

ALGEBRA: Subtraction of Algebraic Expressions (Sample Problems & Solutions) - Part 003

1. What is the difference if $(4x^2 + 3x - 1)$ is subtracted to $(3x^2 - 4x + 2)$?

Solution:

Applying subtraction, we have,

$$(4x^2 + 3x - 1) - (3x^2 - 4x + 2)$$

Applying distributive property, we have,

$$(4x^2 + 3x - 1) - (3x^2 - 4x + 2)$$

$$4x^2 + 3x - 1 - 3x^2 + 4x - 2$$

Then, simplifying further, we have

$$4x^2 + 3x - 1 - 3x^2 + 4x - 2$$

$$x^2 + 3x - 1 + 4x - 2$$

$$x^2 + 3x - 1 + 4x - 2$$

$$x^2 + 7x - 1 - 2$$

$$x^2 + 7x - 1 - 2$$

$$x^2 + 7x - 3$$

Therefore, the difference of the two algebraic expressions is $x^2 + 7x - 3$.