Name_____ Sequences HW Day 2

1) Arithmetic Sequences grow like _____ functions.

2) Geometric Sequences grow like _____ functions.

Find the recursive rule for the sequence using function notation.

3) 4, 7, 10, 13…

4) 8, 16, 32, 64, …

Find the first four terms based on the recursive rule.

5) $a_1 = 5 \quad a_{n+1} = a_n \cdot (-2)$

6) $f(1) = 10 \quad f(n) = f(n-1) + 4$

Find the indicated term of the sequence.

7) a_6 if $a_1 = 3 \quad a_n = a_{n-1} + 1.5$

8) $f(6)$ if $f(1) = 3 \quad f(n) = 2 \cdot f(n-1) + 5$

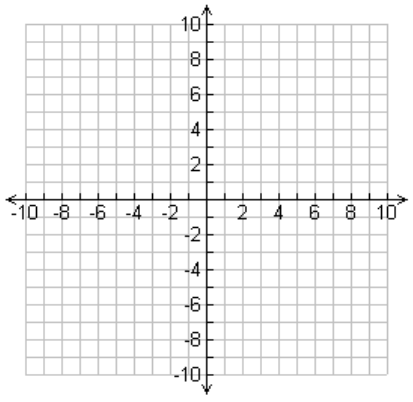
Exam Review: Functions

9) Does this table describe a function? Why or why not?

x	1	4	5	1
y	13	12	4	5

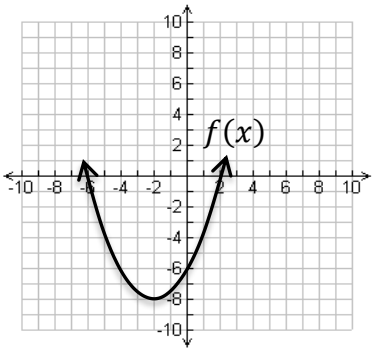
10) Graph: $b(x) = x^2 - 3$.

x	b(x)
-3	
-2	
-1	
0	
1	
2	
3	



Domain :
Range:
Interval of Increasing:
Interval of Decreasing:

11) Which is greater, $f(-2)$ or $g(-2)$?



$g(x) = \left|\frac{1}{2}x - 3\right| + 2$