Homework 4.6

Name_____

Date_____ Per_____

1. Find the rate of change and the rule:

a)

X	
0	10
1	11
2	12
3	13
4	14
5	15

Rate of change:

Initial value:

Function:

b)

X	y
0	4
2	5
4	6
6	7
8	8
10	9

Rate of change:

Initial value:

Function:

c)

X	Y
1	20
2	18
3	16
4	14

Rate of change:

Initial value:

Function:

d)

X	Y
1	1
2	3
3	5

Rate of change:

Initial value:

Function:

2. Find the domain:

a)

X	Y
1	1
2	3
3	3

b)

X	Y
-1	1
2	3
-1	4

c) $y = 2x - 1$

d) $y = -3x$

e) $y = \frac{2}{x}$

f) $y = \frac{1}{x-1}$

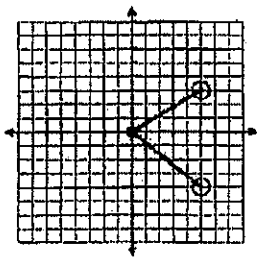
Find the domain (cont)

g) $y = \frac{1}{2}x - 3$

h) $y = \frac{2}{3x}$

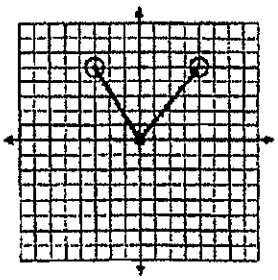
i)

Domain:



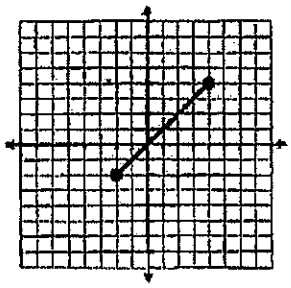
j)

Domain:



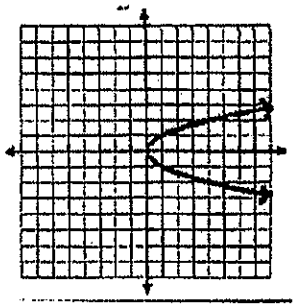
k)

Domain:



l)

Domain:



3. Eva biked 100 miles in 5 hours. Find the average rate of change in miles per hour.

4. If Daniel's ticket cost $300 for a 150-mile flight, find how much he is paying in dollars per mile.

5. The average amount for room, board, and tuition at a public four-year college was $17,447 in 2006 and $21,189 in 2010. Find the average rate at which room, board, and tuition are increasing (money per year)

6. At 2:00 Brandon rented a mountain bike from Slickrock Cycles. He returned the bike at 5:00, after cycling 18 mi. Brandon paid $24 for the rental.

a) Find Brandon's average speed in miles per hour.

b) Find the rental rate, in dollars per hour.