

statement	assumptions	step type
0. $0 \in \mathbb{N}$		modus ponens
1. $((0 \in \mathbb{N}) \wedge [\forall_{n \in \mathbb{N}} ((n+1) \in \mathbb{N})]) \Rightarrow (0 \in \mathbb{N})$		specialization v $\{A_{\square} : (), B : 0\}$
2. $(0 \in \mathbb{N}) \wedge [\forall_{n \in \mathbb{N}} ((n+1) \in \mathbb{N})]$		modus ponens
3. $\forall \dots, A_{\square}, \dots, B, \dots, C_{\square}, \dots ((\dots \wedge A_{\square} \wedge \dots \wedge B \wedge \dots \wedge C_{\square} \wedge \dots) \Rightarrow B)$	theorem: proveit.logic.boolean.co	
4. $(\mathbb{N} = \mathbb{N}) \Rightarrow ((0 \in \mathbb{N}) \wedge [\forall_{n \in \mathbb{N}} ((n+1) \in \mathbb{N})])$		specialization v $\{A : \mathbb{N} = \mathbb{N}, B$
5. $\mathbb{N} = \mathbb{N}$		specialization v $\{x : \mathbb{N}\}$
6. $\forall_{A,B} \mid (A \Leftrightarrow B) (A \Rightarrow B)$	theorem: proveit.logic.boolean.in	
7. $(\mathbb{N} = \mathbb{N}) \Leftrightarrow ((0 \in \mathbb{N}) \wedge [\forall_{n \in \mathbb{N}} ((n+1) \in \mathbb{N})])$		specialization v $\{S : \mathbb{N}\}$
8. $\forall_x (x = x)$	axiom: proveit.logic.equality.equ	
9. $\forall_S \mid (S \subseteq \mathbb{N}) ((S = \mathbb{N}) \Leftrightarrow ((0 \in S) \wedge [\forall_{n \in S} ((n+1) \in S)]))$	axiom: proveit.number.sets.integ	
10. $\mathbb{N} \subseteq \mathbb{N}$		specialization v $\{A : \mathbb{N}, B : \mathbb{N}\}$
11. $\forall_{A,B} \mid (A=B) (A \subseteq B)$	theorem: proveit.logic.set.theory	