

$E = \{(x+y)\log|x+y|\} \quad x \in [-1, 1) \quad y \in (-1, 1]$  trovare max min, inf e sup

$$\begin{cases} (x+y)\log|x+y| & x+y \neq 0 \\ x \in [-1, 1) \quad y \in (-1, 1] \end{cases}$$

$$\delta = x+y \quad -2 < \delta < 2$$

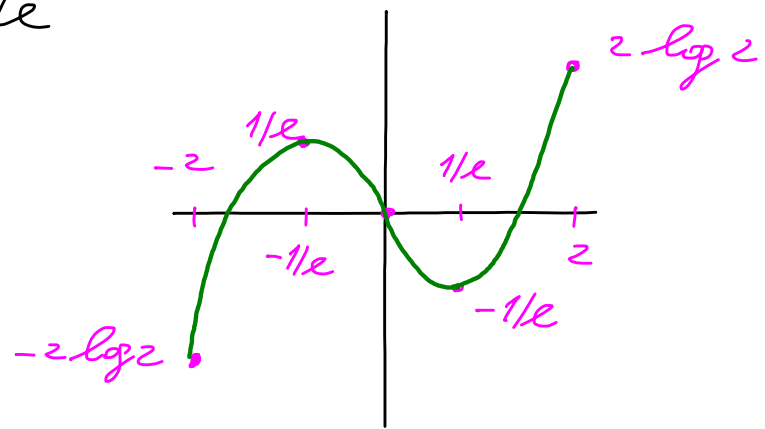
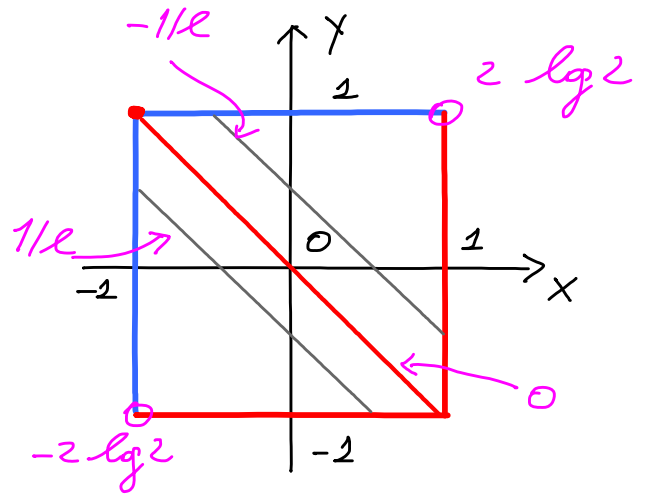
$$f(\delta) = \delta \log|\delta| \quad \delta \neq 0$$

$$f(\delta) = -f(-\delta)$$

$$\delta > 0 \quad f(\delta) = \delta \log \delta \quad f'(\delta) = \log \delta + 1 = 0 \quad \delta = 1/e$$

$$f(1/e) = -1/e$$

$$\delta \rightarrow 0 \quad f(\delta) = 0$$



$$\leadsto \inf(f) = -2 \log 2 \quad \sup(f) = 2 \log 2$$