

Esercizi sulle disequazioni irrazionali

Esercizio 1. $\sqrt{2x-1} \geq x-8$ $R. \left\{ \frac{1}{2} \leq x \leq 13 \right\}$

Esercizio 2. $\sqrt{x^2-x-2} \leq 2x+6$ $R. \{-2 \leq x \leq -1\} \cup \{x \geq 2\}$

Esercizio 3. $\sqrt{x^2-3x+2} < 7-5x$ $R. \{x \leq 1\}$

Esercizio 4. $\sqrt{16-2x^2} < x+4$ $R. \left\{ -2\sqrt{2} \leq x < -\frac{8}{3} \right\} \cup \{0 < x \leq 2\sqrt{2}\}$

Esercizio 5. $\sqrt{1-x^2} > 2x-1$ $R. \left\{ -1 \leq x < \frac{4}{5} \right\}$

Esercizio 6. $\sqrt{x^2-1} < x+3$ $R. \left\{ -\frac{5}{3} < x \leq -1 \right\} \cup \{x \geq 1\}$

Esercizio 7. $\sqrt{x^2+1} \leq \frac{1}{2}x + \frac{\sqrt{3}}{2}$ $R. \left\{ x = \frac{\sqrt{3}}{3} \right\}$

Esercizio 8. $\sqrt{x^2+1} \leq \frac{1}{2}x+1$ $R. \left\{ 0 \leq x \leq \frac{4}{3} \right\}$

Esercizio 9. $\sqrt{x^2+1} \leq \frac{1}{2}x-1$ $R. \text{impossibile}$

Esercizio 10. $\sqrt{x^3+4x^2} \geq 2x-2$ $R. \{x \geq -4\}$