Definition

thm 1. A quadratic equation is an equation of the form

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

where a, b and c are constants and  $a \neq 0$ .

**Theorem 1.** A quadratic equation 1 has two solutions for the variable x:

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