Disequazioni di secondo grado

1	$7x^2 \geq 0$	$\mathbb{R}$
2	$8x^2 \geq 0$	$\mathbb{R}$
3	$-2x^2 > 0$	*impossibile*
4	$-4x^2 > 0$	*impossibile*
5	$-2x^2 \geq 0$	$x = 0$
6	$-3x^2 \geq 0$	$x = 0$
7	$-6x^2 \leq 0$	$\mathbb{R}$
8	$-5x^2 \leq 0$	$\mathbb{R}$
9	$-\frac{5}{3}x^2 < 0$	$\mathbb{R} - \{0\}$
10	$-\frac{4}{5}x^2 < 0$	$\mathbb{R} - \{0\}$
11	$-\frac{2}{7}x^2 \geq 0$	$x = 0$
12	$-\frac{3}{5}x^2 \geq 0$	$x = 0$
13	$\frac{1}{3}x^2 \geq 0$	$\mathbb{R}$
14	$\frac{1}{2}x^2 \geq 0$	$\mathbb{R}$
15	$\frac{5}{3}x^2 < 0$	*impossibile*
16	$\frac{7}{2}x^2 < 0$	*impossibile*
17	$(2x+3)^2 > 0$	$\mathbb{R} - \left\{-\frac{3}{2}\right\}$
18	$(5x+2)^2 > 0$	$\mathbb{R} - \left\{-\frac{2}{5}\right\}$
19	$(3x-4)^2 < 0$	*impossibile*
20	$(4x-5)^2 < 0$	*impossibile*
21	$(x+3)^2 \leq 0$	$x = -3$

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22	$(x+2)^2 \leq 0$	$x = -2$
23	$x^2 + 2x < 0$	$-2 < x < 0$
24	$x^2 + 3x < 0$	$-3 < x < 0$
25	$x^2 - 5x \geq 0$	$x \leq 0 \vee x \geq 5$
26	$x^2 - 4x \geq 0$	$x \leq 0 \vee x \geq 4$
27	$-\frac{3}{4}x^2 - 1 > 0$	*impossibile*
28	$-\frac{2}{5}x^2 - 1 > 0$	*impossibile*
29	$-9x^2 - 4 \leq 0$	$\mathbb{R}$
30	$-4x^2 - 25 \leq 0$	$\mathbb{R}$
31	$-3x^2 - 1 \leq 0$	$\mathbb{R}$
32	$9x^2 + 25 \geq 0$	$\mathbb{R}$
33	$4x^2 + 49 \geq 0$	$\mathbb{R}$
34	$x^2 - 64 \geq 0$	$x \leq -8 \vee x \geq 8$
35	$x^2 - 81 \geq 0$	$x \leq -9 \vee x \geq 9$
36	$32 - 2x^2 \geq 0$	$-4 \leq x \leq 4$
37	$27 - 3x^2 \geq 0$	$-3 \leq x \leq 3$
38	$-3x^2 - x \leq 0$	$x \leq -\frac{1}{3} \vee x \geq 0$
39	$-5x^2 - x \leq 0$	$x \leq -\frac{1}{5} \vee x \geq 0$
40	$3x^2 + 2x - 1 \geq 0$	$x \leq -1 \vee x \geq \frac{1}{3}$
41	$4x^2 - 6x + 2 \geq 0$	$x \leq 1 \vee x \geq \frac{1}{2}$
42	$6x^2 - 5x + 2 \leq 0$	*impossibile*

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43	$3x^2 - 6x + 4 \leq 0$	*impossibile*
44	$2x - x^2 - 1 \leq 0$	$x = 1$
45	$4x - x^2 - 4 \leq 0$	$x = 2$
46	$x^2 - x + 5 > 0$	$\mathbb{R}$
47	$x^2 + x + 4 > 0$	$\mathbb{R}$
48	$2x^2 + 13x + 6 < 0$	$-6 < x < -\frac{1}{2}$
49	$8x^2 - 6x + 1 < 0$	$\frac{1}{4} < x < \frac{1}{2}$
50	$x^2 - 10x + 25 < 0$	*impossibile*
51	$x^2 - 14x + 49 < 0$	*impossibile*
52	$2(1 - 3x) + 3(2x^2 + 1) \leq 5x + 2$	$\frac{1}{3} \leq x \leq \frac{3}{2}$
53	$3(1 - 2x) + 2(1 + 3x^2) - 5x \leq 2$	$\frac{1}{3} \leq x \leq \frac{3}{2}$
54	$5 - 2(x + 1)^2 > 8x + 13$	$-5 < x < -1$
55	$11 - 2(x + 2)^2 > 4x + 13$	$-5 < x < -1$
56	$2(2 - x)(2 + x) - 5(x + 1)(x - 1) - 13x \leq 11$	$x \leq -2 \vee x \geq \frac{1}{7}$
57	$5(1 - x)(1 + x) - 11 \leq 13x - 2(2 - x)(2 + x)$	$x \leq -2 \vee x \geq \frac{1}{7}$
58	$\left(x - \frac{2}{3}\right)(1 - x) \leq \frac{2}{3} + 2(1 - x)$	$x \leq \frac{5}{3} \vee x \geq 2$
59	$(1 - x)(x - 2) \leq \frac{2}{3}(1 - x) + \frac{2}{3}$	$x \leq \frac{5}{3} \vee x \geq 2$
60	$1 - \frac{(x + 1)(2x + 1)}{3} < \frac{(1 - 4x)(x + 2)}{2}$	$-2 \leq x \leq \frac{1}{8}$
61	$\frac{(4x - 1)(x + 2)}{2} - \frac{(x - 2)(2x + 1)}{3} \leq 2x$	$-2 \leq x \leq \frac{1}{8}$
62	$\frac{x}{3}(3x + 1) + \frac{(1 - x)(1 + x)}{4} + \frac{(x + 1)(x - 3)}{12} > \frac{3 + x}{3}$	$x < -1 \vee x > \frac{6}{5}$
63	$\frac{(x + 1)(x - 3)}{12} + \frac{x}{3}(3x + 2) > \frac{3 + 2x}{3} + \frac{(x + 1)(x - 1)}{4}$	$x < -1 \vee x > \frac{6}{5}$

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64	$\frac{x^2-1}{x-2} \geq 0$	$-1 \leq x \leq 1 \vee x > 2$
65	$\frac{x^2-4}{x-1} \geq 0$	$-2 \leq x < 1 \vee x > 2$
66	$\frac{x-2}{x^2-1} \leq 0$	$x < -1 \vee 1 < x \leq 2$
67	$\frac{x-1}{x^2-4} \leq 0$	$x < -2 \vee 1 \leq x < 2$
68	$\frac{9-x^2}{x^2-1} \geq 0$	$-3 \leq x < -1 \vee 1 < x \leq 3$
69	$\frac{x^2-1}{4-x^2} \geq 0$	$-2 < x \leq -1 \vee 1 \leq x < 2$
70	$\frac{9+x^2}{x^2+3x} \leq 0$	$-3 < x < 0$
71	$\frac{4+x^2}{x^2+2x} \geq 0$	$-2 < x < 0$
72	$\frac{x^2-5x}{4-x^2} \geq 0$	$-2 < x \leq 0 \vee 2 < x \leq 5$
73	$\frac{x^2-2x}{9-x^2} \geq 0$	$-3 < x \leq 0 \vee 2 \leq x < 3$
74	$\frac{x^2-1}{-x^2-2} > 0$	$-1 < x < 1$
75	$\frac{x^2-4}{-x^2-3} > 0$	$-2 < x < 2$
76	$\frac{x^2+2}{x^2-4} < 1$	$-2 < x < 2$
77	$\frac{x^2+3}{x^2-9} < 1$	$-3 < x < 3$
78	$\frac{3(5x-17)}{x^2-7x+10} \geq 3$	$2 < x \leq 3 \vee 5 < x \leq 9$
79	$\frac{3(-x^2-7x+14)}{x^2-7x+12} \geq 3$	$-1 \leq x \leq 1 \vee 3 < x < 4$
80	$\frac{3(6-x^2)-14x}{x^2-5x+6} \leq \frac{3x-10}{x-3} + \frac{1}{x-2}$	$x \leq \frac{1}{3} \vee \frac{1}{2} \leq x < 2 \vee x > 3$
81	$\frac{10-3x}{x-3} - \frac{15}{x-2} \leq \frac{3(x^2+1)+21}{x^2-5x+6}$	$x \leq \frac{1}{3} \vee \frac{1}{2} \leq x < 2 \vee x > 3$
82	$\frac{x-5}{x^2-5x+6} \leq \frac{4}{x-3} - \frac{1+x}{x-2}$	$0 \leq x < 2 \vee 3 < x \leq 5$
83	$\frac{x-4}{x-3} \leq \frac{5}{x^2-5x+6} - \frac{1}{x-2}$	$0 \leq x < 2 \vee 3 < x \leq 5$