

Download Quadratic Polynomial Equation

Completing the square can be used to derive a general formula for solving quadratic equations, called the quadratic formula. The mathematical proof will now be briefly summarized. It can easily be seen, by polynomial expansion, that the following equation is equivalent to the quadratic equation: $(x + a)^2 = b$. Taking the square root of both sides, and isolating x , gives: $x + a = \pm\sqrt{b}$. In algebra, a quadratic function, a quadratic polynomial, a polynomial of degree 2, or simply a quadratic, is a polynomial function with one or more variables in which the highest-degree term is of the second degree. For example, a quadratic function in three variables x , y , and z contains exclusively terms x^2 , y^2 , z^2 , xy , xz , yz , x , y , z , and a constant. More than just an online equation solver, Wolfram|Alpha is a great tool for finding polynomial roots and solving systems of equations. It also factors polynomials, plots polynomial solution sets and inequalities and more. The name Quadratic comes from "quad" meaning square, because the variable gets squared (like x^2). It is also called an "Equation of Degree 2" (because of the "2" on the x) - Quadratic Polynomial Equation