

5.1. Slope-Intercept form

Graph
Paper,

Feb. 27, 2007

But Not Required

Recall: The Slope-Intercept form of the equation of a line is: $y = mx + b$

- generic equation

Where $m = \text{slope}$ $b = y\text{-int.}$

Write the equation of the line
with $\boxed{\text{slope} = 3}$ & $\boxed{y\text{-int} = 7}$

$$y = mx + b$$
$$y = 3x + 7$$

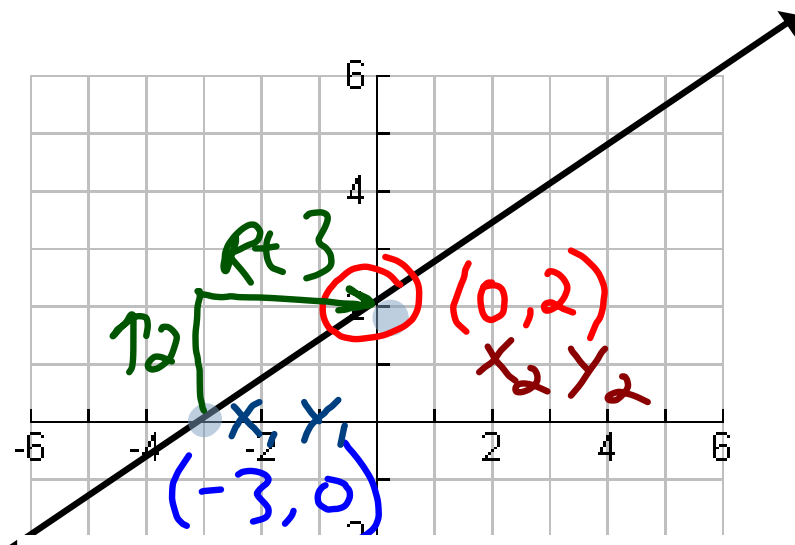
w/ $\boxed{y\text{-int} = -8}$ & $\boxed{m = \frac{5}{2}}$

$$y = mx + b$$
$$y = \frac{5}{2}x - 8$$

$$\cancel{y = \frac{5}{2}x - 8}$$

Write the equation of the line:

Angela



$$m = \text{Slope} = \frac{\text{rise}}{\text{run}} = \frac{\text{Change in } y}{\text{Change in } x} = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\frac{2 - 0}{0 - (-3)} = \frac{2}{3}$$

We know Slope Intercept
 $y = mx + b$

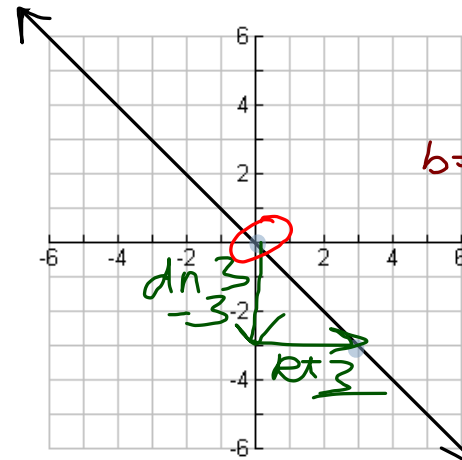
We Need to know...

$$\text{Slope} = \frac{2}{3}$$

$$y\text{-int.} = 2$$

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

Write the equation of the line:



$$m = \text{slope} = \frac{-3}{3} = -1$$

$$b = y\text{-int} = 0$$

$$y = mx + b$$

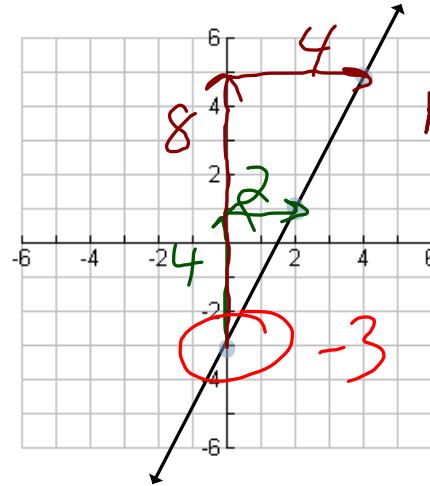
$$y = -1x + 0$$

$$\underline{\underline{y = -1x}}$$

or

$$\underline{\underline{y = -x}}$$

Write the equation of the line:



$$y = mx + b$$

$$m = \text{slope} = \frac{4}{2} = 2$$

$$b = y\text{-int} = -3$$

$$y = mx + b$$

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

$$\underline{\underline{y = 2x - 3}}$$

O.T.L.

① Pg 272: 1-3, 13, 16,

18-25(a), 34-39(a)

22-25: write the slope, y-int, &
the eqn of
the line.