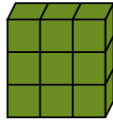


Write the explicit formula for a geometric sequence

1

1, 3, 9, ?



?

A 7

B 2

C 12

D 17

E 57

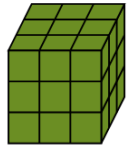
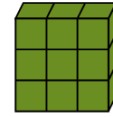
F 27

2

1, 7, 9, 27



?



A 28

B 3

C 33

D 8

E 17

F 7

3

?, 3, 9, 27, 81, 243

A

1

B

21

C

14

D

16

E

4

F

26

4

Start at 3 and multiply by 4 for each term

A

5, 20, 80, 320

B

3, 12, 48, 192

C

-1, -4, -16, -64

D

3, 7, 10, 17

E

3, -1, -5, -9

F

3, 9, 27, 81

5

3, 6, 12, 24, 48, 96

A

Start at 3 and multiply by 6 for each term

B

Start at 7 and multiply by 2 for each term

C

Start at 3 and add 2 for each term

D

Start at 3 and multiply by 2 for each term

E

Start at 3 and multiply by 4 for each term

F

Start at -1 and multiply by 2 for each term

6

3, 9, 27

A

 5^d

B

 2^d

C

 3^d

D

 0^d

E

 1^d

F

 4^d **7**What are the first 3 terms, starting with $x = 1$ in this number sequence

$$2^x$$

A

4, 8, 12

B

2, 8, 18

C

1, 4, 9

D

2, 16, 54

E

6, 8, 10

F

2, 4, 8

8

Find the rule that describes this pattern equation

$$a_n = 2 \times 3^{n-1}$$

A

Start at 2 and add 3 for each term

B

Start at 2 and multiply by 3 for each term

C

Start at 2 and multiply by -1 for each term

D

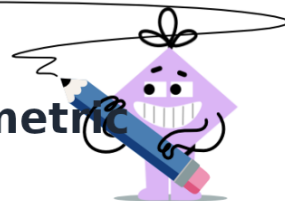
Start at 2 and multiply by 5 for each term

E

Start at 2 and subtract 3 for each term

F

Start with 2 and 5. Add the prior two terms for each subsequent term



Write the explicit formula for a geometric sequence

9

Choose the first values that this equation would create starting with $n=1$

$$a_n = 2 \times 5^{n-1}$$

A 2, 10, 50, 250

B -1, -5, -25, -125

C 4, 20, 100, 500

D 2, 7, 9, 16

E 2, 8, 32, 128

F 3, 15, 75, 375

10

Start at 1 and multiply by 5 for each term

A $a_n = 1 \times 6^{n-1}$

B $a_n = 1 \times 5^{n-1}$

C $a_n = 1 \times 5^n$

D $a_n = 3 \times 5^{n-1}$

E $a_n = 4 \times 5^{n-1}$

F $a_n = 1 \times 8^{n-1}$

11

3, 9, 27, 81, 243, 729

A $a_n = 4 \times 3^{n-1}$

B $a_n = 3 + 3(n-1)$

C $a_n = 5 \times 3^{n-1}$

D $a_n = 3 \times 3^{n-1}$

E $a_n = 3 \times 2^{n-1}$

F $a_n = 3 \times 5^{n-1}$

12

Start at 3 and multiply by 4 for each term

A $a_n = 3 \times 3^{n-1}$

B $a_n = 3 \times 5^{n-1}$

C $a_n = 3 \times 4^{n-1}$

D $a_n = 3 \times 4^n$

E $a_n = 0 \times 4^{n-1}$

F $a_n = 3 \times 2^{n-1}$