

Peano Axioms

Axiom 7

There exists a whole number 0.

Axiom 8

Every whole number n has a successor, $\text{succ } n$.

Axiom 9

No whole number has 0 as its successor.

Axiom 10

If $a, b \in \mathbb{W}$, then $a = b$ iff $\text{succ } a = \text{succ } b$.