

بعض أشكال عملية الضرب

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

مثال

$$(4Y+5J)^2 = (4Y)^2 + 2(4Y)(5J) + (5J)^2 \\ = 16Y^2 + 40JY + 25J^2$$

$$(2I+3S)^2 = (2I)^2 + 2(2I)(3S) + (3S)^2 \\ = 4I^2 + 12IS + 9S^2$$

$$(t+4i)^2 = (t)^2 + 2(t)(4i) + (4i)^2 \\ = t^2 + 8it + 16i^2$$

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

مثال

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

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

$$(3A-4Y)^2 = (3A)^2 - 2(3A)(4Y) + (4Y)^2 \\ = 9A^2 - 24AY + 16Y^2$$

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

مثال

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

$$(4R+3U)(4R-3U) = (4R)^2 - (3U)^2 \\ = 16R^2 - 9U^2$$

$$(4W+2F)(4W-2F) = (4W)^2 - (2F)^2 \\ = 16W^2 - 4F^2$$