

Q.10

Eg. $(\forall n)(A_n = \{1\})$

Prove $(\forall n)(A_n = \{1\})$ follows the stated properties.

Proof: $A_{n+1} = \{1\}$ and $A_n = \{1\}$ according to the example.

Thus, $A_{n+1} \subset A_n$.

The intersection of all A_n is $\{1\}$.

Thus, the statement is proven.

QED 