

Name of School.....

Half Yearly Examination

Session – 2025-26

Class – 8

Subject – Maths

M.M. 40

All questions are compulsory.

1. Write the additive inverse each of the following.

(i) $\frac{2}{8}$

(ii) $-\frac{5}{9}$

2. Solve the following equations:

(i) $x - 2 = 7$

(ii) $y + 3 = 10$

3. Amina thinks of a number and subtracts from it. She multiplies the result by 8. The result now obtained is 3 times the same number she thought of. What is the number?

4. Find the measure of each exterior angle of a regular polygon of

- (i) 9 sides
- (ii) 15 sides

5. State whether True or False.

- (a) All rectangles are squares
- (b) All rhombuses are parallelograms
- (c) All squares are rhombuses and also rectangles
- (d) All squares are not parallelograms

6. Construct the following qua-drilaterals.

(i) Quadrilateral MORE

- MO = 6 cm
- OR = 4.5 cm
- $\angle M = 60^\circ$
- $\angle O = 105^\circ$
- $\angle R = 105^\circ$

7. List the outcomes you can see in these experiments.

- (a) Spinning a wheel
- (b) Tossing two coins together



8. Without adding, find the sum.

(i) $1 + 3 + 5 + 7 + 9$

(ii) $1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17 + 19$

9. Which of the following numbers are not perfect cubes?

(i) 216

(ii) 128

10. Find the smallest number by which each of the following numbers must be divided to obtain a perfect cube.

(i) 81

(ii) 128

11. Convert the following ratios to percentages.

(a) 3 : 4

(b) 2 : 3

12. Calculate the amount and compound interest on

(a) ₹ 10,800 for 3 years at 12% compounded annually.

(b) ₹ 18,000 for 2 years at 10% per annum compounded annually.

13. Identify the terms, their coefficients for each of the following expressions.

(i) $5xyz^2 - 3zy$ (ii) $1 + x + x^2$

14. Multiply the binomials

(i) $(2x + 5)$ and $(4x - 3)$

(ii) $(y - 8)$ and $(3y - 4)$