



SET DIFFERENCES

Why

We want to exclude all the elements of one set from the other.

Definition

Let A and B denote sets. The *difference* between A and B is the set $\{x \in A \mid x \notin B\}$. The difference of A and B is also known as the *relative complement* of B in A . We need is not necessary that $B \subset A$.

ℳNotation

We denote the difference between A and B by $A - B$.

Properties

The following are straightforward.

Proposition 1. $A - \emptyset = A$

Proposition 2. $A - A = \emptyset$

