

$$\begin{cases} \frac{5x-3}{2x(1-3x)} < 0 & \text{DIS1} \\ \frac{x(x-1)}{2x+6} \geq 0 & \text{DIS2} \\ \frac{3-4x}{2-x} < 0 & \text{DIS3} \end{cases}$$

Dopo aver denominato con DIS1, DIS2 e DIS3
le 3 disequazioni, le risolvo separatamente

DIS1 $\frac{5x-3}{2x(1-3x)} < 0$, semplifico e denomino

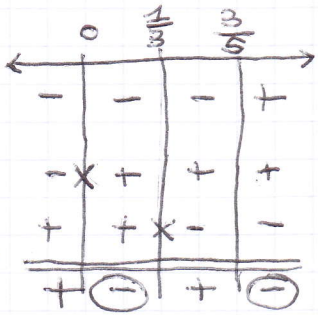
$$\frac{5x-3}{x(1-3x)} < 0$$

$D_1 \quad D_2$

$N > 0, 5x-3 > 0 \Rightarrow x > \frac{3}{5}$

$D_1 > 0 \Rightarrow x > 0$

$D_2 > 0 \Rightarrow 1-3x > 0, 3x-1 < 0, x < \frac{1}{3}$



SOLUZI. $0 < x < \frac{1}{3} \vee x > \frac{3}{5}$

DIS2 $\frac{x(x-1)}{2(x+3)} \geq 0$, semplifico e denomino

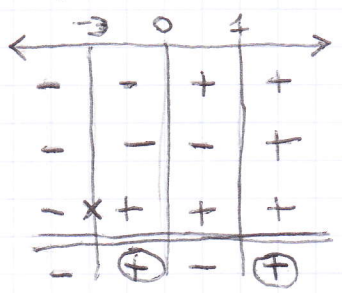
$$\frac{x_1(x-1)}{x+3} \geq 0$$

$N_1 \quad N_2 \quad D$

$N_1 > 0 \Rightarrow x > 0$

$N_2 > 0 \Rightarrow x > 1$

$D > 0 \Rightarrow x > -3$



SOLUZI. $-3 < x \leq 0 \vee x \geq 1$

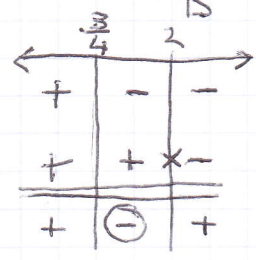
DIS3 $\frac{3-4x}{2-x} < 0$, denomino

$$\frac{3-4x}{2-x} < 0$$

$N \quad D$

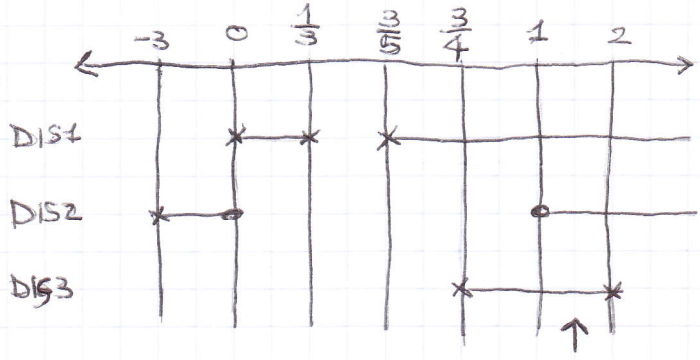
$N > 0 \Rightarrow 3-4x > 0, x < \frac{3}{4}$

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



SOLUZI. $\frac{3}{4} < x < 2$

Rappresentazione grafica del sistema



SOLUZI. $1 < x < 2$

ESERCIZI CONSIGLIATI PER LA VERIFICA
 PAG 64 n° 42, 44, 45, 46, 47, 50, 52, 54, 55
 PAG 65 n° 10, 11, 12, 13