

## بعض أشكال عملية الضرب

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

مثال

$$(5L + 3C)^2 = (5L)^2 + 2(5L)(3C) + (3C)^2 \\ = 25L^2 + 30CL + 9C^2$$

$$(5m + 2e)^2 = (5m)^2 + 2(5m)(2e) + (2e)^2 \\ = 25m^2 + 20em + 4e^2$$

$$(q + 4i)^2 = (q)^2 + 2(q)(4i) + (4i)^2 \\ = q^2 + 8iq + 16i^2$$

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

مثال

$$(3R - 2M)^2 = (3R)^2 - 2(3R)(2M) + (2M)^2 \\ = 9R^2 - 12MR + 4M^2$$

$$(e - 4u)^2 = (e)^2 - 2(e)(4u) + (4u)^2 \\ = e^2 - 8eu + 16u^2$$

$$(R - 2I)^2 = (R)^2 - 2(R)(2I) + (2I)^2 \\ = R^2 - 4IR + 4I^2$$

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

مثال

$$(2y + 4g)(2y - 4g) = (2y)^2 - (4g)^2 \\ = 4y^2 - 16g^2$$

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

$$(I + 3L)(I - 3L) = (I)^2 - (3L)^2 \\ = I^2 - 9L^2$$