

4.3 Slope-Intercept Form

Date: _____

Slope-Intercept Form: $y = mx + b$.

The "m" is the slope.

The "b" is the y-intercept - Where the line crosses y-axis
(0, #)

Identify the slope and y-intercept of the line with the given equation.

Ex.1: a.) $y = 3x + 4$

$m = 3$ $b = 4$ (0,4)

b.) $3x + y = 2$

$y = -3x + 2$

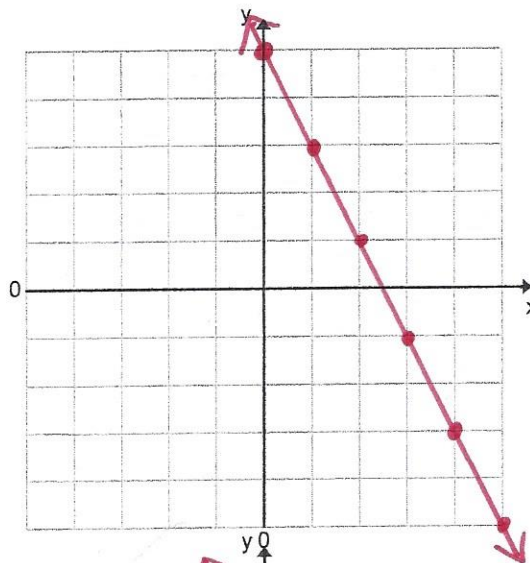
$m = -3$ $b = 2$ (0,2)

Ex.2: Graph the equation $y = -2x + 5$

② $m = -\frac{2}{1}$

$b = 5$

① (0,5)

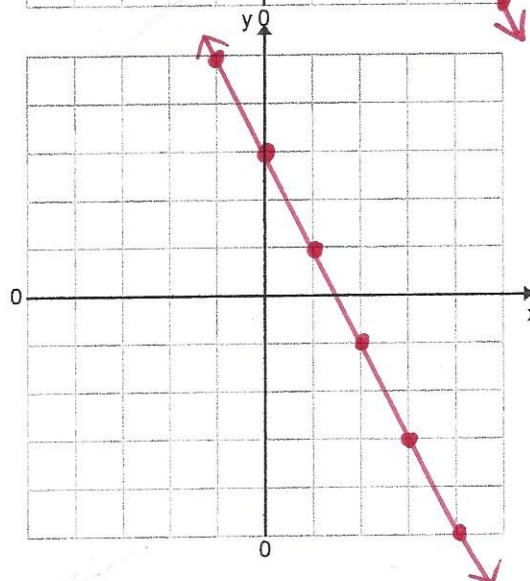


Ex.3: Graph the equation $2x + y = 3$

$y = -2x + 3$

② $m = -\frac{2}{1}$

① $b = 3$ (0,3)



$$y = mx + b$$

Write an equation for the line with the given slope that passes through the given point.

$$m = \frac{1}{2}, (0, 5)$$

$$y = \frac{1}{2}x + 5$$

$$m = -4, (0, 2)$$

$$y = -4x + 2$$

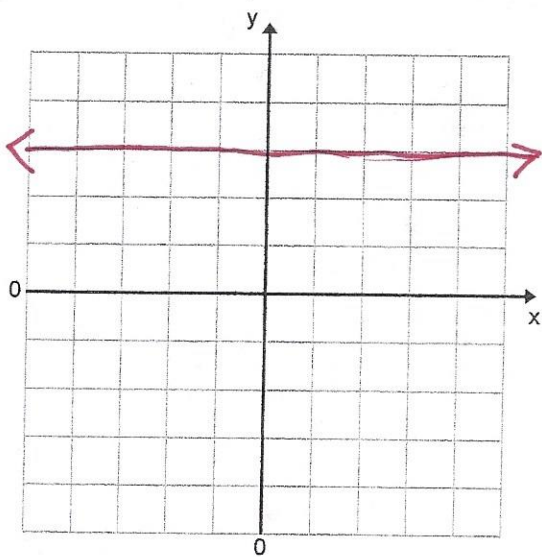
$$m = \frac{-5}{2}, (0, -4)$$

$$y = \frac{-5}{2}x + (-4)$$

$$y = \frac{-5}{2}x - 4$$

Special Graphs:

$$y = 3$$



$$x = 3$$

