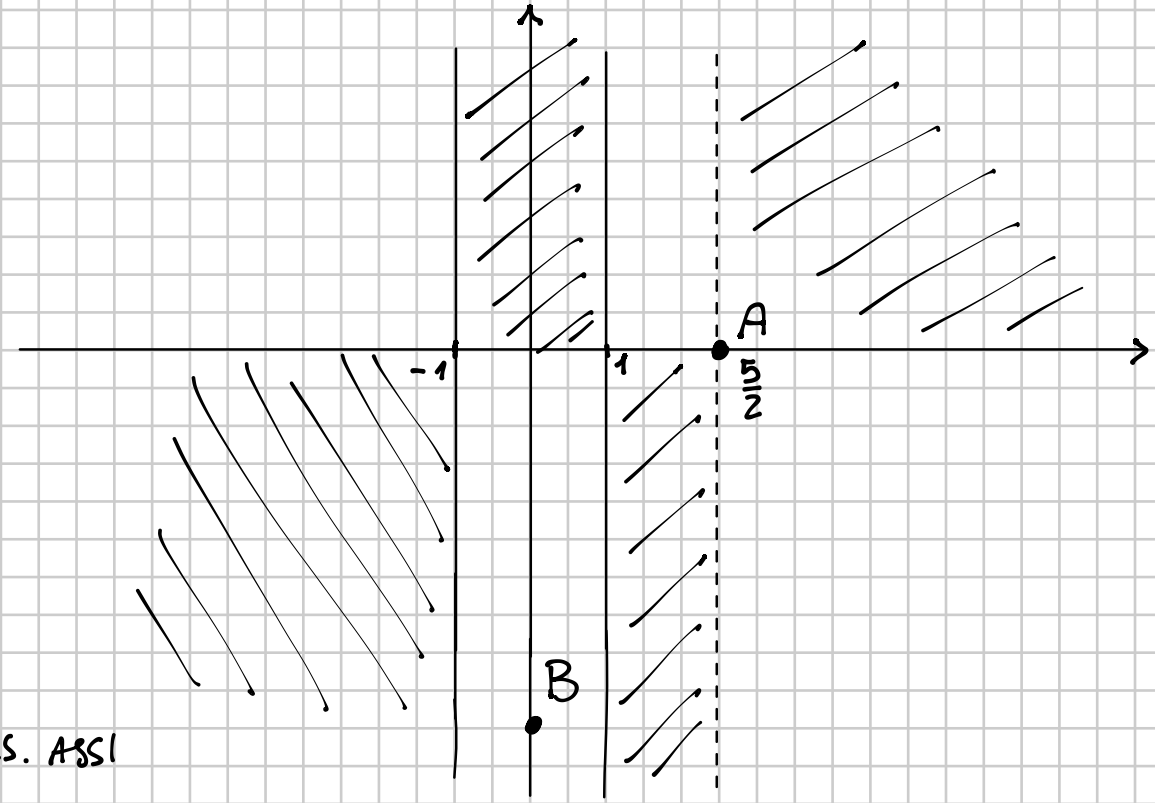
194 $y = \dfrac{5-2x}{|x|-1}$

1) DOMINIO $\quad |x|-1 \neq 0 \quad |x| \neq 1 \quad x \neq \pm 1 \quad D = (-\infty,-1) \cup (-1,1) \cup (1,+\infty)$



2) INTERS. ASSI

ASSE x $\quad \begin{cases} y=0 \\ y=\dfrac{5-2x}{|x|-1} \end{cases} \qquad \dfrac{5-2x}{|x|-1}=0 \Rightarrow 5-2x=0 \quad x=\dfrac{5}{2}$

$A\left(\frac{5}{2},0\right)$

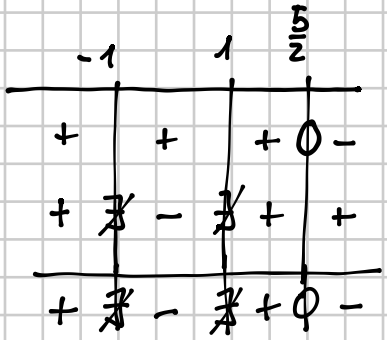
ASSE y $\quad \begin{cases} x=0 \\ y=\dfrac{5-2x}{|x|-1} \end{cases} \quad \begin{cases} x=0 \\ y=-5 \end{cases} \quad B(0,-5)$

3) SEGNO

$\dfrac{5-2x}{|x|-1} > 0$

$5-2x>0 \quad x<\frac{5}{2}$

$|x|-1>0 \quad |x|>1 \quad x<-1 \vee x>1$

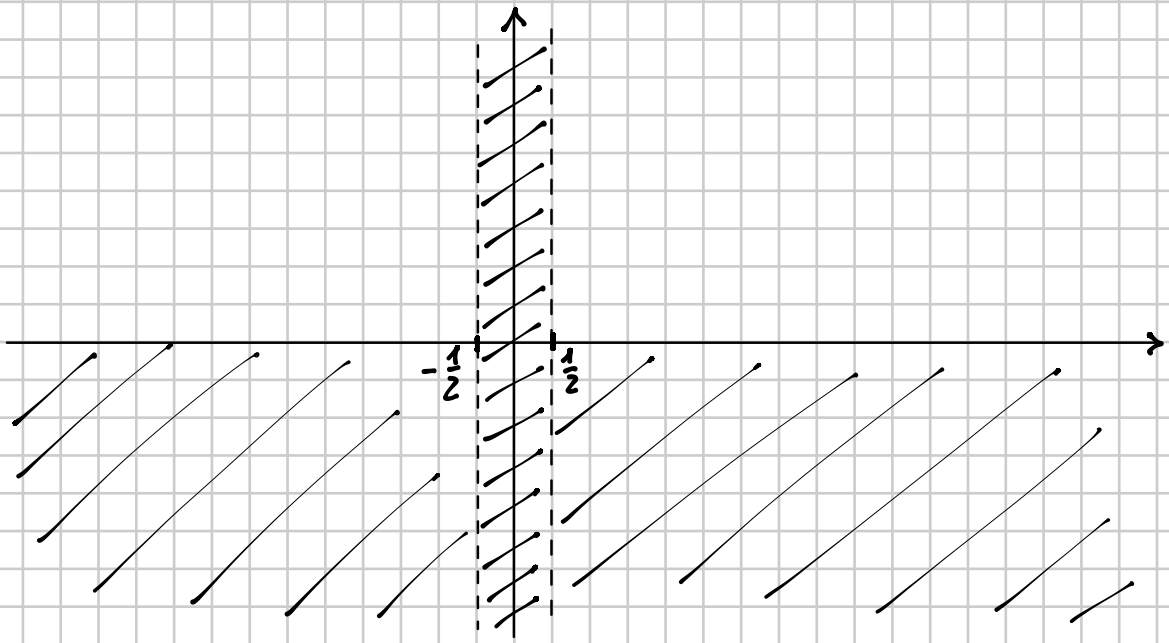


208 $y = \sqrt{4x^2 - 1} - 2x + 6$

1) DOMINIO: $4x^2 - 1 \geq 0$ $\quad x \leq -\frac{1}{2} \vee x \geq \frac{1}{2}$

$x = \pm \frac{1}{2}$

$D = \left(-\infty, -\frac{1}{2}\right] \cup \left[\frac{1}{2}, +\infty\right)$



2) INT. ASSI

ASSE x $\begin{cases} y = \sqrt{4x^2 - 1} - 2x + 6 \\ y = 0 \end{cases}$

$\sqrt{4x^2 - 1} - 2x + 6 = 0$

$\sqrt{4x^2 - 1} = 2x - 6$

$\begin{cases} 2x - 6 \geq 0 \\ 4x^2 - 1 = 4x^2 - 24x + 36 \end{cases}$

$\begin{cases} x \geq 3 \\ x = \frac{37}{24} \text{ N.A.} \end{cases}$ $\quad \emptyset$

NON CI SONO INTERS. CON ASSE x

Siccome $x = 0$ non fa parte del dominio, non ci sono interses. con l'asse y

3) SEGNO

$$\sqrt{4x^2-1} - 2x + 6 > 0$$

$$\sqrt{4x^2-1} > 2x - 6$$

$$\begin{cases} 2x-6 < 0 \\ 4x^2-1 \geq 0 \end{cases} \quad \vee \quad \begin{cases} 2x-6 \geq 0 \\ 4x^2-1 > 4x^2 - 24x + 36 \end{cases}$$

$$\begin{cases} x < 3 \\ x \leq -\frac{1}{2} \vee x \geq \frac{1}{2} \end{cases} \quad \vee \quad \begin{cases} x \geq 3 \\ x > \frac{37}{24} \end{cases}$$

$$x \leq -\frac{1}{2} \vee \frac{1}{2} \leq x < 3 \quad \vee \quad x \geq 3 \implies x \leq -\frac{1}{2} \vee x \geq \frac{1}{2}$$