

Chapter 09

ALGEBRAIC EXPRESSION & IDENTITIES

Addition of Algebraic Expressions:

To add two algebraic expressions, we add similar terms by adding their coefficients and keeping the same variable part.

Example:

Add $5x^2 + 3x - 8$, $6 - 5x + 4x^2$ and $4x + 7 - 2x^2$

Solution:

Step- 1:

Writing the given expressions in descending powers of x in the form of rows with like terms below each other.

$$\boxed{5x^2} + 3x - 8$$

$$\boxed{4x^2} - 5x + 6$$

$$\boxed{-2x^2} + 4x + 7$$

Step- 2:

By adding columnwise, we get

$$\boxed{5x^2} + 3x - 8$$

$$\boxed{4x^2} - 5x + 6$$

$$\boxed{-2x^2} + 4x + 7$$

$$\boxed{7x^2} + 2x + 5$$

Note: We cannot do addition with different variables.