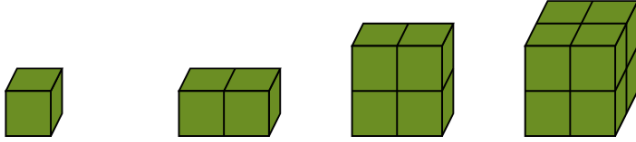




Recognize geometric sequences

1

1, 2, 4, 8



A

17, 16, 15, 14

B

1, 2, 4, 8

2

2, 6, 18

A

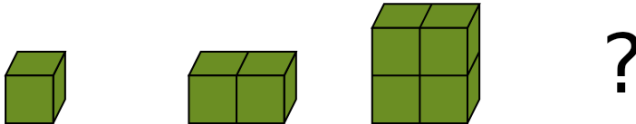


B



3

1, 2, 4, ?



A

7

B

8

C

23

D

18

E

33

F

38

4

4, 16, 64

A

2^r

B

4^r

C

6^r

D

3^r

E

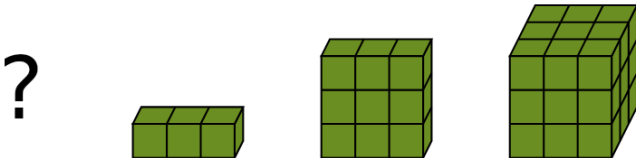
5^r

F

1^r

5

?, 3, 9, 27



A

6

B

31

C

26

D

9

E

1

F

24

6

Start at 3 and multiply by 5 for each term

A

3, -2, -7, -12

B

-1, -5, -25, -125

C

3, 8, 11, 19

D

6, 30, 150, 750

E

3, 15, 75, 375

F

3, 24, 192, 1,536

7

1, 3, ?, 27, 81, 243

A

6

B

24

C

1

D

4

E

9

F

16

8

Start at 1 and multiply by 5 for each term

A

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

B

$a_n = 1 \times 5^n$

C

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

D

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

E

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

F

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



Recognize geometric sequences

9

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

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

A 1, -3, -7, -11

B 1, 4, 16, 64

C 2, 8, 32, 128

D 1, 0, 0, 0

E 1, 2, 4, 8

F -3, -12, -48, -192

10

What are the first 3 terms, starting with $n = 1$ in this number sequence

$$7^n$$

A 1, 128, 2187

B 14, 28, 42

C 7, 896, 15309

D 7, 49, 343

E 7, 56, 189

F 21, 28, 35

11

Find the rule that describes this pattern equation

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

A Start at 4 and multiply by 3 for each term

B Start at 1 and multiply by 3 for each term

C Start at 1 and add 3 for each term

D Start at 1 and subtract 3 for each term

E Start with 1 and 4. Add the prior two terms for each subsequent term

F Start at 0 and multiply by 3 for each term

12

1, 2, 4, 8

A Decreasing (Arithmetic)

B Geometric

13

2, 8, 32, 128

A Start with 2 and 6. Add the prior two terms for each subsequent term

B Start at 5 and multiply by 4 for each term

C Start at 2 and add 4 for each term

D Start at 2 and subtract 4 for each term

E Start at 2 and multiply by 4 for each term

F Start at 0 and multiply by 4 for each term

14

1, 3, 9, 27, 81, 243

A $a_n = 0 \times 3^{n-1}$ B $a_n = 1 - 3(n - 1)$ C $a_n = 1 \times 4^{n-1}$ D $a_n = 1 \times 3^{n-1}$ E $a_n = a_{n-2} + a_{n-1}$ F $a_n = 1 \times 3^n$