

INTERNATIONAL INDIAN SCHOOL BURAI DAH
Mid-Term Examination Sample Paper (2025-2026)

Class: VIII

Mathematics

Date: 20-09-2025

Duration: 3 hrs

Max. Marks: 80M

SECTION A

Choose the correct option from the brackets:

(1 × 15 = 15M)

1. Which of the following is the additive inverse of $\frac{5}{9}$
a) $\frac{-5}{9}$ b) $\frac{9}{5}$ c) $\frac{-9}{5}$ d) $\frac{-5}{-9}$
2. My mother's age is 4 more than three times of my age, then mother's age is
a) $x + 4$ b) $4x + 3$ c) $3x + 4$ d) $3x - 4$
3. How many sides of a regular polygon has whose each exterior angle is 45°
a) 7 b) 6 c) 8 d) 5
4. Which of the following numbers is not a perfect square
a) 6250 b) 57600 c) 90000 d) 1225
5. The value of $4x^2 + 2x - 5$ if $x = -1$
a) 2 b) 3 c) -3 d) -2
6. The product of two rational number is always
a) integers b) rational c) natural numbers d) whole numbers
7. The cost of 2kg mango is ₹250. The cost of 7kg mango is
a) ₹960 b) ₹750 c) ₹875 d) ₹720
8. The number of diagonals of a triangle is
a) 1 b) 2 c) 3 d) 0
9. The number of non-square numbers lies between 1 and 30
a) 26 b) 12 c) 13 d) 24
10. A quadrilateral with one pair of parallel sides is a-----
a) parallelogram b) rhombus c) trapezium d) kite
11. A rational number that is equal to its reciprocal is---

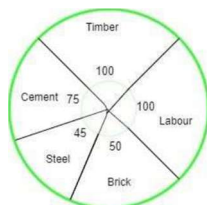
- a) 0 b) 1 c) 2 d) 3
12. If $2x - 3 = x + 2$, then x is equal to-----
- a) 1 b) 3 c) 5 d) 7
13. The central angle of a pie-graph is
- a) 180° b) 360° c) 90° d) 540°
14. The square of an odd number is
- a) Odd b) even c) odd or even d) none of these
15. In the following, which one is an example of a binomial
- a) $2x$ b) $5x^2 + 3x - 5$ c) $4x - 3$ d) 10

SECTION-B

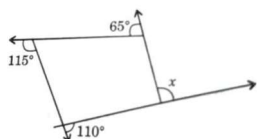
Answer the following Questions:

(2 × 11 =22M)

16. Solve $8x + 4 = 3(x - 1) + 7$
17. Write the Pythagorean triplet whose one member is 15
18. A loaded truck travels 14km in 25 minutes. If the speed remains the same, how far can it travel in 5 hours
19. Verify $a + b = b + a$, if $a = \frac{1}{5}$, $b = \frac{3}{4}$
20. Find the square root of 1024 using the factorisation method
21. Multiply $(a - b) (a^2 + ab + b^2)$
22. The opposite angles of a parallelogram are $(3x + 5)^\circ$ and $(61 - x)^\circ$. Find the measure of four angles?
23. The given pie graph represents the expenditure on different items to construct a flat. If the expenditure incurred on cement is ₹112500, find the following:



- a) Total cost of the flat
- b) Expenditure incurred on labour
24. In the given figure, find x



25. Subtract $3x^2 - 5x + 7$ from $5x^2 - 7x + 9$
26. Find the smallest square number that is divisible by each of the numbers 4,6,8

SECTION-C

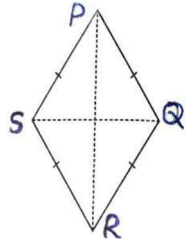
Answer the following Questions:

(3 × 9 =18M)

27. a) Find the smallest square number that must be subtracted from 2557 to get a perfect square. Also, find the square root of the perfect squares so obtained

OR

- b) Find the square root of 12.25 using the long division method
28. Verify the property $a \times (b \times c) = (a \times b) \times c$, where $a = \frac{-2}{7}$, $b = \frac{1}{2}$, $c = \frac{5}{6}$
29. The three angles of a triangle are in the ratio 2:3:4. Find the angles.
30. PQRS is a Rhombus. Diagonals PR and SQ meet at O. PO = 8cm, RO = x, SO = 6 cm, QO = y. Find the value of x and y. Also, find the side SP



31. a) In a deck of 52 cards, what is the probability of getting.
1. Black cards
 2. King
 3. Face cards
 4. An ace

OR

- b) A bag contains 5 blue balls, 6 black balls, and 4 orange balls. A ball is drawn at random from the bag. What is the probability that the ball drawn is
1. Orange
 2. Blue
 3. Black
 4. Not Blue
32. If 15 workers can build a wall in 48 hours, how many workers will be required to do the same work in 30 hours? If the number of workers is reduced to 10, then how much time will they take to finish the wall?
33. a) Solve $5x + \frac{7}{2} = \frac{3}{2}x - 14$

OR

- b) The sum of three consecutive multiples of 8 is 888. Find the multiples
34. Write any two properties of
- a) a parallelogram b) a Kite c) a rectangle
35. Find the greatest 4-digit number that is a perfect square

SECTION-D

Answer the following Questions:

(4× 4 =16M)

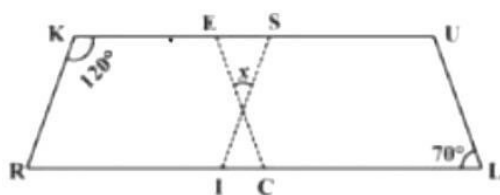
36. Using suitable properties, find the value

a) $\frac{2}{5} \times \frac{-3}{7} - \frac{1}{14} - \frac{3}{7} \times \frac{3}{5}$

OR

b) $\frac{-2}{3} \times \frac{3}{5} + \frac{5}{2} - \frac{3}{5} \times \frac{1}{6}$

37. In the given figure, both RISK and CLUE are parallelograms. Find the value of x



38. a) $m - \frac{m-1}{2} = 1 - \frac{m-2}{3}$

OR

b) $x + 7 - \frac{8x}{3} = \frac{17}{6} - \frac{5x}{2}$

39. The choice of food for a group of people is given below. Draw a pie graph using the information.

Favourite food	North Indian	South Indian	Chinese	Others	Total
No. of People	30	40	25	25	120