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Standard form

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Warm-Up:

Solve for y:

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

HW: What questions do you have?

Algebra 2 Homework
2.4 Slope Intercept Form Practice

Name: _____

Directions: For #1 – 5, write the equation of the line with the following information:

- 1.) slope of -1 and y-intercept of 3 2.) slope of $\frac{1}{2}$ and y-intercept of 0

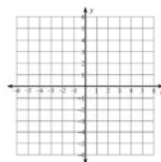
- 3.) passes through the point (-5, 1) and has a slope of $-\frac{3}{5}$

- 4.) passes through the point (1, -2) and has a slope of 2

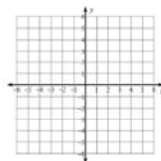
- 5.) passes through the point (-1, -3) and has a slope of 3

Directions: For #6 – 8, write the equation of and graph the line with the following information:

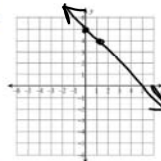
- 6.) passes through the point (2, -2) and has a slope of $-\frac{1}{2}$



- 7.) passes through the point (1, -5) and has a slope of -3



- 8.) passes through the point (2, 3) and the point (0, 5)



$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$m = \frac{5 - 3}{0 - 2} = \frac{2}{-2}$$

$$m = -1$$

$$y - 3 = -1(x - 2)$$

$$y - 3 = -x + 2$$

$$y = -x + 5$$

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More practice:

solve for y:

1. $3x + y = 4$

$$\begin{array}{r} -3x \quad -3x \\ \hline y = -3x + 4 \end{array}$$

2. $2x + 5y = 8$

$$\begin{array}{r} -2x \quad -2x \\ \hline 5y = \frac{-2x + 8}{5} \\ y = -\frac{2}{5}x + \frac{8}{5} \end{array}$$

3. $-35x - 7y = 56$

4. $x + 3y = -4$

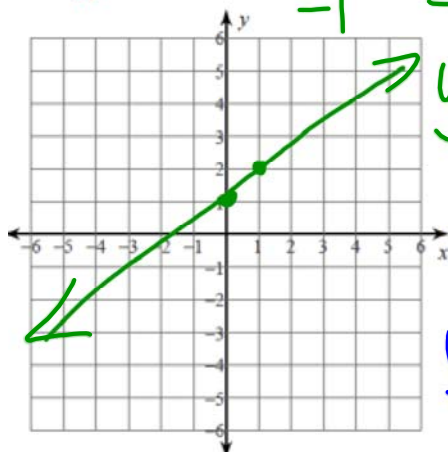
$ax + by = c$

$y = mx + b$

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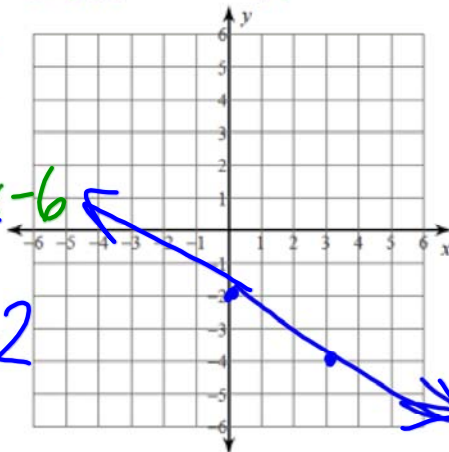
1. $x - y = -1$

$$\begin{array}{r} -x \quad -x \\ \hline -y = -x - 1 \\ y = x + 1 \end{array}$$



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

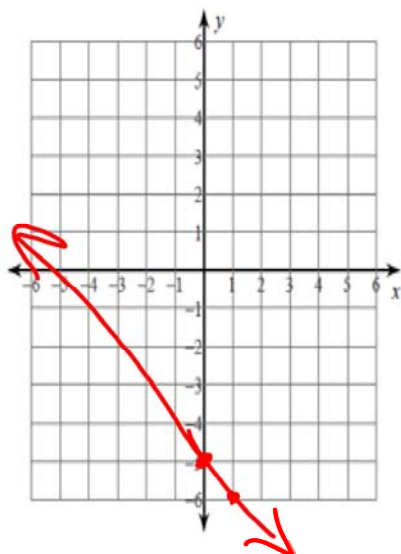
$$\begin{array}{r} -2x \quad -2x \\ \hline 3y = -2x - 6 \\ y = -\frac{2}{3}x - 2 \end{array}$$



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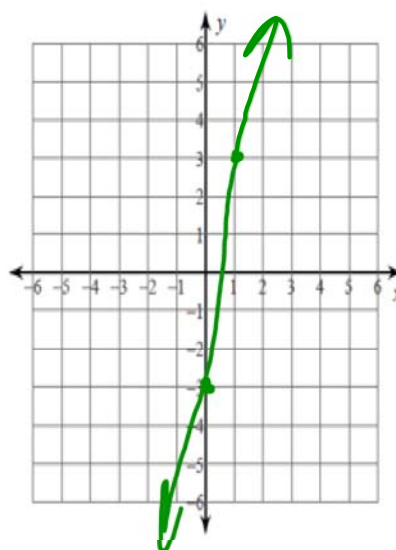
$$y = -x - 5$$

3. $x + y = -5$



$$y = 6x - 3$$

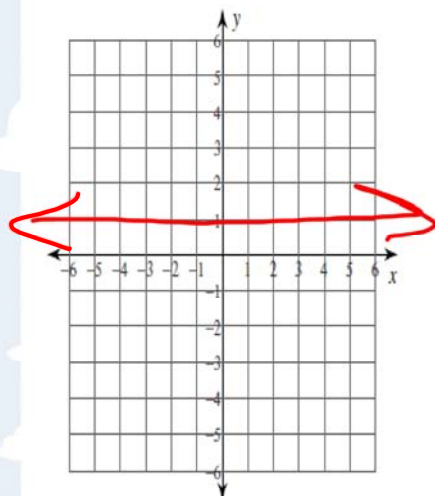
4. $6x - y = 3$



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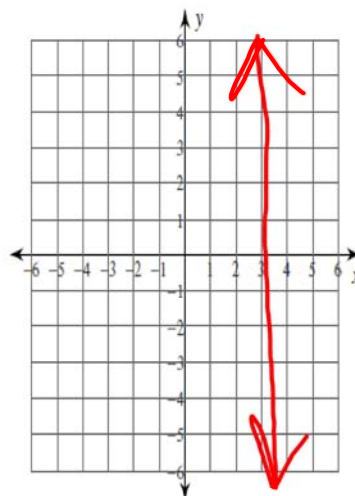
$$H0Y$$

5) $y = 1$



$$V0X$$

6) $x = 3$



Homework assignment: Graphing lines in standard form