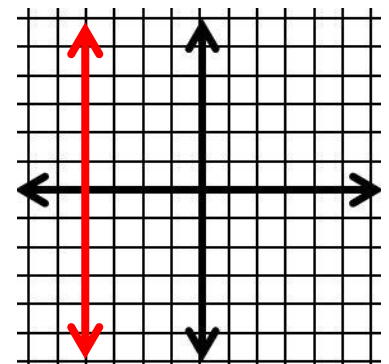


### Example 4:

a) Graph  $y = 3$ .



b) Graph  $x = -4$ .



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## Directions:

Print pages 1 & 2 so that the text is facing in opposite directions (my printer has the option to print front to back & flip pages on the short edge).

Fold the top and bottom in to the solid line at the center. Cut along the dotted lines to create the four tabs.

NOTE: If the pages don't line up properly try using a different printer. I have the best luck printing on my personal printer. Sometimes if I print the pages at school, the printer alters the margins and the lines don't end up matching up like they are supposed to!

The final product should look like this:

