

Discriminant

A *discriminant* is an expression derived from an equation which gives us some information about the solutions of the equation.

For instance, the discriminant of the quadratic equation $ax^2 + bx + c = 0$ is $d = b^2 - 4ac$. In this case:

- if $d > 0$, the equation has two real solutions;
- if $d = 0$, the equation has one real solution;
- if $d < 0$, the equation has no real solutions.