12.4 Sequence Notes

Sequence:

Term:

How to find the next term in a sequence:

Arithmetic:

72, 60, 48, _____, _____, _____, …

Common Difference:

Recursive:

Explicit:

Find a_{21}:

Geometric:

4, 8, 16, _____, _____, _____, …

Common Ratio:

Recursive:

Explicit:

Find g_{14}:

	Explicit	Recursive
Arithmetic	$a_n = a_0 + dn$ $a_n = any\ term$ $a_0 = \ term\ zero$ $d = common\ difference$	$a_0 =$ $a_n = a_{n-1} + d$
Geometric	$g_n = g_0 \cdot (r)^n$ $r = common\ ratio$	$g_0 =$ $g_n = g_{n-1} \cdot r$