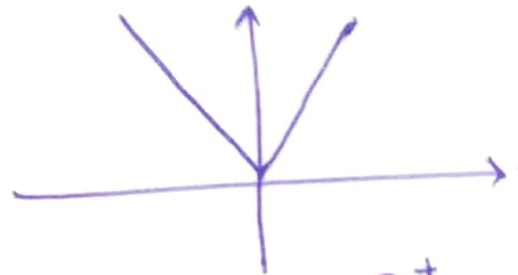


TIPS AND TRICKS

Graphs

$$y = |x|$$

\Rightarrow



$r \in \mathbb{R}^+$ \Rightarrow a constant number

$$|x-a| < r \quad \Rightarrow \quad x \in (a-r, a+r)$$

$$|x-a| \leq r \quad \Rightarrow \quad x \in [a-r, a+r]$$

$$|x-a| > r \quad \Rightarrow \quad x \in (-\infty, a-r) \cup (a+r, \infty)$$

$$|x-a| \geq r \quad \Rightarrow \quad x \in (-\infty, a-r] \cup [a+r, \infty)$$