

Functions That Are Onto; One-to-One Functions

A function $f : A \rightarrow B$ is onto B (or is a surjection) iff $\text{rng}(f) = B$. When f is a surjection, we write $f : A \xrightarrow{\text{onto}} B$.

A function $f : A \rightarrow B$ is one-to-one (or is an injection) iff whenever $f(x) = f(y)$, then $x = y$. When f is an injection, we write $f : A \xrightarrow{1-1} B$.