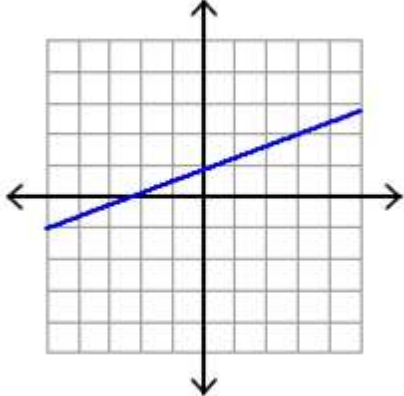
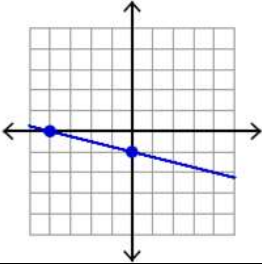


U11-3 Writing the Equation of a Line Given the Graph

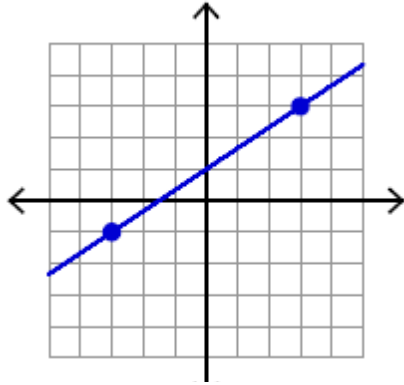
Writing Linear Equations:

When asked to write a linear equation in slope-intercept form ($y = mx + b$), you need to know **two** things:

- 1) The _____ of the line (m)
- 2) The _____ of the line (b). Where does the line cross the _____?

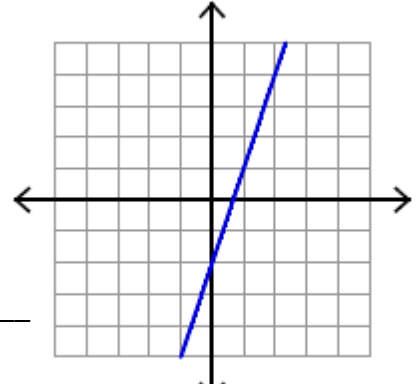
Ex 1.	Write the slope-intercept form of the equation of the line graphed to the right.	
Step 1:	Find the _____ of the line by making a slope triangle.	$m =$
Step 2:	Where does the line cross the _____?	$b =$
Step 3:	Plug "m" and "b" into slope intercept form, $y = mx + b$	$y = \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$
Step 4:	Use your graphing calculator to check to see if your equation is correct.	<ul style="list-style-type: none"> • $Y =$ • GRAPH
Ex 2.	Write the slope-intercept form of the equation of the line.	
1)	Find the slope.	$m =$
2)	Find the y-intercept	$b =$
3)	Plug "m" and "b" into slope-intercept form, $y = mx + b$	$Y = \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$

1)



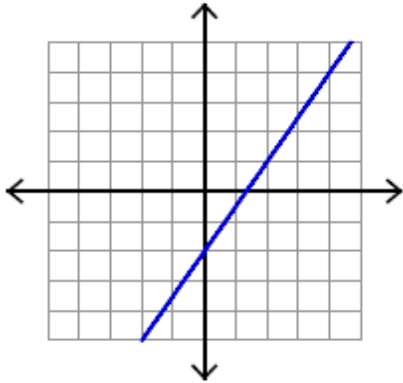
$m = \underline{\hspace{2cm}}$
 $b = \underline{\hspace{2cm}}$
 $y = \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$

2)



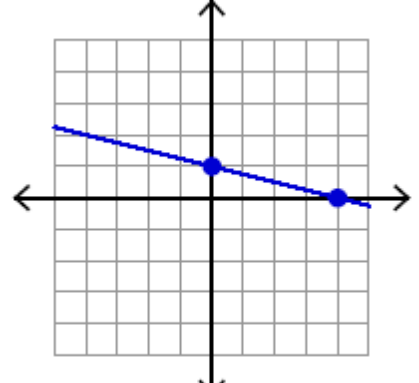
Slope = $\underline{\hspace{2cm}}$
 y-intercept = $\underline{\hspace{2cm}}$
 $y = \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$

3)



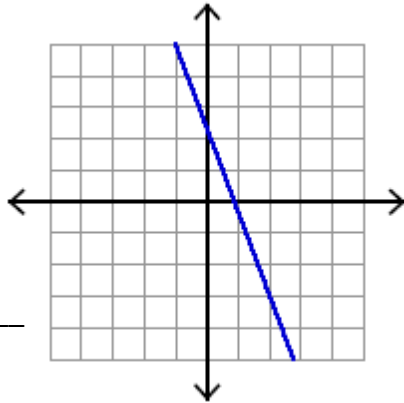
$m = \underline{\hspace{2cm}}$
 $b = \underline{\hspace{2cm}}$
 $y = \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$

4)



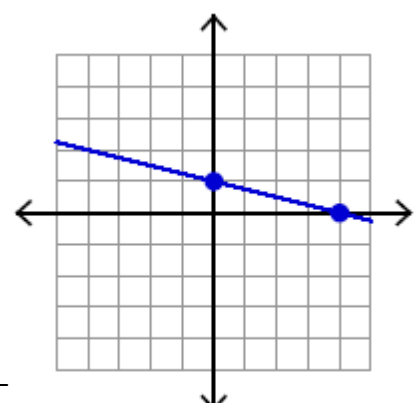
$m = \underline{\hspace{2cm}}$
 $b = \underline{\hspace{2cm}}$
 $y = \underline{\hspace{1cm}}x + \underline{\hspace{1cm}}$

5)



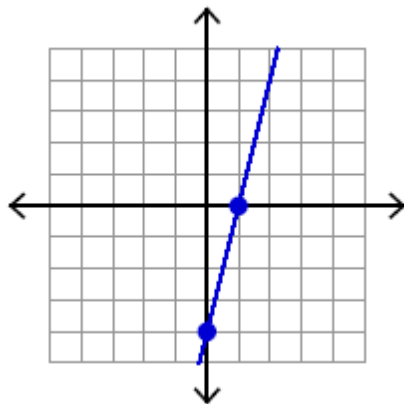
slope = $\underline{\hspace{2cm}}$
 y-intercept = $\underline{\hspace{2cm}}$
 $y = \underline{\hspace{2cm}}$

6)



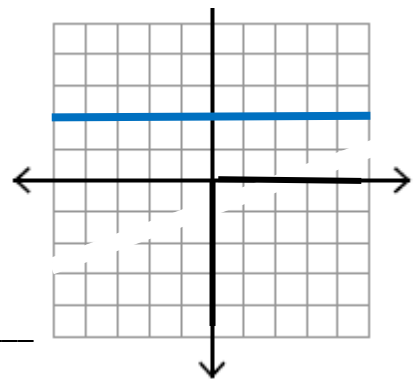
$m = \underline{\hspace{2cm}}$
 $b = \underline{\hspace{2cm}}$
 $y = \underline{\hspace{2cm}}$

7)



$m = \underline{\hspace{2cm}}$
 $b = \underline{\hspace{2cm}}$
 $y = \underline{\hspace{2cm}}$

8)



slope = $\underline{\hspace{2cm}}$
 y-intercept = $\underline{\hspace{2cm}}$
 $y = \underline{\hspace{2cm}}$