

Explicit Formulas for Geometric Sequences

A) Write the geometric sequence using the given general term.

1) $a_n = -10 \cdot (-7)^n$

2) $a_n = 8 \cdot (-9)^{n-1}$

3) $a_n = 16 \cdot (11)^{n-1}$

4) $a_n = -7.3 \cdot (-3)^{n-1}$

5) $a_n = -\frac{6}{7} \cdot \left(\frac{7}{3}\right)^{n-1}$

6) $a_n = -12 \cdot (6)^{n+1}$

B) Write the general term of each geometric sequence.

1) $\frac{\sqrt{5}}{7}, \frac{8\sqrt{5}}{7}, \frac{64\sqrt{5}}{7}, \frac{512\sqrt{5}}{7}, \dots$

2) $-5, -85, -1445, -24565, -417605, \dots$

3) $-2.9, -11.6, -46.4, -185.6, -742.4, \dots$

4) $\frac{5}{4}, -\frac{5}{9}, \frac{20}{81}, -\frac{80}{729}, \frac{320}{6561}, \dots$
