



Patterning - Equation for Geometric Pattern



1

Find the correct equation to describe this geometric pattern where $n=1$ is the first term

2, 4, 8, 16, 32, 64

- A $a_n = 2 \times 2^n$
- B $a_n = 2 \times 2^{n-1}$
- C $a_n = 2 + 2(n-1)$
- D $a_n = a_{n-2} + a_{n-1}$
- E $a_n = 2 \times 2^{n-1}$
- F $a_n = 2 - 2(n-1)$

2

Find the correct equation to describe this geometric pattern where $n=1$ is the first term

1, 3, 9, 27, 81, 243

- A $a_n = 1 + 3(n-1)$
- B $a_n = 1 \times 3^n$
- C $a_n = a_{n-2} + a_{n-1}$
- D $a_n = 1 \times 3^{n-1}$
- E $a_n = -2 \times 3^{n-1}$
- F $a_n = 5 \times 3^{n-1}$

3

Find the correct equation to describe this geometric pattern where $n=1$ is the first term

1, 2, 4, 8, 16, 32

- A $a_n = 1 \times 2^{n-1}$
- B $a_n = 1 \times 6^{n-1}$
- C $a_n = a_{n-2} + a_{n-1}$
- D $a_n = 1 - 2(n-1)$
- E $a_n = 1 \times -2^{n-1}$
- F $a_n = 1 \times 2^n$

4

Find the correct equation to describe this geometric pattern where $n=1$ is the first term

3, 15, 75, 375

- A $a_n = 3 - 5(n-1)$
- B $a_n = 2 \times 5^{n-1}$
- C $a_n = 3 \times 5^{n-1}$
- D $a_n = 3 \times 5^n$
- E $a_n = 3 \times 6^{n-1}$
- F $a_n = 5 \times 5^{n-1}$

5

Find the correct equation to describe this geometric pattern where $n=1$ is the first term

3, 9, 27, 81, 243, 729

- A $a_n = 3 \times 3^n$
- B $a_n = 3 \times 0^{n-1}$
- C $a_n = 3 \times -1^{n-1}$
- D $a_n = 3 \times 3^{n-1}$
- E $a_n = a_{n-2} + a_{n-1}$
- F $a_n = 6 \times 3^{n-1}$

6

Find the correct equation to describe this geometric pattern where $n=1$ is the first term

1, 5, 25, 125

- A $a_n = a_{n-2} + a_{n-1}$
- B $a_n = 1 \times 5^{n-1}$
- C $a_n = -3 \times 5^{n-1}$
- D $a_n = 1 + 5(n-1)$
- E $a_n = 1 \times 5^n$
- F $a_n = 1 - 5(n-1)$

7

Find the correct equation to describe this geometric pattern where $n=1$ is the first term

3, 12, 48, 192

- A $a_n = 3 - 4(n-1)$
- B $a_n = 3 \times 4^n$
- C $a_n = 3 \times 1^{n-1}$
- D $a_n = 6 \times 4^{n-1}$
- E $a_n = 3 \times 4^{n-1}$
- F $a_n = a_{n-2} + a_{n-1}$

8

Find the correct equation to describe this geometric pattern where $n=1$ is the first term

3, 6, 12, 24, 48, 96

- A $a_n = 3 \times -2^{n-1}$
- B $a_n = 2 \times 2^{n-1}$
- C $a_n = 3 + 2(n-1)$
- D $a_n = a_{n-2} + a_{n-1}$
- E $a_n = 3 \times 2^{n-1}$
- F $a_n = -1 \times 2^{n-1}$