

## Warm Up:

If  $f(x) = 7x - 5$ , find the value of the following:

$$f(-2) = 7(-2) - 5 = -19$$

$$f(3) = 7(3) - 5 = 16$$

$$f(0) = 7(0) - 5 = -5$$

Which algebraic expression represents 15 less than  $x$  divided by 9?

1)  $\frac{x}{9} - 15$

2)  $9x - 15$

3)  $15 - \frac{x}{9}$

4)  $15 - 9x$

fraction -15



**SLOPE-**

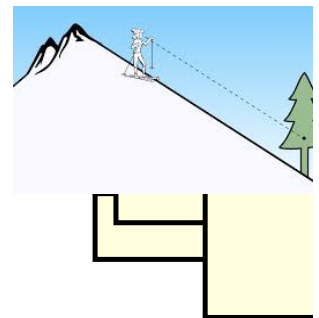
- the way a line moves, aka rate of change

$\frac{\text{change in } y}{\text{change in } x}$





- represented with the letter "m"

change in y

- formula:  $m = \frac{y_2 - y_1}{x_2 - x_1}$



**TYPES OF SLOPE**

			
Positive	Negative	Zero	Undefined

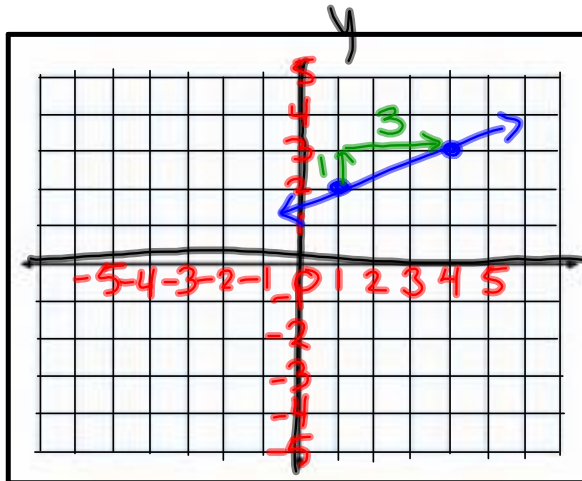
$$\text{slope} = \frac{\text{vertical change}}{\text{horizontal change}} = \frac{\text{rise}}{\text{run}}$$



Let's try it!

Find the slope given the points  $(1, 2)$  and  $(4, 3)$ .

**Plotting and counting** vs. **Formula?**



$$+\frac{1}{3}$$

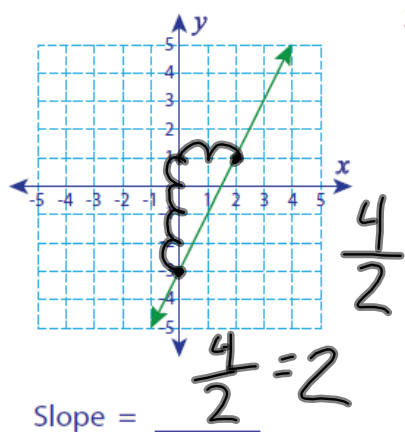
$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{3 - 2}{4 - 1} = \frac{1}{3}$$

## Find the Slope

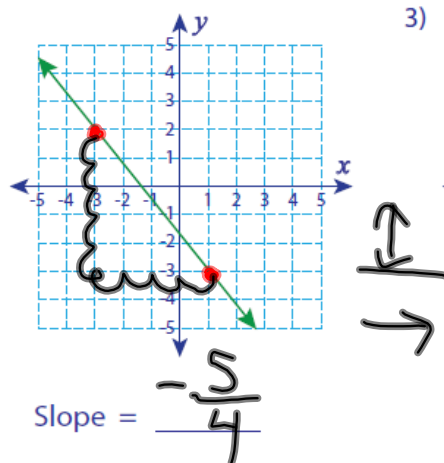
Level 1: S1

Calculate the rise and run to find the slope of each line.

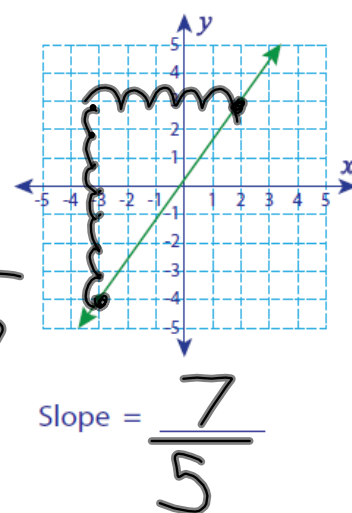
1)



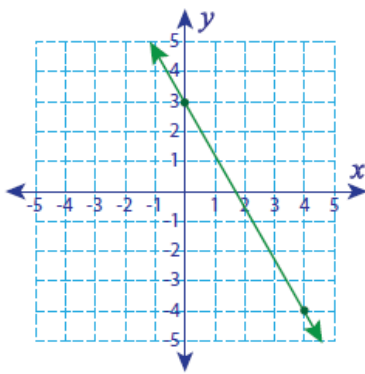
2)



3)

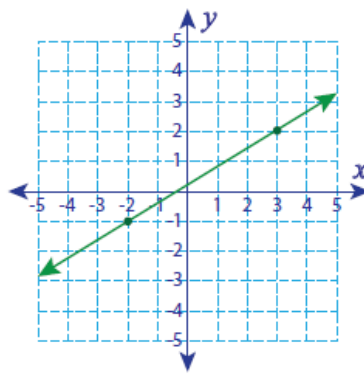


4)



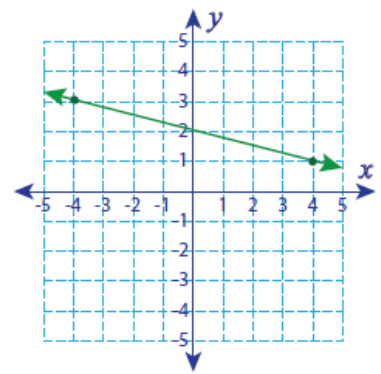
Slope = \_\_\_\_\_

5)



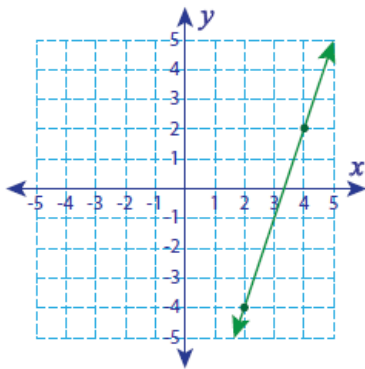
Slope = \_\_\_\_\_

6)



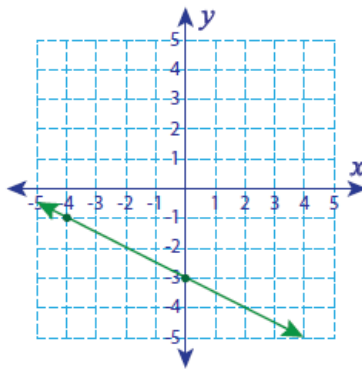
Slope = \_\_\_\_\_

7)



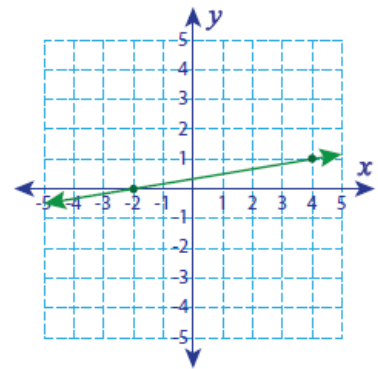
Slope = \_\_\_\_\_

8)



Slope = \_\_\_\_\_

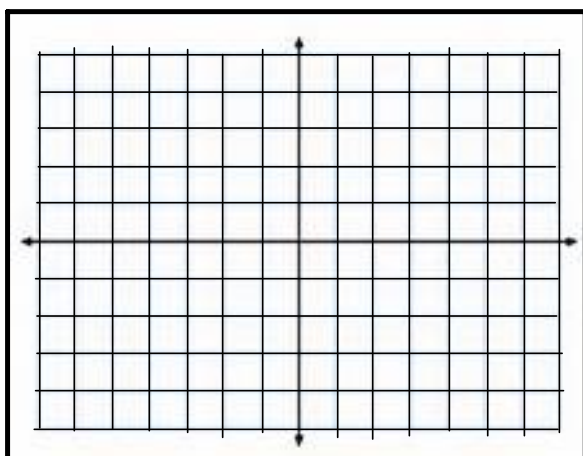
9)



Slope = \_\_\_\_\_

Find the slope given the points  $(-3, 4)$  and  $(4, -5)$ .

**Plotting and counting** vs. **Formula?**



$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

Tear off and complete the exit ticket at the end  
of the packet!!!



Tear off and complete the exit ticket at the end  
of the packet!!!

(handed out)





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

Score: \_\_\_\_/6

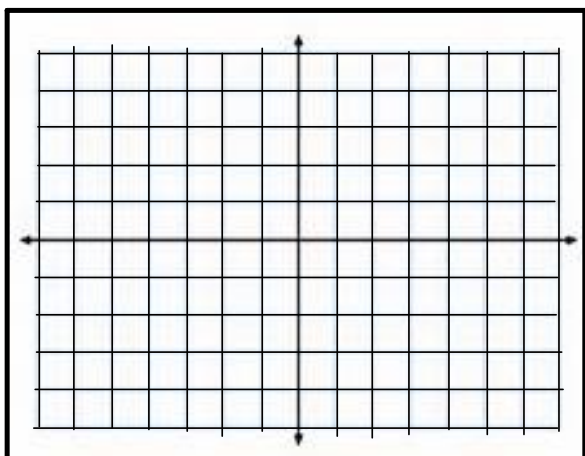


FINDING SLOPE

# EXIT TICKET

\*tear this page off and  
turn it in before you  
leave class today\*

a) Find the slope between the points  $(-4, 2)$  and  $(3, 6)$ . Use of the grid is optional.



b) Find the slope of the line in the graph below.

