

- Factorisation means write an expression as a product of its factors.
- Like prime factors, an irreducible factor, and a factor which cannot be expressed further as a product of factors.
- Expressions to be factorised.

$$a^2 + 2ab + b^2 = (a + b)^2 .$$

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

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

$$x^2 + (a + b)x + ab = (x + a)(x + b)$$

- When factorisation of  $x^2 + (a + b)x + ab$  is done by splitting the middle term, the two numbers which give the product  $a b$  and  $(a + b)$  as the coefficient of  $x$  have to be chosen very casually with correct sign.