

Explicit Formulas for Geometric Sequences

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

1) $a_n = \frac{2}{5} \cdot \left(-\frac{1}{2}\right)^{n-1}$

2) $a_n = 8.5 \cdot (-13)^{n-1}$

3) $a_n = -2 \cdot (3)^{n+1}$

4) $a_n = 5 \cdot (-8)^n$

5) $a_n = 2 \cdot (10)^{n-1}$

6) $a_n = -6 \cdot (-4)^{n-1}$

B) Write the general term of each geometric sequence.

1) $-1.1, -6.6, -39.6, -237.6, \dots$

2) $\sqrt{10}, \frac{\sqrt{10}}{2}, \frac{\sqrt{10}}{4}, \frac{\sqrt{10}}{8}, \frac{\sqrt{10}}{16}, \dots$

3) $-3, 12, -48, 192, -768, \dots$

4) $\frac{1}{3}, -\frac{1}{2}, \frac{3}{4}, -\frac{9}{8}, \frac{27}{16}, \dots$
