

Arithmetic
Sequence

$$a_n = a_0 + dn$$

Geometric
Sequence

$$a_n = a_0(r)^n$$

Arithmetic
Series

$$S_n = \frac{n}{2}(a_1 + a_n)$$

Geometric
Series

$$S_n = \frac{a_1(1-r^n)}{1-r}$$

$$S_{\infty} = \frac{a_1}{1-r} \quad |r| < 1$$