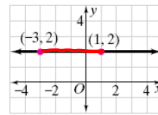


Vertical and Horizontal Lines

Finding Slope for Special Cases

Example 1:

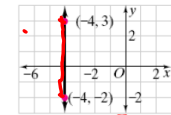


y values were both 2

Slope: $\frac{\text{rise}}{\text{run}} = \frac{0}{4} = \frac{\text{change in } y}{\text{change in } x}$

Slope = \emptyset for all horizontal lines.

Example 2:

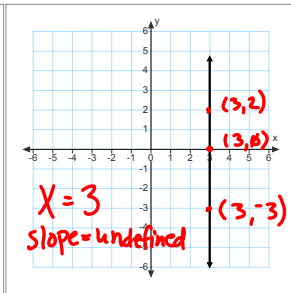
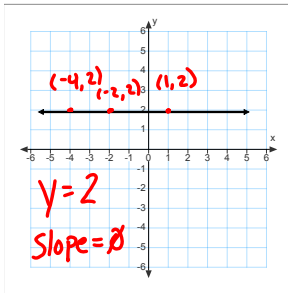


x values were both -4

Slope: $\frac{\text{rise}}{\text{run}} = \frac{5}{0} = \frac{\text{change in } y}{\text{change in } x}$

undefined

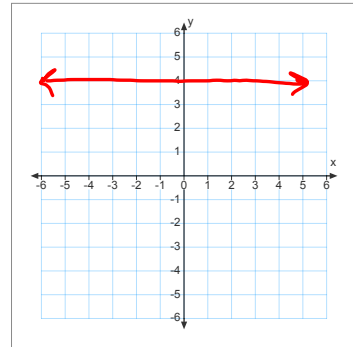
Slope = _____ for all vertical lines.



Find the slope of the lines formed by graphing the ordered pair below. Is the slope positive, negative, zero, or undefined?

(5,4), (-6,4)

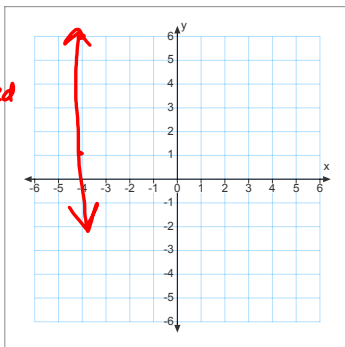
slope = ∅
y = 4



Find the slope of the lines formed by graphing the ordered pair below. Is the slope positive, negative, zero, or undefined?

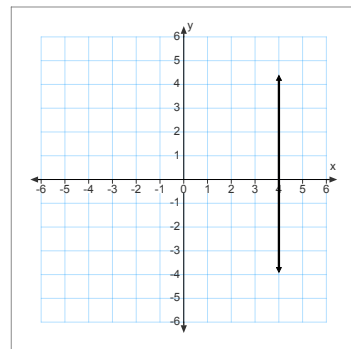
(-4,1), (-4,6)

Slope = undefined
x = -4



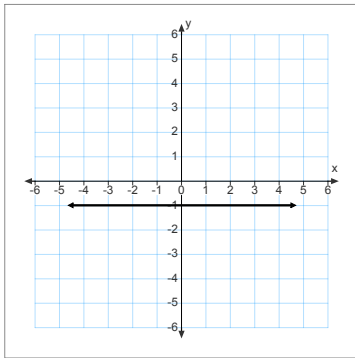
Is the slope of the line on the graph positive, negative, zero, or undefined?

Slope = undefined



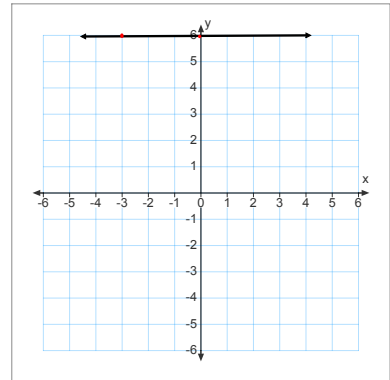
Is the slope of the line on the graph positive, negative, zero, or no slope?

$slope = 0$



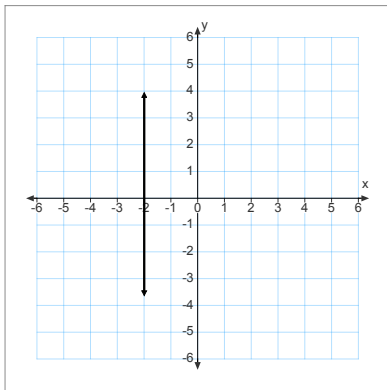
What is the equation of the line below?

$y = 6$

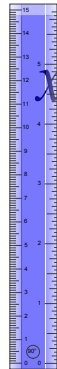


What is the equation of the line below?

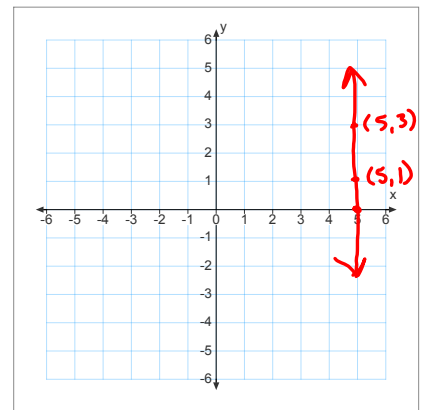
$x = -2$



Draw the line of the equation below.

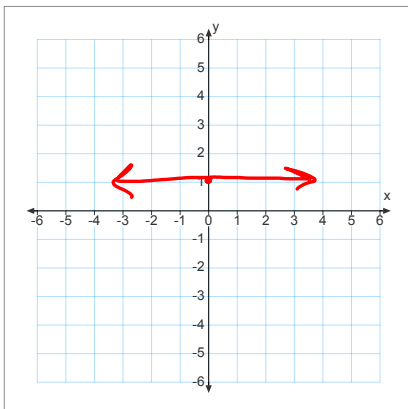
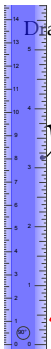


$x = 5$

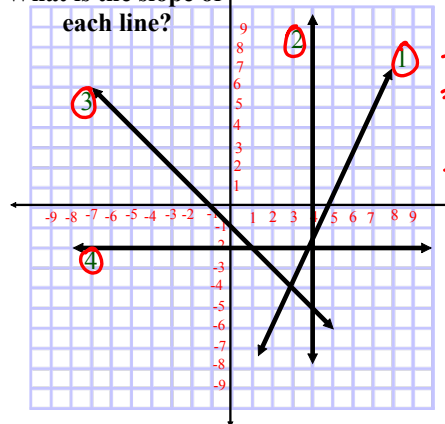


Draw the line of the equation below.

$y = 1$



What is the slope of each line?



- #1 = positive
- #2 = undefined
- #3 = negative
- #4 = 0

Warm up 12/11

Evaluate the following
expression for $x = -2$

$$4x - 3(-2x - 5)$$

$$4(-2) - 3(-2(-2) - 5)$$

$$4(-2) - 3(4 - 5)$$

$$4(-2) - 3(-1)$$

$$-8 - 3(-1)$$

$$-8 + 3$$

$$\textcircled{-5}$$

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