Name _____   Date_____

Sequences as Functions

If possible, list the next three terms for each sequence and describe how each new term was generated.

1) 1, 2, 3, 4, 5, _____, _____, _____   Rule: _____

2) 2,4,6,8,10, _____, _____, _____   Rule: _____

3) $-7,-14,-21,-28$, _____, _____, _____   Rule: _____

4) 1,−4,16,−64, _____, _____, _____   Rule: _____

5) 1, 5, 2, 4, -1, _____, _____, _____   Rule: _____

6) $1, \dfrac{1}{2}, \dfrac{1}{4}, \dfrac{1}{8}$, _____, _____, _____   Rule: _____

7) 1, 1, 2, 3, 5, 8, _____, _____, _____   Rule: _____

Use the function to write the first five terms of the sequence.

8) $f(n) = 3n - 2$

n					
f(n)					

9) $f(n) = \dfrac{n}{2}$

n					
f(n)					

Write the function that represents the *nth* term of the sequence.

10) 1,4,9,16,…

n	1	2	3	4	…	n
How we got from n to f(n):						
f(n)	1	4	9	16	…	

f(n) =

11) 3,6,9,12,…

n	1	2	3	4	…	n
How we got from n to f(n):						
f(n)	3	6	9	12	…	

f(n) =