December 7, 2010

Get out your homework from Friday and Monday

⑤ $(16,-1)\ (-14,-11)$

$$m = \frac{-11+(+1)}{-14-16}$$

$$= \frac{-10}{-30}$$

$$= \frac{1}{3}$$

12/7 Graphing Lines from Slope-Intercept Form

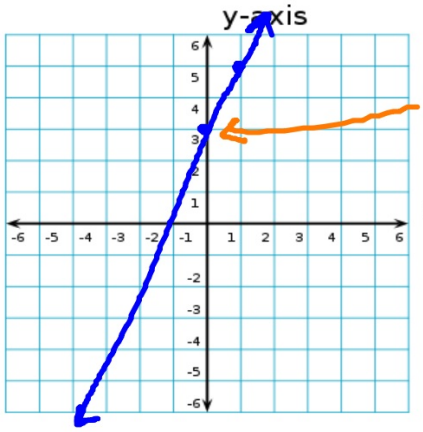
Remember you need a slope and a point to graph a line.

$\frac{\text{up}}{\text{over}}$

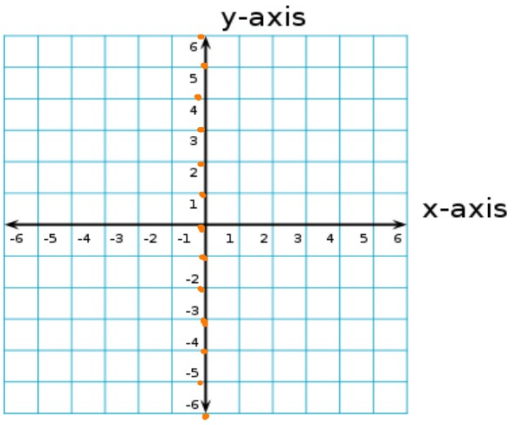
$\frac{\text{rise}}{\text{run}}$

$\frac{\text{Vertical}}{\text{horizontal}}$

(0,3) $m=\frac{2}{1}$ up Right



y-intercept



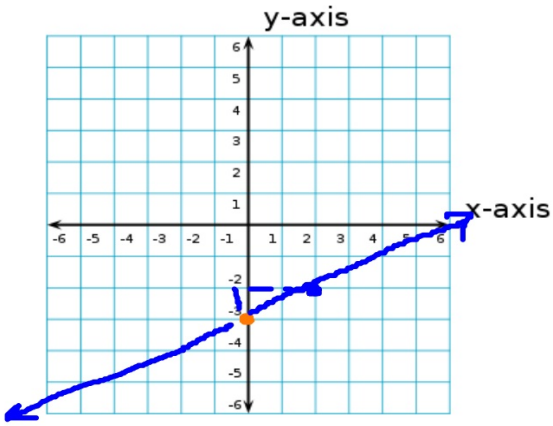
Points on the y-axis are called **y-intercepts**

How many **y-intercepts** are there?

infinite #

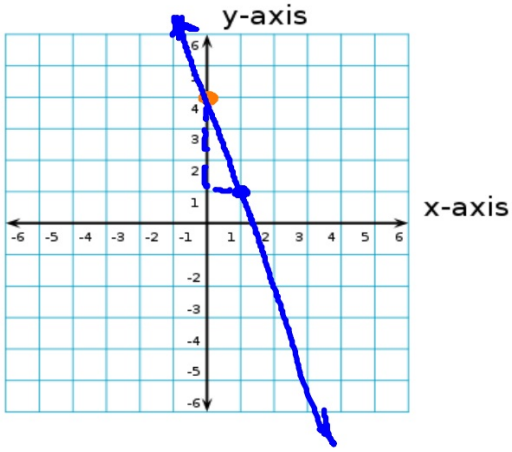
If you have **one** intercept and a slope, you get **one** line...

Graph these:



$m = \frac{1}{2}$ up right

$y - \text{int} = -3$ Start here



$m = \frac{-3}{1}$ down right

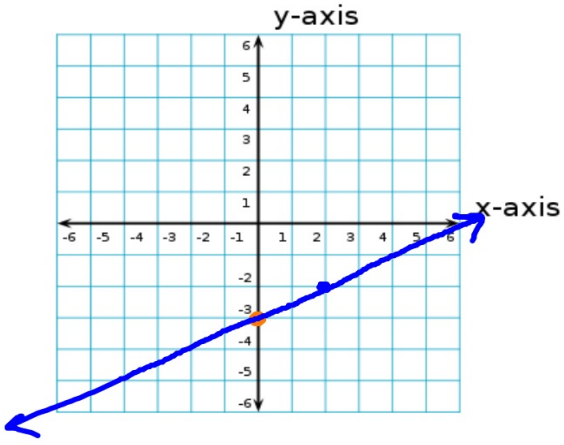
$y - \text{int} = 4$

Slope – Intercept Form

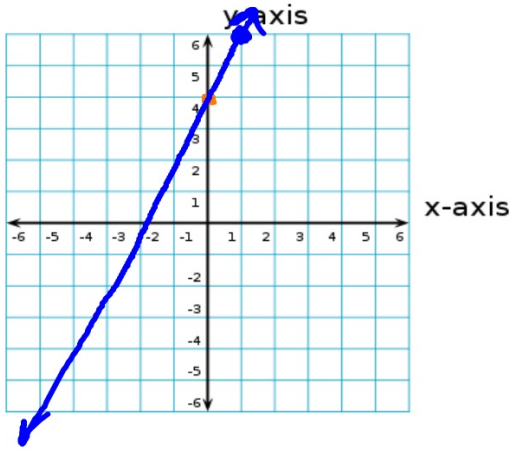
$$y = mx + b$$

slope — y-intercept

$y = \frac{1}{2}x - 3$ (up 1, right 2; y-int)

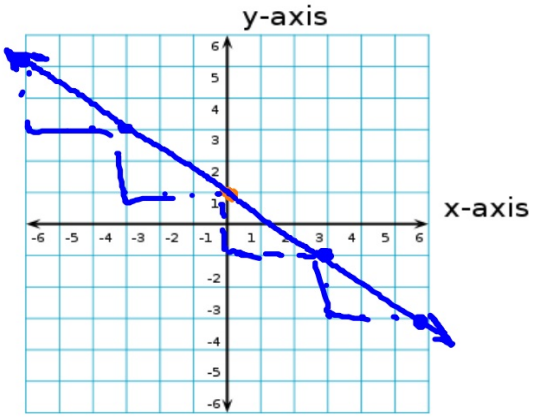


$y = 2x + 4$ (up 2, right 1; y-int)



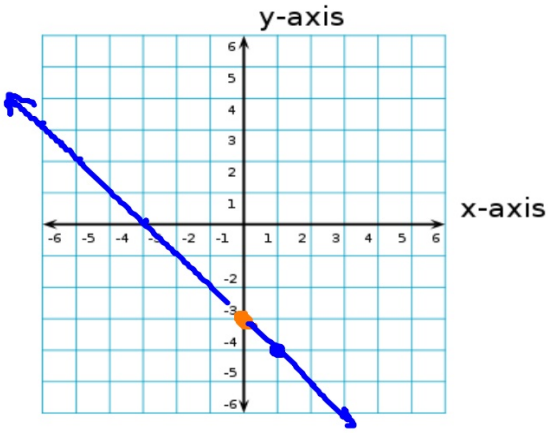
$y = -\frac{2}{3}x + 1$

$m = \frac{-2}{3}$ down right



$y = -x - 3$

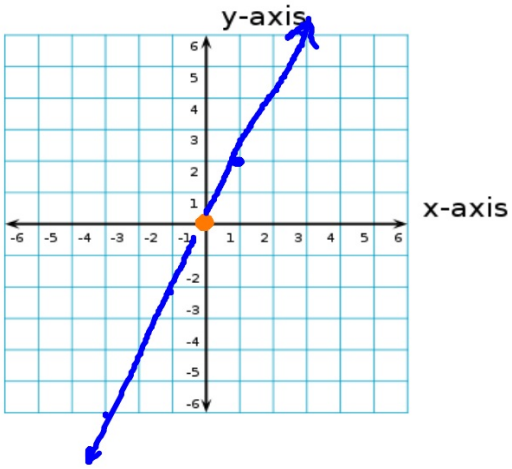
$m = \frac{-1}{1}$ down right



$y = 2x + 0$

y-int.

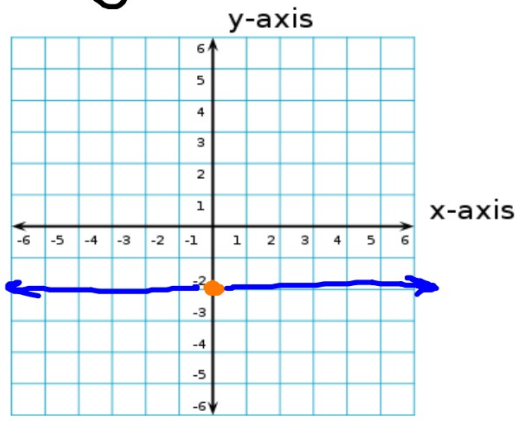
$m = \frac{2}{1}$ up right



$y = -2$

y-int (no "x" in that)

$y = 0x - 2$



Homework:

Worksheet

Due: Monday with Pink WS3