Please have your homework on your desk. Calculator? Yes!

DATE:

TSW calculate the slope given two points.

QRQ1:

1 Solve $-2(x + 1) \geq 3x + 3$

$-2x - 2 \geq 3x + 3$

$+2x \quad +2x$

$-2 \geq 5x + 3$

$-3 \quad -3$

$\frac{-5}{5} \geq \frac{5x}{5}$

If $-1 \geq x$

then $x \leq -1$

2 Evaluate $-a^2 - b^2 + c$ when $a = -5$, $b = -3$, and $c = -9$

$-(-5)^2 - (-3)^2 + (-9)$

$-(25) - (9) - 9$

$-25 - 9 - 9$

-43

Discuss answers to After Test2 Assignment

Ex1

Find the slope Of the line containing (-5, 3) and (3, -1)

(x_1, y_1) (x_2, y_2)

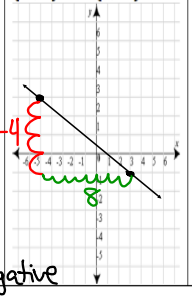
$M = \frac{y_2 - y_1}{x_2 - x_1}$

$= \frac{-1 - 3}{3 - -5}$

$= \frac{-4}{8} = \frac{-1}{2}$

Negative

Plot the points (-5, 3) and (3, -1)



What is the rise/run? How Do you move from one point On the graph to the other point?

$\frac{\text{rise}}{\text{run}} = \frac{-4}{8} = \frac{-1}{2}$

$\downarrow 4 \rightarrow 8$

Ex2

Find the slope Of the line containing (1, -4) and (4, 5)

(x_1, y_1) (x_2, y_2)

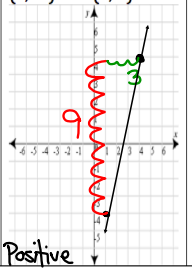
$M = \frac{y_2 - y_1}{x_2 - x_1}$

$= \frac{5 - -4}{4 - 1}$

$= \frac{9}{3} = \frac{3}{1}$

Positive

Plot the points (1, -4) and (4, 5)



What is the rise/run? How Do you move from one point On the graph to the other point?

$\frac{\text{rise}}{\text{run}} = \frac{9}{3} = \frac{3}{1}$

$\uparrow 9 \rightarrow 3$

Ex3

Find the slope Of the line containing (-6, -4) and (-6, 2)

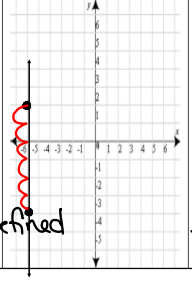
(x_1, y_1) (x_2, y_2)

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

$= \frac{2 - -4}{-6 - -6}$

$= \frac{6}{0}$ undefined

Plot the points (-6, -4) and (-6, 2)



What is the rise/run? How Do you move from one point On the graph to the other point?

$\frac{\text{rise}}{\text{run}} = \frac{6}{0}$

$\uparrow 6 \rightarrow 0$

$\frac{N}{0}$

Ex4

Find the slope Of the line containing (2, -5) and (-3, -5)

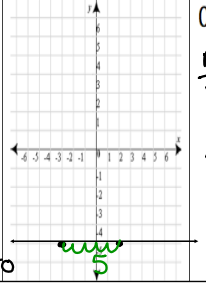
(x_1, y_1) (x_2, y_2)

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

$= \frac{-5 - -5}{-3 - 2}$

$= \frac{0}{-5}$ zero

Plot the points (2, -5) and (-3, -5)



What is the rise/run? How Do you move from one point On the graph to the other point?

$\frac{\text{rise}}{\text{run}} = \frac{0}{-5}$

$\uparrow 0 \rightarrow 5$

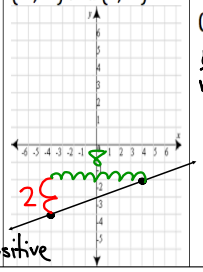
Now You Try #1

Find the slope Of the line containing (-4, -4) and (4, -2)

x_1, y_1 x_2, y_2

$$M = \frac{y_2 - y_1}{x_2 - x_1} = \frac{-2 - -4}{4 - -4} = \frac{2}{8} = \frac{1}{4}$$ Positive

Plot the points (-4, -4) and (4, -2)



What is the rise/run? How Do you move from one point On the graph to the other point?

$\frac{\text{rise}}{\text{run}} = \frac{2}{8} = \frac{1}{4}$

↑ 2 → 8

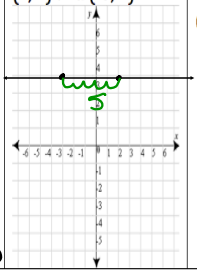
Now You Try #2

Find the slope Of the line containing (2, 4) and (-3, 4)

x_1, y_1 x_2, y_2

$$M = \frac{y_2 - y_1}{x_2 - x_1} = \frac{4 - 4}{-3 - 2} = \frac{0}{-5}$$ zero

Plot the points (2, 4) and (-3, 4)



What is the rise/run? How Do you move from one point On the graph to the other point?

$\frac{\text{rise}}{\text{run}} = \frac{0}{5}$

↑ 0 → 5

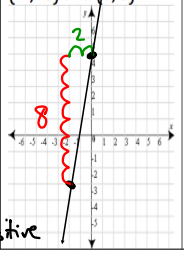
Now You Try#3

Find the slope Of the line containing (-2, -3) and (0, 5)

x_1, y_1 x_2, y_2

$$M = \frac{y_2 - y_1}{x_2 - x_1} = \frac{5 - -3}{0 - -2} = \frac{8}{2} = \frac{4}{1}$$ Positive

Plot the points (-2, -3) and (0, 5)



What is the rise/run? How Do you move from one point On the graph to the other point?

$\frac{\text{rise}}{\text{run}} = \frac{8}{2} = \frac{4}{1}$

↑ 8 → 2

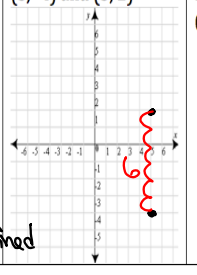
Now You Try #4

Find the slope Of the line containing (5, -4) and (5, 2)

x_1, y_1 x_2, y_2

$$M = \frac{y_2 - y_1}{x_2 - x_1} = \frac{2 - -4}{5 - 5} = \frac{6}{0}$$ undefined

Plot the points (5, -4) and (5, 2)



What is the rise/run? How Do you move from one point On the graph to the other point?

$\frac{\text{rise}}{\text{run}} = \frac{6}{0}$

↑ 6 → 0