

Name: _____ Period: _____

Score:
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HW 3-4 HONORS: Arithmetic, Geometric, Or Neither

For each problem.

- a) Determine if it is Arithmetic, Geometric, or Neither
If it is Arithmetic or Geometric then,
- b) Write a recursive equation
- c) Write an explicit equation

1.) $60, 15, \frac{15}{4}, \dots$

2.) $-187, -201, -215 \dots$

3.) $20, 4, \frac{4}{5}, \dots$

4.

x	f(x)
2	12
3	18
4	24

5.

x	f(x)
-4	5
-3	20
-2	80

6.

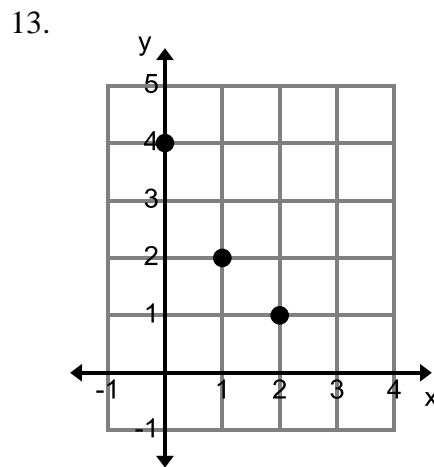
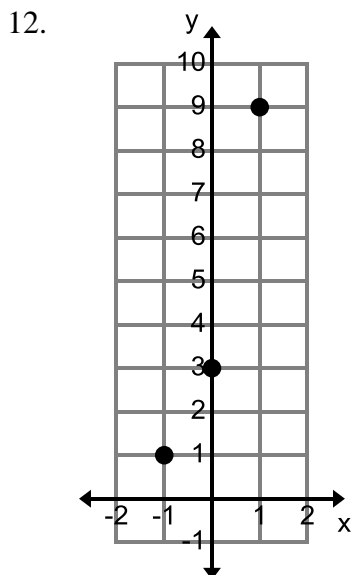
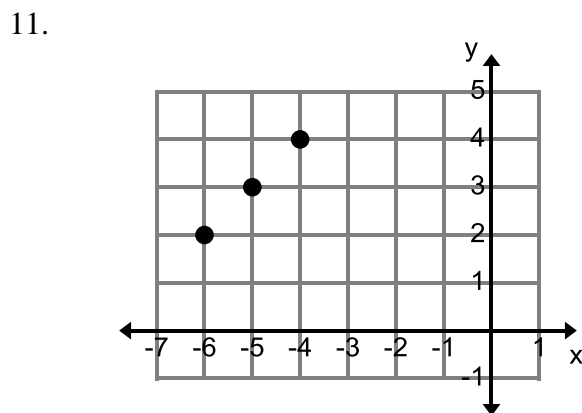
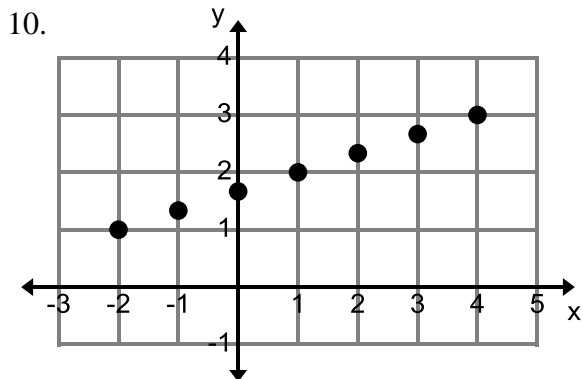
x	f(x)
-1	-18
0	-11
1	-4

7.) $-5, -4, -3, \dots$

8.) $14, 7, 3\frac{1}{2}, \dots$

9.

x	f(x)
5	11
6	33
7	55



For questions #14-21: Use the recursive equation to find the requested values.

14) $f(1) = 7$ $f(x) = f(x-1) + 9$

$f(0) =$

$f(1) =$

$f(2) =$

$f(3) =$

$f(4) =$

$f(5) =$

15) $f(1) = 2$ $f(x) = f(x-1) \cdot 7$

$f(0) =$

$f(1) =$

$f(2) =$

$f(3) =$

$f(4) =$

$f(5) =$

16) $f(3) = 2$ $f(x) = f(x-1) - 7$

$f(1) =$

$f(2) =$

$f(3) =$

$f(4) =$

$f(5) =$

$f(6) =$

17) $f(2) = 12$ $f(x) = 2 \cdot f(x-1)$

$f(1) =$

$f(2) =$

$f(3) =$

$f(4) =$

$f(5) =$

$f(6) =$

18) $f(1) = 3$ & $f(2) = 5$ $f(x) = 2 \cdot f(x-2)$

$f(0) =$

$f(1) =$

$f(2) =$

$f(3) =$

$f(4) =$

$f(5) =$

19) $f(1) = 8$ $f(x) = 2 \cdot f(x-1) + 6$

$f(1) =$

$f(2) =$

$f(3) =$

$f(4) =$

$f(5) =$

$f(6) =$

20) $f(1) = 1$ & $f(2) = 1$ $f(x) = f(x-1) + f(x-2)$ 21) $f(1) = 2$ $f(x) = 3 \cdot f(x-1) + 4$

$f(1) =$

$f(2) =$

$f(3) =$

$f(4) =$

$f(5) =$

$f(6) =$

$f(1) =$

$f(2) =$

$f(3) =$

$f(4) =$

$f(5) =$

$f(6) =$