FORMULE DE CALCUL PRESCURTAT

$a^2 - b^2 = (a - b)(a + b)$
$a^3 - b^3 = (a - b)(a^2 + ab + b^2)$
$a^n - b^n = (a - b)(a^{n-1} + a^{n-2}b + a^{n-3}b^2 + ... + ab^{n-2} + b^{n-1}),\ n \geq 2$

$a^3 + b^3 = (a + b)(a^2 - ab + b^2)$
n impar $\Rightarrow a^n + b^n = (a + b))(a^{n-1}b^0 - a^{n-2}b + a^{n-3}b^2 - ... - ab^{n-2} + b^{n-1}),\ n \geq 3$

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

$(a + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2ac + 2bc = a^2 + b^2 + c^2 + 2(ab + ac + bc)$
$(x_1 + x_2 + ... + x_n)^2 = x_1^2 + x_2^2 + ... + x_n^2 + 2(x_1x_2 + x_1x_3 + ... + x_1x_n + x_2x_3 + ... + x_{n-1}x_n),\ n \geq 2$