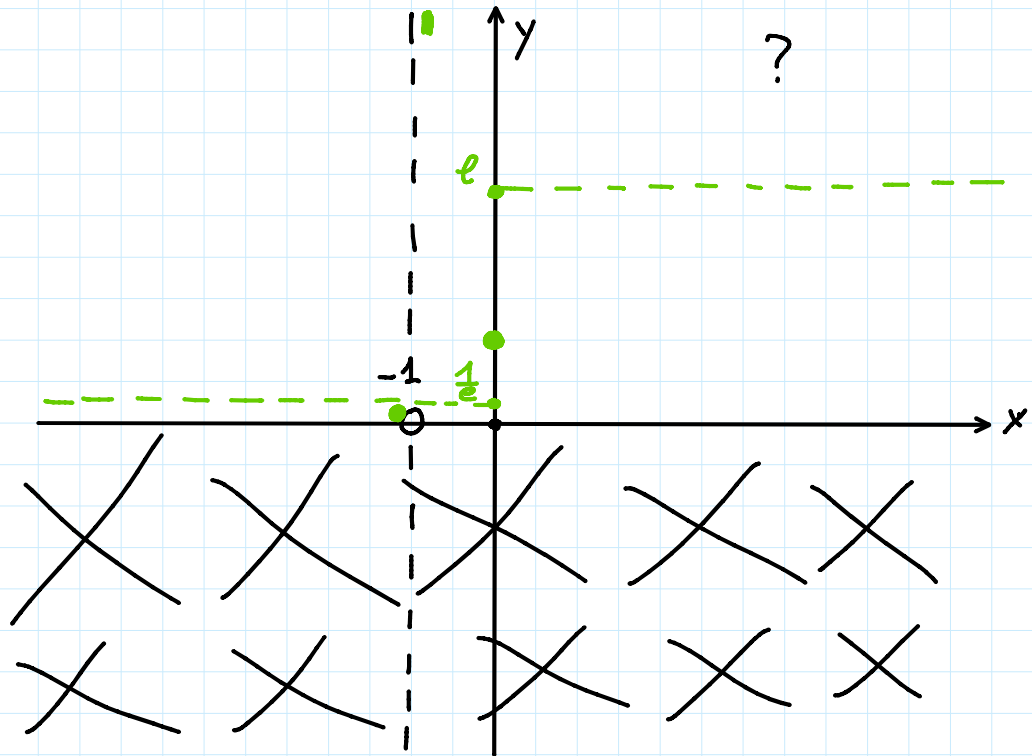
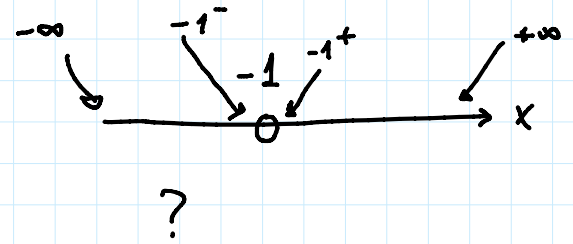


$$f(x) = e^{\frac{|x|}{x+1}}$$

1) DOMINIO $x+1 \neq 0$ $x \neq -1$



2) PARI E DISPARI

$$f(x) = e^{\frac{|x|}{x+1}} \quad \text{CALCOLO } f(-x) = e^{\frac{|-x|}{-x+1}} = e^{\frac{|x|}{1-x}}$$

NO SIMMETRIE (NÈ PARI ; NÈ DISPARI)

3) INTERSEZIONE ASSI

$$\begin{cases} x=0 \\ y = e^0 = 1 \end{cases}$$

A(0;1)

$$\begin{cases} y=0 \\ e^{\frac{|x|}{x+1}} = 0 \text{ MAI} \end{cases}$$

4) STUDIO SEGNO

$$e^{\frac{|x|}{x+1}} \geq 0 \quad \underline{\underline{\forall x \in D}}$$

5) ASINTOTI

VERTICALE

$$\lim_{x \rightarrow -1^+} e^{\frac{|x|}{x+1}} = e^{\frac{1-1}{-1+1}} = e^{\frac{1}{0^+}} = +\infty$$

$$\lim_{x \rightarrow -1^-} e^{\frac{|x|}{x+1}} = e^{\frac{1}{0^-}} = e^{-\infty} = 0$$

$x = -1$ A. VERTICALE DESTRO

ASINTOTI ORIZZONTALI

$$\lim_{x \rightarrow +\infty} e^{\frac{|x|}{x+1}} \quad |x| = x \quad \lim_{x \rightarrow +\infty} e^{\frac{x}{x+1}} \sim \lim_{x \rightarrow +\infty} e^{\frac{x}{x}} = e$$

$$\lim_{x \rightarrow -\infty} e^{\frac{|x|}{x+1}} \quad |x| = -x \quad \sim \lim_{x \rightarrow -\infty} e^{-\frac{x}{x}} = e^{-1} = \frac{1}{e}$$

$$y = e \quad \text{se } x \rightarrow +\infty$$

$$y = \frac{1}{e} \quad \text{se } x \rightarrow -\infty$$