What is **slope intercept form**? 1.

What does the *m* represent?

What does the *b* represent?

Define the *y-intercept*.

Find the slope and y-intercept of the graph of each equation.

**2.** 
$$y = 3x - 5$$
  $m = ____ b = ___$  **3.**  $y = -5x + 13$   $m = ___ b = ___$ 

$$y = -5x + 13$$
  $m = -5x + 13$ 

**4.** 
$$y = -x - 1$$
  $m =$ \_\_\_\_  $b =$ \_\_\_\_ **5.**  $y = -6.75x + 8.54$   $m =$ \_\_\_\_  $b =$ \_\_\_\_

**5.** 
$$y = -6.75x + 8.54$$

7. 
$$x = -5$$

Write an equation of a line with the given slope *m* and *y*-intercept *b*.

8. 
$$m = -1, b = 3$$

**9.** 
$$m = 4, b = -2$$

**10.** 
$$m = -5$$
,  $b = -8$ 

**11.** 
$$m = \frac{1}{4}, b = 6$$

**12.** 
$$m = 0, b = -11$$

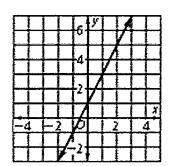
**13.** 
$$m = 10, b = 5$$

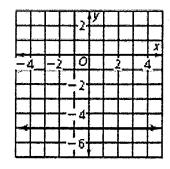
**14.** What is the formula for **slope**?

How do we label our points?

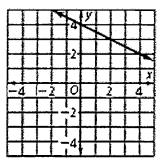
How do you find the slope from a graph?

Find the slope by counting rise over run.





**17.** 
$$m =$$
\_\_\_\_\_



Find the slope by using the slope formula.