Exact Solutions > Algebraic Equations and Systems of Algebraic Equations > Algebraic Equation > Quadratic Equation

2.
$$ax^2 + bx + c = 0$$
 $(a \neq 0)$.

Quadratic equation.

Solutions:

$$x_1 = \frac{-b + \sqrt{b^2 - 4ac}}{2a}, \quad x_2 = \frac{-b - \sqrt{b^2 - 4ac}}{2a}.$$

Vieta's theorem:

$$x_1 + x_2 = -b/a,$$

$$x_1 x_2 = c/a.$$

Quadratic Equation

Copyright © 2004 Andrei D. Polyanin

http://eqworld.ipmnet.ru/en/solutions/ae/ae0102.pdf