BeWise Academy

Notes

Algebraic Identities

- $(a + b)^2 = a^2 + 2ab + b^2$
- $(a – b)^2 = a^2 – 2ab + b^2$
- $(a + b)(a – b) = a^2 – b^2$
- $(x + a)(x + b) = x^2 + x(a + b) + ab$
- $(a + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$
- $(a + b)^3 = a^3 + 3a^2b + 3ab^2 + b^3$
- $(a + b)^3 = a^3 + b^3 + 3ab(a + b)$
- $(a – b)^3 = a^3 – 3a^2b + 3ab^2 – b^3$
- $(a – b)^3 = a^3 – b^3 – 3ab(a – b)$
- $a^3 – b^3 = (a – b)(a^2 + ab + b^2)$
- $a^3 + b^3 = (a + b)(a^2 – ab + b^2)$