

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

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

Proove that  $A \Rightarrow B$ .

**Proof by contrapostion:**

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.