Trinomul patrat

1. Ecuatia patrata $ax^2 + bx + c = 0,\ a \neq 0$ are
   a) doua solutii distincte, daca $\Delta = b^2 - 4ac > 0$

$$x_1 = \frac{-b - \sqrt{\Delta}}{2a}, \qquad x_2 = \frac{-b + \sqrt{\Delta}}{2a};$$

   b) doua radacini egale, daca $\Delta = 0, \quad x_1 = x_2 = -\frac{b}{2a}$;
   c) nu are solutii, daca $\Delta < 0$.

Cazuri particulare

1. $ax^2 + 2kx + c = 0, \quad a \neq 0,\ x_{1,2} = \dfrac{-k \pm \sqrt{k^2 - ac}}{a} \quad (k^2 - ac \geq 0).$

2. $x^2 + px + q = 0, \quad x_{1,2} = -\dfrac{p}{2} \pm \sqrt{\left(\dfrac{p}{2}\right)^2 - q},$ daca $p^2 \geq 4q.$