

Expansions

$$1) \quad a^2 - b^2 = (a + b)(a - b)$$

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

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

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

$$5) \quad a^3 - b^3 = (a - b)(a^2 + ab + b^2)$$