

ACTIVITY 1.X

The Natural Numbers

- (1) X is a set satisfying the Peano's axioms. Consider the function, $f : \mathbb{N} \rightarrow X$ such that $f(1) = 1_X$ and $f(n+) = f(n)+$ for all $n \in \mathbb{N}$. Show that f is one-one using mathematical induction.