

CLASS VIII MATHEMATICS SAMPLE PAPER – 2

Time: 3 Hours **Maximum Marks:** 80

Instructions: Attempt all questions. Show all steps. Calculators are not allowed.

Section A – MCQs (10×1)

1. Multiplicative inverse of $\frac{5}{9}$ is ____.
2. Which is a perfect cube? (a)343 (b)350 (c)360 (d)370
3. 12.5% of 640 = ____.
4. Sum of angles of a quadrilateral = ____.
5. Cube root of 729 = ____.
6. Which graph shows continuous data?
7. Value of $(5+3)^2$ = ____.
8. Opposite angles of a parallelogram are ____.
9. Probability ranges from ____.
10. Rational number example.

Section B – Very Short

11. Write four equivalent fractions of $\frac{3}{5}$.
12. Simplify $(-24)+18-9$.
13. Find square of 36.
14. Convert 1.125 to fraction.
15. Name any four quadrilaterals.

Section C – Short

16. Solve $8x+7=63$.
17. Find compound/simple interest on ₹8000 at 5% for 2 years (simple interest).
18. Find area of rhombus with diagonals 16 cm and 10 cm.
19. Draw a bar graph using marks of five students: 45,55,60,70,80.
20. Verify $(a-b)^2$ identity for $a=9, b=4$.
21. Evaluate $(-15 \times 12) \div (-6)$.

Section D – Long

22. A farmer has a rectangular field 75 m by 48 m. Find area, perimeter and fencing cost at ₹180 per metre.
23. Prepare a pie chart for transport modes: Bus 40, Cycle 25, Walk 20, Car 15.
24. A factory produced 1250 items, 78 were defective. Find percentage defective and percentage good.
25. A train travels 540 km in 9 hours. Find speed and distance in 14 hours at same speed.

Section E – HOTS

26. Explain how algebraic identities simplify multiplication with examples.
27. Compare two shapes having equal perimeter but different areas and justify.