Let  $x \geq 0$  , with tow porpositions:

- A: 
$$\forall > 0, 0 \le x \le \epsilon;$$
  
- B:  $x = 0.$ 

- 
$$B: x = 0$$

Proove that  $A \Rightarrow B$ .

## Proof by contradiction:

Suppose that  $x \neq 0, \exists \epsilon > 0 \mid \epsilon = \frac{x}{2}$  (B is false)  $\Rightarrow x > 0$  and  $x > \epsilon$  (A is false) Then:  $A \Rightarrow B$  is true.