# Proprieta' del valore assoluto:

$|x| \geq 0 \quad \forall x \in \mathbb{R}$

$|x| = 0 \iff x = 0$

$|x| = |-x| \quad \forall x \in \mathbb{R}$

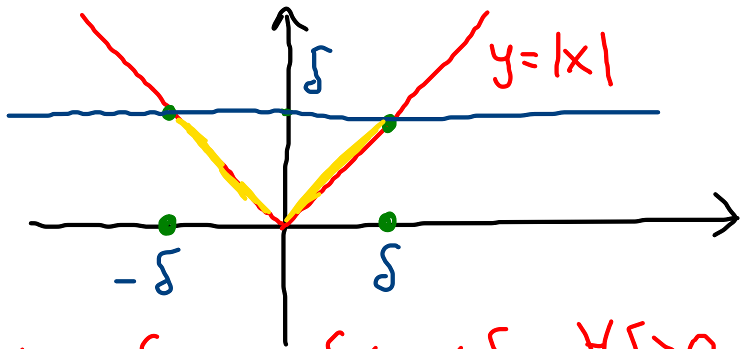
$|x| = \max\{x, -x\} \quad \forall x \in \mathbb{R}$

$x \leq |x| \quad \forall x \in \mathbb{R}$

$-x \leq |x| \quad \forall x \in \mathbb{R}$

$|x_1 x_2| = |x_1|\,|x_2| \quad \forall x_1, x_2 \in \mathbb{R}$

$\left|\dfrac{x_1}{x_2}\right| = \dfrac{|x_1|}{|x_2|} \quad \forall x_1, x_2 \in \mathbb{R},\ x_2 \neq 0$




$|x| < \delta \iff -\delta < x < \delta \quad \forall \delta > 0$

Disuguaglianza Triangolare:

$|x_1 + x_2| \leq |x_1| + |x_2| \quad \forall x_1, x_2 \in \mathbb{R}$


Se $a, b \in \mathbb{R}$, $a < b$ il segmento di estremi $a$ e $b$ ha lunghezza $b-a$

Se $a, b \in \mathbb{R}$, la lunghezza del segmento di estremi $a$ e $b$ e' $|a-b| = |b-a|$