

**Utilizing the Explicit Formula – Day 2**  
Unit 7: Representations of Exponential Relations

For each of the following find the explicit formula and...

- A. Identify the next three terms
- B. Find the term named in the problem
- C. Find the 8<sup>th</sup> term.

1. $1.5, -6, 24, -96, \dots$ Find $a_{10}$	2. $3, -6, 12, -24, \dots$ Find $a_{12}$
3. $-2, -8, -32, -128, \dots$ Find $a_{10}$	4. $64, 32, 16, 8, \dots$ Find $a_{12}$
5. $-\frac{9}{4}, -\frac{3}{2}, -1, -\frac{2}{3}, \dots$ Find $a_{11}$	6. $-40, -20, -10, -5, \dots$ Find $a_{11}$
7. $-2, -10, -50, -250, \dots$ Find $a_9$	8. $1, 3, 9, 27, \dots$ Find $a_{11}$
9. $2, -4, 8, -16, \dots$ Find $a_{11}$	10. $-3, -9, -27, -81, \dots$ Find $a_9$

11.  $4, -12, 36, -108, \dots$   
Find  $a_{10}$

12.  $5, -\frac{5}{3}, \frac{5}{9}, -\frac{5}{27}, \dots$   
Find  $a_{12}$

13.  $-4, 2, -1, \frac{1}{2}, \dots$   
Find  $a_{10}$

14.  $-\frac{1}{4}, -\frac{1}{8}, -\frac{1}{16}, -\frac{1}{32}, \dots$   
Find  $a_{11}$

15.  $1, 2, 4, 8, \dots$   
Find  $a_{10}$

16.  $-3, 9, -27, 81, \dots$   
Find  $a_9$

17.  $-4, -\frac{4}{3}, -\frac{4}{9}, -\frac{4}{27}, \dots$   
Find  $a_{10}$

18.  $-4, -12, -36, -108, \dots$   
Find  $a_{10}$

19.  $-4, 12, -36, 108, \dots$   
Find  $a_{12}$

20.  $-3, -12, -48, -192, \dots$   
Find  $a_{10}$