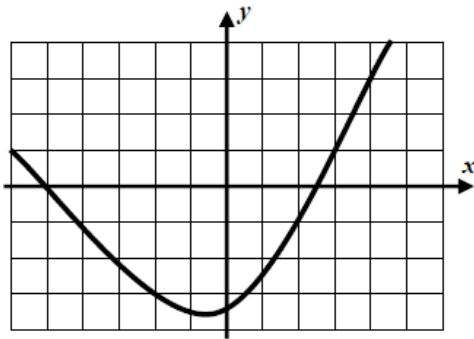


Name: _____
 Date: _____
 Class: _____

Algebra
 Unit 4
 HW 4-5

1)



What is the average rate of change between $x = -6$ and $x = 3$?

What is the average rate of change between $x = -6$ and $x = -1$?

2) Using the following table which represents the number of points scored in each quarter of a basketball game, find the average rate of points per minute for the entire game and compare it to the 1st half and 2nd half.

t	$f(t)$
0	0
8	30
16	48
24	55
32	64

3) Find the average rate of change between $x = -5$ and $x = -2$ for this function:

$f(x) = 2x - 5$. What is the average rate of change between $x = 6$ and $x = 10$.

Does the average rate of change vary for this function? Why or Why Not?

4)

x	$f(x)$
-3	7
0	-2
1	3
4	-8

Which has a larger average rate of change?

a) $x = -3$ to $x = 1$

b) $x = 0$ to $x = 4$

5) Sketch a graph of the following function: $g(x) = -x^2 - 2x$ on the interval $-3 \leq x \leq 3$

6) During which interval of the graph in #5 is the function increasing?

7) Does the function in #5 have an absolute maximum or minimum? If so what is its value?

8) What is the average rate of change between $x = -2$ and $x = -4$ for the function $f(x) = 9 - x^2$.