5.1.   Slope-Intercept form   Graph Paper, But Not Required

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

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

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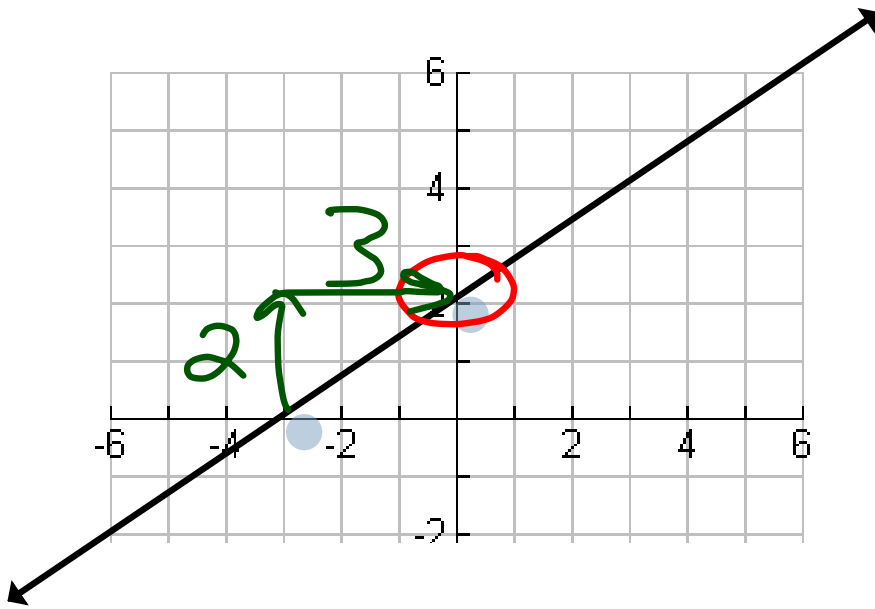
$$y = mx + b$$
$$y = 3x + 7$$

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

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

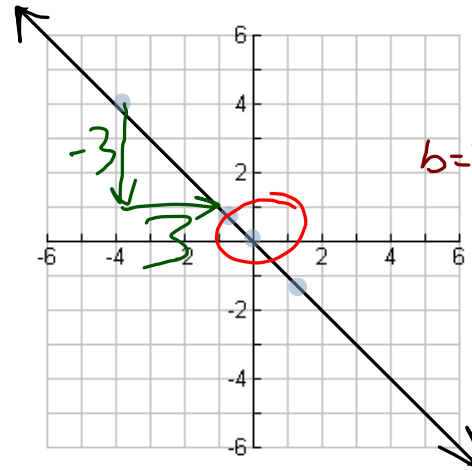# Write the equation of the line:

We know SlopeIntercept

$$y = mx + b$$

We need to know...

Slope $= \dfrac{2}{3}$

y-int. $= 2$

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

Write the equation of the line:

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

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

$y = mx + b$
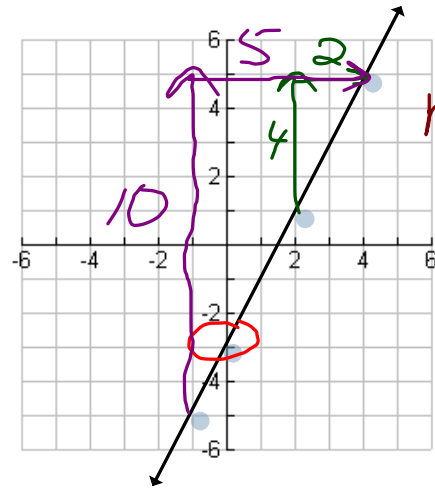
$y = -1x + 0$

$$y = -1x$$

or

$$y = -x$$

Write the equation of the line:

$$y = mx + b$$

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

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

$$y = mx + b$$

$$y = 2x + 3$$

$$y = 2x - 3$$

O.T.L.

① Pg 272: 1-3, 13, 16,
18-25(a), 34-39(a)

22-25: write the Slope, y-int, &
the equ of
the line.