Type isomorphism

Type isomorphism is similar to set bijection:

Proposition

If there is some $n \in \mathbb{N}$ such that A and B each have n elements, then A and B are isomorphic.

Proof.

Construct isomorphisms from A to $\mathrm{Fin}\ n$ and B to $\mathrm{Fin}\ n$. Since $\cong$ is an equivalence relation, $A \cong \mathrm{Fin}\ n \cong B$. □