8th CBSE MATHEMATICS SYLLABUS

Chapter 1

Rational Numbers

- Introduction
- Properties of Rational Numbers
- Representation of Rational Numbers on the Number Line
- Rational Numbers between Two Rational Numbers

Chapter 2

Linear Equations in One Variable

- Introduction
- Solving Equations which have Linear Expressions on one Side and Numbers on the other Side
- Some Applications
- Solving Equations having the Variable on both Sides
- Some More Applications
- Reducing Equations to Simpler Form
- Equations Reducible to the Linear Form

Chapter 3

Understanding Quadrilaterals

- Introduction
- Polygons
- Sum of the Measures of the Exterior Angles of a Polygon
- Kinds of Quadrilaterals
- Some Special Parallelograms

Chapter 4

Practical Geometry

- Introduction
- Constructing a Quadrilateral
- Some Special Cases

Chapter 5

Data Handling

- Looking for Information
- Organising Data
- Grouping Data
- Circle Graph or Pie Chart
- Chance and Probability

Chapter 6

Squares and Square Roots

- Introduction
- Properties of Square Numbers
- Some More Interesting Patterns
- Finding the Square of a Number
- Square Roots
- Square Roots of Decimals
- Estimating Square Root

Chapter 7

Cubes and Cube Roots

- Introduction
- Cubes
- Cube Roots

Chapter 8

Comparing Quantities

- Recalling Ratios and Percentages
- Finding the Increase or Decrease Per cent
- Finding Discounts
- Prices Related to Buying and Selling (Profit and Loss)
- Sales Tax/Value Added Tax/Goods and Services Tax
- Compound Interest
- Deducing a Formula for Compound Interest
- Rate Compounded Annually or Half Yearly (Semi Annually)
- Applications of Compound Interest Formula

Chapter 9

Algebraic Expressions and Identities

- What are Expressions?
- Terms, Factors and Coefficients
- Monomials, Binomials and Polynomials
- Like and Unlike Terms
- Addition and Subtraction of Algebraic Expressions
- Multiplication of Algebraic Expressions: Introduction
- Multiplying a Monomial by a Monomial
- Multiplying a Monomial by a Polynomial
- Multiplying a Polynomial by a Polynomial
- What is an Identity?

- Standard Identities
- Applying Identities

Chapter 10

Visualising Solid Shapes

- Introduction
- Views of 3D-Shapes
- Mapping Space Around Us
- Faces, Edges and Vertices

Chapter 11

Mensuration

- Introduction
- Let us Recall
- Area of Trapezium
- Area of a General Quadrilateral
- Area of a Polygon
- Solid Shapes
- Surface Area of Cube, Cuboid and Cylinder
- Volume of Cube, Cuboid and Cylinder
- Volume and Capacity

Chapter 12

Exponents and Powers

- Introduction
- Powers with Negative Exponents
- Laws of Exponents
- Use of Exponents to Express Small Numbers in Standard Form

Chapter 13

Direct and Inverse Proportions

- Introduction
- Direct Proportion
- Inverse Proportion

Chapter 14

Factorisation

- Introduction
- What is Factorisation?
- Division of Algebraic Expressions

- Division of Algebraic Expressions Continued (Polynomial ÷ Polynomial)
- Can you Find the Error?

Chapter 15

Introduction to Graphs

- Introduction
- Linear Graphs
- Some Applications

Chapter 16

Playing with Numbers

- Introduction
- Numbers in General Form
- Games with Numbers
- Letters for Digits
- Tests of Divisibility