

بعض أشكال عملية الضرب

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

مثال

$$(4i + 2n)^2 = (4i)^2 + 2(4i)(2n) + (2n)^2 \\ = 16i^2 + 16in + 4n^2$$

$$(3i + 5p)^2 = (3i)^2 + 2(3i)(5p) + (5p)^2 \\ = 9i^2 + 30ip + 25p^2$$

$$(j + 2t)^2 = (j)^2 + 2(j)(2t) + (2t)^2 \\ = j^2 + 4jt + 4t^2$$

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

مثال

$$(5z - 2e)^2 = (5z)^2 - 2(5z)(2e) + (2e)^2 \\ = 25z^2 - 20ez + 4e^2$$

$$(5T - 4G)^2 = (5T)^2 - 2(5T)(4G) + (4G)^2 \\ = 25T^2 - 40GT + 16G^2$$

$$(2r - 4m)^2 = (2r)^2 - 2(2r)(4m) + (4m)^2 \\ = 4r^2 - 16mr + 16m^2$$

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

مثال

$$(H + 2X)(H - 2X) = (H)^2 - (2X)^2 \\ = H^2 - 4X^2$$

$$(3D + 2Q)(3D - 2Q) = (3D)^2 - (2Q)^2 \\ = 9D^2 - 4Q^2$$

$$(5I + 3Y)(5I - 3Y) = (5I)^2 - (3Y)^2 \\ = 25I^2 - 9Y^2$$