Arithmetic Series

Arithmetic Series: the indicated sum of the terms of an arithmetic sequence

If the first term and the nth term are given, then

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

If the nth term is not given, then

$$S_n = \frac{n}{2}[2a_1 + (n-1)d]$$