



## Patterning - Equation from Rule for Increasing Arithmetic Pattern

**1**

Find the correct equation that this pattern rule describes

Start at 1 and add 5 for each term

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

C  $a_n = 5 + 5(n-1)$  D  $a_n = 4 + 5(n-1)$

E  $a_n = 1 - 5(n-1)$  F  $a_n = -3 + 5(n-1)$

**2**

Find the correct equation that this pattern rule describes

Start at 3 and add 5 for each term

A  $a_n = 3 \times 5^{n-1}$  B  $a_n = 1 + 5(n-1)$

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

E  $a_n = 3 + 8(n-1)$  F  $a_n = 3 + 5(n-1)$

**3**

Find the correct equation that this pattern rule describes

Start at 3 and add 4 for each term

A  $a_n = 3 + 1(n-1)$  B  $a_n = a_{n-2} + a_{n-1}$

C  $a_n = 3 + 4(n-1)$  D  $a_n = 3 + 3(n-1)$

E  $a_n = 3 - 4(n-1)$  F  $a_n = 3 + 4(n)$

**4**

Find the correct equation that this pattern rule describes

Start at 3 and add 2 for each term

A  $a_n = 4 + 2(n-1)$  B  $a_n = 3 + 3(n-1)$

C  $a_n = 1 + 2(n-1)$  D  $a_n = 3 + 1(n-1)$

E  $a_n = 3 \times 2^{n-1}$  F  $a_n = 3 + 2(n-1)$

**5**

Find the correct equation that this pattern rule describes

Start at 3 and add 3 for each term

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

C  $a_n = 3 + 2(n-1)$  D  $a_n = 3 + 3(n)$

E  $a_n = 3 \times 3^{n-1}$  F  $a_n = 3 - 3(n-1)$

**6**

Find the correct equation that this pattern rule describes

Start at 1 and add 6 for each term

A  $a_n = 1 + 10(n-1)$  B  $a_n = a_{n-2} + a_{n-1}$

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

E  $a_n = -2 + 6(n-1)$  F  $a_n = 2 + 6(n-1)$

**7**

Find the correct equation that this pattern rule describes

Start at 1 and add 4 for each term

A  $a_n = 1 - 4(n-1)$  B  $a_n = -3 + 4(n-1)$

C  $a_n = 1 + 2(n-1)$  D  $a_n = 1 + 4(n-1)$

E  $a_n = 1 \times 4^{n-1}$  F  $a_n = 1 + 4(n)$

**8**

Find the correct equation that this pattern rule describes

Start at 2 and add 3 for each term

A  $a_n = 2 - 3(n-1)$  B  $a_n = 2 \times 3^{n-1}$

C  $a_n = 2 + 3(n)$  D  $a_n = a_{n-2} + a_{n-1}$

E  $a_n = 2 + 4(n-1)$  F  $a_n = 2 + 3(n-1)$