## Lesson #2: Slope Intercept Form (part 2) -- Notes

Recall that the slope intercept form is y = mx + b, where m is the slope of the line and b is the y-intercept. In today's lesson, we are going to focus on creating the equation of a line given various pieces of information.

For all the following examples, create y = mx + b.

1. 
$$m = \frac{4}{3}$$
 and  $b = -8$ 

2. 
$$m = -7$$
 and  $(0,5)$ 

3. 
$$m = \frac{-3}{5}$$
 and (10,6)

4. 
$$m = \frac{2}{7}$$
 and  $(-2,3)$ 

5. 
$$(-3,3)$$
 and  $(-2,5)$ 

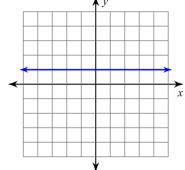
6. 
$$(-4,5)$$
 and  $(5,2)$ 

7. Create the equation of a line which has the same slope as 4x-5y=-5 and has the same y-intercept as 3y+5x-9=0.

8. Create the equation of a line which has the same slope as 8-3y=7x and has the same y-intercept as 5x+2y=3.

Horizontal and Vertical Lines: Given the graph, determine the equation of the line:

a)



b)

