Calculating Slope Practice

Name _____

A Table

$$m = \frac{\Delta y}{\Delta x}$$

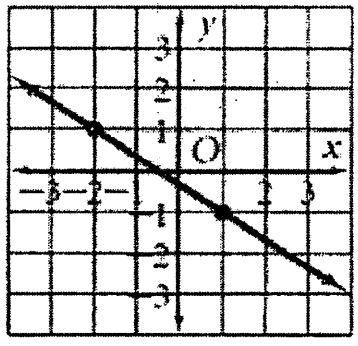
x	y
0	8
2	14
3	17
5	23

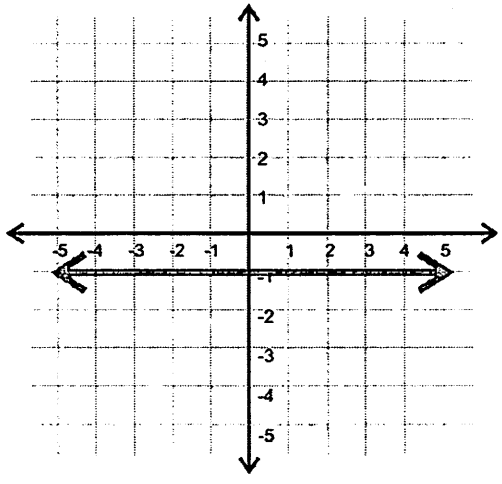
x	0	3	6	9
y	20	11	2	−7

x	2	4	6	8	10	12	14
y	0	1	2	3	4	5	6

A Graph

$$m = \frac{rise}{run}$$





Two Points

$$m = \frac{\Delta y}{\Delta x} \text{ or } \frac{y_2 - y_1}{x_2 - x_1}$$

(-4 , 5) and (-9 , 3)

(0 , -6) and (8 , -2)

(-4 , -6) and (-4 , 9)

(143 , 672) and (140 , 660)

Calculating Slope Practice

Name Key

A Table

$$m = \frac{\Delta y}{\Delta x}$$

x	y
0	8
2	14
3	17
5	23

+2, +1, +2 ; +6, +3, +6 ; $\frac{\Delta y}{\Delta x}$; $\frac{6}{2} = 3$; $\frac{3}{1} = 3$; $\frac{6}{2} = 3$

$m = 3$

x	0	3	6	9
y	20	11	2	−7

+3 +3 +3 ; −9 −9 −9

$m = \frac{-9}{3} = -3$

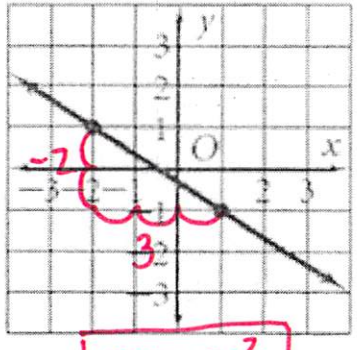
x	2	4	6	8	10	12	14
y	0	1	2	3	4	5	6

+2 +2 +2 +2 +2 +2 ; +1 +1 +1 +1 +1 +1

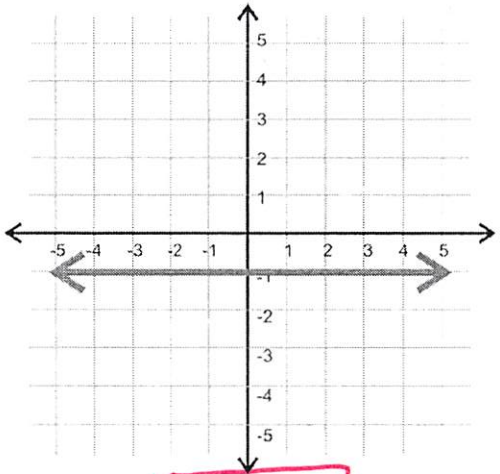
$m = \frac{1}{2}$

A Graph

$$m = \frac{rise}{run}$$



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



$m = 0$

Two Points

$$m = \frac{\Delta y}{\Delta x} \text{ or } \frac{y_2 - y_1}{x_2 - x_1}$$

x_1 y_1 x_2 y_2

(-4 , 5) and (-9 , 3)

$$m = \frac{3-5}{-9-(-4)} = \frac{-2}{-5} = \frac{2}{5}$$

x_1 y_1 x_2 y_2

(0 , -6) and (8 , -2)

$$m = \frac{-2-(-6)}{8-0} = \frac{4}{8} = \frac{1}{2}$$

x_1 y_1 x_2 y_2

(-4 , -6) and (-4 , 9)

$$m = \frac{9-(-6)}{-4-(-4)} = \frac{15}{0} \rightarrow \text{undefined}$$

x_1 y_1 x_2 y_2

(143 , 672) and (140 , 660)

$$m = \frac{660-672}{140-143} = \frac{-12}{-3} = 4$$