
1. Identify the difference between an arithmetic sequence and a geometric sequence:

2. In the sequence  -7, -21, -63, -189, -567........
   What is the value of:
   \[ a_1 = \underline{\phantom{00000}} \quad a_3 = \underline{\phantom{00000}} \quad r = \underline{\phantom{00000}} \]

3. If given : \( a_1 = .5 \) \quad r = 2 \quad \text{Find} \quad a_{\underline{25}} \quad \underline{\phantom{00000}}

4. Name a practical application for using a geometric sequence.

5. Find the 12th term in the following sequence: 9, 3, 1, .......

6. Identify the following as either arithmetic, geometric or neither:
   A. 5, 1, 1/5, 1/25...... 
   B. 2, 1, 2, 1, 2..............
   C. 7, 9, 11, 13, 15...........