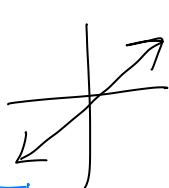
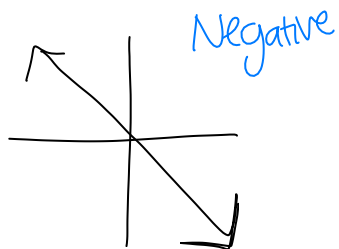


Positive
 x_1, y_1
 $(1, 7)$
 x_2, y_2
 $(2, 10)$

$$\frac{10-7}{2-1} = \boxed{3}$$



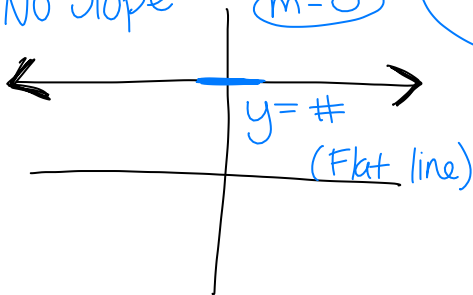
$$\frac{\text{rise}}{\text{run}} = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1}$$



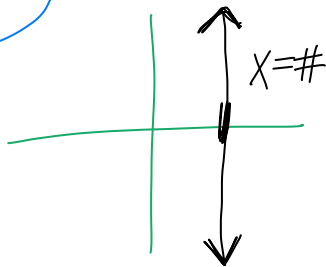
m
Slope

No Slope

$$m = 0$$



Undefined



* Divide by
0 error
Undefined

Compare the two functions below. Determine which function has a "greater rate of change."

Function 1

X	Y
1	2
2	4
3	6
4	8

$m=2$

$>+2$
 $>+2$
 $>+2$

Function 2

$y = mx + b$
 $y = 3x - 4$
 $m=3$

greater Slope
Higher Rate of change

Function 1

$(3, 8)$ and $(4, 2)$

$\frac{2-8}{4-3} = -6$

greater Rate of change

Function 2

$y = -3x + 7$
 $m=-3$

Function 1

X	Y
2	0
4	6
6	12
8	18

$+6$
 $+6$
 $+6$
 $+6$

$\frac{6}{2} = 3$

$m=3$

Function 2

$y = -10x - 4$
 $m=-10$

greater Rate of change

Function 1

$(4, 0)$ and $(2, 10)$

$\frac{10-0}{2-4} = \frac{10}{-2} = -5 = m$

Greater Rate of change

Function 2

