Algebraic Identities For Class 10
$(a+b)^2 = a^2 + 2a + b^2$
$(a-b)^2 = a^2 - 2a + b^2$
$(a+b)(a-b) = a^2 - b^2$
$(x+a)(x+b) = x^2 + (a+b)x + a$
$(x+a)(x-b) = x^2 + (a-b)x - a$
$(x-a)(x+b) = x^2 + (b-a)x - a$
$(x-a)(x-b) = x^2 - (a+b)x + a$
$(a+b)^3 = a^3 + b^3 + 3a\ (a+b)$
$(a-b)^3 = a^3 - b^3 - 3a\ (a-b)$
$(x+y+z)^2 = x^2 + y^2 + z^2 + 2x + 2y + 2x$
$(x+y-z)^2 = x^2 + y^2 + z^2 + 2x - 2y - 2x$
$(x-y+z)^2 = x^2 + y^2 + z^2 - 2x - 2y + 2x$
$(x-y-z)^2 = x^2 + y^2 + z^2 - 2x + 2y - 2x$
$x^3 + y^3 + z^3 - 3x = (x+y+z)(x^2 + y^2 + z^2 - x - y - x)$
$x^2 + y^2 = 12[(x+y)^2 + (x-y)^2]$
$(x+a)(x+b)(x+c) = x^3 + (a+b+c)x^2 + (a + b + c)x + a$
$x^3 + y^3 = (x+y)(x^2 - x + y^2)$
$x^3 - y^3 = (x-y)(x^2 + x + y^2)$
$x^2 + y^2 + z^2 - x - y - z = 12[(x-y)^2 + (y-z)^2 + (z-x)^2]$
Linear Equation in Two Variables
$a_1x+b_1y+c_1 =0$
$a_2x+b_2y+c_2 =0<$