

Give the starting value and constant multiplier for each sequence. then find the 7th term of the sequence. 27,18 ,12,

Solution:

This is geometric progression starting value equal to 27. So constant multiplier q equal to

$$q = \frac{a_2}{a_1} = \frac{18}{27} = \frac{1}{3}$$

Formulae for the n-th term

$$a_n = a_1 q^{n-1}$$

For 7th term of our sequence

$$a_7 = 27 \left(\frac{1}{3}\right)^6 = \frac{27}{729} = \frac{1}{27}$$

Answer:

starting value equal to 27;

constant multiplier q equal to $\frac{1}{3}$;

7th term of sequence $\frac{1}{27}$;