Pre-Algebra Linear Equations Study Guide

My child completed the study guide.

Parent Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

My child used the links on the teacher website to practice for at least 20 minutes.

Parent Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is Slope?
3. Formula:
4. What are the 4 types of slope? (Draw each one out)
5. What are two ways you can find slope?
6. What are the two different forms for equations of lines?
7. What is a proportional relationship (otherwise known as direct variation)?
   1. When an equation can be written as y = number(multiplied by x)
   2. The graph goes through the origin
8. Slope Intercept Form (y=mx+b)
   1. Slope =
   2. Y-intercept =

Examples:

* 1. Graphing Slope Intercept Form
     1. Plot y-intercept (0, number)
     2. Use slope to plot next few points

Examples:

* 1. Writing an equation given a graph
     1. Read y-intercept off graph
     2. Calculate slope from graph using
        1. Triangle method or slope formula
     3. Substitute slope and y-intercept into the equation of a line y=mx+b

Examples:

* 1. Writing an equation given two points
     1. Calculate slope using slope formula
     2. Pick a point and substitute x and y coordinates in
     3. Solve for b
     4. Substitute slope and y-intercept into the equation of a line y=mx + b

Examples:

1. Standard Form (Ax + By = C 2x + 3y=6)
   1. Solve for y to convert to slope-intercept form

Examples:

* 1. Use cover up method to find x and y-intercepts to graph
     1. Cover up opposite letter to find each intercept
     2. Solve the equation for that variable
     3. X-int (#,0)
     4. Y-int (0,#)
     5. Plot those points then draw your line

Examples:

1. Parallel and Perpendicular Lines
   1. Parallel lines have the \_\_\_\_\_\_\_\_\_\_\_\_\_ slope
      1. Examples:
   2. Perpendicular lines have the \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ slope
      1. Examples: