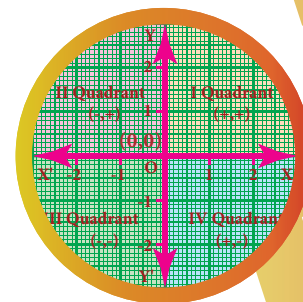


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ALGEBRA



Learning Objectives



- ❖ To recall addition and subtraction of expressions.
- ❖ To know how to multiply algebraic expressions with integer co-efficients
- ❖ To know how to divide algebraic expressions by monomials.
- ❖ To recall the identities $(a + b)^2$, $(a - b)^2$, $(a^2 - b^2)$ and $(x + a)(x + b)$ and able to apply them in problems.
- ❖ To understand the identities $(a + b)^3$, $(a - b)^3$, $(x + a)(x + b)(x + c)$ and apply them in problems.
- ❖ To recognize expressions that are factorizable of the type $(a + b)^3$ and $(a - b)^3$.
- ❖ To solve word problems that involve linear equations.
- ❖ To know how to plot the points in the graph.
- ❖ To draw graphs of simple linear equations.

Recap

In our earlier classes, we have learnt about constants, variables, like terms, unlike terms, co-efficients, numerical and algebraic expressions. Later, we have done some basic operations like addition and subtraction on algebraic expressions. Now, we shall recollect them and extend the learning.

Further, we are going to learn about multiplication and division of algebraic expressions and algebraic identities.

Answer the following questions :

1. Write the number of terms in the following expressions

(i) $x + y + z - xyz$

(ii) m^2n^2c

(iii) $a^2b^2c - ab^2c^2 + a^2bc^2 + 3abc$

(iv) $8x^2 - 4xy + 7xy^2$

2. Identify the numerical co-efficient of each term in the following expressions.

(i) $2x^2 - 5xy + 6y^2 + 7x - 10y + 9$

(ii) $\frac{x}{3} + \frac{2y}{5} - xy + 7$