DISEQUAZIONI

$$x + 2 \geq -2x - 5$$

$$x + 2x \geq -2 - 5$$

$$3x \geq -7$$

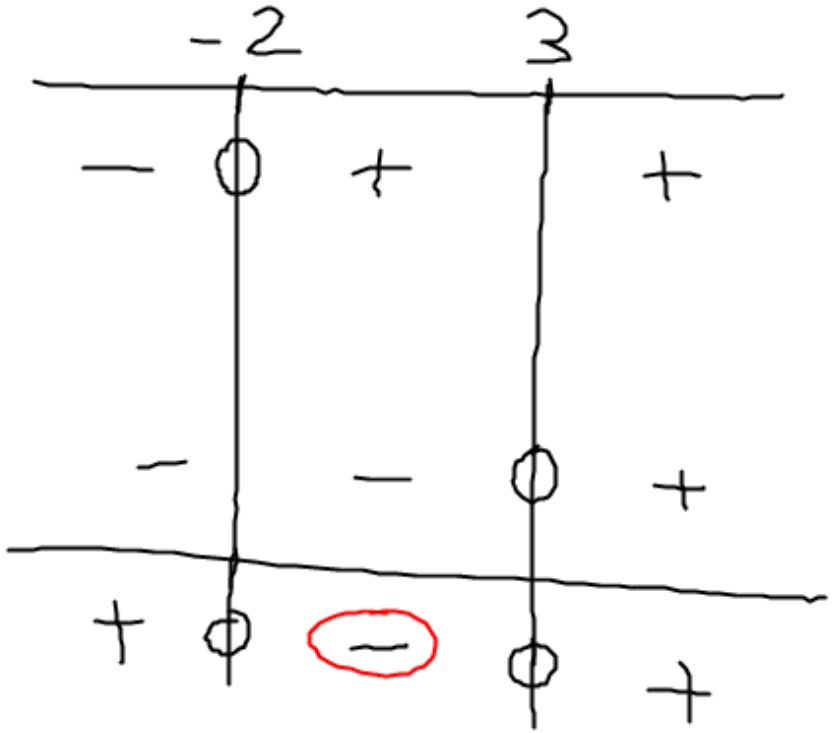
$$\boxed{x \geq -\frac{7}{3}}$$ INSIEME SOLUZIONE

$$(x+2)(x-3) \leq 0$$

1 2

1 $x+2>0 \Rightarrow x>-2$

2 $x-3>0 \Rightarrow x>3$



$-2 \leq x \leq 3$

SE AVESSI $(x+2)(x-3) \geq 0$

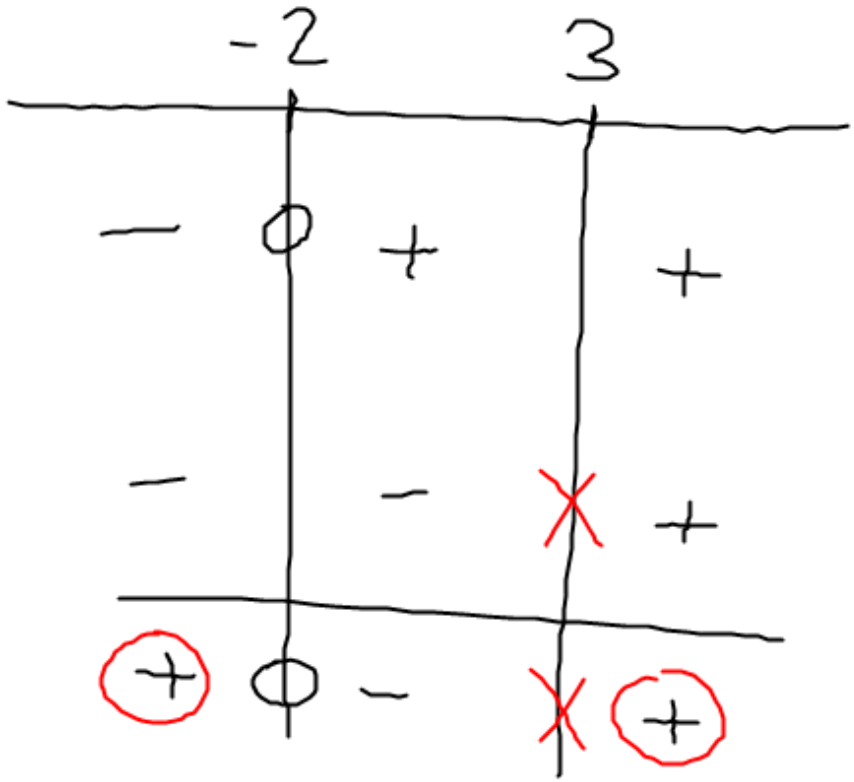
$x \leq -2 \quad \vee \quad x \geq 3$

N_1 $\dfrac{x+2}{x-3} \geq 0$

D_1

N_1 $x+2>0 \Rightarrow x>-2$

D_1 $x-3>0 \Rightarrow x>3$



$x \leq -2 \quad \vee \quad x>3$

DISEQUAZIONI DI 2° GRADO

$$2x^2 - x - 1 > 0$$

COEFF. DI x^2 POSITIVO

(SE NON LO È CAMBIO I SEGNI E INVERTO LA DISUGUAGLIANZA)

CONSIDERO $y = 2x^2 - x - 1$

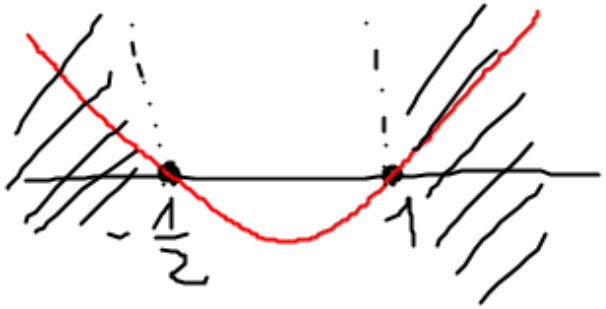
E TROVO LE INTERSEZIONI CON L'ASSE X

$$\begin{cases} y = 2x^2 - x - 1 \\ y = 0 \end{cases}$$

$$2x^2 - x - 1 = 0$$

$$\Delta = 1 + 8 = 9$$

$$x = \frac{1 \pm 3}{4} = \begin{cases} -\frac{1}{2} \\ 1 \end{cases}$$



$x < -\frac{1}{2} \vee x > 1$