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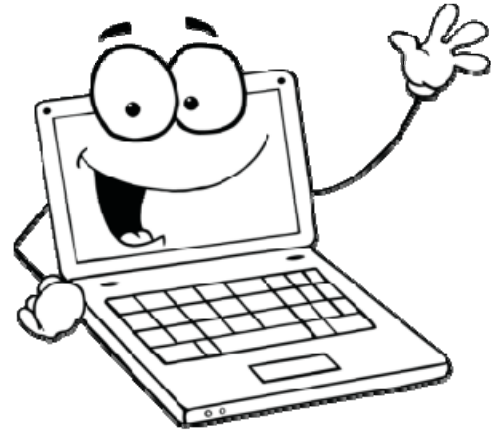
Explicit Expressions and Recursive Processes - Step-by-Step Lesson

Write an explicit and recursive formula for the following sequences.

2, 4, 6, 8...

Explicit: _____

Recursive: _____

**Explanation:**

An explicit formula allows you to determine any term in a set sequence.

If we take a deep look at the set, we would see:

2	4	6	8	10 (predicted)
$n = 1$	$n = 2$	$n = 3$	$n = 4$	$n = 5$

We can easily see that for each successive number the term number (n) multiplies by 2. The formula can be represented as:

$$a_n = 2n$$

A recursive formula is a something that we can use to determine the next term in a set or number sequence. It tells us how each term is connected to the next term.

The difference between each term is 2 ($a_1 = 2$). We can display this in a recursive formula using the following:

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

a_n = term number a_{n-1} = the term before the n term

