

## **The Principle of Induction.**

Let  $P(n)$  be a predicate. If

- $P(0)$  is true, and
- $P(n)$  IMPLIES  $P(n + 1)$  for all nonnegative integers,  $n$ ,

then

- $P(m)$  is true for all nonnegative integers,  $m$ .