

## 11.2 Explicit Formulas

\*\* HINT: These formulas will look incredibly familiar!

Explicit Formulas	
Arithmetic	$a_n = a_0 + dn$ <i>d = common difference</i>
Geometric	$g_n = g_0 \cdot (r)^{n-1}$ <i>r = common ratio</i>

Given a sequence of numbers: 6, 10, 14, 18, ...

**Notation:**

6,	10,	14,	18...	Value of Specific Term
$n = 1$	$n = 2$	$n = 3$	$n = 4$	Position in the sequence
$a_1$	$a_2$	$a_3$	$a_4$	General name for a specific term

Complete:  $a_1 = \underline{\quad}$      $a_2 = \underline{\quad}$      $a_3 = \underline{\quad}$      $a_4 = \underline{\quad}$

Write an explicit rule for the above sequence:

Example 1) 4, 16, 64 ...    Example 2) 30, 25, 20, 15, ....    Example 3) 125, 25, 1,  $\frac{1}{5}$ ...