SIMS®

(SCHOLARS INTEGRAL MATHS & SCIENCE OLYMPIADS-HYD)

GRADE VIII

BIGGEST STATE LEVEL OLYMPIAD : 2025-26

SIMO QUESTION PAPER : STAGE - I

MAX. MARKS : 90 **TIME: 60 MIN.**

NAME OF THE STUDENT	:	.....
HALL TICKET NUMBER	:	.....
NAME OF THE SCHOOL	:	.....

INSTRUCTIONS:

- This question paper contains 30 questions.
- First 25 questions (1 to 25) are single correct answer type. Each question carries 3 marks.
- Next 5 questions (26 to 30) are one or more than one correct answer type. Each question carries 3 marks.
- No negative marks.
- You have not allowed to use a calculator or any other electronic devices in the examination hall.
- Read the instructions given in the answer sheet(OMR sheet) before answering the questions.
- The answer sheet should be returned to the invigilator before leaving the examination hall (You can retain the question paper with you)
- Results will be available at www.simsolympiads.com

Single Correct Answer Type: 25 × 3 = 75

1. What should be subtracted from $\left(\frac{3}{4}+\frac{1}{3}+\frac{2}{5}\right)$ to get $\frac{1}{2}$?

1) $\frac{53}{60}$ 2) $\frac{59}{60}$ 3) $\frac{119}{60}$ 4) $\frac{60}{51}$

2. Which property of multiplication is not involved in the following ?

$$32\times\frac{1}{4}=(8\times4)\times\frac{1}{4}=8\times\left(4\times\frac{1}{4}\right)=8\times1=1\times8$$

1) Associative 2) Distributive property

3) Commutative 4) Property of 1

3. If a triangle has a base of $10\frac{3}{4}$ cm and a height of $15\frac{3}{4}$ cm, then what is its area ?

1) $150\frac{9}{16}\text{cm}^2$ 2) $75\frac{9}{32}\text{cm}^2$ 3) $84\frac{21}{32}\text{cm}^2$ 4) $169\frac{5}{16}\text{cm}^2$

4. The value of m, if $\left(\frac{2}{9}\right)^3\times\left(\frac{2}{9}\right)^{-6}=\left(\frac{2}{9}\right)^{2m-1}$ is _____.

1) 1 2) –1 3) 2 4) –2

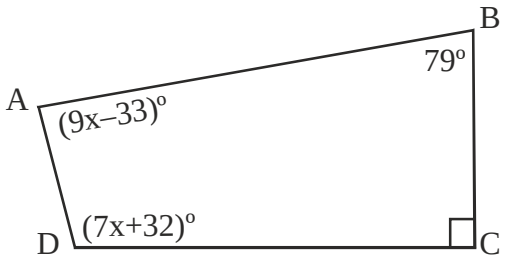
5. Simplify : $\sqrt{900}+\sqrt{0.09}+\sqrt{0.000009}$.

1) 33.3 2) 30.203 3) 30.33 4) 30.303

6. Find what sum will amount to ` 55,125 in two years at 5% per annum compound interest.

1) ` 30,000 2) ` 40,000 3) ` 50,000 4) ` 60,000

7. The diagram below shows quadrilateral ABCD, then the value of x is _____.



1) 12 2) 14 3) 8 4) 33

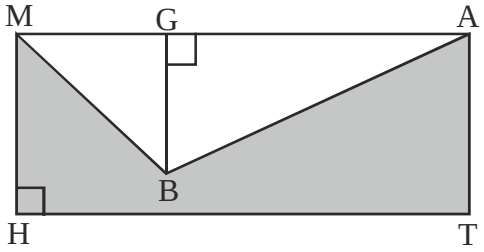
8. In a pie graph, a component is represent as a sector with sector angle is 45°, then the percentage of the component value in the total is _____.

1) 8% 2) 27 % 3) 22.5% 4) 12.5%

9. If $\sqrt{12+\sqrt{12+\sqrt{12+\ldots}}} = x$, then the value of x is _____.

1) 3 2) 4 3) 6 4) 12

10. In the diagram, MATH is a rectangle. If BG = 9, HM= 12 and HT = 30, then the area of the shaded region of the diagram is _____.



1) 495 sq.units 2) 360 sq.units

3) 225 sq.units 4) 135 sq.units

11. If the difference of a cube and the square of a natural number is 48, then the number is ____.

1) 4 2) 6 3) 5 4) 8

12. A book is marked at ` 880 and sold for ` 770, then the discount percentage is _____.

1) 8 % 2) 25 % 3) 15 % 4) 12.5 %

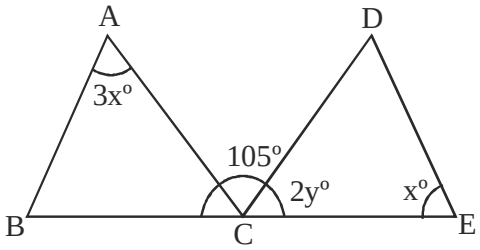
13. If 2A = 3B = 4C, then the value of A : B : C is _____.

1) 2 : 3 : 4 2) 4 : 3 : 2 3) 3 : 4 : 6 4) 6 : 4 : 3

14. The value of $3\frac{1}{12}-\left[1\frac{3}{4}+\left\{2\frac{1}{2}-\left(1\frac{1}{2}-\frac{1}{3}\right)\right\}\right]$ is _____.

1) $\frac{1}{2}$ 2) 2 3) $\frac{7}{12}$ 4) 0

15. In the figure, AB || CD and AC || DE, then the values of x and y respectively are _____.



1) 35°, 20° 2) 20°, 35° 3) 25°, 40° 4) 15°, 55°

16. The value of $(-1)^{101} + (-1)^{102} + (-1)^{103} + ... + (-1)^{200}$ is _____.

1) 0 2) 1 3) – 1 4) 100

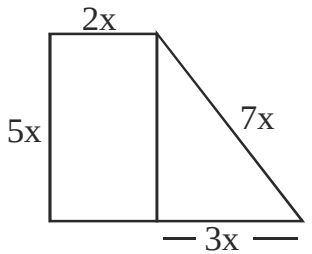
17. If $2^x + 3^y = 43$, where x and y are natural numbers, then x–y is equal to

1) 2 2) 3 3) 7 4) 1

18. Three consecutive numbers such that twice the first, 3 times the second and 4 times the third together make 191. The least of the consecutive numbers is _____.

1) 18 2) 21 3) 19 4) 20

19. If the perimeter of the figure given is 57 cm, the perimeter of the triangle in the figure is _____.



1) 30 cm 2) 45 cm 3) 39 cm 4) 3 cm

20. If $\frac{x+3}{2}-\frac{3x+1}{4}=\frac{2(x-2)}{3}-2$, then the value of x is _____.

1) –5 2) 5 3) $-\frac{61}{11}$ 4) $\frac{61}{11}$

21. The sum of two numbers is 94. If one of the numbers is 20 more than the other, what are the numbers ?

1) 67, 27 2) 47, 27 3) 57, 37 4) 56, 38

22. Divide 100 into two parts in such a way $\left(\frac{8}{5}\right)^{th}$ of one part is equal to $\left(\frac{2}{5}\right)^{th}$ of the other. What are two numbers ?

1) 20, 80 2) 30, 70 3) 50, 50 4) 40, 60

23. If a = 1, b = 2 and c = 3, then the value of $2a^2b + 2b^2c - 4c^2a$ is _____.

1) 8 2) 2 3) –5 4) –8

24. Subhash wanted to type the first 100 natural numbers. How many times does he have to press the keys ?

1) 192 2) 100 3) 190 4) 189

25. Lavanya tried to cut out a piece of paper in such a way that the opposite sides are equal and parallel but not perpendicular. Which of the following shapes can be formed by her ?

1) Rectangle 2) Square

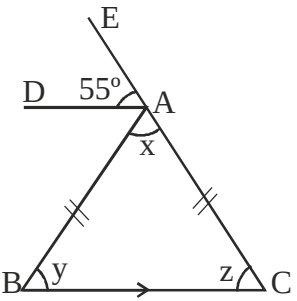
3) Rhombus 4) Parallelogram

One or more Correct Answer Type: 5 × 3 = 15

26. Which of the following rational numbers are equal to their reciprocals ?

1) 0 2) 1 3) –1 4) –100

27. In the figure, AB = AC and AD || BC, then



1) $x = 70^o$ 2) $y = 65^o$ 3) $z = 55^o$ 4) $x+y-z = 70^o$

28. The ratio between two numbers is 3 : 5. If each number is increased by 4, then the ratio becomes 2 : 3. The numbers are _____.

1) 12 2) 18 3) 20 4) 8

29. The equation $\frac{x-2}{x+7} \times \frac{x+7}{x-2} = 1$ is true for all rational values of x, where x is not equal to _____.

1) 5 2) –7 3) 2 4) $-\frac{5}{2}$

30. Which of the following numbers are in continued proportion ?

1) 6, 8, 10 2) 4, 8, 16 3) 7, 14, 16 4) 9, 12, 16

*** ***ALL THE BEST*** ***

ROUGH WORK