

$$(a \pm b)^2 = a^2 \pm 2ab + b^2$$

$$(a \pm b)^3 = a^3 \pm 3a^2b + 3ab^2 \pm b^3$$

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

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

$$(a + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2ac + 2bc$$

$$a^3 + b^3 = (a + b)(a^2 - ab + b^2)$$

$$a^3 - b^3 = (a - b)(a^2 + ab + b^2)$$

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

$$a^2 + b^2 = \text{non si scompone}$$

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

$$a^3 + b^3 = (a + b)(a^2 - ab + b^2)$$

$$a^3 - b^3 = (a - b)(a^2 + ab + b^2)$$

$$a^4 + b^4 = (a + b)(a^3 - a^2b + ab^2 + b^3)$$

$$a^4 - b^4 = (a - b)(a^3 + a^2b - ab^2 - b^3)$$

$$a^4 - b^4 = (a - b)(a + b)(a^2 + b^2)$$