

곱셈공식

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

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

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

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

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

$$(6) \quad (a+b)(a^2 - ab + b^2) = a^3 - b^3$$

$$(7) \quad (a-b)(a^2 + ab + b^2) = a^3 - b^3$$

$$(8) \quad (a+b+c)^2 = a^2 + b^2 + c^2 + 2(ab + bc + ca)$$

$$(9) \quad (a+b+c)(a^2 + b^2 + c^2 - ab - bc - ca) = a^3 + b^3 + c^3 - 3abc$$

$$(10) \quad (a+b)^3 = a^3 + b^3 + 3ab(a+b)$$

$$(11) \quad (a-b)^3 = a^3 - b^3 - 3ab(a-b)$$

$$(12) \quad (x-a)(x-b) = x^2 - (a+b)x + ab$$

$$(13) \quad (x-a)(x-b)(x-c) = x^3 - (a+b+c)x^2 + (ab+bc+ca)x - abc$$

$$(14) \quad (a^2 + ab + b^2)(a^2 - ab + b^2) = a^4 + a^2b^2 + b^4$$