

September 15, 2011

Warm-Up:

Complete the t-chart using $y = \frac{1}{2}x - 3$

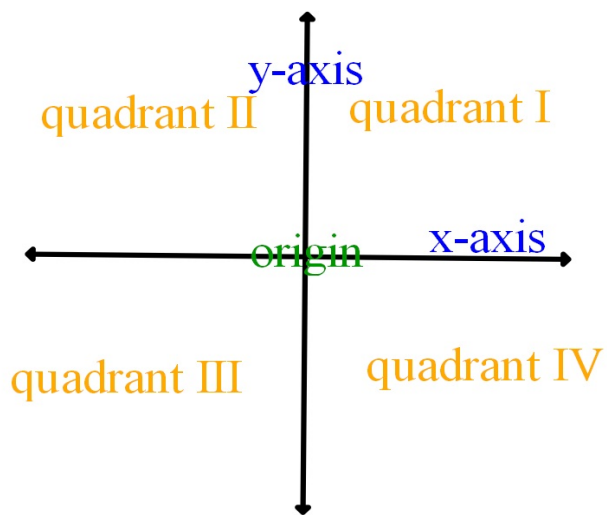
8 pts

-4	$\frac{1}{2}(-4) - 3 = -5$
6	$\frac{1}{2}(6) - 3 = 0$
5	$\frac{1}{2}(5) - 3 = -\frac{1}{2}$
-3	$\frac{1}{2}(-3) - 3 = -4\frac{1}{2}$

9/16

~~9/15~~ - Slope

What is the Cartesian Plane?



Slope

$$y = mx + b$$

$$\frac{\text{rise}}{\text{run}}$$

direction

angle

Can graph it

incline

Steepness

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

$$y - y_1 = m(x - x_1)$$

positive and negative

zero and undefined

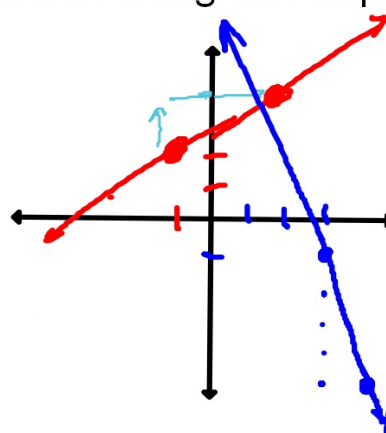
zero

undefined

Sketch the line through the given point with the given slope.

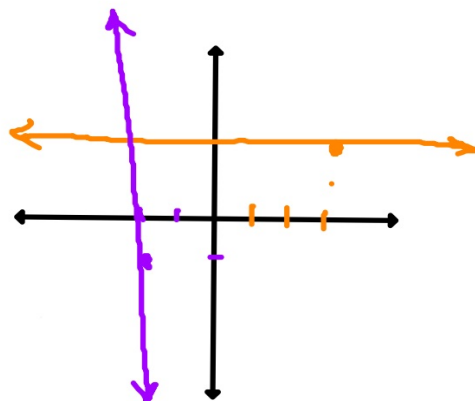
$(-1, 2)$ $m = \frac{1}{2}$ *up
Right*

$(3, -1)$ $m = -\frac{4}{1}$ *down
right*



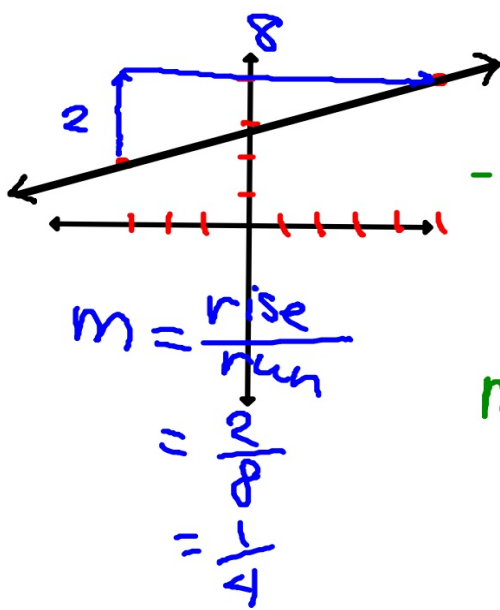
$(3, 2)$ $m = 0$ $\frac{0}{2}$

$(-2, -1)$ m is undefined $\frac{2}{0}$

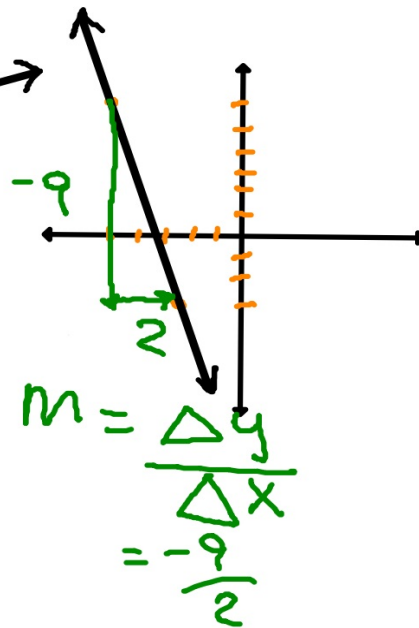


Find the slope of the line between the 2 given points by using a graph.

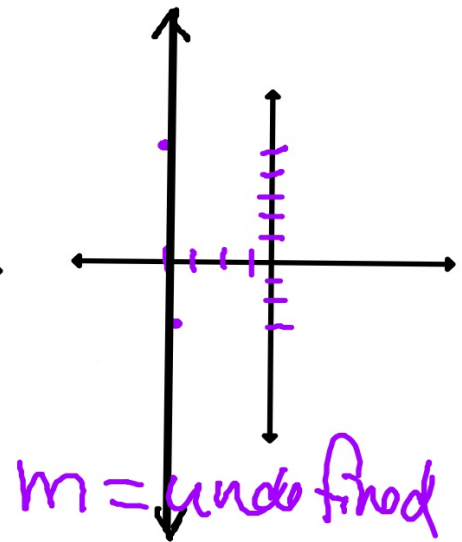
$(-3, 2)$ $(5, 4)$



$(-5, 6)$ $(-3, -3)$



$(-4, 5)$ $(-4, -3)$



Homework:

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#5-36 all
due ~~Monday~~
Tuesday