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Schröder-Bernstein theorem

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Let  $S$  and  $T$  be sets. If there are injections  $S \rightarrow T$  and  $T \rightarrow S$ , then there is a bijection  $S \rightarrow T$ .

The Schröder-Bernstein theorem is useful for proving many results about cardinality, since it replaces one hard problem (finding a bijection between  $S$  and  $T$ ) with two generally easier problems (finding two injections).