Sec I – Unit 8 Linear vs Exp Name_____ ID: 1

Assignment: Day 4 Lin Vs Exp, Four Rep. Date_____Period_____

1. Evaluate using $f(x) = -3x + 5$ and $g(x) = 8\left(\frac{1}{2}\right)^x$

a) $f(-1)$ b) $g(-1)$ c) $\frac{f(-1)}{g(-1)}$

d) $f(2)$ e) $g(2)$ f) $f(2) + g(2)$

Directions: In each of the following problems, you are given one of the representations of a linear function. Complete the remaining 3 representations and answer the questions.

1.

Context

There are 500 seals together in the ocean. A shark comes along and eats half the seals in a week. The next week he eats half of the remaining seals and so forth each week.

Table

0	
1	
2	
3	
4	
5	

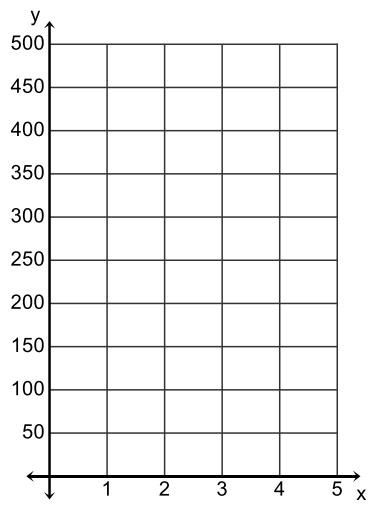
Questions

a) discrete or continuous

b) domain

c) range

Graph



Starting Point (*a*):

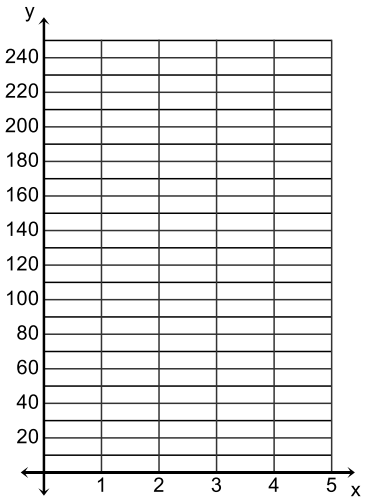
Factor of Change (*b*):

Equation:

d) What is the value at $f(12)$?

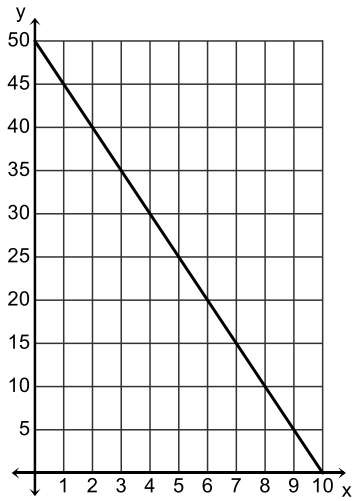
e) What is the value at $f(20)$?

3.

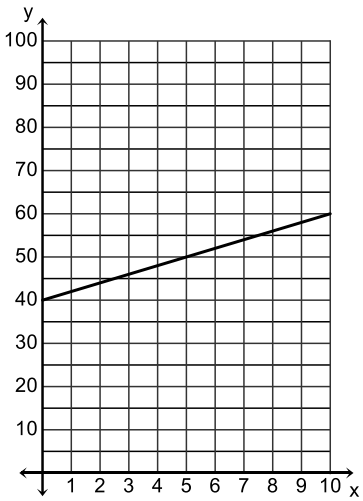
Context	Table	Questions
		a) discrete or continuous b) domain c) range
Graph  	Starting Point (*a*): 2 Factor of Change (*b*): 3 Equation: $f(x) = 2 \cdot 3^x$	d) What is the value at $f(8)$? e) What is the value at $f(11)$?

0		
1		
2		
3		
4		
5		

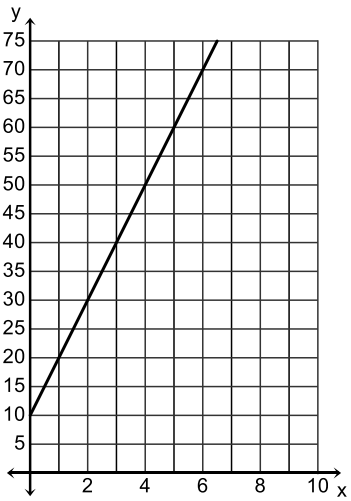
4. Find the slope and y-intercept of each line and then write the equation.



a)



b)



c)