

Summations – Day 3

Unit 7: Representations of Exponential Relations

Evaluate the related series of each sequence.

1. $-2, 6, -18, 54, -162$	2. $-3, -18, -108, -648$
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Evaluate each geometric series described.

3. $1 - 4 + 16 - 64 \dots, n = 9$	4. $-1 - 2 - 4 - 8 \dots, n = 8$
5. $\sum_{m=1}^9 -2^{m-1}$	6. $\sum_{m=1}^8 (4)^{m-1}$
7. $\sum_{i=1}^7 -3(5)^{i-1}$	8. $\sum_{k=1}^7 -3(-2)^{k-1}$
9. $a_1 = 4, a_n = 8748, r = 3$	10. $a_1 = 1, a_n = 2187, r = 3$

Evaluate each geometric series described.

11. $a_1 = -3, a_n = 786432, r = -4$	12. $a_1 = 4, a_n = 262144, r = 4$
13. $a_1 = -4, a_9 = -1024, r = 2$	14. $a_1 = 3, a_9 = 196608, r = 4$
15. $a_1 = -1, a_9 = -6561, r = -3$	16. $a_1 = -2, a_7 = -31250, r = -5$
17. $a_1 = 4, r = 2, n = 9$	18. $a_1 = -4, r = -3, n = 10$
19. $a_1 = -2, r = 3, n = 10$	20. $a_1 = -1, r = -2, n = 10$