

1	$\begin{cases} 4x - 1 > \frac{1}{3}(x - 2) + 2x \\ x^2 - 3x + 2 > 0 \end{cases}$	$\frac{1}{5} < x < 1 \vee x > 2$
2	$\begin{cases} 3x^2 \leq 4x + 7 \\ \frac{2x - 3}{5} + \frac{x}{2} < \frac{x - 5}{2} + 3 \end{cases}$	$-1 \leq x \leq \frac{9}{4}$
3	$\begin{cases} -x(x + 2) > -2 \\ \frac{x}{4} \leq x - \frac{5 - x}{2} + \frac{5}{2} \end{cases}$	$0 \leq x < -1 + \sqrt{3}$
4	$\begin{cases} x(x - 4) + \frac{3x + 1}{4} \geq \frac{3}{4}(1 + x) - \frac{3}{4} \\ 3x^2 + 7x + 2 > 0 \end{cases}$	$\begin{aligned} &x < -2 \vee \\ &-\frac{1}{3} < x \leq \frac{4 - \sqrt{15}}{2} \\ &\vee x \geq \frac{4 + \sqrt{15}}{2} \end{aligned}$
5	$\begin{cases} (x + 3)^2 > x^2 - 9 \\ (x + 1)^2 > (x + 2)^2 \end{cases}$	$3 < x < -\frac{3}{2}$
6	$\begin{cases} x^2 + 5x - 6 < 0 \\ 2x + 3 > x + 2 \end{cases}$	$-1 < x < 1$
7	$\begin{cases} x^2 - 7x + 12 \geq 0 \\ x - 2 \leq 8 \end{cases}$	$x \leq 3 \vee 4 \leq x \leq 10$
8	$\begin{cases} x^2 + 5x - 6 < 0 \\ 2x - 5 > x + 20 \end{cases}$	$-6 < x < 1$
9	$\begin{cases} x + 50 > 10x \\ (x - 3)^2 + 3x^2 - 4 < (2x - 1)^2 \\ (x + 3)^2 > x^2 - 7x + 9 \end{cases}$	$2 < x < \frac{50}{9}$
10	$\begin{cases} x^2 - x - 6 \leq 0 \\ x^2 + 3x - 4 < 0 \end{cases}$	$-2 \leq x < 1$
11	$\begin{cases} x^2 - 9x > 0 \\ 5x^2 - 7x + 1 > 0 \end{cases}$	$x < 0 \vee x > 9$

12	$\begin{cases} \frac{2x+1}{5} - \frac{2-x}{3} > 1 \\ x^2 - 6x + 7 < 0 \\ x^2 - 8x + 15 > 0 \end{cases}$	$2 < x < 3$
13	$\begin{cases} \frac{x+2}{4} + \frac{x}{3} < \frac{x-4}{2} \\ \frac{5x-2}{3} + 1 > \frac{2x-3}{2} \\ x^2 - 2x - 3 > 0 \end{cases}$	$\nexists x \in \mathbb{R}$
14	$\begin{cases} x\left(x - \frac{1}{4}\right) < x^2 - \frac{1}{36} - \frac{x}{3} + \frac{1}{12} \\ 3x + 2 > 4x(x - 1) \end{cases}$	$-\frac{1}{4} < x < \frac{2}{3}$
15	$\begin{cases} 3(4x+1)(4x-1) > 6 - x^2 \\ 3(x^2 - 2) < 43 \end{cases}$	$-\frac{7}{\sqrt{3}} < x < -\frac{3}{7} \vee \frac{3}{7} < x < \frac{7}{\sqrt{3}}$
16	$\begin{cases} x > 2 \\ 6(x-1) - 1 > x(x-2) \\ x(x-2) \leq 4(x-1) - 5 \end{cases}$	$x = 3$
17	$\begin{cases} x + 3 > 0 \\ 4x^2 - x + 1 > 0 \\ x^2 + x - 2 \geq 0 \end{cases}$	$-3 < x \leq -2 \vee x \geq 1$
18	$\begin{cases} x^2 + 3x + 2 > 0 \\ 4(x+1) > 1 - x^2 \\ x^2 + x + 1 < 0 \end{cases}$	<i>impossibile</i>
19	$\begin{cases} 2x(x+5) > 3(x+1)^2 \\ x^2 + 4x + 3 > 3(x-1)^2 \\ x^2 - 16 < (2x-7)^2 \end{cases}$	$1 < x < 3$
20	$\begin{cases} (x-1)^2 < (2x+1)(x+1) \\ 12x^2 + x - 1 > 0 \\ x^2 + 6x < 6 + \frac{x}{8} + \frac{(x+2)(2x-3)}{4} \end{cases}$	$-12 < x < -5 \vee \frac{1}{4} < x < \frac{3}{4}$
21	$\begin{cases} 2x^2 > 3(9-x) \\ x \frac{x-5}{5} < 5x + \frac{64}{5} \\ (x+4)(2x+5) > 0 \end{cases}$	$1 < x < 32$

22	$\begin{cases} x^2 - 5x + 6 > 0 \\ x^2 - 16 < 0 \end{cases}$	$\begin{aligned} -4 < x < 2 \vee \\ 3 < x < 4 \end{aligned}$
23	$\begin{cases} 3x^2 - 5x - 2 > 0 \\ x^2 - 4x + 3 < 0 \end{cases}$	$2 < x < 3$
24	$\begin{cases} 7x(x+2) - 2 > x + 4(5x^2 - 3x) + 5(5x - 3) \\ 2(x+6) + x^2 \leq 2x(2x+1) \end{cases}$	$\nexists x \in R$
25	$\begin{cases} (3x-5)^2 < 12x-5 \\ (2x+1)(2x-3) - 4x + 6 > \left(x + \frac{1}{2}\right)^2 \\ 2x - \frac{x^2-7}{4} > \frac{4x-1}{2} \end{cases}$	$\frac{9+\sqrt{3}}{6} < x < 3$
26	$\begin{cases} 2(5x^2-9) < 6x^2+63 \\ 3x-2 \leq 5 - \frac{x}{2} \end{cases}$	$-\frac{9}{2} < x \leq 2$
27	$\begin{cases} 2x - \frac{2(x-2)}{3} \geq x - 1 + \frac{x-1}{2} \\ 3\left(x + \frac{1}{3}\right)^2 > \left(x - \frac{1}{3}\right)(x-3) \end{cases}$	$\begin{aligned} x < -\frac{4+\sqrt{19}}{3} \vee \\ \frac{\sqrt{19}-4}{3} < x \leq 17 \end{aligned}$
28	$\begin{cases} \frac{7}{4} - \frac{3}{2}(4x-1) \geq (3x-1)^2 \\ 2x^2 - \frac{x}{2} > x^2 - \frac{2}{5}\left(x - \frac{11}{10}\right) - \frac{x}{10} \end{cases}$	$\nexists x \in R$
29	$\begin{cases} 3x - \frac{1}{2} > x + \frac{3}{2}(x-5) \\ x(x+8) - 27 \leq 3(x-1) \end{cases}$	$-8 \leq x \leq 3$
30	$\begin{cases} x(x-2) + \frac{5}{2}x > 6(x-1) - \frac{x}{2} \\ \frac{(x+1)^2}{3} + \frac{x^2-1}{2} - 3x \leq \frac{3}{2}(x+1)^2 - \frac{2x^2-11}{3} \end{cases}$	$-1 \leq x < 2 \vee x > 3$
31	$\begin{cases} \frac{x}{2}(x+1) - x - \frac{x}{2} > 2 - x^2 + 2(x+1) \\ x(x-5+2x-10) < 0 \end{cases}$	$\frac{3+\sqrt{33}}{3} < x < 5$

32	$\begin{cases} (3x - 5)(2x - 5) > (x + 3)(x - 1) \\ 4(x^2 - 1) < 4x - 1 \end{cases}$	$-\frac{1}{2} < x < \frac{7}{5}$
33	$\begin{cases} 2\left(x - \frac{1}{2}\right)x + 2x - \frac{1}{3} > 4\left(x - \frac{1}{3}\right) \\ (x - 1)^2 + 1 < 3(1 - x) \end{cases}$	$\frac{-1 - \sqrt{5}}{2} < x < \frac{1}{2}$
34	$\begin{cases} \frac{x}{2}(x + 1) - 3x + 5 > 2 \\ x^2 + 3x - 4 > 0 \end{cases}$	$\begin{aligned} x < -4 \vee \\ 1 < x < 2 \vee \\ x > 3 \end{aligned}$
35	$\begin{cases} x\left(x + \frac{1}{2}\right) - 3x - 1 < -\frac{3}{2}x - \frac{1}{4} \\ 2x^2 - 3x + 4 > 0 \end{cases}$	$-\frac{1}{2} < x < \frac{3}{2}$
36	$\begin{cases} 2\left(x - \frac{1}{2}\right)x + 2x - \frac{1}{3} > 4\left(x - \frac{1}{3}\right) \\ (x - 1)^2 + 1 < 3(1 - x) \end{cases}$	$\frac{-1 - \sqrt{5}}{2} < x < \frac{1}{2}$
37	$\begin{cases} \frac{x}{2}(x + 1) - 3x + 5 > 2 \\ x^2 + 3x - 4 > 0 \end{cases}$	$\begin{aligned} x < -4 \vee \\ 1 < x < 2 \vee x > 3 \end{aligned}$
38	$\begin{cases} x\left(x + \frac{1}{2}\right) - 3x - 1 < -\frac{3}{2}x - \frac{1}{4} \\ 2x^2 - 3x + 4 > 0 \end{cases}$	$-\frac{1}{2} < x < \frac{3}{2}$
39	$\begin{cases} (3x + 1)^2 \leq \left(x - \frac{5}{3}\right) + 1 + \frac{2}{3}x \\ (3x - 2)x + x - \frac{2}{3} < \frac{4}{3} - 2x \end{cases}$	$\textit{impossibile}$
40	$\begin{cases} \left(x - \frac{1}{2}\right)^2 + \frac{(x - 3)^2}{4} - 33 > \frac{3 - 10x}{4} \\ x\left(x - \frac{1}{2}\right) < \frac{1}{2} \end{cases}$	$\textit{impossibile}$
41	$\begin{cases} \frac{x^2}{2} - \frac{1 - 6x^2}{12} > \frac{4 - x^2}{3} \\ \frac{x(x + 4)}{9} - 1 < x - \frac{2x + 1}{3} \end{cases}$	$\begin{aligned} -3 < x < -\frac{\sqrt{17}}{4} \vee \\ \frac{\sqrt{17}}{4} < x < 2 \end{aligned}$
42	$\begin{cases} \frac{(x^2 - 1)}{2} - \frac{2}{3}(x + 1) > \frac{x - 5}{6} \\ \frac{x + 1}{2} + \frac{2x - 3}{4} \leq x^2 - 1 \end{cases}$	$x \leq -\frac{1}{2} \vee x > 2$

43	$\begin{cases} 3x^2 - 2x + 7 < 0 \\ 2x \left( 2x - \frac{1}{3} \right) > \frac{7}{4}x + 5 \end{cases}$	<i>impossibile</i>
44	$\begin{cases} \frac{x^2}{2} + \frac{x+1}{5} > -2 \\ \frac{x-2}{7} - \frac{x^2-1}{2} < 3 \end{cases}$	$\forall x \in \mathbb{R}$
45	$\begin{cases} x^2 - 5x < 0 \\ x - 2 > 0 \end{cases}$	$2 < x < 5$
46	$\begin{cases} x^2 + 2x - 3 > 0 \\ x + \frac{19}{2} \geq \frac{7}{2} \\ x^2 + x - 12 \geq 0 \end{cases}$	$6 < x < -4 \vee x > 3$
47	$\begin{cases} \frac{x+3}{2} > \frac{2x+9}{6} \\ 2(x+2) - 4 < 3(x+2) - 7 \\ 2x + 3(x+2) < 16 \end{cases}$	$1 < x < 2$
48	$\begin{cases} (x+1)^2 - \frac{5}{2} < x(x+1) + \frac{x}{2} \\ \frac{2-x^2-4x}{5} < \frac{x+5}{2} - \frac{(2x-3)(x-1)}{10} \end{cases}$	$-1 < x < 3$
49	$\begin{cases} 3x^2 - 8x + 5 > \frac{(5x-8)^2 - (4x-7)^2}{3} \\ \frac{x}{2} + \frac{2x-1}{3} > 3 \end{cases}$	<i>impossibile</i>
50	$\begin{cases} \left( x + \frac{3}{2} \right)^2 \geq \frac{9}{4} \\ x + \frac{7}{4} < \frac{3}{4} \\ (x+5)^2 = x+5 \end{cases}$	$x = -5; x = -4$