

## Definition

- We say that  $A$  is **countably infinite** if  $|A| = |\mathbb{N}|$ .  
i.e., there is a bijection  $f: A \rightarrow \mathbb{N}$ .
- We say that  $A$  is **countable** if it is countably infinite, or finite.
- We denote the cardinality of  $\mathbb{N}$  by the symbol  $\aleph_0$  (“aleph zero”).