Definition. Let A and B be sets. A function $f: A \rightarrow B$ is a subset

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

with the property

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

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