

Esercizi di base sulle disequazioni di secondo grado

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|---|---|
| 1) $-x^2 + 7x - 6 > 0$ | $S =]1; 6[$ |
| 2) $2x^2 - 5(x-1)^2 \geq 0$ | $S = \left[\frac{5-\sqrt{10}}{3}; \frac{5+\sqrt{10}}{3} \right]$ |
| 3) $4(2x+1)^2 - 9 < 0$ | $S = \left] -\frac{5}{4}; \frac{1}{4} \right[$ |
| 4) $16x^2 + 16x - 5 \geq 0$ | $S = \left] -\infty; -\frac{5}{4} \right] \cup \left[\frac{1}{4}; +\infty \right[$ |
| 5) $3x^2 - x - 4 \leq 0$ | $S = \left[-1; \frac{4}{3} \right]$ |
| 6) $x^2 - (3-2x)^2 < 0$ | $S = \left] -\infty; 1 \right[\cup \left] 3; +\infty \right[$ |
| 7) $x^2 + 3(x-1)^2 > 0$ | $S = R$ |
| 8) $4x^2 - 4x + 3 < 0$ | $S = \emptyset$ |
| 9) $x^2 + (1-x)^2 - 1 \leq 0$ | $S = [0; 1]$ |
| 10) $(3x-2)^2 + 24x \leq 0$ | $S = \left\{ -\frac{2}{3} \right\}$ |
| 11) $2x^2 - x - 6 > 0$ | $S = \left] -\infty; -\frac{3}{2} \right[\cup \left] 2; +\infty \right[$ |
| 12) $(x-1)^2 - \frac{3}{2}(x-1) \geq 0$ | $S = \left] -\infty; 1 \right] \cup \left[\frac{5}{2}; +\infty \right[$ |
| 13) $\frac{x+2}{3} - (x+2)^2 < 0$ | $S = \left] -\infty; -2 \right[\cup \left] -\frac{5}{3}; +\infty \right[$ |
| 14) $3x^2 + (4-x)^2 \leq 0$ | $S = \emptyset$ |
| 15) $0,01x^2 - 0,2x + 1 > 0$ | $S = R - \left\{ \frac{1}{10} \right\}$ |
| 16) $\frac{1}{4} - 9(x-3)^2 \geq 0$ | $S = \left[\frac{17}{6}; \frac{19}{6} \right]$ |
| 17) $\frac{9}{4} - \left(2x - \frac{1}{2} \right)^2 < 0$ | $S = \left] -\infty; -\frac{1}{2} \right[\cup \left] 1; +\infty \right[$ |
| 18) $5 + (3-4x)^2 \geq 0$ | $S = R$ |
| 19) $\left(3x - \frac{1}{2} \right)^2 > -6x$ | $S = R - \left\{ -\frac{1}{6} \right\}$ |
| 20) $\frac{x^2}{2} + 0,2 < 0,6x$ | $S = \emptyset$ |