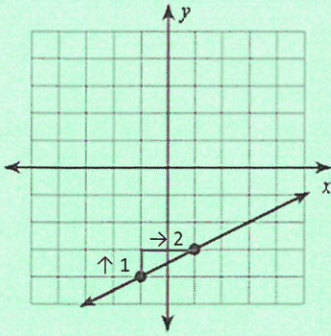
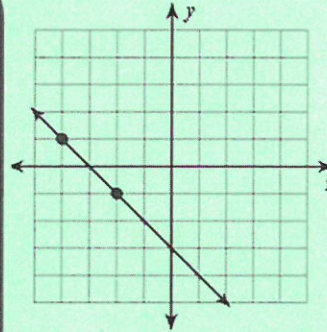


**Objective:** Determine the slope of the line given a graph or a set of ordered pairs.

1.  $m = \frac{1}{2}$



2.  $m = \frac{-2}{2} = \boxed{-1}$



\*slope =  $\frac{\text{rise}}{\text{run}}$

\*slope =  $\frac{\text{change in } y = \Delta y}{\text{change in } x = \Delta x}$

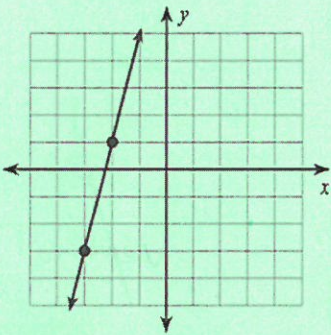
How to find slope from graph:

(start with the point on left and go to the point on the right)

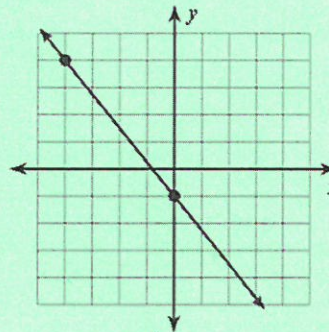
1. count up/down (this will be the numerator -  $\Delta y$ )

2. count right (this will be the denominator -  $\Delta x$ )

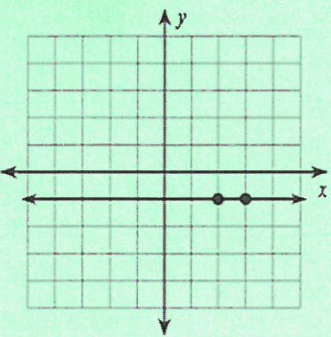
3.  $m = 4$



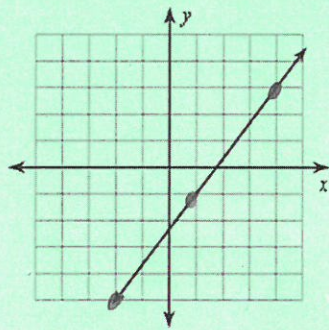
4.  $m = \frac{-5}{4}$



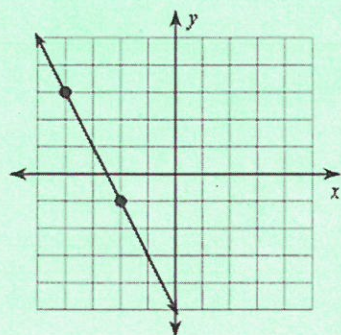
5.  $m = 0$



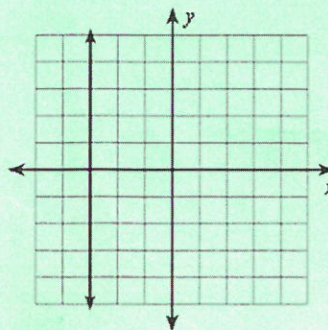
6.  $m = \frac{4}{3}$



7.  $m = \frac{-4}{2} = \boxed{-2}$



8.  $m = \emptyset$



Find the slope of the line between two given points.

9. Example:  $(2, 13)$   $(1, 8)$   
 $x_1 \ y_1 \ x_2 \ y_2$

$$\text{slope} = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\text{slope} = \frac{13 - 8}{2 - 1}$$

$$\text{slope} = \frac{5}{1} = 5$$

1. Decide which ordered pair is going to be #1 and which will be #2, then label your x's and y's

2. Fill the numbers from your ordered pairs into the appropriate spots within the formula

3. Simplify

10. (5, 1) (1, 3)

$$m = \frac{3-1}{1-5} = \frac{2}{-4} = \boxed{-\frac{1}{2}}$$

x	y
5	1
1	3

or  $-4 < \left( \begin{array}{c|c} 5 & 1 \\ 1 & 3 \end{array} \right) + 2$

$$\frac{2}{-4} = \boxed{-\frac{1}{2}}$$

11. (6, 8) (0, -6)

$$\frac{-6-8}{0-6} = \frac{-14}{-6} = \boxed{\frac{7}{3}}$$

12. (7, -4) (7, 8)

$$\frac{8-(-4)}{7-7} = \frac{12}{0} = \phi$$

no slope

13. (-4, 8) (8, -1)

$$\frac{-1-8}{8-(-4)} = \frac{-9}{12} = \boxed{-\frac{3}{4}}$$

14. (6, -2) (-3, 4)

$$\frac{4-(-2)}{-3-6} = \frac{6}{-9} = \boxed{-\frac{2}{3}}$$

15. (16, 9) (-8, 9)

$$\frac{9-9}{-8-16} = \frac{0}{-24} = \boxed{0}$$

16. (3, 4) (-2, 7)

$$\frac{7-4}{-2-3} = \boxed{\frac{3}{-5}}$$