

**Slopes:**

Match each slope with a graph of a line.

\_\_\_\_\_ 1.  $m = \frac{1}{3}$

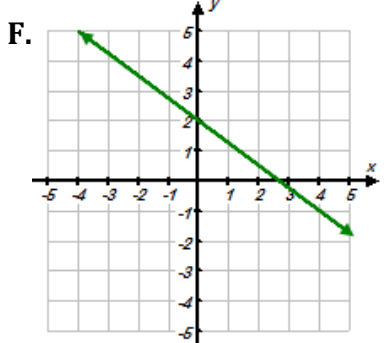
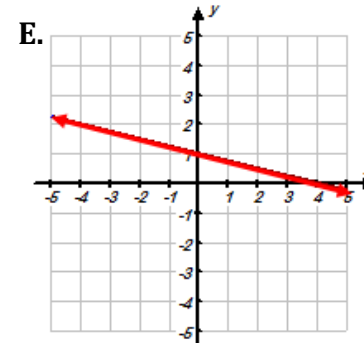
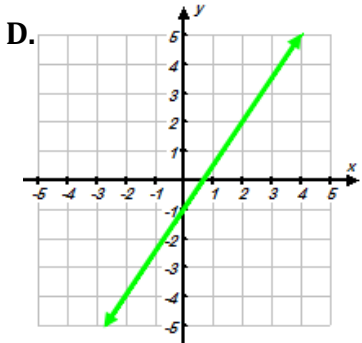
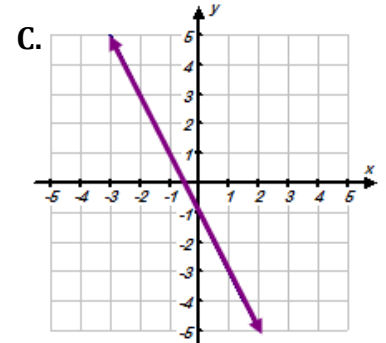
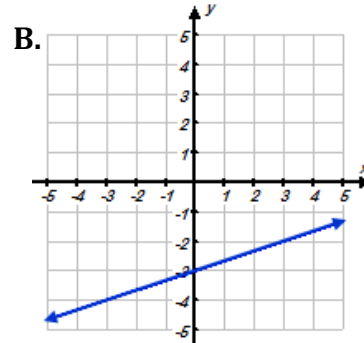
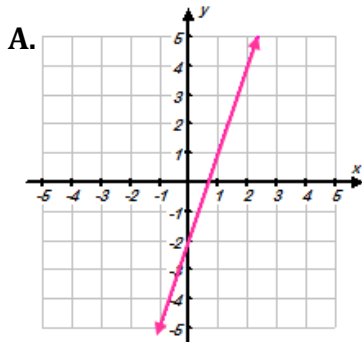
\_\_\_\_\_ 2.  $m = -\frac{3}{4}$

\_\_\_\_\_ 3.  $m = -\frac{1}{4}$

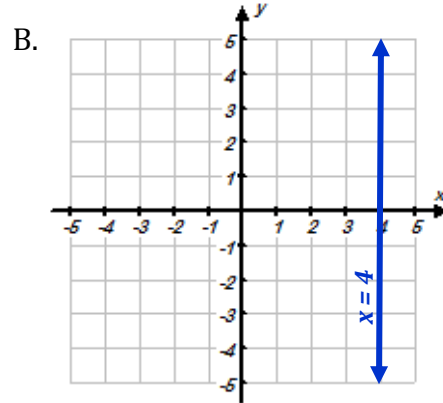
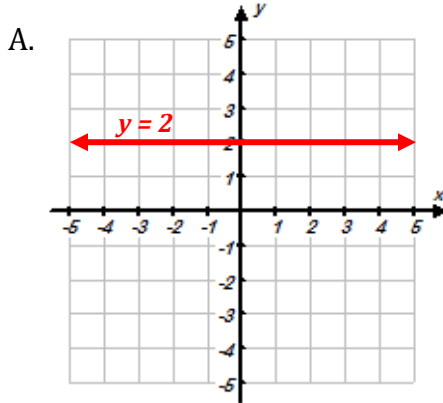
\_\_\_\_\_ 4.  $m = -2$

\_\_\_\_\_ 5.  $m = \frac{3}{2}$

\_\_\_\_\_ 6.  $m = 3$



7. Describe the following slopes.

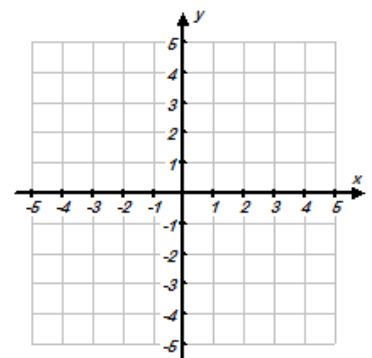
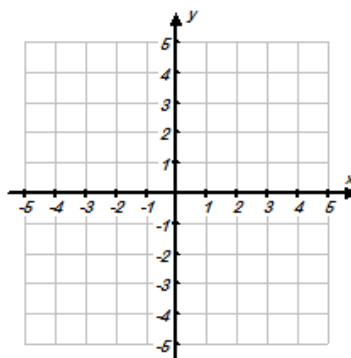
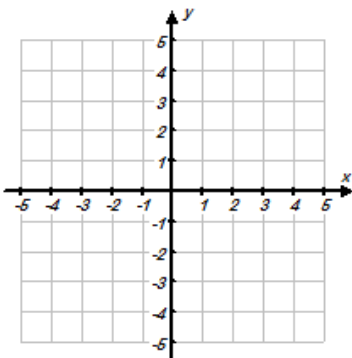


8. Find the slope of a line that passes through the given points.

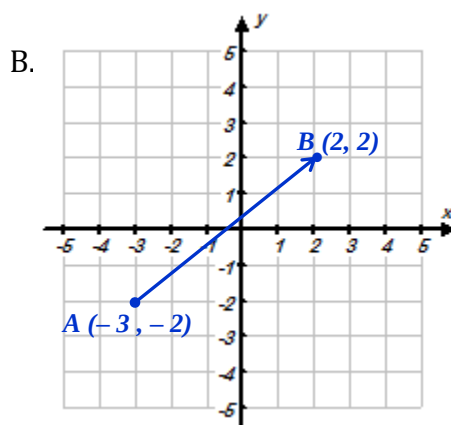
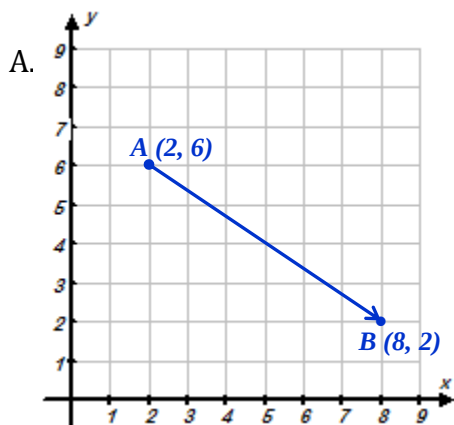
A.  $(-3, 2)$  and  $(-1, -4)$

B. the origin and  $(-1, 4)$

C.  $(4, 2)$  and  $(-3, 2)$



9. A directed line segment is a line segment from one point to another point in the coordinate plane. The segment is described by an ordered pair of the directional change of  $x$  followed by the directional change of  $y$ . Find the components of  $\overrightarrow{AB}$  in each problem below.



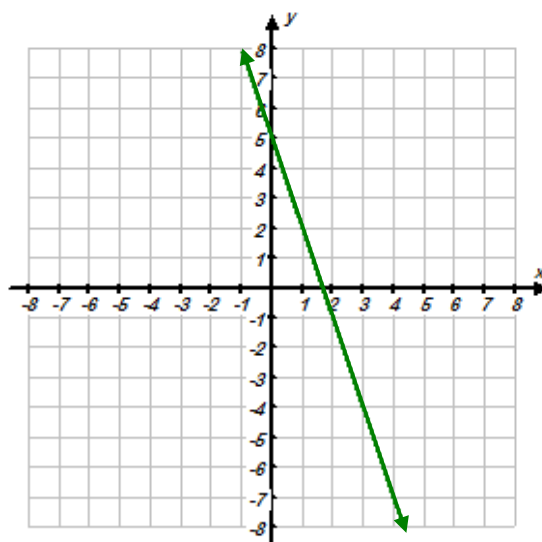
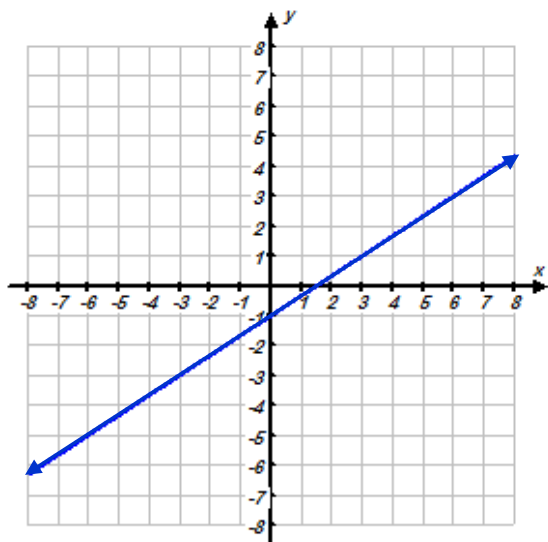
- C. Point A  $(-1, 3)$  &  
Point B  $(5, -2)$

10. Determine if the given point lies on the given line.

A. Line  $m$ :  $y = \frac{1}{2}x - 2$   
Point A:  $(6, 1)$

B. Line  $n$ :  $3y = -2x + 1$   
Point B:  $(5, 3)$

11. Determine the equation of the graphed lines:



12. Determine the **slope** and **y-intercept** of each of the linear equations below.

A.  $y = \frac{2}{5}x - 3$

B.  $3y - 8 = 2x$

C.  $y = 5$

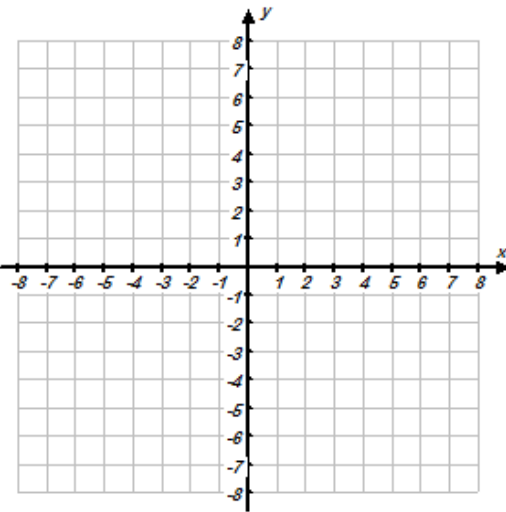
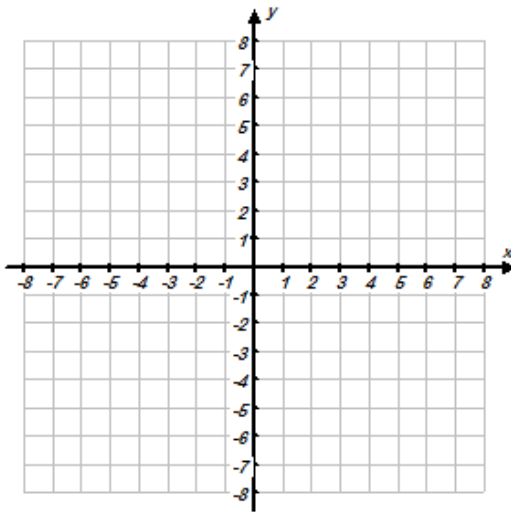
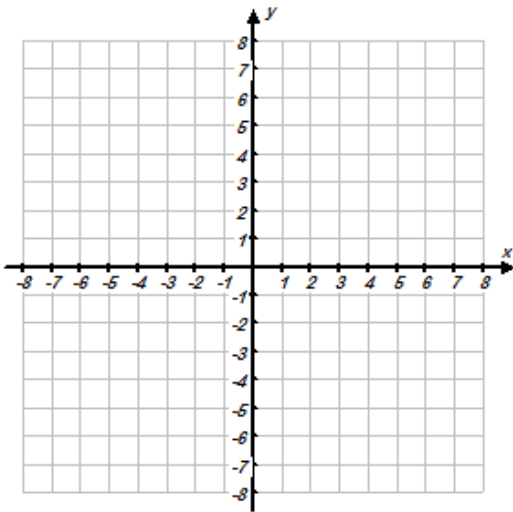
D.  $x = 3$

13. Graph the following lines:

A.  $y = -\frac{3}{2}x - 2$

B.  $2y - 4x = 6$

C.  $y = 5$  and  $x = -4$



14. Given each of the following parameters, determine an equation of each line in slope intercept form.

A. Find the equation of a line with a slope of  $\frac{1}{2}$  and y-intercept of 5

B. Find the equation of a line with a slope of  $\frac{2}{3}$  and passing through the point  $(6, -4)$

C. Find the equation of a line passes through the points  $(4, 2)$  and  $(-8, 5)$