

## بعض أشكال عملية الضرب

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

مثال

$$(f+5j)^2 = (f)^2 + 2(f)(5j) + (5j)^2 \\ = f^2 + 10fj + 25j^2$$

$$(5w+q)^2 = (5w)^2 + 2(5w)(q) + (q)^2 \\ = 25w^2 + 10qw + q^2$$

$$(t+2g)^2 = (t)^2 + 2(t)(2g) + (2g)^2 \\ = t^2 + 4gt + 4g^2$$

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

مثال

$$(3H-2X)^2 = (3H)^2 - 2(3H)(2X) + (2X)^2 \\ = 9H^2 - 12HX + 4X^2$$

$$(5c-4m)^2 = (5c)^2 - 2(5c)(4m) + (4m)^2 \\ = 25c^2 - 40cm + 16m^2$$

$$(2H-3S)^2 = (2H)^2 - 2(2H)(3S) + (3S)^2 \\ = 4H^2 - 12HS + 9S^2$$

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

مثال

$$(S+2N)(S-2N) = (S)^2 - (2N)^2 \\ = S^2 - 4N^2$$

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

$$(2A+5R)(2A-5R) = (2A)^2 - (5R)^2 \\ = 4A^2 - 25R^2$$