

Arithmetic Sequences and Series  
 Geometric Sequences and Series  
 ... Set 2

**Arithmetic and Geometric Cheat Sheet**

	<b>ARITHMETIC</b>	<b>GEOMETRIC</b>
<b>DEFINITION</b>	add to get next term (common difference)	multiply to get next term (common ratio)
<b>KEY WORDS</b>	"arithmetic", "common difference"	"geometric", "common ratio"
<b>SEQUENCE FORMULA (rule)</b>	$u_n = u_1 + (n - 1)d$	$u_n = u_1 \cdot r^{n-1}$
<b>SERIES FORMULA (rule)</b>	$S_n = \frac{n}{2} [2u_1 + (n - 1)d]$	$S_n = \frac{u_1(1 - r^n)}{1 - r}$