

Definition

Let **A** and **B** be sets. A *function* $f : \mathbf{A} \rightarrow \mathbf{B}$ is a subset

$$f \subseteq \mathbf{A} \times \mathbf{B},$$

with the property

$$\forall x \in \mathbf{A} \quad \exists! y \in \mathbf{B} : \langle x, y \rangle \in f.$$

We say that **A** is the *source* and **B** is the *target* of f .