

Difference of Two Squares

Difference of two squares is a type of quadratic factorisation used when an algebraic expression is made up of a squared term subtracted from another squared term.

$$a^2 - b^2 = (a + b)(a - b)$$

 **Example** Factorise using the difference of two squares

$$\begin{array}{ccc} & \xrightarrow{\text{blue}} & x^2 - 9 \xleftarrow{\text{pink}} \\ \sqrt{x^2} = x & & \sqrt{9} = 3 \\ (x + 3)(x - 3) \end{array}$$