

Recursive Formulas for Geometric Sequences

A) Write the geometric sequence using the recursive formula.

1) $a_n = a_{n-1} \cdot 4 ; a_1 = 35$

2) $a_n = a_{n-1} \cdot -6 ; a_1 = -82$

3) $a_n = a_{n-1} \cdot -9 ; a_1 = 7.2$

4) $a_n = a_{n-1} \cdot -7 ; a_1 = 29$

5) $a_n = a_{n-1} \cdot 2 ; a_1 = -16$

6) $a_n = a_{n-1} \cdot \frac{\sqrt{6}}{2} ; a_1 = 9$

B) Write the recursive formula of each geometric sequence.

1) $-\frac{2}{7}, \frac{5}{14}, -\frac{25}{56}, \frac{125}{224}, -\frac{625}{896}, \dots$

2) $18, 72, 288, 1152, 4608, \dots$

3) $158, -316, 632, -1264, 2528, \dots$

4) $-10, -5, -2.5, -1.25, -0.625, \dots$
