

# Arithmetic Sequences

**Arithmetic Sequence:** a sequence where every term after the first is obtained by adding a constant called the common difference

**Common difference:** the constant difference  $d$  between any two consecutive terms

To find any term in an arithmetic sequence, use

$$a_n = a_1 + (n - 1)d$$

To find  $d$ , use

$$d = \frac{a_n - a_k}{n - k}$$