

## بعض أشكال عملية الضرب

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

مثال

$$(2L+S)^2 = (2L)^2 + 2(2L)(S) + (S)^2 \\ = 4L^2 + 4LS + S^2$$

$$(T+2I)^2 = (T)^2 + 2(T)(2I) + (2I)^2 \\ = T^2 + 4IT + 4I^2$$

$$(2C+3L)^2 = (2C)^2 + 2(2C)(3L) + (3L)^2 \\ = 4C^2 + 12CL + 9L^2$$

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

مثال

$$(5Q-V)^2 = (5Q)^2 - 2(5Q)(V) + (V)^2 \\ = 25Q^2 - 10QV + V^2$$

$$(5Q-3T)^2 = (5Q)^2 - 2(5Q)(3T) + (3T)^2 \\ = 25Q^2 - 30QT + 9T^2$$

$$(3M-J)^2 = (3M)^2 - 2(3M)(J) + (J)^2 \\ = 9M^2 - 6JM + J^2$$

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

مثال

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

$$(2w+4k)(2w-4k) = (2w)^2 - (4k)^2 \\ = 4w^2 - 16k^2$$

$$(2G+4H)(2G-4H) = (2G)^2 - (4H)^2 \\ = 4G^2 - 16H^2$$