

## بعض أشكال عملية الضرب

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

مثال

$$(3 J + 5 V)^2 = (3 J)^2 + 2(3 J)(5 V) + (5 V)^2 \\ = 9 J^2 + 30 J V + 25 V^2$$

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

$$(2 k + a)^2 = (2 k)^2 + 2(2 k)(a) + (a)^2 \\ = 4 k^2 + 4 a k + a^2$$

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

مثال

$$(3 i - v)^2 = (3 i)^2 - 2(3 i)(v) + (v)^2 \\ = 9 i^2 - 6 i v + v^2$$

$$(2 S - 5 Z)^2 = (2 S)^2 - 2(2 S)(5 Z) + (5 Z)^2 \\ = 4 S^2 - 20 S Z + 25 Z^2$$

$$(2 v - 3 z)^2 = (2 v)^2 - 2(2 v)(3 z) + (3 z)^2 \\ = 4 v^2 - 12 v z + 9 z^2$$

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

مثال

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

$$(3 A + K)(3 A - K) = (3 A)^2 - (K)^2 \\ = 9 A^2 - K^2$$

$$(3 T + 5 N)(3 T - 5 N) = (3 T)^2 - (5 N)^2 \\ = 9 T^2 - 25 N^2$$