Finite Sets

The **cardinality** of a finite set X is the number of elements in X, and is denoted $|X|$.

Hence, $|\{1, 2, 3, 4, 5\}| = |\{2, 9, 12, 17, 18\}|$.

A set X is **finite** if $|X| = n$ for some $n \in Z$.