Use the distributive property (x coefficient + exponents)

(a + b)² = a² + 2ab + b²
(a - b)² = a² - 2ab + b²

Monomial times a Polynomial
-4y²(5y⁴ - 3y² + 2) =
-20y⁶ + 12y⁴ - 8y²

Polynomial times a Polynomial
(2x - 3)(4x² + x - 6) =
8x³ - 10x² - 15x + 18

Polynomial Products (Multiplying Polynomials and Special Products)

FoIL
First Outer Inner Last

(3x - 5)(2x + 7) =
6x² + 11x - 35

DOTS = Difference of Two Squares

(a + b)(a - b) = a² - b²

Example:
(t³ - 6)(t³ + 6) = t⁶ - 36

Square of a Binomial

1. Square the first term
2. Multiply two terms and Double
3. Square the last term

(x + 6)² = x² + 12x + 36
(7m - 2p)² = 49m² - 14mp + 4p²

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