

بعض أشكال عملية الضرب

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

مثال

$$(3z + 4i)^2 = (3z)^2 + 2(3z)(4i) + (4i)^2 \\ = 9z^2 + 24iz + 16i^2$$

$$(m + 5a)^2 = (m)^2 + 2(m)(5a) + (5a)^2 \\ = m^2 + 10am + 25a^2$$

$$(2n + 4m)^2 = (2n)^2 + 2(2n)(4m) + (4m)^2 \\ = 4n^2 + 16mn + 16m^2$$

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

مثال

$$(4d - 5u)^2 = (4d)^2 - 2(4d)(5u) + (5u)^2 \\ = 16d^2 - 40du + 25u^2$$

$$(4Z - 5U)^2 = (4Z)^2 - 2(4Z)(5U) + (5U)^2 \\ = 16Z^2 - 40UZ + 25U^2$$

$$(2F - U)^2 = (2F)^2 - 2(2F)(U) + (U)^2 \\ = 4F^2 - 4FU + U^2$$

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

مثال

$$(4d + 3n)(4d - 3n) = (4d)^2 - (3n)^2 \\ = 16d^2 - 9n^2$$

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

$$(3w + 2y)(3w - 2y) = (3w)^2 - (2y)^2 \\ = 9w^2 - 4y^2$$