

Squaring Binomials and the Product of a Sum and Difference

① The Square of a Binomial

Algebra

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

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

Examples

$$(x+8)^2 = x^2 + 16x + 64$$

$$(x-5)^2 = x^2 - 10x + 25$$

② The Product of a Sum and Difference

Algebra

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

Example

$$(x+7)(x-7) = x^2 - 49$$