

Recursive and Explicit Equations of Sequences

Find the following information about each sequence below, and then write the recursive and explicit equations:

1. $-3, -10, -17, -24, \dots$

Initial Term: _____ Common Difference: _____

Recursive: _____ Explicit: _____

2. $-3, 9, -27, 81, \dots$

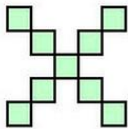
Initial Term: _____ Common Ratio: _____

Recursive: _____ Explicit: _____

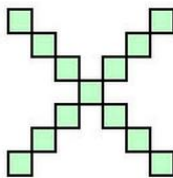
3. The sequence is the number of blocks below



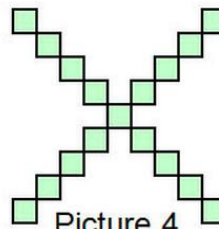
Picture 1



Picture 2



Picture 3



Picture 4

Initial Term: _____ Common Difference: _____

Recursive: _____ Explicit: _____

Recursive and Explicit Equations of Sequences

Find the following information about each sequence below, and then write the recursive and explicit equations:

1. $-3, -10, -17, -24, \dots$

Initial Term: -3

Common Difference: -7

Recursive: $a_{n+1} = a_n - 7, a_1 = -3$

Explicit: $a_n = -7n + 4$

2. $-3, 9, -27, 81, \dots$

Initial Term: -3

Common Ratio: -3

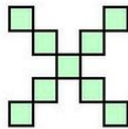
Recursive: $a_{n+1} = a_n * (-3), a_1 = -3$

Explicit: $a_n = (-3)^n$

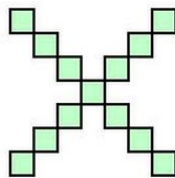
3. The sequence is the number of blocks below



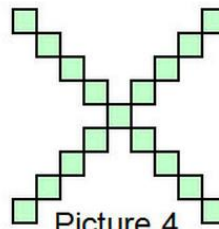
Picture 1



Picture 2



Picture 3



Picture 4

Initial Term: 5

Common Difference: 4

Recursive: $a_{n+1} = a_n + 4, a_1 = 5$

Explicit: $a_n = 4n + 1$