

## 6-2 Slope-Intercept Form

1.

$$y = mx + b$$

Slope      y-intercept

$$y = 3x + 2$$

2. Find the slope and y-intercept of each equation.

$$y = -2x + 1$$

$$\text{Slope} = -2$$

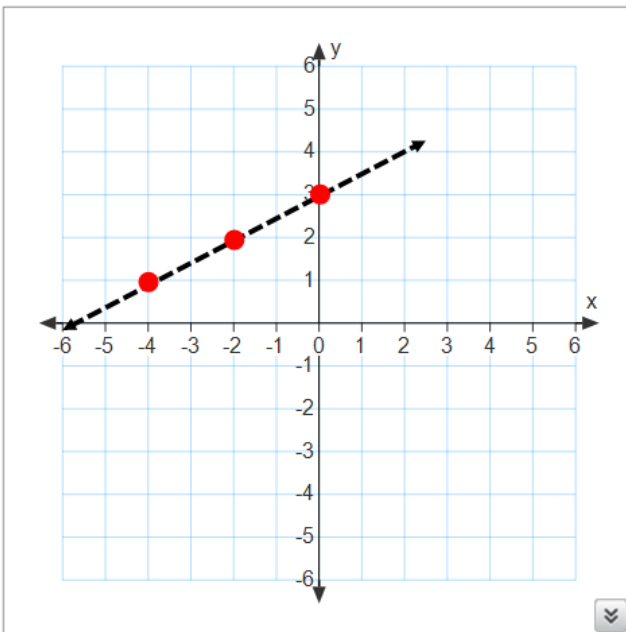
$$\text{y-int} = 1$$

3. Write an equation of a line with the given slope and y-intercept.

$$y = mx + b$$

Given:  $m = \frac{3}{4}$ ,  $b = 2$        $y = \frac{3}{4}x + 2$

4. Write a slope-intercept form of the equation for each line.



$$y = mx + b$$

1. Where does the line cross the y-axis?

$$y = mx + 3$$

2. From the bottom point, how far do you rise and run?

$$\begin{array}{l} \text{rise: } 1 \\ \text{run: } 2 \end{array} \quad \text{slope} = \frac{1}{2}$$

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

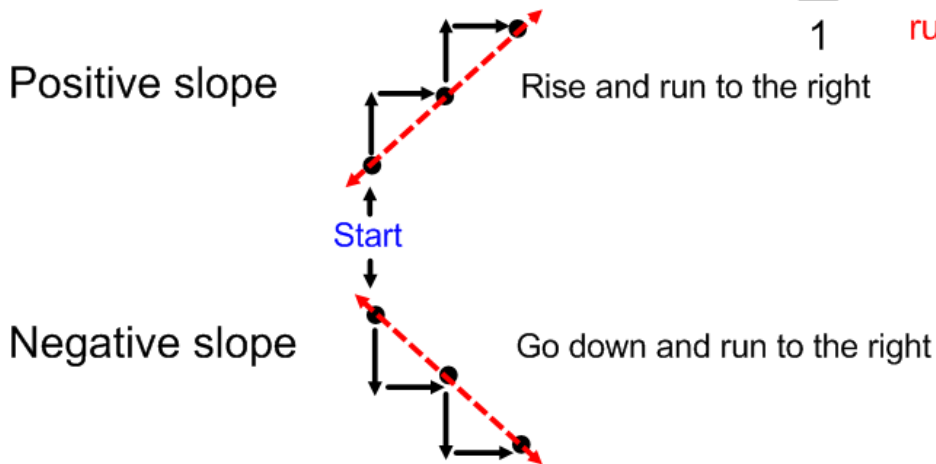
# Algebra I

To graph:

1. Start with y-intercept (b)

\*\*It tells you where to put the first dot on the y-axis.

2. Look at the slope (m). If it is a whole number make it a fraction by putting the whole number over 1. Ex:  $5 \rightarrow \frac{5}{1} \rightarrow \frac{\text{rise } 5}{\text{run } 1}$



$$y = 2x - 4$$

↑            ↑  
slope    y-intercept

$$y = \frac{2}{1}x - 4$$

