

# **Graphing Lines in the Coordinate Plane**

## **Graphing with a Table**

1. Set-up your TABLE

x	(equation)	y	(x,y)

2. Choose 5 values for x.

HINT: Use 0, 1,2,3,4

3. Substitute each value into your equation and SOLVE.
  4. GRAPH each set of coordinates.
  5. CONNECT the POINTS and write the EQUATION on the LINE.
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## Graphing Using Slope-Intercept Form

$$y = mx + b$$

↑  
Slope

↙  
y-intercept

**Remember:** SLOPE =  $\frac{\text{rise}}{\text{run}}$

**Remember:** y-intercept is your STARTING POINT!

1. Identify the Y-INTERCEPT and graph it on your Y-AXIS.
  2. Identify the SLOPE as  $\frac{\text{rise}}{\text{run}}$
  3. From your y-intercept point, move using the  $\frac{\text{rise}}{\text{run}}$
  4. Repeat this step to graph 4 points.
  5. CONNECT the POINTS and write the EQUATION on the LINE.
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## Writing the Equation of a Line

1. Identify WHERE the LINE meets the Y-AXIS.

Your coordinate should look like this (0,number)

2. The second number in your coordinate is the Y-INTERCEPT.

3. Now, get from that point to the next point using only  $\frac{\text{rise}}{\text{run}}$

4. The number of spaces you move up or down is your RISE.

The number of spaces you move right or left is your RUN.