Definition: Peano Axioms

- Zero is a Natural Number, $0 \in \mathbb{N}$

- Every successor of a Natural Number is a Natural Number, $n \in \mathbb{N} \to n + 1 \in \mathbb{N}$

- Zero is not the successor of any Natural Number, $n + 1 = 0 \to n \notin \mathbb{N}$

- Every successor is unique, $n + 1 = m + 1 \to n = m$

- Principle of Mathematical Induction, $\forall n \in \mathbb{N} \colon P(n) \leftrightarrow P(0) \wedge \forall k \in \mathbb{N} \colon P(k) \to P(k + 1)$