#### Class 7

## Important Formulas Chapter 7 – Congruence of Triangles

1. Two figures are congruent, if they have exactly the same shape and size.

2.

(i) Two line segments are congruent, if they have the same length.

(ii) Two angles are congruent, if they have the same measure.

(iii) Two squares are congruent, if they have the same side length.

(iv) Two rectangles are congruent, if they have the same length and breadth.

(v) Two circles are congruent, if they have the same radius.

3. Two triangles are congruent, if in matching of their vertices, the three sides and the three angles of one triangle are respectively equal to the corresponding parts of the other.

4. SSS Congruence Condition: Two triangles are congruent, if three sides of one triangle are respectively equal to the three sides of the other.

5. SAS Congruence Condition: Two triangles are congruent, if two sides and the included angle of one are respectively equal to the two sides and the included angle of the other.

6. ASA Congruence Condition: Two triangles are congruent, if two angles and the included side of the one are respectively equal to the two angles and the included side of the other.

7. RHS Congruence Condition: Two right triangles are congruent, if the hypotenuse and one side of the one triangle are respectively equal to the hypotenuse and one side of the other

8. In an isosceles triangle, the angles opposite to equal sides are equal.

9. The bisector of the vertical angle of an isosceles triangle bisects the base at right angles.

10. Two congruent figures are equal in area but two figures having the same area need not be congruent.

# **NCERT Solutions For Class 7 Maths**

#### Class 7 Maths Chapter 1 Integers

- Class 7 Integers Ex 1.1
- Class 7 Integers Ex 1.2
- Integers Class 7 Exercise 1.3
- Integers Class 7 Exercise 1.4

#### Class 7 Maths Chapter 2 Fractions and Decimals

- Fractions and Decimals Class 7 Ex 2.1
- Fractions and Decimals Class 7 Ex 2.2
- Fractions and Decimals Class 7 Ex 2.3
- Fractions and Decimals Class 7 Ex 2.4
- Fractions and Decimals Class 7 Exercise 2.5
- Fractions and Decimals Class 7 Exercise 2.6
- Fractions and Decimals Class 7 Exercise 2.7

#### Class 7 Maths Chapter 3 Data Handling

- Data Handling Class 7 Ex 3.1
- Data Handling Class 7 Ex 3.2
- Data Handling Class 7 Exercise 3.3
- Data Handling Class 7 Exercise 3.4

#### Class 7 Maths Chapter 4 Simple Equations

- Simple Equations Class 7 Ex 4.1
- Simple Equations Class 7 Ex 4.2
- Simple Equations Class 7 Exercise 4.3
- Simple Equations Class 7 Exercise 4.4

#### Class 7 Maths Chapter 5 Lines and Angles

- Lines and Angles Class 7 Ex 5.1
- Lines and Angles Class 7 Exercise 5.2

#### Class 7 Maths Chapter 6 The Triangle and Its Properties

- The Triangle and Its Properties Class 7 Ex 6.1
- The Triangle and Its Properties Class 7 Ex 6.2
- The Triangle and Its Properties Class 7 Exercise 6.3
- The Triangle and Its Properties Class 7 Exercise 6.4
- The Triangle and Its Properties Class 7 Exercise 6.5

#### Class 7 Maths Chapter 7 Congruence of Triangles

• Congruence of Triangles Class 7 Ex 7.1

CBSE Sample Papers

• Congruence of Triangles Class 7 Ex 7.2

#### Class 7 Maths Chapter 8 Comparing Quantities

- Comparing Quantities Class 7 Ex 8.1
- Comparing Quantities Class 7 Ex 8.2
- Comparing Quantities Class 7 Exercise 8.3

#### Class 7 Maths Chapter 9 Rational Numbers

- Rational Numbers Class 7 Ex 9.1
- Rational Numbers Class 7 Ex 9.2

#### Class 7 Maths Chapter 10 Practical Geometry

- Practical Geometry Class 7 Ex 10.1
- Practical Geometry Class 7 Ex 10.2
- Practical Geometry Class 7 Ex 10.3
- Practical Geometry Class 7 Exercise 10.4
- Practical Geometry Class 7 Exercise 10.5

#### Class 7 Maths Chapter 11 Perimeter and Area

- Perimeter and Area Class 7 Ex 11.1
- Perimeter and Area Class 7 Ex 11.2
- Perimeter and Area Class 7 Exercise 11.3
- Perimeter and Area Class 7 Exercise 11.4

#### Class 7 Maths Chapter 12 Algebraic Expressions

- Algebraic Expressions Class 7 Ex 12.1
- Algebraic Expressions Class 7 Ex 12.2
- Algebraic Expressions Class 7 Exercise 12.3
- Algebraic Expressions Class 7 Exercise 12.4

#### Class 7 Maths Chapter 13 Exponents and Powers

- Exponents and Powers Class 7 Ex 13.1
- Exponents and Powers Class 7 Ex 13.2
- Exponents and Powers Class 7 Exercise 13.3

#### Class 7 Maths Chapter 14 Symmetry

- Symmetry Class 7 Ex 14.1
- Symmetry Class 7 Ex 14.2
- Class 7 Symmetry Exercise 14.3

#### Class 7 Maths Chapter 15 Visualising Solid Shapes

**CBSE Sample Papers** 

NCERT Solutions

- Visualising Solid Shapes Class 7 Ex 15.1
- Visualising Solid Shapes Class 7 Ex 15.2
- Visualising Solid Shapes Class 7 Exercise 15.3
- Visualising Solid Shapes Class 7 Exercise 15.4

### **RD Sharma Class 7 Solutions**

Chapter 1: Integers **Chapter 2: Fractions** Chapter 3: Decimals **Chapter 4: Rational Numbers** Chapter 5: Operations on Rational Numbers Chapter 6: Exponents **Chapter 7: Algebraic Expressions** Chapter 8: Linear Equations in One Variable **Chapter 9: Ration And Proportion** Chapter 10: Unitary Method Chapter 11: Percentage Chapter 12: Profit and Loss Chapter 13: Simple Interest Chapter 14: Lines and Angles Chapter 15: Properties of Triangles Chapter 16: Congruence Chapter 17: Constructions Chapter 18: Symmetry Chapter 19: Visualising Solid Shapes Chapter 20: Mensuration I Chapter 21: Mensuration II Chapter 22: Data Handling I (Collection and organisation of Data) Chapter 23: Data Handling II (Central Values) Chapter 24: Data Handling III (Construction of Bar Graphs)

Chapter 25: Data Handling IV (Probability)