

EQUAZIONI NUMERICHE FRAZIONARIE

1. $\frac{2x+1}{x} = \frac{4x+1}{2x-1}$ $x = -1$
2. $\frac{x-1}{x+2} - \frac{4}{3} = \frac{1}{2}$ $x = -\frac{28}{5}$
3. $\frac{x-2}{x-1} - 2 = \frac{2}{x-1}$ $x = -2$
4. $\frac{2}{x-1} - \frac{1}{x} = \frac{1}{x^2-x}$ *imp.*
5. $\frac{2x+5}{x-3} = \frac{1}{2} + \frac{x}{2x-6}$ $x = -\frac{13}{2}$
6. $\frac{1}{2x-1} + \frac{1}{2x+2} - \frac{1}{x} = 0$ $x = 2$
7. $\frac{2(x+7)}{x^2-4} + \frac{x+4}{x+2} = \frac{x+3}{x-2}$ $x = 0$
8. $\frac{4x-3}{4x^2-9} + \frac{2}{2x+3} = \frac{1}{2x+3} - \frac{4}{6x+9}$ $x = \frac{15}{13}$
9. $\frac{x+2}{x} = \frac{3}{x} - \frac{1}{5x}$ $x = \frac{4}{5}$
10. $\frac{2}{3} - \frac{4}{x+1} = \frac{x-3}{x+1}$ *imp.*
11. $\frac{x-1}{2x+6} + \frac{x+2}{x+3} = \frac{3}{4}$ $x = 1$
12. $\frac{2x-3}{x^2+1} - \frac{4}{5} = \frac{8x-(2x+1)^2}{5x^2+5}$ $x = 3$
13. $\frac{5}{2x^2+x} - \frac{3}{2x^2-x} = \frac{20}{4x^2-1}$ *imp.*
14. $\frac{3}{x+2} - \frac{x+1}{x^2+2x} = \frac{2x-1}{x^2+4x+4}$ $x = \frac{1}{2}$
15. $\frac{x+1}{x} + \frac{1+x}{x+2} = \frac{2}{x^2+2x} + 2$ *ind. ma con $x \neq 0 \wedge x \neq -2$*
16. $1 - \frac{1-2x}{4x^2-6x} = \frac{2x}{2x-3} - \frac{1}{2x}$ $x = -2$
17. $\frac{2}{x^2-1} + \frac{1}{x^2-x-2} = \frac{3}{x^2-3x+2}$ *imp.*
18. $x^2 - \frac{9(x-3)}{4x-6} = \frac{2x^3}{2x-3} + \frac{6x^2-9x}{6-4x}$ *imp.*
19. $\left(\frac{1}{x+4} - \frac{1}{5}\right) : \left(\frac{1}{x-4} + \frac{1}{3}\right) = 1$ $x = -1$

$$20. \left(\frac{x}{12} - \frac{12}{x} \right) : \left(1 + \frac{12}{x} \right) = \frac{x-12}{12}$$

$$\text{ind: } x \neq 0 \wedge x \neq -12$$

$$21. \frac{1}{x} \left(\frac{1}{x-1} - 2 \right) + 2 \left(\frac{2}{x+1} - \frac{1}{x} \right) + \frac{4}{3x^2-3} = 0$$

$$x = 3$$

$$22. x \left(\frac{1}{x-2} + \frac{1}{1-x} \right) - (x-2) \left(\frac{1}{x-1} - \frac{1}{x} \right) = \frac{4}{x^2-2x}$$

$$\text{ind: } x \neq 1 \wedge x \neq 2 \wedge x \neq 0$$