Preliminaries and Objectives

Preliminaries

- Algebraic Expressions Using Variables
- Distributive Law

Objectives

- Multiply Polynomials

Example 1

$$(x + 3)(x - 2) = x^2 + -2x + 3x + -6$$

$$= x^2 + x - 6$$

Example 2

$$(2 - 4x)(5x - 1) = 10x - 2 - 20x^2 + 4x$$

$$= -20x^2 + 14x - 2$$

Example 3

$$(x^2 + 4x - 3)(x^2 + 2)$$

$$= x^4 + 2x^2 + 4x^3 + 8x - 3x^2 - 6$$

$$= x^4 + 4x^3 - x^2 + 8x - 6$$