

Solving Quadratic Equations pt.1

Kwadratische vergelijkingen oplossen

- 5.20.** 1) $x^2 - 36 = 0$; 2) $4x^2 - 25 = 0$;
 3) $\frac{1}{2}x^2 + 20 = 38$; 4) $13x^2 - 19 = 7x^2 + 5$.
- 5.21.** 1) $x^2 + 3x = 0$; 2) $x^2 = 5x$;
 3) $2x^2 - 7x = 0$; 4) $-3x^2 + 5x = 0$.
- 5.22.** 1) $4x^2 + 6x = 9x^2 - 15x$; 2) $12x^2 - 5x = 9x^2 + 7x$;
 3) $\frac{5x^2 + 9}{6} - \frac{4x^2 - 9}{5} = 3$; 4) $\frac{8x^2 - 3}{5} + \frac{9x^2 - 5}{4} = 2$.
- 5.23.** 1) $x^2 - 3x + 2 = 0$; 2) $x^2 + 5x + 6 = 0$;
 3) $x^2 - 4x + 3 = 0$; 4) $x^2 - 6x - 7 = 0$.
- 5.24.** 1) $x^2 - 8x = 20$; 2) $x^2 + 30 = 11x$;
 3) $x^2 = x + 20$; 4) $7x = x^2 + 12$.
- 5.25.** 1) $2x^2 - 7x + 6 = 0$; 2) $5x^2 - 8x + 3 = 0$;
 3) $3x^2 + 2x - 8 = 0$; 4) $3x^2 + 11x + 6 = 0$.
- 5.26.** 1) $x^2 - \frac{5}{3}x - 26 = 0$; 2) $x^2 - 4,5x + 4,5 = 0$;
 3) $x^2 + 3\frac{5}{12}x + 2 = 0$; 4) $x^2 - 5,6x + 6,4 = 0$.
- 5.27.** 1) $\frac{5+2x}{4x-3} = \frac{3x+3}{7-x}$; 2) $\frac{5-x}{2x-1} = \frac{15-4x}{3x+1}$;
 3) $\frac{x(x-7)}{3} - 1 = \frac{11x}{10} - \frac{x-4}{3}$; 4) $\frac{7}{x} - \frac{21+65x}{7} + 8x + 11 = 0$.

$$5.28. \quad 1) \quad \frac{5x-x^2}{3} - \frac{(3x-11)^2}{4} = 9 - \frac{(7-x)^2}{2};$$

$$2) \quad \frac{(x-12)^2}{6} - \frac{x}{9} + \frac{x(x-9)}{18} = \frac{(x-14)^2}{2} + 5;$$

$$3) \quad \frac{5x-1}{9} + \frac{3x-1}{5} = \frac{2}{x} + x - 1;$$

$$4) \quad x-7 + \frac{(x-6)^2}{3} = \frac{(x+4)^2}{2} - \frac{(x+2)(x+6)}{4}.$$

$$5.29. \quad 1) \quad \sqrt{2}z^2 + 4\sqrt{3}z - 2\sqrt{2} = 0; \quad 2) \quad z^2 + 2(\sqrt{3}+1)z + 2\sqrt{3} = 0;$$

$$3) \quad \frac{x\sqrt{5}}{2x-\sqrt{5}} = \frac{2x}{x\sqrt{5}-3}; \quad 4) \quad \frac{2x}{x\sqrt{3}-5} = \frac{x\sqrt{3}}{x-2\sqrt{3}}.$$