

208 $(x - \sqrt{3})(\sqrt{3} + x) + (x + \sqrt{5})^2 = 0$

$$\left[\frac{-\sqrt{5} \pm 1}{2} \right]$$

209 $3(x - 3)(x - 5) = -(2x - 1)^2$ [impossibile]

210 $\left(x + \frac{4}{3}\right)^2 = \left(\frac{x-1}{2}\right)^2 \cdot \frac{4}{9}$

$$\left[-\frac{5}{2}, -\frac{3}{4} \right]$$

211 **AL VOLO** $\left(\frac{x-1}{5}\right)^2 + \left(\frac{x-7}{3}\right)^2 + 1 = 0$

212 $\frac{x(x-3)}{\sqrt{2}} = -2\sqrt{2}x$ [0; -1]

213 $-7 = \frac{(t-11)(11+t)}{3}$ [±10]

214 $(1, \bar{3} + x)x = (1 + 2^{-2})x$ $\left[-\frac{1}{12}, 0 \right]$

215 $7 = 2x(4x - 1) - 1 - 10x$ $\left[-\frac{1}{2}, 2 \right]$

216 $x\left[x - 2\left(1 - \frac{x}{2}\right)\right] = 4$ [-1; 2]

217 $x^2 + (x + 2)^2 = 8x + (2 - x)^2$ [0 doppia]

218 $\frac{x-3}{2} - \left(\frac{3-x}{2}\right)^2 = 0$ [5; 3]

219 $10(5 + \sqrt{2}) = x(-x + 2) - 1 + 10\sqrt{2}x$ $[5\sqrt{2} + 1 \text{ doppia}]$

220 $-4(x - 3)(3 + x) + 5(x^2 + 1) = 0$ [impossibile]

221 $(3 - 4a) \cdot 9 + 2[a(6a - 2) + 3] = -3^{-1}$ $\left[\frac{5}{3} \text{ doppia} \right]$

222 $x[x + 2(2\sqrt{5} + 1)] = -4\sqrt{5}(\sqrt{5} + 1)$ $[-2 - 2\sqrt{5}; -2\sqrt{5}]$

223 $\frac{x + \sqrt{3}}{3} - \frac{\sqrt{3} - x}{\sqrt{3}} = \frac{x^2 - 1 + \sqrt{3}}{3}$ [impossibile]

224 $\frac{(x-3)(x+2)}{3} + \frac{5}{6} = \frac{3(1-2x)}{2}$ $[-4 \pm 2\sqrt{3}]$

225 $3^{\frac{1}{2}}(2x + 1) + (x + 1)x + 4^{-1} = -3$ $\left[-\sqrt{3} - \frac{1}{2} \text{ doppia} \right]$

226 $(\sqrt{18} + b)^2 - (6 + b) \cdot 3 = 4b\left(b - \frac{3}{2}\right)$ $[0; 2\sqrt{2}]$

227 $\left(2x - \frac{1}{3}\right)(x + 3) = \left(\frac{x}{2} - 2\right)\left(\frac{x}{2} + 3\right)$ [impossibile]

228 $(x^3 - 2x)(x^3 + 2x) + \frac{3}{5}x - 2 = x^2(x^4 - 6) - 2\left(\frac{x}{5} - 2\right)$ [-2; 2]

229 $\frac{x^2 - 3x + 5}{4} - 2 = \left(x + \frac{1}{2}\right)(x - 3) + \left(\frac{x}{2} - 1\right)^2 - 1$ [-1; 1]

230 $x(x^3 + x - 2) - (x - 3)^2 = (x^2 - 1)(x^2 + 1) - (x + 1)(x - 7)$ [-1; 7]

231 $(x + 2)^3 + (x - 3)(1 - x)(3 + x) = 19x$ $\left[-1 \pm \frac{2\sqrt{3}}{7} \right]$

232 $(x - 0,5)^3 - \left(\frac{2x+1}{2}\right)^3 = 0$ [impossibile]

233 $x\left[x(1+x) - \frac{1}{4}\right] = \frac{(2x+1)^3}{8}$ [-1; 1]

234 $x(x^2 - 4) - x^2 = (x - 1)^3 + 2(x - 2) - 2x$ [-1; 2]

235 $x^2(x + 3\sqrt{2}) - (x + \sqrt{3})^3 + 3(3x + \sqrt{3}) = 0$ [0 doppia]

$$\text{359} \quad \frac{2}{x} - \frac{x^2}{x^2 + 4x} = \frac{16 + x}{3x + 12}$$

 $\left[\frac{3}{2}\right]$

$$\text{360} \quad \frac{x-2}{x+5} + \frac{6x-19}{x^2+3x-10} = \frac{1}{2-x} \quad [\text{impossibile}]$$

$$\text{361} \quad \frac{1}{x^2+2x} + \frac{1}{x} = \frac{x+1}{2+x} - 2 \quad [-1; -3]$$

$$\text{362} \quad 4\left(\frac{x}{x-3} + \frac{1}{x}\right) = -\frac{13}{x^2-3x} \quad \left[-\frac{1}{2} \text{ doppia}\right]$$

$$\text{363} \quad \frac{1}{x+2} + \frac{1}{x^2-2x+4} = \frac{7-x^2}{x^3+8} \quad \left[1; -\frac{1}{2}\right]$$

$$\text{364} \quad \frac{3(x-1)}{x-2} + \frac{x(x-5)}{2x-4} = 0 \quad [-3]$$

$$\text{365} \quad \frac{x+3}{x+2} + \frac{1}{x^2+3x+2} = 2 \quad [0]$$

$$\text{366} \quad \frac{2}{x+1} - \frac{3}{x} = \frac{x-1}{2x+2} - \frac{x^2+3}{x^2+x} \quad [1]$$

$$\text{367} \quad \frac{2-x}{(x+4)^2} + \frac{3}{x+4} = \frac{x-2}{x(x+4)} \quad [-6 \pm 2\sqrt{7}]$$

$$\text{368} \quad \frac{6x^2-5x+3}{3x-9x^2} = \frac{2-x}{3x-1} - \frac{2x-3}{3x} \quad [4]$$

$$\text{369} \quad \frac{x-2}{\sqrt{5}(5x-\sqrt{5})} + \frac{2}{5} = \frac{x^2}{5x-\sqrt{5}} \quad [\text{impossibile}]$$

$$\text{370} \quad \frac{3x+1}{x} + 3 = \frac{25x-4}{x^2+2x} \quad [1 \text{ doppia}]$$

$$\text{371} \quad \frac{3}{2x+3} - \frac{x-2}{2x^2-3x} - \frac{6x-4}{4x^2-9} = 0 \quad [1; -3]$$

$$\text{372} \quad \frac{x^2+1}{3+x} - 2 \cdot \frac{1-3x}{6+2x} + \frac{x-1}{2} = 0$$

$$\text{373} \quad \frac{x-2}{x+3} + \frac{9-x}{3x+x^2} = \frac{1}{2}$$

$$\text{374} \quad 1 - \frac{1}{x^2+2x+1} - \frac{2x}{1+x} = 0 \quad [0 \text{ doppia}]$$

$$\text{375} \quad \frac{2}{x} + \frac{1}{1-(x-1)^2} = 3 \cdot \frac{x}{2-x} \quad [1; -1]$$

$$\text{376} \quad \frac{9a(a+1)}{a^2+4+4a} = 1 + \frac{3a}{2+a} \quad \left[-\frac{4}{5}\right]$$

$$\text{377} \quad \frac{(3-x)(x+3)+x^2}{x^2-2x} = 0,5 \cdot \left(1 + \frac{1}{x}\right) \quad [5; -5]$$

$$\text{378} \quad \frac{1}{a-2} + \frac{4}{a^2+2a} + 2\left(\frac{1}{a^2-4} - \frac{1}{a}\right) = 0$$

$$\text{379} \quad \frac{2+x}{x-1}(x-3) - \frac{x^2}{x+1} = \frac{2x+3(x+2)}{1-x}$$

$$\text{380} \quad \frac{5x+8}{x^2-8} - \frac{\sqrt{2}}{x+2\sqrt{2}} = \frac{x+3\sqrt{2}}{x-2\sqrt{2}}$$

$$\text{381} \quad \frac{x+2}{(2x)^2-2^4} \cdot x^2 + 0,25 - \left(1 - \frac{9-x}{4-2x}\right) = 0$$

$$\text{382} \quad [(a+1)(1-a) + a^2 + 2] \cdot \frac{1}{5} + \frac{\frac{3}{5}a^2 + 40}{10a + a^2} = \frac{a-4}{a} \quad [\text{impossibile}]$$

$$\text{383} \quad \frac{3x}{x^2-4x+4} - \frac{1+3x}{x^2-4} = \frac{1}{x^2+2x} \quad [-1; -3]$$

$$\text{384} \quad \frac{x+1}{x+\sqrt{2}} + \frac{x^2-10\sqrt{2}}{x^2-2} + \frac{3-x}{x-\sqrt{2}} = 0 \quad [-4; 2]$$

$$\text{385} \quad \frac{4}{x^2-1} + \frac{15+7x}{x^4-5x^2+4} = \frac{2}{4-x^2} \quad \left[-\frac{3}{2}\right]$$

$$\text{386} \quad \frac{1}{1 + \frac{1}{1 + \frac{1}{x}}} = x \quad \left[\pm \frac{1}{2}\right]$$

$$\text{387} \quad \frac{b^2+9-7b}{5b+b^2} + \frac{2}{b}(1+2b) = \frac{13}{5+b} \quad [\text{impossibile}]$$

$$\text{388} \quad \frac{\frac{2}{x} + 1}{1 + \frac{3}{x}} = 0,2 \left[\frac{4x^2 - (14+x)}{x^2+x-6} + 1 \right] \quad [x \neq 0 \wedge x \neq -3 \wedge x \neq 6]$$

$$\text{389} \quad \frac{8\sqrt{5}}{5x^2-4} + \frac{2\sqrt{5}-3x}{2-x\sqrt{5}} = \frac{2x}{x\sqrt{5}+2} \quad [\text{impossibile}]$$