

**Utilizing the Explicit Formula – Day 3**  
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. 3, -9, 27, -81, ...<br>Find $a_{11}$                                 | 2. -4, -8, -16, -32, ...<br>Find $a_{11}$   |
| 3. -0.75, -3, -12, -48, ...<br>Find $a_{10}$                            | 4. 2.5, -5, 10, -20, ...<br>Find $a_{11}$   |
| 5. $-2, \frac{2}{5}, -\frac{2}{25}, \frac{2}{125}, \dots$<br>Find $a_9$ | 6. -2, -4, -8, -16, ...<br>Find $a_{12}$  |
| 7. -1, 4, -16, 64, ...<br>Find $a_{10}$                                 | 8. 1, 3, 9, 27, ...<br>Find $a_{11}$  |
| 9. -1, 2, -4, 8, ...<br>Find $a_{12}$                                   | 10. $-\frac{7}{4}, \frac{7}{8}, -\frac{7}{16}, \frac{7}{32}, \dots$<br>Find $a_9$ |

|   |   |
|---|---|
| 11. $-4, 12, -36, 108, \dots$<br>Find $a_{11}$                            | 12. $-3, -9, -27, -81, \dots$<br>Find $a_9$                 |
| 13. $2, -\frac{2}{3}, \frac{2}{9}, -\frac{2}{27}, \dots$<br>Find $a_{11}$ | 14. $-2, -8, -32, -128, \dots$<br>Find $a_{10}$             |
| 15. $4, 16, 64, 256, \dots$<br>Find $a_9$                                 | 16. $2, -1, \frac{1}{2}, -\frac{1}{4}, \dots$<br>Find $a_9$ |
| 17. $-3, -12, -48, -192, \dots$<br>Find $a_{10}$                          | 18. $-4, -12, -36, -108, \dots$<br>Find $a_{11}$            |
| 19. $-1, -3, -9, -27, \dots$<br>Find $a_{12}$                             | 20. $2, -4, 8, -16, \dots$<br>Find $a_{12}$                 |