

Definition FS.3.1: $A \approx B$ if and only if there exists f such that f is a bijection from A to B .

Definition FS.3.2: $x \leq y$ if and only if there exists $z \subseteq y$ such that $x \approx z$.

Definition FS.3.3: $A < B$ if and only if $A \leq B$ and it is not the case that $B \leq A$.

Definition FS.3.4: x is a *minimal element* of A if and only if $x \in A$ and for every $y \in A$, it is not the case that $y \in x$.

Definition FS.3.5: x is a *maximal element* of A if and only if $x \in A$ and for every $y \in A$, it is not the case that $x \in y$.

Definition FS.3.6: x is *finite* if and only if for every $A \neq \emptyset$, if $A \subseteq \wp(x)$ then there exists $y \in A$ such that y is a minimal element of A .

Definition FS.3.7: x is *finite* if and only if for every $y \subseteq x$, if $y \neq x$ then it is not the case that $x \approx y$.