Recursive Formulas Explicit Formulas ... Set 1

SEQUENCES REFERENCE SHEET

Arithmetic Sequence: A series of terms where the same number is added each time to produce the next term.

Geometric Sequence: A series of terms where each term is multiplied by the same number to produce the next term.

Recursive Formula: A formula that relies on the previous term for finding each term in the sequence. The first term must be given.

Explicit Formula: A formula you can use to find any term in a sequence.

	Arithmetic Sequence	Geometric Sequence
Recursive Formulas	f(n) = f(n-1) + d $a_n = a_{n-1} + d$	$f(n) = r \times f(n-1)$ $a_n = r \times a_{n-1}$
Explicit Formulas	f(n) = f(1) + d(n-1) $a_n = a_1 + d(n-1)$	$f(n) = f(1) \times r^{n-1}$ $a_n = a_1 \times r^{n-1}$