

EQUAZIONI DI 2° GRADO NUMERICHE INTERE
(risolvere mediante annullamento del prodotto)

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|----|---|---|
| 1 | $(x+1)(2x-3)=0$ | $\left[-1; \frac{3}{2}\right]$ |
| 2 | $(2x+5)(6x-1)=0$ | $\left[-\frac{5}{2}; \frac{1}{6}\right]$ |
| 3 | $2x^2-5x=0$ | $\left[0; \frac{5}{2}\right]$ |
| 4 | $4x^2-9=0$ | $\left[-\frac{3}{2}; \frac{3}{2}\right]$ |
| 5 | $9x^2-12x+4=0$ | $\left[\frac{2}{3}; \frac{2}{3}\right]$ |
| 6 | $x^2+x-20=0$ | $[-5; 4]$ |
| 7 | $x^2+8x+12=0$ | $[-6; -2]$ |
| 8 | $20x^2-29x+5=0$ | $\left[\frac{1}{5}; \frac{5}{4}\right]$ |
| 9 | $(3x-1)^2-(x-2)^2=23x-\left(\frac{2x-1}{2}\right)^2+\frac{1}{4}$ | $\left[-\frac{1}{9}; 3\right]$ |
| 10 | $4\left(\frac{2}{3}x^2-\frac{1}{5}x\right)+(x+1)^2-1=x^2+\frac{3}{5}$ | $\left[-\frac{3}{4}; \frac{3}{10}\right]$ |

EQUAZIONI DI 2° GRADO NUMERICHE FRATTE
(risolvere mediante annullamento del prodotto)

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|---|--|---------------------------------|
| 1 | $\frac{x}{x-2}-\frac{6}{x^2-x-2}=\frac{5}{x+1}$ | $[imp.]$ |
| 2 | $\frac{x-2}{x-1}+\frac{x-2}{x-3}=2+\frac{x^2-6}{(x-3)(1-x)}$ | $[\pm 2]$ |
| 3 | $\frac{x^2+8x+11}{x^2+5x+6}+\frac{x-1}{x+3}=\frac{x-2}{x+2}$ | $[-5]$ |
| 4 | $\frac{x}{x+2}-\frac{5}{x-2}=\frac{7x-6}{4-x^2}$ | $[\pm 4]$ |
| 5 | $\frac{x-1}{2x+1}+\frac{1+3x}{2x}=\frac{3x+9}{4x^2+2x}$ | $[\pm 1]$ |
| 6 | $\frac{1}{3}\left(\frac{2x-2}{x+2}-\frac{x-3}{x-2}\right)+\frac{2(10-x)}{12-3x^2}=\frac{1}{2-x}$ | $[imp.]$ |
| 7 | $\frac{y+2}{y+1}=\frac{y-2}{1-y}-\frac{4}{y-1}$ | $[-2; 0]$ |
| 8 | $\frac{3x+5}{x-2}-\frac{x-2}{x+2}=-\frac{3}{2}$ | $\left[-\frac{30}{7}; 0\right]$ |
| 9 | $\frac{x}{2x+1}+\frac{25}{3x+5}=1+\frac{6(7x+5)}{6x^2+13x+5}$ | $[imp.]$ |

$$10 \quad \frac{1}{4} + \frac{1}{3} \cdot \frac{(x+1)^2}{x^2+4x+4} - \frac{2}{3} - \frac{1}{3} \left(\frac{x+3}{x+2} \right)^2 = 0 \quad \left[-\frac{26}{5} \right]$$

EQUAZIONI DI GRADO SUPERIORE AL 2°
(risolvere mediante annullamento del prodotto)

$$1 \quad (x^2 - 3x)(2x^2 + 1) = 0 \quad [0; 3]$$

$$2 \quad (x^2 - 9x + 14)(4x^2 - 9) = 0 \quad \left[\pm \frac{3}{2}; 2; 7 \right]$$

$$3 \quad (4x^2 + 8x + 3)(5x^2 + 2) = 0 \quad \left[-\frac{3}{2}; -\frac{1}{2} \right]$$

$$4 \quad (3x^2 + x + 1)(x^2 - 2x + 10) = 0 \quad [imp.]$$

$$5 \quad (3x^2 - 4x - 15)(x^2 + 4x + 4) = 0 \quad \left[-2; 3; -\frac{5}{3} \right]$$

$$6 \quad x^3 - 2x^2 - x + 2 = 0 \quad [\pm 1; 2]$$

$$7 \quad 5x^3 - x^2 - 20x + 4 = 0 \quad \left[\pm 2; \frac{1}{5} \right]$$

$$8 \quad 2x^3 + x^2 - 11x - 10 = 0 \quad \left[-2; -1; \frac{5}{2} \right]$$

$$9 \quad 5x^3 + 4x^2 - 31x + 6 = 0 \quad \left[-3; 2; \frac{1}{5} \right]$$

$$10 \quad 15x^3 + x^2 - 6x = 0 \quad \left[0; -\frac{2}{3}; \frac{3}{5} \right]$$

$$11 \quad 36x^3 - 3x^2 - 3x = 0 \quad \left[0; \frac{1}{3}; -\frac{1}{4} \right]$$

$$12 \quad 6x^3 + 19x^2 - 26x - 24 = 0 \quad \left[-4; -\frac{2}{3}; \frac{3}{2} \right]$$

$$13 \quad 6x^3 + 4x^2 + 3x + 2 = 0 \quad \left[-\frac{2}{3} \right]$$

$$14 \quad 4x^3 + 11x^2 + 6x = 0 \quad \left[-2; 0; -\frac{3}{4} \right]$$

$$15 \quad x^5 - 14x^3 - 32x = 0 \quad [0; \pm 4]$$

$$16 \quad 9x^3 - 3x^2 + 12x - 4 = 0 \quad \left[\frac{1}{3} \right]$$

$$17 \quad 7x^3 - 8x^2 - 14x + 16 = 0 \quad \left[\frac{8}{7}; \pm \sqrt{2} \right]$$

$$18 \quad x^5 - 2x^4 - x + 2 = 0 \quad [2; \pm 1]$$

$$19 \quad 12x^4 + 35x^3 + 20x^2 - 5x - 2 = 0 \quad \left[-2; -1; -\frac{1}{4}; \frac{1}{3} \right]$$

$$20 \quad 4x^4 + 4x^3 - 25x^2 - x + 6 = 0 \quad \left[2; -3; \pm \frac{1}{2} \right]$$

$$21 \quad x^4 - 2x^3 - 10x^2 + 11x - 12 = 0 \quad [4; -3]$$

$$22 \quad 2x^4 + 3x^3 + 5x^2 + 6x + 2 = 0 \quad \left[-1; -\frac{1}{2} \right]$$

$$23 \quad x^4 + 6x^3 + 8x^2 - 6x - 9 = 0 \quad [\pm 1; -3]$$

$$\boxed{24} \quad 4x^4 - 4x^3 + 5x^2 - 4x + 1 = 0$$

$$\left[\frac{1}{2} \right]$$

$$\boxed{25} \quad x^5 + 3x^4 - 5x^3 - 15x^2 + 4x + 12 = 0$$

$$[\pm 1; \pm 2; -3]$$

$$\boxed{26} \quad 2x^5 + 3x^4 - 6x^3 + 6x^2 - 8x + 3 = 0$$

$$\left[1; -3; \frac{1}{2} \right]$$