

DISQUATIONE IN VALORE ASSOLUTO

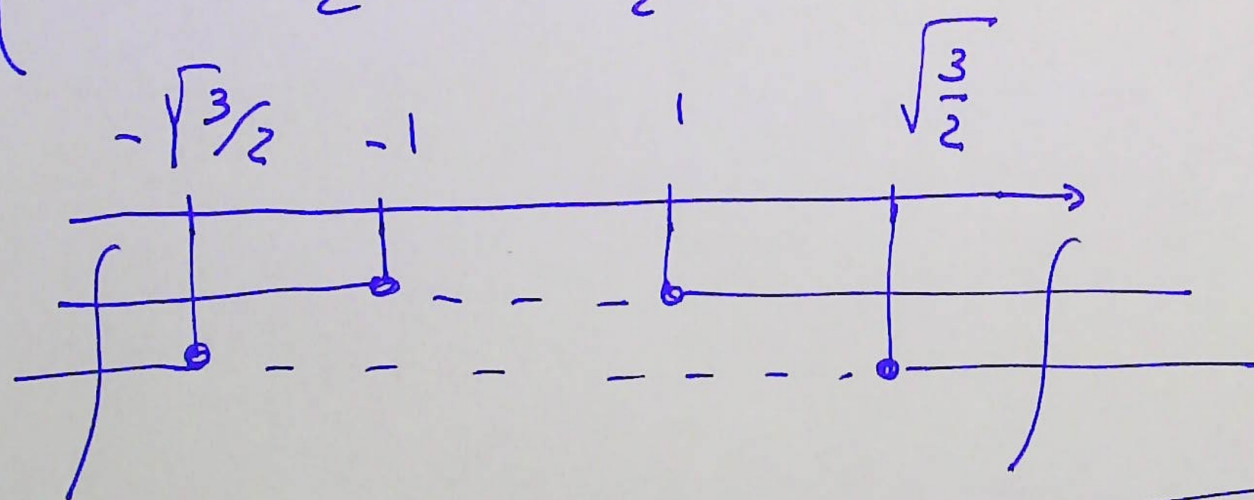
$$|x^2 - 1| > 2 - x^2$$

$$|x^2 - 1| = \begin{cases} x^2 - 1 & \text{se } x^2 - 1 > 0 \\ 1 - x^2 & \text{se } x^2 - 1 < 0 \end{cases}$$

$$\begin{cases} x^2 - 1 > 0 \\ x^2 - 1 > 2 - x^2 \end{cases} \cup \begin{cases} x^2 - 1 < 0 \\ 1 - x^2 > 2 - x^2 \end{cases}$$

$$S_1 \begin{cases} x^2 - 1 > 0 \\ 2x^2 > 3 \end{cases} \cup \begin{cases} x^2 - 1 < 0 \\ 1 > 2 \end{cases} \quad S_2: \emptyset$$

$$\begin{cases} x \leq -1 \vee x > 1 \\ x \leq -\sqrt{\frac{3}{2}} \vee x > \sqrt{\frac{3}{2}} \end{cases} \cup \emptyset$$



$$\Rightarrow \sqrt{\frac{3}{2}} = \frac{\sqrt{3}}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{6}}{2} \Rightarrow \boxed{x \leq -\frac{\sqrt{6}}{2} \vee x \geq \frac{\sqrt{6}}{2}}$$