

**7th CBSE MATHEMATICS SYLLABUS****Chapter 1 Integers**

- Introduction
- Recall
- Properties of Addition And Subtraction of Integers
- Multiplication of Integers
- Properties of Multiplication of Integers
- Division of Integers
- Properties of Division Of Integers

**Chapter 2****Fractions and Decimals**

- Introduction
- How Well Have You Learnt About Fractions?
- Multiplication Of Fractions
- Division Of Fractions
- How well Have You Learnt About Decimal Numbers
- Multiplication Of Decimal Numbers
- Division Of Decimal Numbers

**Chapter 3****Data Handling**

- Introduction
- Collecting Data
- Organisation Of Data
- Representative Values
- Arithmetic Mean
- Mode
- Median
- Use Of Bar Graphs With A Different Purpose
- Chance And Probability

**Chapter 4****Simple Equations**

- A Mind-Reading Game!
- Setting Up Of An Equation
- Review Of What We Know
- What Equation Is?

- More Equations
- From Solution To Equation
- Applications Of Simple Equations To Practical Situations

## Chapter 5

### Lines and Angles

- Introduction
- Related Angles
- Pairs Of Lines
- Checking For Parallel Lines

## Chapter 6

### The Triangle and its Properties

- Introduction
- Medians of A Triangle
- Altitudes of A Triangle
- Exterior Angle of A Triangle and Its Property
- Angle Sum Property of A Triangle
- Two Special Triangles: Equilateral and Isosceles
- Sum of The Lengths of Two Sides of a Triangle
- Right-Angled Triangles And Pythagoras Property

## Chapter 7

### Congruence of Triangles

- Introduction
- Congruence Of Plane Figures
- Congruence Among Line Segments
- Congruence Of Angles
- Congruence Of Triangles
- Criteria For Congruence Of Triangles
- Congruence Among Right-Angled Triangles

## Chapter 8

### Comparing Quantities

- Introduction
- Equivalent Ratios
- Percentage – Another Way Of Comparing Quantities
- Use Of Percentages
- Prices Related To An Item Or Buying And Selling
- Charge Given On Borrowed Money Or Simple Interest

## Chapter 9

### Rational Numbers

- Introduction
- Need For Rational Numbers
- What Are Rational Numbers?
- Positive And Negative Rational Numbers
- Rational Numbers On A Number Line
- Rational Numbers In Standard Form
- Comparison Of Rational Numbers
- Rational Numbers Between Two Rational Numbers
- Operations On Rational Numbers

## Chapter 10

### Practical Geometry

- Introduction
- Construction Of A Line Parallel To A Given Line, Through A Point Not On The Line
- Construction Of Triangles
- Constructing A Triangle When The Lengths Of Its Three Sides Are Known (SSS Criterion)
- Constructing A Triangle When The Lengths Of Two Sides And The Measure Of The Angle Between Them Are Known. (SAS Criterion)
- Constructing A Triangle When The Measures Of Two Of Its Angles And The Length Of The Side Included Between Them Is Given. (ASA Criterion)
- Constructing A Right-Angled Triangle When The Length Of One Leg And Its Hypotenuse Are Given (RHS Criterion)

## Chapter 11

### Perimeter and Area

- Introduction
- Squares And Rectangles
- Area Of A Parallelogram
- Area Of A Triangle
- Circles
- Conversion Of Units
- Applications

## Chapter 12

### Algebraic Expressions

- Introduction
- How Are Expressions Formed?
- Terms Of An Expression

- Like And Unlike Terms
- Monomials, Binomials, Trinomials And Polynomials
- Addition And Subtraction Of Algebraic Expressions
- Finding The Value Of An Expression
- Using Algebraic Expressions – Formulas And Rules

## **Chapter 13**

### **Exponents and Powers**

- Introduction
- Exponents
- Laws Of Exponents
- Miscellaneous Examples Using The Laws Of Exponents
- Decimal Number System
- Expressing Large Numbers In The Standard Form

## **Chapter 14**

### **Symmetry**

- Introduction
- Lines Of Symmetry For Regular Polygons
- Rotational Symmetry
- Line Symmetry And Rotational Symmetry

## **Chapter 15**

### **Visualising Solid Shapes**

- Introduction: Plane Figures And Solid Shapes
- Faces, Edges And Vertices
- Nets For Building 3-D Shapes
- Drawing Solids On A Flat Surface
- Viewing Different Sections Of A Solid