Formulas

Algebraic Identities

1.	$(a + b)^2 = a^2 + 2ab + b^2$
2.	$(a - b)^2 = a^2 - 2ab + b^2$
3.	$a^2 - b^2 = (a + b)(a - b)$
4.	$(a + b)^3 = a^3 + b^3 + 3ab(a + b)$
5.	$(a - b)^3 = a^3 - b^3 - 3ab(a - b)$
6.	$a^3 + b^3 = (a + b)(a^2 - ab + b^2)$
7.	$a^3 - b^3 = (a - b)(a^2 + ab + b^2)$
8.	$(a + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$
9.	$a^3 + b^3 + c^3 - 3abc = (a + b + c)(a^2 + b^2 + c^2 - ab - bc - ca)$