

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Slope

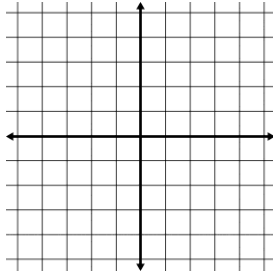
Find the slope of the line that passes through the two points.

Two methods:

1) Plot the two points and find the rise and run.

2) Use  $\frac{y_2 - y_1}{x_2 - x_1}$

Example:  $(4,1)$  and  $(0,-3)$



Example:  $(1,4)$  and  $(3,9)$

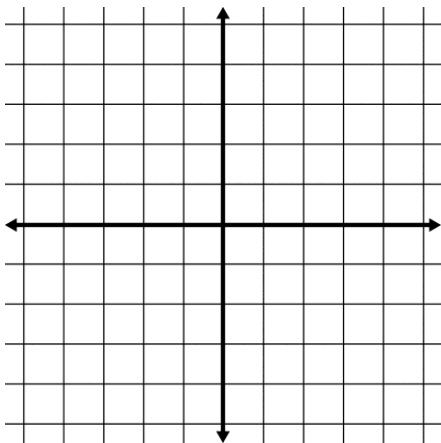
$x_1, y_1$        $x_2, y_2$

$x_1 = 1$        $y_1 = 4$        $x_2 = 3$        $y_2 = 9$

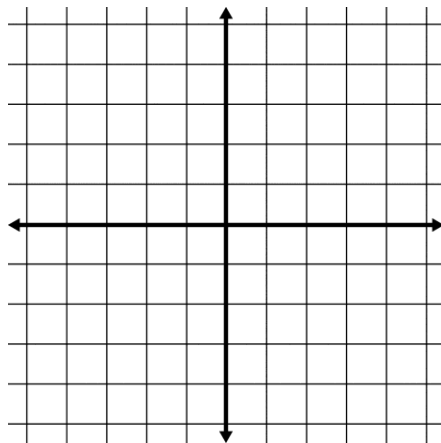
Plug in:  $\frac{9-4}{3-1} = \frac{5}{2}$

Try These using graphing.

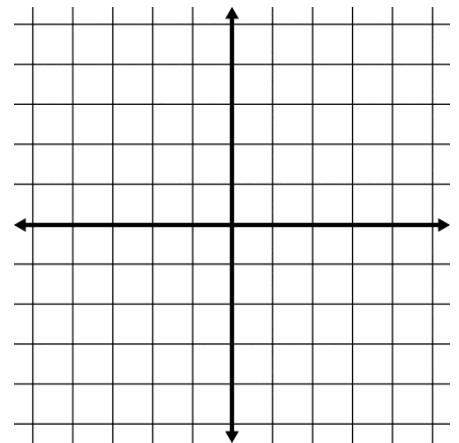
1) Find the slope of the line that passes through  $(3,1)$  and  $(-2,-1)$ .



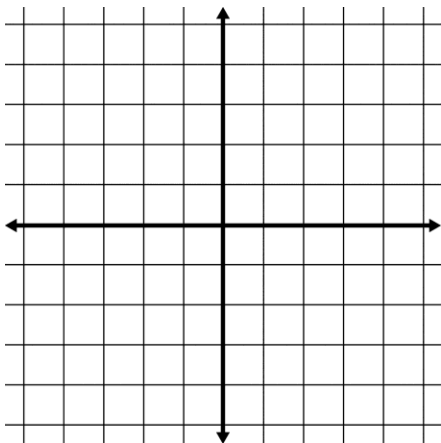
2) Find the slope of the line that passes through  $(2,2)$  and  $(0,-1)$ .



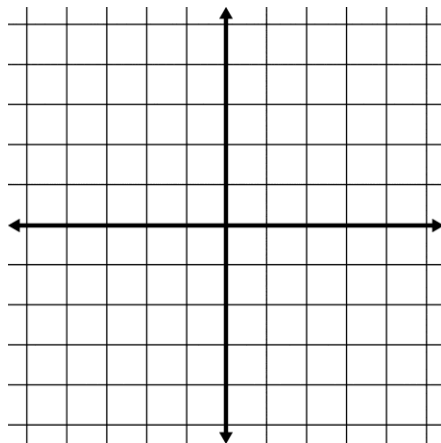
3) Find the slope of the line that passes through  $(5,0)$  and  $(-3,-2)$ .



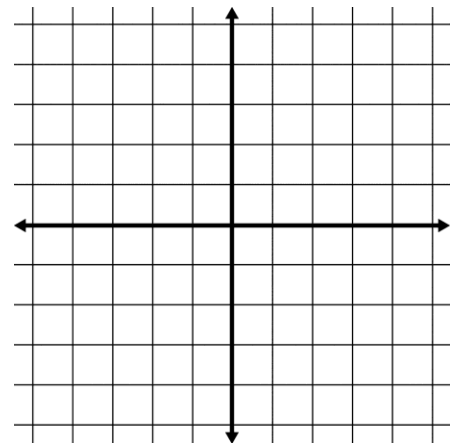
4) Find the slope of the line that passes through  $(1,2)$  and  $(3,5)$ .



5) Find the slope of the line that passes through  $(2,3)$  and  $(-2,1)$ .



6) Find the slope of the line that passes through  $(0,4)$  and  $(1,5)$ .



Try these using  $\frac{y_2 - y_1}{x_2 - x_1}$

7) (2,4) and (3,5)

8) (0,3) and (4,4)

9) (1,6) and (-2,4)

10) (2,0) and (3, -2)

11) (-2,4) and (6, -1)

12) (3,3) and (2,7)

13) (-3, -2) and (-1,1)

14) (1,4) and (-3,3)