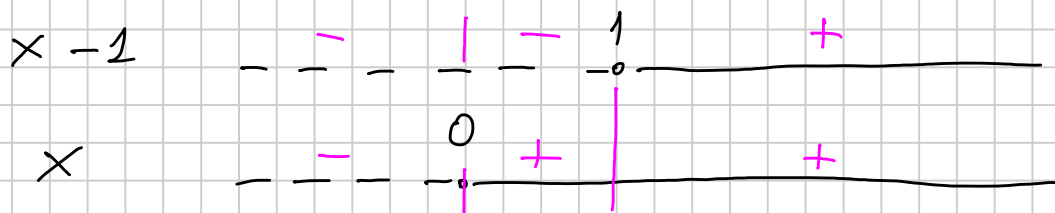


$$e^{-\frac{|x-2|}{|x|-1}} - e \geq 0 \quad x \neq \pm 1$$

$$e^{-\frac{|x-2|}{|x|-1}} \geq e \quad \leadsto \quad -\frac{|x-2|}{|x|-1} \geq 1 \quad \left(e^x \text{ MONOTONA CRESCENTE} \right)$$

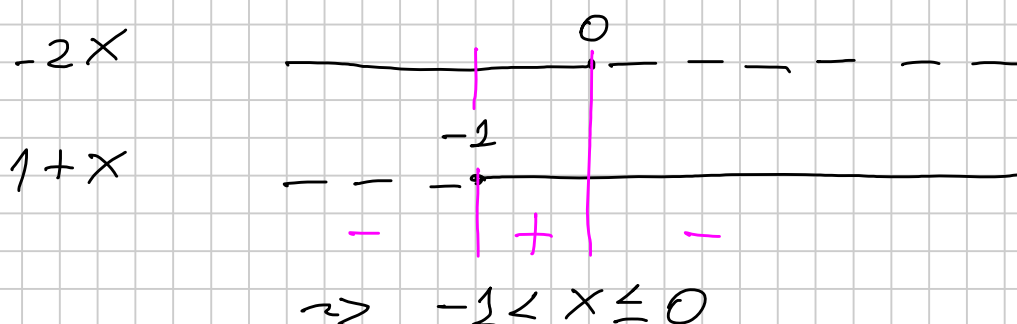


$$\exists \text{ CASI } (x \neq \pm 1) \quad \left\{ \begin{array}{l} x \leq 0 \quad -\frac{-x+1}{-x-1} \geq 1 \\ 0 < x < 1 \quad -\frac{-x+1}{x-1} \geq 1 \leadsto \frac{1-x}{1-x} = 1 \geq 1 \quad \forall x \neq 1 \\ x > 1 \quad -\frac{x-1}{x-1} \geq 1 \leadsto -1 \geq 1 \quad \text{IMPOSS.} \end{array} \right.$$

1° CASO

$$x \leq 0 \quad (x \neq -1) \quad -\frac{-x+1}{-x-1} \geq 1 \quad \leadsto \quad \frac{1-x}{1+x} - 1 \geq 0$$

$$\leadsto \frac{1-x-1-x}{1+x} \geq 0 \quad \leadsto \quad \frac{-2x}{1+x} \geq 0$$



$$1^\circ \text{ CASO} + 2^\circ \text{ CASO} \leadsto -1 < x < 1$$