



Nishant eAcademy

CBSE Sample Paper Class 8 Mathematics 2020-21

Subject: Mathematics Class: 8 Maximum Marks: 80 Duration: 2.5 hours

Section A: Objective Type Questions (Each question carries 1 mark)

1. If the product of two numbers is 36 and their LCM is 12, then find their HCF. (a) 1 (b) 3 (c) 6 (d) 9
2. Which of the following is an irrational number? (a) $\sqrt{25}$ (b) $\sqrt{49}$ (c) $\sqrt{81}$ (d) $\sqrt{2}$
3. If the circumference of a circle is 22 cm, then find its diameter. (a) 7 cm (b) 11 cm (c) 14 cm (d) 22 cm

Section B: Short Answer Type Questions (Each question carries 2 marks)

4. Solve the equation: $3x - 5 = 10$.
5. Simplify the expression: $2(3x - 4) + 5(x - 2)$.
6. Find the volume of a cube with side length 4 cm.

Section C: Long Answer Type Questions (Each question carries 3 marks)

7. A shopkeeper purchased 12 dozen pens at ₹15 per pen. He sold each pen at ₹20. Find his profit or loss percentage.
8. Construct a triangle ABC with $AB = 6$ cm, $BC = 8$ cm, and $AC = 9$ cm. Then, construct its circumcircle.

Section D: Very Long Answer Type Questions (Each question carries 5 marks)

9. The length of a rectangle is 3 cm more than its breadth. If the perimeter of the rectangle is 26 cm, find its length and breadth.
10. A solid cone has a base radius of 5 cm and height of 12 cm. Find its curved surface area and total surface area.