Imp Formulas

Thursday, March 18, 2021 12:08 PM

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

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

(3) $(a+b)^2 - (a-b)^2 = 4ab$.

(4) $(a+b)^2 + (a-b)^2 = 2(a^2+b^2)$

Ex: $(5x+4y)^2 + (5x-4y)^2$

(5) $(a^2-b^2) = (a-b)(a+b)$

(6) $(a+b+c)^2 = a^2+b^2+c^2+2ab+2bc+2ac$.

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

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

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

(10) if $(a+b+c) = 0$.

$a^3+b^3+c^3 = 3abc$ //