

Represent pattern rules using algebraic expressions

1

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

$$9z - 2$$

A 10, 19, 28

B 11, 20, 29

C 7, 16, 25

D 12, 22, 32

E 19, 20, 21

F 12, 21, 30

2

3, 6, 9, 12

A 30

B -5

C 27

D 22

E 26

F 19,683

3

93, 87, 81, 75, 69

A -1

B -5

C -7

D -3

E 29

F 0

4

Start at 1 and add 6 for each term

A $a_n = a_{n-2} + a_{n-1}$

B $a_n = 1 + 6(n)$

C $a_n = 1 - 6(n - 1)$

D $a_n = 1 + 9(n - 1)$

E $a_n = 1 + 7(n - 1)$

F $a_n = 1 + 6(n - 1)$

5

5, 6, 7

A $p + 4$

B $p + 6$

C $p + 5$

D $p + 2$

E $p + 1$

6

Start at 2 and add 5 for each term

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

B $a_n = 2 - 5(n - 1)$

C $a_n = 2 + 1(n - 1)$

D $a_n = 3 + 5(n - 1)$

E $a_n = 2 + 2(n - 1)$

F $a_n = 2 + 5(n - 1)$

7

-3, -2, -1

A $z - 3$

B $z - 1$

C $z - 6$

D $z - 5$

E $z - 4$

F $z - 2$

8

Start at 1 and add 6 for each term

A $a_n = -2 + 6(n - 1)$

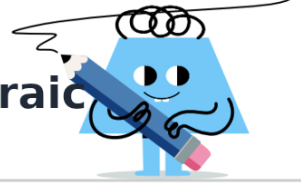
B $a_n = -3 + 6(n - 1)$

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

D $a_n = 1 + 6(n)$

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

F $a_n = 1 + 6(n - 1)$



Represent pattern rules using algebraic expressions

9

-2, -1, 0

A $m - 2$

B $m - 3$

C $m - 1$

D $m - 5$

E $m - 0$

10

Start at 2 and add 2 for each term

A $a_n = -1 + 2(n - 1)$

B $a_n = 2 + 2(n - 1)$

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

D $a_n = 2 + 2(n)$

E $a_n = a_{n-2} + a_{n-1}$

F $a_n = 2 + 4(n - 1)$

11

5, 6, 7

A $b + 1$

B $b + 5$

C $b + 2$

D $b + 4$

E $b + 6$

12

Start at 1 and add 5 for each term

A $a_n = -2 + 5(n - 1)$

B $a_n = 1 + 2(n - 1)$

C $a_n = 1 + 9(n - 1)$

D $a_n = 1 + 8(n - 1)$

E $a_n = 1 - 5(n - 1)$

F $a_n = 1 + 5(n - 1)$