

Name: _____ Date: _____ Period: _____ Score: _____

Sequences #3 Assignment

Evaluate if $a = 2$, $b = 3$, $c = -1$

1. $4(3)^{a-1}$

2. $7(2)^{b-1}$

3. ab^c

4. $a^{(4-b)}$

Remember these sequences from our first assignment? You have already written recursive formulas for each one. Now **write an explicit formula for each sequence.**

5. 55, 57, 59, 61, . . .

6. 4, 12, 36, 108, . . .

7. 16, 8, 4, 2, . . .

8. -20, -26, -32, -38, . . .

9.

Term	1st	2nd	3rd	4th	5th
Value	66	50	34	18	2

10.

Term	1st	2nd	3rd	4th	5th
Value	160	80	40	20	10

11.

Term #	1	2	3	4	5	nth term
Value	4	12	36	108	324	

12. Write the first five terms of the sequence whose explicit formula is $f(x) = 5(3)^{x-1}$

13. Write the first five terms of the sequence whose explicit formula is $f(x) = -47 + 8(x - 1)$

14. Write the first five terms of the sequence whose explicit formula is $f(x) = 9(2)^{x-1}$

15. Write the first five terms of the sequence whose explicit formula is $f(x) = 9 + 2(x - 1)$

16. Write the first five terms of the sequence whose explicit formula is $f(x) = -6(3)^{x-1}$

17. Write the first five terms of the sequence whose explicit formula is $f(x) = -6 + 3(x - 1)$

18. Which sequences in this assignment are arithmetic? (write the question numbers)

19. Which sequences in this assignment are geometric? (write the question numbers)