

ESERCIZI IN PIÙ**LA RISOLUZIONE DELLE EQUAZIONI IRRAZIONALI**

Risolvi le seguenti equazioni irrazionali.

$$1 \quad 2x - \frac{1}{4} = \sqrt{x^3 + \frac{97}{16}} \quad [2; 3]$$

$$2 \quad x + 2 - \frac{10}{\sqrt{2x + 25}} = 0 \quad [0]$$

$$3 \quad \sqrt{2} \frac{3x + 15}{\sqrt{x^2 + 5x + 4}} - 5 = x \quad [-7; -5; 2]$$

$$4 \quad \left(\frac{5\sqrt{5}}{\sqrt{x}} - 2x + 5 \right) (\sqrt{2x - 4} - \sqrt{x - 3} - 1) = 0 \quad [4; 5]$$

$$5 \quad \frac{3x + 1}{\sqrt{2x^2 + x + 1}} + x + 1 = 0 \quad \left[-\frac{1}{2} \right]$$

$$6 \quad \sqrt{3 + 2x} = \sqrt{4x - 1} + \sqrt{x - 2} \quad [2]$$

$$7 \quad \sqrt{x^2 + 5\sqrt{x + 3}} = x + 5 \quad [-2]$$

$$8 \quad \sqrt{x^2 + 2 + \sqrt{x + 7}} = x + 1 \quad [2]$$

$$9 \quad \frac{1}{\sqrt{6x + \sqrt{3x - 1}}} + \frac{2}{3} = \frac{1}{\sqrt{6x + \sqrt{3x - 1}}} \quad \left[\frac{2}{3}, \frac{5}{3} \right]$$

$$10 \quad \sqrt{\frac{x - 3}{x + 1}} + \sqrt{\frac{11 - x}{x + 1}} = \sqrt{2} \quad [3; 7]$$