

# Size of Infinity

Show

- $|\mathbb{N}| = |\{x \in \mathbb{N} : x > 10\}|$
- $|\mathbb{N}| = |\mathbb{Z}|$

To do this, find a bijective function, either algebraically, or diagrammatically

# Size of Infinity

Let  $F = \{f: \mathbb{N} \rightarrow \{0,1,2,3,4,5,6,7,8,9\}\}$ .

Prove  $|F| > |\mathbb{N}|$