

Quadratic equations

$$ax^2 + bx + c = 0 \quad (1)$$

$$x_{1,2} = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}. \quad (2)$$

If the *discriminant* Δ with

$$\Delta = b^2 - 4ac$$

Is zero, then the equation (1) has a double solution: (2) becomes

$$x = -\frac{b}{2a}$$

$$x_1^2 + x_2^2 = 1, \quad 2^{2^x} = 64$$

$$\sqrt[64]{x} = \sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{x}}}}}}}}}$$

$$\frac{n(n+1)}{2}, \quad \frac{\frac{\sqrt{x}+1}{2} - x}{y^2}$$

$$\mathcal{A}, \mathcal{B}, \mathcal{C}, \dots, \mathcal{Z}$$