$ax^2 + bx + c = 0$ is the standard form of a quadratic equation where a, b, c are constants and $a \neq 0$.

It describes how to solve a quadratic equation and find solution. The discriminant is $b^2 - 4ac$.

If the discriminant is equal to zero, then the quadratic equation has only one root. If the discriminant value is less than zero it has no real solution and greater than zero, it has two solutions.

It enables the students to solve real life problems