A

Answer

$10 \times 0.5^{n-1}$

The below sequence is geometric, find the values of k.

$k-2, k+2, 18$

B

Answer

2

Find the 50^{th} term:

$6, 12, 24, 48 \ \ldots$

C

Answer

1.27×10^{30}

The below sequence is geometric, find the value of k.

$k, \qquad 2k, \qquad 5k - 12$

D

Answer

13

Find the 50^{th} term:

16, -8, 4, -2, 1 …

E

Answer

3069

For the following geometric sequence terms, find u_n.

u_5 = 405 and u_{10} = 98415

F

Answer

-1023

Find the first term of the following sequence that exceeds 1 million.

$3, 9, 27$

G

Answer

9.99

Find the sum of the following:

$1 + 2 + 4 + 8 + \cdots$ (100 terms).

H

Answer

1.72×10^{30}

Find the sum of the following:

$$3 + 6 + 12 + 24 + \cdots + 1{,}572{,}864$$

I

Answer

5115

Carly places one grain of rice on the first square of a chess board, three grains on the second, nine grains on the third. She continues to triple the grains she places until all 64 squares have rice on them.

How many grains of rice on the 64^{th} square?

J

Answer

$$-2.84 \times 10^{-14}$$

Carly places one grain of rice on the first square of a chess board, three grains on the second, nine grains on the third. She continues to triple the grains she places until all 64 squares have rice on them.

How many grains of rice will be on the chess board in total?

K

Answer

$k = 12$

Find the following sum:

$$\sum_{n=1}^{10} 3(2)^{n-1}$$

L

Answer

$3{,}145{,}725$

Find *x* for the following geometric sequence:

$$x, x + 2, x + 6$$

M

Answer

$k = 10, \qquad k = 4$

Find the sum of the first 10 terms of:

$5, 2.5, 1.25$

N

Answer

1.14×10^{30}

Find the nth term:

$10, 5, 2.5 \ldots$

O

Answer

3.38×10^{15}

Find the sum of the following:

$5, 10, 20, \ldots 2560$

P

Answer

$5 \times 3^{n-1}$

Find the sum of the first 10 terms

$3, -6, 12 \ldots$