

بعض أشكال عملية الضرب

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

مثال

$$(4I + 2X)^2 = (4I)^2 + 2(4I)(2X) + (2X)^2 \\ = 16I^2 + 16IX + 4X^2$$

$$(3x + 2r)^2 = (3x)^2 + 2(3x)(2r) + (2r)^2 \\ = 9x^2 + 12rx + 4r^2$$

$$(2I + 5T)^2 = (2I)^2 + 2(2I)(5T) + (5T)^2 \\ = 4I^2 + 20IT + 25T^2$$

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

مثال

$$(4A - T)^2 = (4A)^2 - 2(4A)(T) + (T)^2 \\ = 16A^2 - 8AT + T^2$$

$$(4R - P)^2 = (4R)^2 - 2(4R)(P) + (P)^2 \\ = 16R^2 - 8PR + P^2$$

$$(4d - 2i)^2 = (4d)^2 - 2(4d)(2i) + (2i)^2 \\ = 16d^2 - 16di + 4i^2$$

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

مثال

$$(G + 5Y)(G - 5Y) = (G)^2 - (5Y)^2 \\ = G^2 - 25Y^2$$

$$(4u + 2w)(4u - 2w) = (4u)^2 - (2w)^2 \\ = 16u^2 - 4w^2$$

$$(t + 4v)(t - 4v) = (t)^2 - (4v)^2 \\ = t^2 - 16v^2$$