

4 Quadratische Gleichungen

$$x^2 = a \Rightarrow x = \sqrt{a}$$

$$x = -\sqrt{a}$$

Satz von Vieta

$$\underbrace{x^2}_a - \underbrace{6x}_b + \underbrace{5}_c = 0$$

$$\hookrightarrow (x-1)(x-5) = 0$$

$$\hookrightarrow x = 1 \vee x = 5$$

Lösungsformel:

$$ax^2 + bx + c = 0 \quad | :a$$

$$x^2 + \frac{b}{a}x + \frac{c}{a} = 0$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$