

1	$\begin{cases} 12(x^2 - 16) > 0 \\ (x + 2)^7 > 0 \end{cases}$	$-2 < x < 0 \vee x > 4$
2	$\begin{cases} \frac{1}{x-4} > 0 \\ \frac{7}{5-x} > 0 \end{cases}$	$4 < x < 5$
3	$\begin{cases} \frac{x-5}{x-3} > 1 \\ x - 2(1-x) \geq 2x \end{cases}$	$2 \leq x < 3$
4	$\begin{cases} \frac{x+2}{4} - \frac{x-4}{2} < 3 - \frac{x}{3} \\ \frac{5x-2}{3} + 1 > \frac{2x-3}{2} \\ x^2 - 2x - 3 > 0 \end{cases}$	$-\frac{11}{4} < x < -1 \vee 3 < x < 6$
5	$\begin{cases} \frac{x+3}{2x-1} < 0 \\ \frac{x+2}{x+8} \leq 0 \end{cases}$	$-3 < x \leq -2$
6	$\begin{cases} -x^2 + 6x + 7 > 0 \\ -x^2 + 8x - 15 < 0 \\ \frac{2x+1}{5} - 1 > \frac{2-x}{3} \end{cases}$	$2 < x < 3 \vee 5 < x < 7$
7	$\begin{cases} \frac{x-1}{5-x} > 0 \\ 2x - 3 > 0 \end{cases}$	$\frac{3}{2} < x < 5$
8	$\begin{cases} \frac{14}{x+2} < 0 \\ (x+10)(8-x) > 0 \\ \frac{14-x}{18} > 0 \end{cases}$	$-10 < x < -2$
9	$\begin{cases} \frac{x^2 - 2x}{(x+1)(5-x)} \geq 0 \\ \frac{x+1}{x^2-9} < \frac{1}{x+3} \end{cases}$	$-1 < x \leq 0 \vee 2 \leq x < 3$
10	$\begin{cases} x^2 - 5x + 6 < 0 \\ \frac{x-2}{x+1} \geq 0 \end{cases}$	$2 < x < 3$
11	$\begin{cases} x^2 - 5x + 6 > 0 \\ (2x-3)(x+1) < 0 \end{cases}$	$-1 < x < \frac{3}{2}$

12	$\begin{cases} \frac{x-2}{x+3} \geq 0 \\ 7+2x > -\frac{x^2}{7} \end{cases}$	$x < -3 \vee x \geq 2 \wedge x \neq -7$
13	$\begin{cases} x^2 + 12x + 35 > 0 \\ x^2 - x - 6 > 0 \end{cases}$	$x < -7 \vee -5 < x < -2 \vee x > 3$
14	$\begin{cases} x - x^2 > 0 \\ 2x^2 + 3x - 5 < 0 \\ x^2 + 5x + 6 > 0 \end{cases}$	$0 < x < 1$
15	$\begin{cases} \frac{1+x^2}{3x} \leq 0 \\ x < (x+2)(3-x) \end{cases}$	$-\sqrt{6} < x < 0$
16	$\begin{cases} \frac{x-1}{x+2} \leq \frac{-1}{x-3} \\ 3 - \frac{4-x}{3} + \frac{3-x}{2} \geq 2 \end{cases}$	$-2 < x < 3$
17	$\begin{cases} \frac{2x-3}{x-5} \leq 0 \\ \frac{13}{x} - 5 < 21 \end{cases}$	$\frac{3}{2} \leq x < 5$
18	$\begin{cases} 2 + \frac{1}{x} < \frac{2}{5x} \\ \frac{2x-1}{2} \cdot \frac{x}{4} + \frac{6x-1}{4} \leq \left(\frac{x}{2} + 1\right)^2 + \frac{3}{8}x \end{cases}$	$\frac{5-\sqrt{35}}{5} < x < 0 \vee x > \frac{5+\sqrt{35}}{5}$
19	$\begin{cases} \frac{x-1}{5-x} > 0 \\ 2x-3 > 0 \end{cases}$	$\frac{3}{2} < x < 5$
20	$\begin{cases} (x-\sqrt{2})(x+\sqrt{2}) \geq 2(-x-1) - 1 \\ \frac{x^2-5x+6}{x^2-6x-7} > 0 \end{cases}$	$x < -1 \vee 2 < x < 3 \vee x > 7$
21	$\begin{cases} 3x+9+2 < x-1 \\ 2x-3 > x+7 \end{cases}$	<i>impossibile</i>
22	$\begin{cases} 3x-5 < 2x+4 \\ -4x > 2+8\left(x-\frac{5}{8}\right) - 6x \end{cases}$	$x < \frac{1}{2}$

23	$\begin{cases} \frac{x+3}{2} - \frac{2}{3} < \frac{x-1}{6} - 1 \\ 2x - 2 > x + 1 \end{cases}$	<i>impossibile</i>
24	$\begin{cases} 2x + \frac{1}{2}x - \frac{1}{6} < \frac{3}{2} \\ \frac{1}{2}x + x - 3 > -(5 + x) \end{cases}$	$-\frac{4}{5} < x < \frac{2}{3}$
25	$\begin{cases} 4\left(\frac{1}{8}x - 2\right) - \frac{x}{4} \leq \frac{x+3}{3} \\ \frac{1}{3}x + 2 > \frac{1}{2}x - \frac{x-5}{6} + 1 \end{cases}$	$x \geq 108$
26	$\begin{cases} \frac{1}{2}(2+x) - 1 > -\frac{1}{3}(x-1) \\ \frac{1}{5}(x+10) < \frac{1}{3}(x+6) \end{cases}$	$x > \frac{2}{5}$
27	$\begin{cases} \frac{x+2}{5} + \frac{x^2+1}{2} \geq 3 \\ (2x-1)^2 - 3x(x-1) \leq x+9 \end{cases}$	$\frac{\sqrt{106}-1}{5} \leq x \leq 4$
28	$\begin{cases} \frac{x(2x-1)}{2} - \frac{(3x-1)(x+2)}{6} + 2\frac{(x^2-1)}{3} > \frac{1-2x}{2} \\ (3x-\sqrt{2})^2 < 2(x^2+6) + 2x(3x-\sqrt{2}) \end{cases}$	$-\sqrt{2} < x < -\frac{5}{7} \vee 1 < x < 5\sqrt{2}$
29	$\begin{cases} x(x-\sqrt{2}) - \frac{(x\sqrt{2}-1)^2}{2} + \frac{x+\sqrt{2}}{2} > 1 \\ \left(\frac{1}{3}x-2\right)(x-1) + (x-1)^2 < x^2 - x \end{cases}$	$3 - \sqrt{2} < x < 9$
30	$\begin{cases} \frac{2x-5}{x^2-4} \geq 0 \\ \frac{x^2-3x}{2+3x} < 0 \end{cases}$	$-2 < x < -\frac{2}{3} \vee 0 < x < 2 \vee \frac{5}{2} \leq x < 3$
31	$\begin{cases} \frac{3x-1}{x-1} + \frac{x+3}{2x-2} > 2 \\ \frac{3x-x^2+10}{x^2-2x+1} \geq 0 \end{cases}$	$-2 \leq x < -\frac{5}{3} \vee 1 < x \leq 5$
32	$\begin{cases} \sqrt{(4x-1)(x-1)} - 1 < 2x \\ 2 > \sqrt{9x-x^2-14} \end{cases}$	$2 \leq x < 3 \vee 6 < x \leq 7$
33	$\begin{cases} x-2 < \sqrt{2x-1} \\ \sqrt{x+2}-1 > \sqrt{x-3} \end{cases}$	$3 \leq x < 5$