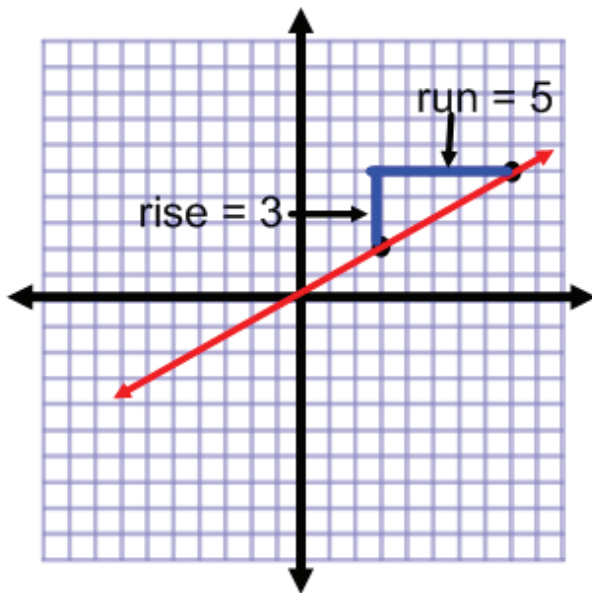


# Graphing Equations – Quick Reference

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

- Calculate the slope by choosing two points on the line.
- Count the rise (how far up or down to get to the next point?) This is the numerator.
- Count the run (how far left or right to get to the next point?) This is the denominator.
- Write the slope as a fraction.



$$\text{Slope} = 3/5$$

\*\* Read the graph from left to right. If the line is **falling**, then the slope is **negative**. If the line is **rising**, the slope is **positive**.

\*\*When counting the rise and run, if you count **down** or **left**, then the number is **negative**. If you count **up** or **right**, the number is **positive**.

## Slope Intercept Form

$$y = mx + b$$

Slope      Y-intercept

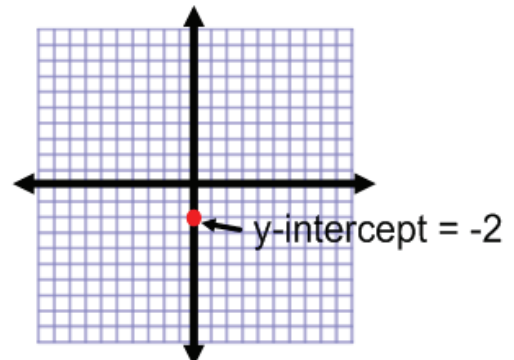
## Graphing Using Slope Intercept Form

1. Identify the slope and y-intercept in the equation.

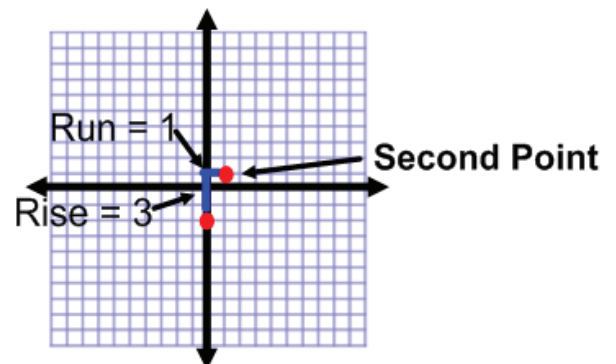
$$y = 3x - 2$$

Slope      Y-intercept

2. Plot the y-intercept on the graph.



3. From the y-intercept, count the rise and run for the slope. Plot the second point.



4. Draw a line through your two points.

