

$$\lim_{x \rightarrow -\infty} \frac{3}{x-2} = 0$$

$\forall \epsilon > 0 \exists I_\epsilon(0) \in \text{CORRISP. } \exists I_M(-\infty) / \forall x \in I_M(-\infty)$
 $\Rightarrow f(x) \in I_\epsilon(0) \text{ cioè } \left| \frac{3}{x-2} \right| < \epsilon$

$$\begin{cases} \left| \frac{3}{x-2} \right| < \epsilon \\ \left| \frac{3}{x-2} \right| - \epsilon < 0 \\ x < -M \end{cases} \quad \begin{cases} \left| \frac{3}{x-2} \right| - \epsilon < 0 \\ x < -M \end{cases}$$

$$\textcircled{1} \begin{cases} \text{SE } x > 2 \\ \frac{3}{x-2} - \epsilon < 0 \end{cases} \quad \begin{cases} \text{SE } x < 2 \\ -\frac{3}{x-2} - \epsilon < 0 \end{cases} \rightarrow -\epsilon < \frac{3}{x-2}$$

$$\frac{3 - \epsilon x + 2\epsilon}{x-2} < 0 \quad \frac{-3 - \epsilon x + 2\epsilon}{x-2} < 0$$

$$N > 0 \Rightarrow -\epsilon x + 2\epsilon + 3 > 0$$

$$N > 0 \Rightarrow -\epsilon x + 2\epsilon - 3 > 0$$

$$x < \frac{2\epsilon + 3}{\epsilon}$$

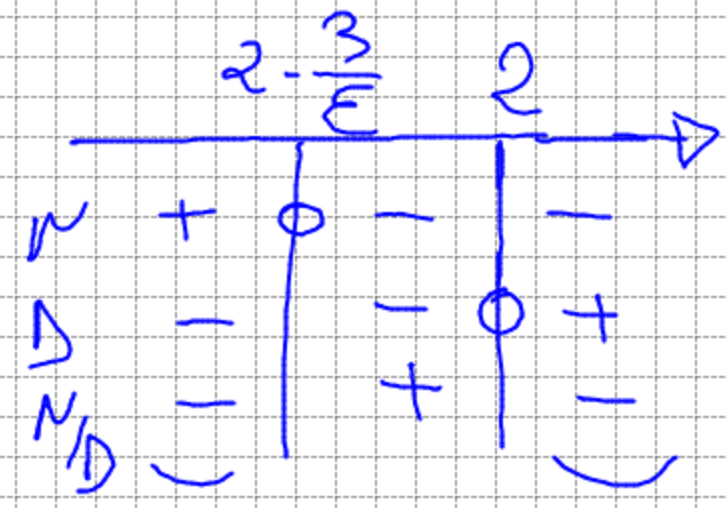
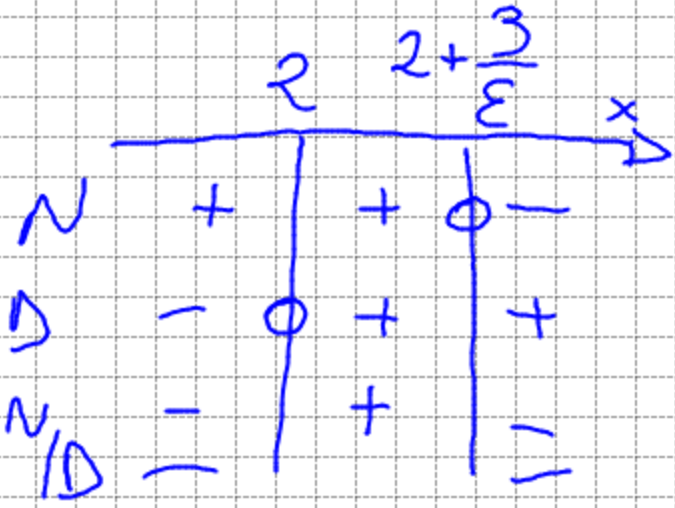
$$x < \frac{2\epsilon - 3}{\epsilon}$$

$$x < 2 + \frac{3}{\epsilon}$$

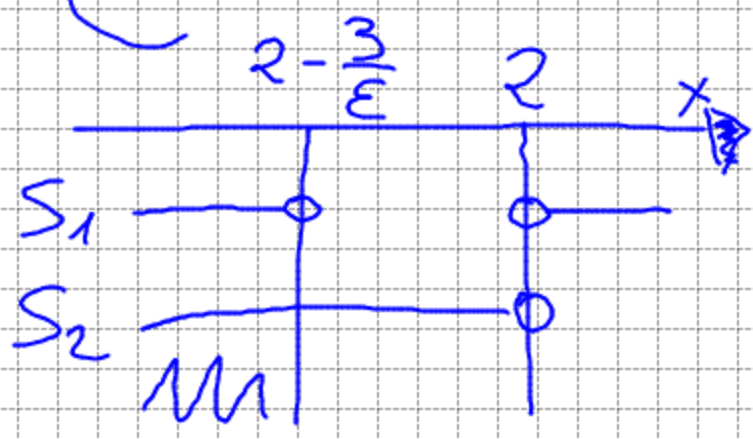
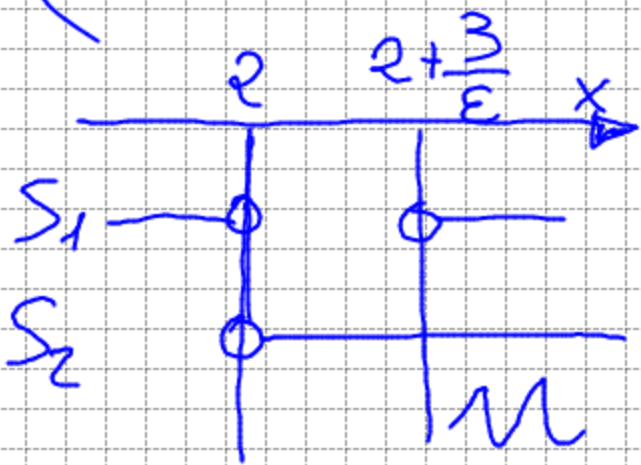
$$x < 2 - \frac{3}{\epsilon}$$

$$D > 0 \Rightarrow x - 2 > 0 \\ x > 2$$

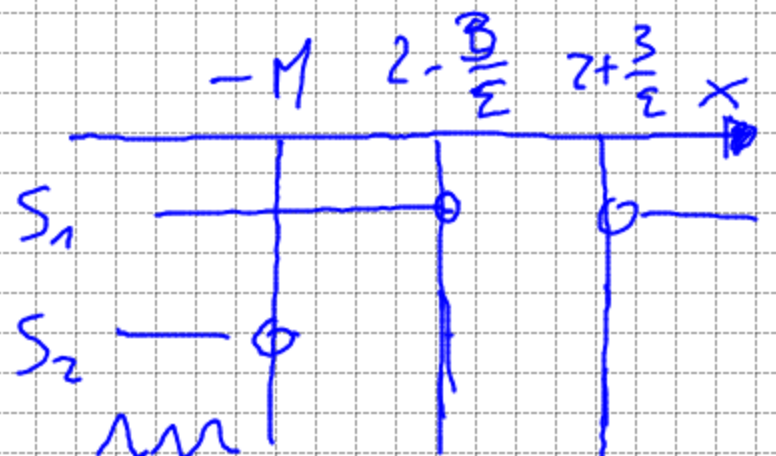
$$D > 0 \Rightarrow x - 2 > 0 \\ x > 2$$



$$\begin{cases} \frac{3}{x-2} - \epsilon < 0 \\ x > 2 \end{cases} \cup \begin{cases} -\frac{3}{x-2} - \epsilon < 0 \\ x < 2 \end{cases}$$



$$\begin{cases} x < 2 - \frac{3}{\epsilon} \cup x > 2 + \frac{3}{\epsilon} \\ x < -M \end{cases}$$



$$f(x) = \frac{3}{x-2}$$

$$D_f = \{x \in \mathbb{R} \mid x-2 \neq 0\} =$$

$$= \{x \in \mathbb{R} \mid x \neq 2\} = (-\infty, 2) \cup (2, +\infty)$$

$f(x)$ É PARI $f(x) = f(-x)$

$$f(-x) = \frac{3}{-x-2} \quad \text{NON É PARI}$$

$f(x)$ É DISPARI SE $f(x) = -f(-x)$

$$-f(-x) = -\frac{3}{-x-2} = \frac{3}{x+2} \quad \text{NON É DISPARI}$$