

CLASS 9

MATHEMATICS

NCERT SOLUTIONS

NCERT Solutions for Class 9 Mathematics Chapter 2: Introduction to Linear Polynomials – Free PDF Download

Chapter 2 of Class 9 Maths Ganita Manjari Part 1 is Introduction to Linear Polynomials. It builds on earlier ideas of algebraic expressions to formally define polynomials, focusing on linear polynomials in one variable and their zeroes. These Class 9 Mathematics Chapter 2 solutions are also useful as quick revision ...

Contents

What Is a Polynomial?

Degree of a Polynomial

Zero of a Polynomial

Graph of a Linear Polynomial

Remainder and Factor Concepts (Introductory)

Class 9 Mathematics Chapter 2 – Notes and Extra Questions

Chapter 2 of Class 9 Maths *Ganita Manjari Part 1* is Introduction to Linear Polynomials. It builds on earlier ideas of algebraic expressions to formally define polynomials, focusing on linear polynomials in one variable and their zeroes. These Class 9 Mathematics Chapter 2 solutions are also useful as quick revision notes before exams.

What Is a Polynomial?

A **polynomial** in one variable x is an algebraic expression of the form $a_0 + a_1x + a_2x^2 + \dots + a_nx^n$, where the exponents of x are whole numbers and the coefficients are real numbers. Based on the number of terms: a **monomial** has one term, a **binomial** has two, a **trinomial** has three.

Degree of a Polynomial

The **degree** is the highest power of the variable in the polynomial. A **linear polynomial** has degree 1 (e.g. $2x + 3$); a **quadratic polynomial** has degree 2; a **cubic polynomial** has degree 3.

Zero of a Polynomial

A **zero** (or root) of a polynomial $p(x)$ is a value of x for which $p(x) = 0$. A linear polynomial $ax + b$ ($a \neq 0$) has exactly one zero: $x = -b/a$.

Graph of a Linear Polynomial

The graph of a linear polynomial $y = ax + b$ is always a **straight line**. The zero of the polynomial corresponds to the x -coordinate where this line crosses the x -axis.

Remainder and Factor Concepts (Introductory)

Evaluating a polynomial $p(x)$ at $x = a$ (i.e. finding $p(a)$) tells us the value of the polynomial at that point; if $p(a) = 0$, then $(x - a)$ is a factor of the polynomial, and a is a zero of the polynomial.

Class 9 Mathematics Chapter 2 – Notes and Extra Questions

Along with these NCERT Solutions, students can also use the [Class 9 Mathematics Chapter 2 Extra Questions](#) and [Class 9 Mathematics Chapter 2 Revision Notes](#) for quick revision and extra practice.

See also: [Chapter 1](#)

Practice more: [Chapter 1](#)

Quick revision: [Chapter 1](#)

and more. Visit ncertbooks.org for the latest chapters as they are published.