

## بعض أشكال عملية الضرب

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

مثال

$$(3T + 2E)^2 = (3T)^2 + 2(3T)(2E) + (2E)^2 \\ = 9T^2 + 12ET + 4E^2$$

$$(3w + 4i)^2 = (3w)^2 + 2(3w)(4i) + (4i)^2 \\ = 9w^2 + 24iw + 16i^2$$

$$(3G + 5X)^2 = (3G)^2 + 2(3G)(5X) + (5X)^2 \\ = 9G^2 + 30GX + 25X^2$$

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

مثال

$$(3Z - 2R)^2 = (3Z)^2 - 2(3Z)(2R) + (2R)^2 \\ = 9Z^2 - 12RZ + 4R^2$$

$$(4q - 5p)^2 = (4q)^2 - 2(4q)(5p) + (5p)^2 \\ = 16q^2 - 40pq + 25p^2$$

$$(w - 3y)^2 = (w)^2 - 2(w)(3y) + (3y)^2 \\ = w^2 - 6wy + 9y^2$$

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

مثال

$$(4M + 2A)(4M - 2A) = (4M)^2 - (2A)^2 \\ = 16M^2 - 4A^2$$

$$(2p + 3f)(2p - 3f) = (2p)^2 - (3f)^2 \\ = 4p^2 - 9f^2$$

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