Utilizing the Explicit Formula

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^{th} term.

1. $0.25, 1, 4, 16, \ldots$ Find a_{11}	2. $4, 8, 16, 32, \ldots$ Find a_{11}
3. $-3, 6, -12, 24, \ldots$ Find a_{12}	4. $-2, -6, -18, -54, \ldots$ Find a_{10}
5. $0.5, 2, 8, 32, \ldots$ Find a_{11}	6. $1.5, -3, 6, -12, \ldots$ Find a_9
7. $-0.5, -2, -8, -32, \ldots$ Find a_{11}	8. $1, -\frac{1}{2}, \frac{1}{4}, -\frac{1}{8}, \ldots$ Find a_9
9. $2, 8, 32, 128, \ldots$ Find a_{10}	10. $-5, -\frac{15}{4}, -\frac{45}{16}, -\frac{135}{64}, \ldots$ Find a_9

11. $3, -6, 12, -24, \ldots$ Find a_{11}	12. $3, -9, 27, -81, \ldots$ Find a_{11}
13. $-5, \frac{5}{3}, -\frac{5}{9}, \frac{5}{27}, \ldots$ Find a_{10}	14. $5, \frac{5}{2}, \frac{5}{4}, \frac{5}{8}, \ldots$ Find a_{10}
15. $4, \frac{4}{3}, \frac{4}{9}, \frac{4}{27}, \ldots$ Find a_{11}	16. $1.5, 3, 6, 12, \ldots$ Find a_{12}
17. $1, \frac{1}{3}, \frac{1}{9}, \frac{1}{27}, \ldots$ Find a_{12}	18. $-2, 4, -8, 16, \ldots$ Find a_{11}
19. $-3, -12, -48, -192, \ldots$ Find a_{10}	20. $-3, -6, -12, -24, \ldots$ Find a_{11}