

## بعض أشكال عملية الضرب

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

مثال

$$(3k+5i)^2 = (3k)^2 + 2(3k)(5i) + (5i)^2 \\ = 9k^2 + 30ik + 25i^2$$

$$(3d+4s)^2 = (3d)^2 + 2(3d)(4s) + (4s)^2 \\ = 9d^2 + 24ds + 16s^2$$

$$(4b+i)^2 = (4b)^2 + 2(4b)(i) + (i)^2 \\ = 16b^2 + 8bi + i^2$$

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

مثال

$$(Q-5R)^2 = (Q)^2 - 2(Q)(5R) + (5R)^2 \\ = Q^2 - 10QR + 25R^2$$

$$(2I-3P)^2 = (2I)^2 - 2(2I)(3P) + (3P)^2 \\ = 4I^2 - 12IP + 9P^2$$

$$(c-2s)^2 = (c)^2 - 2(c)(2s) + (2s)^2 \\ = c^2 - 4cs + 4s^2$$

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

مثال

$$(t+3k)(t-3k) = (t)^2 - (3k)^2 \\ = t^2 - 9k^2$$

$$(3i+d)(3i-d) = (3i)^2 - (d)^2 \\ = 9i^2 - d^2$$

$$(3N+F)(3N-F) = (3N)^2 - (F)^2 \\ = 9N^2 - F^2$$