# Mr. P's Re-take Checklist for: Mr. P's Super Simple Slope Quiz 

## - Counting for Slope

- Finding Slope \#2
- Slope Exercises 1
- Slope Exercises 2
$\square$ Complete the following pages and bring in to your conference with Mr. P.
- Fix all of your mistakes on:

Mr. P's Super Simple Slope Quiz

- Parent Signature:

Bring this sheet and the above work, arranged IN ORDER to your pre-arranged conference time.

All math class resources can be found online at: http://tpomeroy.weebly.com/

Slope Review for Retake
Linear Equations have the format of $\mathrm{y}=\mathrm{mx}+\mathrm{b}$, where m is the slope (constant rate when x is changing by 1 ) and $b$ is the $y$-intercept (where the line from the equation, when graphed, crosses the $y$-axis and what $y$ equals when $x$ is 0 ).

From a linear equation, you have all of the information you need to complete a table and draw a graph. Let's step through an example:

In the equation below, the 3 is the slope and the $y$-intercept is $(0,-1)$

$$
y=3 x+-1
$$




The $y$-intercept was place in the table first. Since this equation had $(0,-1)$ as the $y$-intercept, then when x is $0, \mathrm{y}$ is -1 .

When x is increasing by 1 , the slope will be the constant change between each of the y -values. In this equation, the slope was a positive 3 , so the $y$-value would increase by 3 as $x$ increased in value by 1 .

The values from the table created coordinate points to be graphed on the line. Notice that the rise over run between each point was 3 over 1 which is $\frac{3}{1}$, or 3 , which is the slope.

Try the next one on your own, using the steps we used to solve this one.

In the equation below, the $\qquad$ is the slope and the y -intercept is $(0$, $\qquad$ _)

$$
y=2 x+3
$$




First place the y-intercept in the table, you could then plot that point on the graph.
Second, note if the x -values are increasing by one, if they are, then place the slope in the circles so that you can increase or decrease the $y$-value by that constant rate. You would decrease if the slope is negative and increase if the slope is positive.

Third, complete the table and then graph the points. Check your graph by making sure the rise over run between plotted points matches the slope in the equation.

Go to the next page to try more -


In the equation below, the $\qquad$ is the slope and the $y$-intercept is $(0, \ldots)$
$y=-2 x+8$



Pay attention to the slope...is it positive or negative? If it is negative, then you would make sure that the $y$-value is decreasing by that amount every time the $x$-value increases by one. If positive, the $y$-value will be increasing by that amount every time the $x$-value increases by one.

In the equation below, the $\qquad$ is the slope and the $y$-intercept is $(0, \ldots)$
$y=\frac{1}{2} x+-2$

| $x$ | $y$ |
| :---: | :---: |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  |


$y=-4 x-1$

| $x$ | $y$ |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |



Note that the equation is subtraction this time. Change the subtraction problem to addition by "adding the opposite". Then you can find the actual $y$-intercept.

This time you get to use whatever values you want for x . You may want to make sure you go up by ones so that the slope in the equation is what you are increasing or decreasing the $y$-value by. Also, including 0 is a good idea so that you can include the $y$-intercept.

Last one ()
$y=\frac{2}{5} x+2$


