Name: _____ Period: _____ Date: _____

Rate of Change and Slope Assignment

Determine whether the rate of change is constant for each data set. If yes, identify the rate of change both numerically and in words.

1. Football Game's Stats

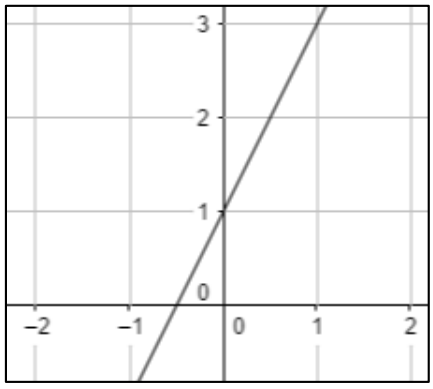
Game	Goals
1	3
2	6
3	9

2. Distance Covered

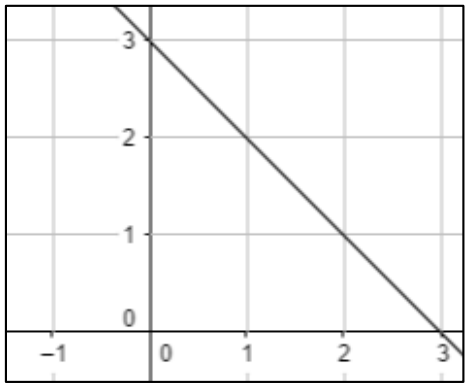
Hours	Distance
1	50
2	150
3	80

Find the slope of each line given below.

1.



2.

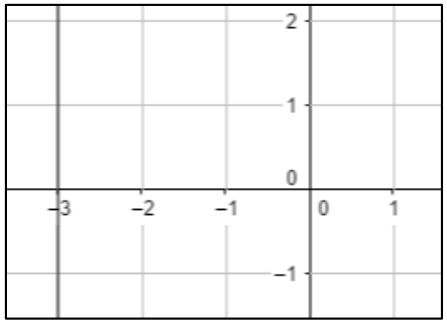


Name: _____ Period: _____ Date: _____

Rate of Change and Slope Assignment

3.

4.



Find the slope of the line passing through the points given below.

1. (2,1) and (3,3)

2. (-1,-4) and (0,-7)

3. (1,0) and (-4,2)

4. (8,-4) and (-6,-3)

Name: _____ Period: _____ Date: _____

Rate of Change and Slope Assignment

Determine whether the rate of change is constant for each data set. If yes, identify the rate of change both numerically and in words.

1. Football Game's Stats

Game	Goals
1	3
2	6
3	9

Rate of change is constant.

Numerically: $\frac{6-3}{2-1} = 3$

In Words: 3 goals per games played.

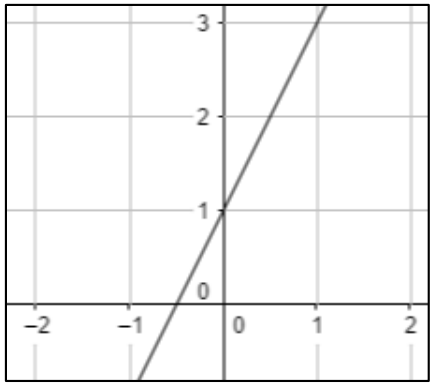
2. Distance Covered

Hours	Distance
1	50
2	150
3	80

Rate of change is not constant.

Find the slope of each line given below.

1.

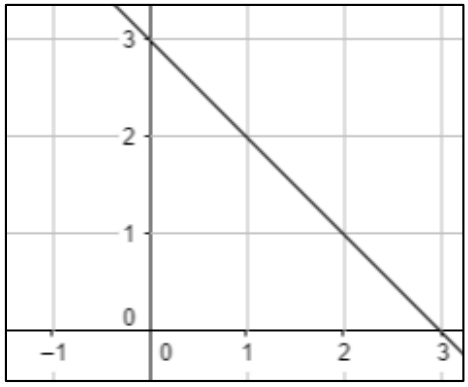


$Slope = \frac{rise}{run}$

$rise = 2\,,\ run = 1$

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

2.



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

$rise = -1\,,\ run = 1$

$Slope = \frac{-1}{1} = -1$

Name: _____ Period: _____ Date: _____

Rate of Change and Slope Assignment

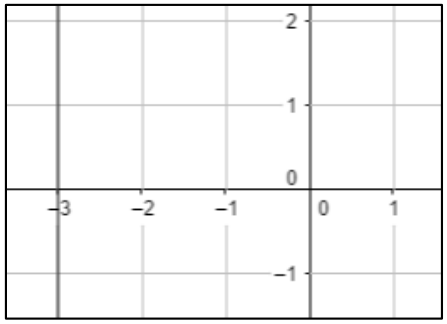
3.

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

$$rise = 0\,,\ run = 1$$

$$Slope = \frac{0}{1} = 0$$

4.



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

$$rise = 1\,,\ run = 0$$

$$Slope = \frac{1}{0} = undefined$$

Find the slope of the line passing through the points given below.

1. (2,1) and (3,3)

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

$$Slope\ m = \frac{3-1}{3-2}$$

$$Slope\ m = 2$$

2. (-1,-4) and (0,-7)

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

$$Slope\ m = \frac{-7-(-4)}{0-(-1)}$$

$$Slope\ m = -3$$

3. (1,0) and (-4,2)

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

$$Slope\ m = \frac{2-0}{-4-1}$$

$$Slope\ m = -\frac{2}{5}$$

4. (8,-4) and (-6,-3)

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

$$Slope\ m = \frac{-3-(-4)}{-6-8}$$

$$Slope\ m = -\frac{1}{14}$$