



SINGAPORE
MATH GLOBAL FINALS

SINGAPORE MATH GLOBAL FINAL -ONLINE 2025 INTERNATIONAL



INFO PACK



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About SINGAPORE MATH COMPETITION Global Finals



Overview

The Singapore International Mastery Contests Center (SIMCC) is proud to announce the launch of the 3rd Singapore Math Global Finals (SMGF), a landmark event that continues to underscore the significance of school mathematics while celebrating Singapore's exceptional success in the field. This announcement comes on the heels of the impressive 2022 results from the Programme for International Student Assessment (PISA), where Singapore's 15-year-olds demonstrated remarkable proficiency in applying critical thinking and reasoning to solve complex, real-world problems.

Earning the top spot in Reading, Mathematics, and Science among 81 participating systems, Singapore's students have exemplified mastery in mathematical reasoning, effectively distinguishing between relevant and irrelevant information, and skillfully employing computational thinking skills such as pattern recognition and algorithm definition. These competencies are not only commendable but also vital in preparing students for the rapidly evolving global landscape marked by digitalization, emerging technologies, and the introduction of new professions.

The 3rd SMGF, organized by SIMCC, aims to further cultivate these skills, offering a platform for young mathematicians to showcase their talents and learn from their peers on an international stage. This event is more than a competition; it's a celebration of the enduring power and relevance of mathematics in shaping the minds of future generations and paving the way for global advancements.

We have partnered with Scholastic Trust Singapore Teachers' Institute (STSTI) to bring you SMC & SMGF as well as training for teachers on how to use Formative and Summative Assessment data to diagnose students' misconceptions about mathematics and plan lessons to correct these misconceptions.

Ms Foo Pau Choo

Dean, Scholastic Trust Singapore
Teachers' Institute (STSTI)



- Experienced educator with more than 20 years of teaching
- Supervised teachers in the marking of Primary School Leaving Examination (PSLE) Mathematics paper
- Presented in numerous Mathematics & Science Education Conferences and conducted academic & Pedagogical workshops for teachers and parents.

Objective



We are a team of dedicated mathematics educators who want to help students and teachers from all over the world to improve in math education. Singapore started with a very poor education base after independence from the British in 1965 and by 1980, we were at the rock bottom of world education rankings.

The “Singapore method” was first developed by a team of teachers in Singapore in the 1980s, who were given the task of creating high-quality teaching materials by the ministry of education. They studied the latest behavioral science research as well as traveled to schools in other countries, including Canada and Japan, to compare the effectiveness of different teaching methods. Aiming to move away from simple rote-learning and to focus instead on teaching children how to problem solve, the textbooks the group produced were influenced by educational psychologists such as the American Jerome Bruner, who posited that people learn in three stages: by using real objects, then pictures, and then through symbols. That theory contributed to Singapore’s strong emphasis on modeling mathematical problems with visual aids; using coloured blocks to represent fractions or ratios, for example.

We hope to share the best of Singapore education with the world. In educating our students in Singapore, we seek to achieve our Desired Outcomes of Education so that our students are future-ready, have a strong sense of national identity, and are equipped to contribute in a globalized world. We aspire to bring out the best in our students so that they are empowered to live life to the fullest, contribute to, and care for their community and nation. We also aim to enable our students to develop their interests to pursue their passions and fulfill their aspirations.

Format of The Test

SINGAPORE MATH GLOBAL FINALS is open to all top 40% of winners of SMC, SASMO, and AMO in 2024 for students from G1 to G10 (Primary 1 to Secondary 4/5):

Singapore Math Global Finals

SINGAPORE MATH GLOBAL FINALS is open to all Primary 1 to 6, Secondary 1 to 4/5 students (Grades 1 to 10 students from International schools). Time given for contest is 90 minutes. Each level has a differentiated paper and contains 31 questions within 3 sections:

90 Minutes
Total Score: 100 points

Section A

15

Multiple choice Questions

2 points for each correct answer

0 point for each unanswered question

Total mark = 30

Section B

10

Non-routine Questions

4 points for each correct answer

0 point for each unanswered question

Total mark = 40

Section C

6

Non-routine Questions

5 points for each correct answer

0 point for each unanswered question

Total mark = 30

Primary 1 to 4 Calculator is NOT Allowed
Primary 5 to Secondary 4/5 Calculator is Allowed



Syllabus for SINGAPORE Math Global Finals

SIMCC reserves the rights to change the syllabus without any prior notice.

Lower Primary Level Grades 1 to Grade 4

PRIMARY 1 / GRADE 1

- Numbers up to 100
- Addition & Subtraction within 100
- Division within 20
- Heuristics Skills
- Length
- Money
- Multiplication within 40
- Numbers to 100
- Ordinal Numbers
- Picture Graphs
- Time

PRIMARY 3 / GRADE 3

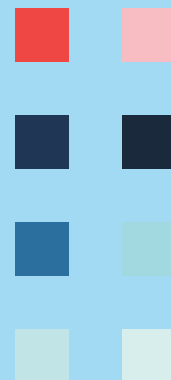
- Addition and Subtraction Within 10 000
- Multiplication tables of 2 to 10
- Division Within Multiplication tables of 2 to 10
- Area and Perimeter of Squares and Rectangles
- Equivalent Fractions
- Addition and Subtraction of Fractions
- Heuristics Skills
- Length
- Mass
- Money
- Numbers to 10 000
- Tables and Graphs
- Time
- Volume

PRIMARY 2 / GRADE 2

- Numbers up to 1000
- Addition & Subtraction within 1000
- Fractions
- Heuristics Skills
- Length
- Mass
- Volume
- Money
- Division within Multiplication tables of 2,3,4,5,10
- Multiplication tables of 2,3,4,5,10
- Picture Graphs with Scales
- Time
- 2D & 3D Shapes

PRIMARY 4 / GRADE 4

- 4 Operations of Whole Numbers
- Angles
- Area and Perimeter of Squares and Rectangles
- 4 Operations of Decimals
- Factors and Multiples
- Addition and Subtraction of Fractions
- Mixed Numbers and Improper Fractions
- Fractions of a set
- Heuristics Skills
- Length
- Mass
- Money
- Numbers to 100 000
- Properties of Squares and Rectangles
- Time
- Tables and Line Graphs
- Line of Symmetry



Upper Primary Level to Secondary Level / Grades 5 to 10/11



PRIMARY 5 / GRADES 5

- 4 Operations of Decimals
- 4 Operations of Whole Numbers
- Angles
- Area of Triangles
- Area and Perimeter of Squares and Rectangles
- Average
- Fractions of a set
- 4 Operations of Fractions
- Tables and Line Graphs
- Heuristics Skills
- Mass
- Percentage
- Rate
- Ratio
- Properties of Triangles
- Properties of Parallelograms and Trapeziums
- Volume of Cube and Cuboid

PRIMARY 6 / GRADES 6

- Operations of Whole Numbers
- 4 Operations of Fractions
- 4 Operations of Decimals
- Percentage
- Volume
- Algebra
- Angles
- Area
- Area and Circumference of Circles
- Area and Perimeter of Squares and Rectangles
- Area of Triangles
- Average
- Heuristics Skills
- Length
- Percentage
- Properties of Quadrilaterals
- Properties of Triangles
- Rate
- Ratio
- Volume
- Volume of Cube and Cuboid
- Tables and Line Graphs

SECONDARY 1 / GRADES 7

- Addition and Subtraction of Linear Expressions
- Algebra and Algebraic Manipulation
- Algebraic Fractions
- Angles, Triangles, Quadrilaterals and Polygons
- Approximation and Estimation
- Area and Perimeter of Plane Figures
- Inequalities
- Linear Equations
- Linear Functions and Graphs
- Percentage
- Primes, Highest Common Factors, Lowest Common Multiples, Square and Cube Roots
- Rate and Speed
- Ratio
- Real Numbers and their Four Operations
- Approximation and Estimation
- Number Patterns
- Volume and Surface Area of Prisms and Cylinders
- Analysis and Interpretations of Tables, Pictograms, Pie Charts, Line and Bar Graphs

SECONDARY 2 / GRADES 8

- Algebra and Algebraic Manipulation
- Angles, Triangles, Quadrilaterals and Polygons
- Approximation and Estimation
- Congruent and Similar Figures
- Direct and Indirect Proportions
- Expansion and Factorisation of Quadratic Expressions
- Four Operations of Algebraic Fractions
- Graphs of Quadratic Functions
- Linear Equations
- Linear Functions and Graphs
- Linear Inequalities
- Map and Scales
- Number Patterns
- Percentage
- Primes, Highest Common Factors, Lowest Common Multiples, Square and Cube Roots
- Probability of Single Events
- Pythagoras' Theorem
- Quadratic Equations
- Number Patterns
- Rate and Speed
- Ratio
- Simultaneous Equations
- Trigonometric Ratios
- Analysis and Interpretations of Tables, Pictograms, Pie Charts, Dot Diagrams, Histograms, Stem-and-Leaf Diagrams, Line and Bar Graphs
- Mean, Mode and Median
- Volume and Surface Area of Prism & Cylinder
- Volume and Surface Area of Pyramids, Cones and Spheres



Upper Primary Level to Secondary Level / Grades 5 to 10/11

SECONDARY 3 / GRADES 9

- Algebra and Algebraic Manipulation
- Algebraic Fractions
- Angles, Triangles, Quadrilaterals and Polygons
- Applications of Trigonometry
- Approximation and Estimation
- Arc Length, Sector Area and Radian Measure
- Area and Perimeter of Plane Figures
- Congruence and Similarity
- Coordinate Geometry
- Data Handling and Analysis
- Expansion and Factorisation of Quadratic Expressions
- Functions and Graphs
- Further Trigonometry
- Indices and Standard Form
- Linear Equations
- Linear Inequalities
- Map and Scales
- Number Patterns
- Percentage
- Primes, Highest Common Factors, Lowest Common Multiples, Square and Cube Roots
- Probability of Single and Combined Events
- Pythagoras' Theorem
- Quadratic Equations
- Rate and Speed
- Ratio
- Direct and Indirect Proportions
- Real Numbers and their Four Operations
- Simultaneous Equations
- Volume and Surface Area of Prism & Cylinder
- Volume and Surface Area of Pyramids, Cones and Spheres

SECONDARY 4 & 5 / GRADES 10/11

- Algebra and Algebraic Manipulation
- Algebraic Fractions
- Angles, Triangles, Quadrilaterals and Polygons
- Applications of Trigonometry
- Approximation and Estimation
- Arc Length, Sector Area and Radian Measure
- Area and Perimeter of Plane Figures
- Congruence and Similarity
- Coordinate Geometry
- Data Handling and Analysis
- Expansion and Factorisation of Quadratic Expressions
- Functions and Graphs
- Further Trigonometry
- Indices and Standard Form
- Linear Equations
- Linear Inequalities
- Map and Scales
- Number Patterns
- Percentage
- Primes, Highest Common Factors, Lowest Common Multiples, Square and Cube Roots
- Probability of Single and Combined Events
- Pythagoras' Theorem
- Quadratic Equations
- Rate and Speed
- Ratio
- Direct and Indirect Proportions
- Real Numbers and their Four Operations
- Simultaneous Equations
- Volume and Surface Area of Prism & Cylinder
- Volume and Surface Area of Pyramids, Cones and Spheres
- Set and Set Notation
- Matrices
- Vectors In Two Dimensions



SMGF Sample Questions

Division Junior (Grades 1 & 2)

- Q1** In the figure below, one part of it is already shaded. How many more parts of the figure must be shaded so that $\frac{3}{8}$ of it is shaded?



Answer : _____ parts

- Q2** Look at the number pattern. What is the missing number?



Answer : _____

- Q3** Find the mass of one ball. (3 marks)



Answer : _____ kg

- Q4** Ali bought some sweets. If he packs them equally into 4 jars, he will have 3 sweets left. If he packs them equally into 5 jars, he will have 1 sweet left. What is the least possible number of sweets Ali bought? (4 marks)

Answer : _____ sweets

- Q5** Anthony and Alvin had the same amount of money. Alvin spent all his money on a story book while Anthony bought a T-Shirt for \$12 and had \$3 left. How much did the two boys have altogether at first? (5 marks)

Answer : \$ _____

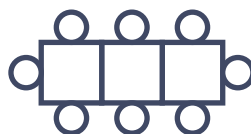
- Q6** Study the pattern below. How many circles will there be in pattern 5?



Pattern 1



Pattern 2



Pattern 3

Answer : _____ circles

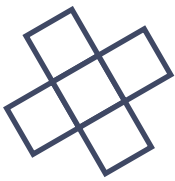
SMGF Sample Questions

Division Middle (Grades 3 & 4)

- Q1 $\star \times \star = 16$,
 $48 \div \star =$
Find the value of $=$.

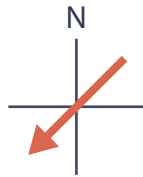
Answer : _____

- Q2 The figure below is made up of 5 identical squares. The perimeter of the figure is 96cm. What is the area of each square?



Answer : _____ cm²

- Q3 The arrow shows the direction Mr Sofian is facing. He turns 135° anti-clockwise. In which direction is he facing now? (2 marks)



Answer : _____

- Q4 There are some birds in three trees. 3 birds flew from the first tree to the second tree. 2 birds flew from the second tree to the third tree. After this, there were 5 birds in each tree. How many birds were there in each tree at first? (3 marks)

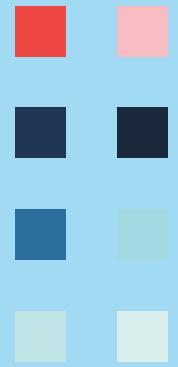
Answer : _____ birds

- Q5 A tank, a pail and a bottle can hold a total 52 litres of water. The pail can hold 8 litres more water than the bottle. The tank can hold 4 times as much water as the pail. How much water can the bottle hold? (5 marks)

Answer : _____ litres

- Q6 The cost of 1 storybook and 3 similar pens is \$7. The cost of 3 storybooks, 9 pens and 2 files is \$25.40. What is the cost of a file?

Answer : \$ _____



SMGF Sample Questions



Division Intermediate (Grades 5 & 6)

- Q1** The table below shows the marks obtained by five students for their Mathematics test. How many student(s) obtained more than the average mark of the group?

Name of students	Marks obtained
Ashykin	40
Benson	31
Charles	42
Devi	45
Eng Hui	27

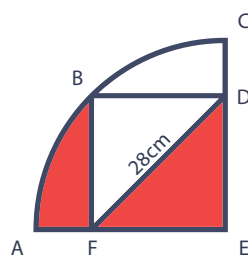
Answer : _____

- Q2** In the figure below, AB is 20cm. B is the midpoint of AC, C is the midpoint of BD and D is the midpoint of BE. What is the length of AE?



Answer : _____cm

- Q3** The figure below is formed by a square BDEF and a quadrant. Given that $DF = 28\text{cm}$, find the total area of the shaded parts. (Take $\pi = 22/7$) (3 marks)



Answer : _____ cm^2

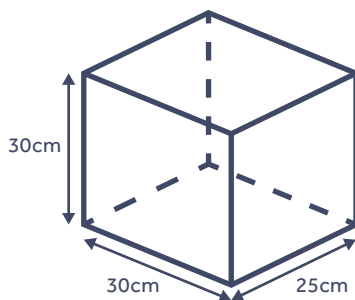
- Q4** Tim had \$1060 more than Cory. After Tim gave $\frac{4}{9}$ of his money to Cory, they each had the same amount of money. How much money did Corey have at first? (4 marks)

Answer : \$ _____

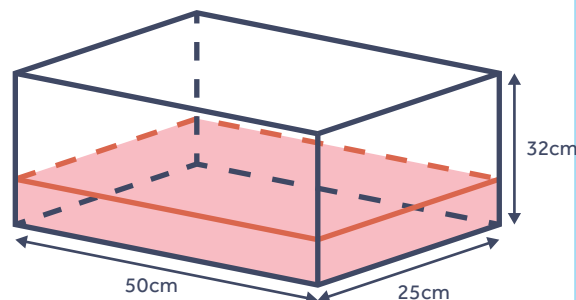
SMGF Sample Questions



- Q5** Two rectangular tanks are shown below. At first Tank A was empty and $\frac{1}{4}$ of Tank B was filled with water. Both taps were turned on at the same time and water from both taps flowed at the same rate of 1.5 litres per minute. How long did it take for the height of water to be the same in both tanks?
(1 litre = 1000cm^3) (5 marks)



Tank A



Tank B

Answer : _____

- Q6** Henry bought some chocolates and gave half of them to Wen Jie. Wen Jie bought some sweets and gave half of them to Henry. Henry ate 15 sweets and Wen Jie ate 18 chocolates. After that, the number of sweets and chocolates Henry had were in the ratio 1:7 and the number of sweets and chocolates Wen Jie had were in the ratio of 1:4. How many sweets did Wen Jie buy?

Answer : _____ sweets

SMGF Sample Questions

Division Intermediate (Grades 7 & 8)

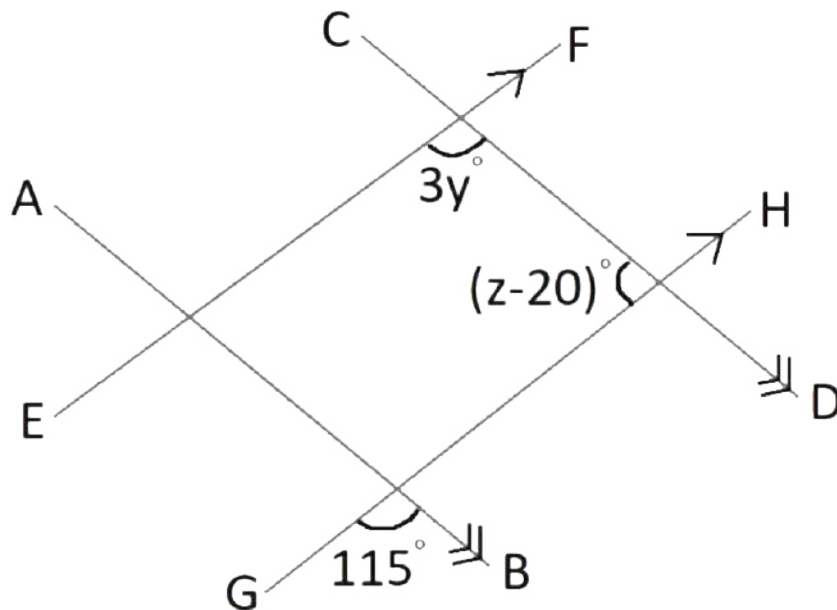
Q1 Consider the numbers stated below:

$$-10, \frac{1}{4}, \sqrt{\frac{1}{9}}, 1, 2.\dot{2}\dot{2}, \frac{22}{7}, \pi, \sqrt{16}, 5, \sqrt[3]{216}, \sqrt{60}, \sqrt[3]{729}, \sqrt{729}$$

Write down the perfect squares and irrational numbers and compute its sum.
Round off the answer to the nearest whole number.

Answer : _____

Q2



In the figure above, AB is parallel to CD and EF is parallel to GH . Find the sum of y and z . Round off the answer to the nearest degree.

Answer : _____

Q3 Solve the simultaneous equations and find the sum of p and q .

$$3p+2q=18$$

$$5p=7q-1$$

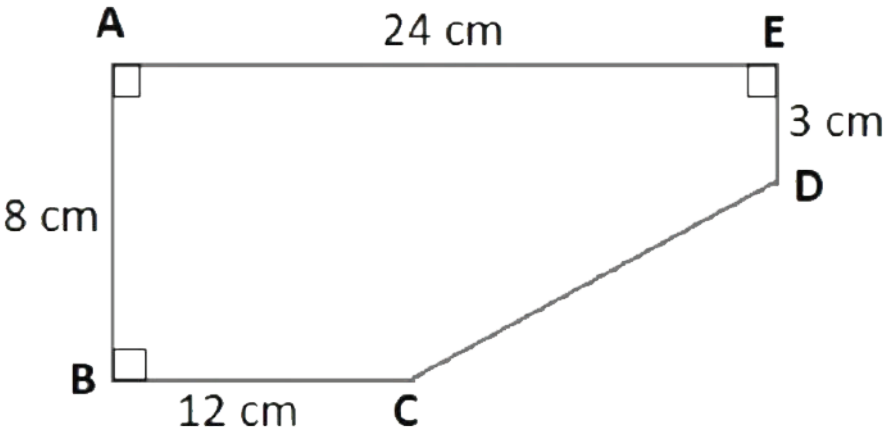
Answer : _____

Q4 Billy jogs for $(2x-4)$ hours at a speed of $(x+2.5)$ km/h. The total distance jogged is 18 km. Find the distance Billy has cycled in kilometers.

Answer : _____



Calculate the area of the figure ABCDE, in centimetres.



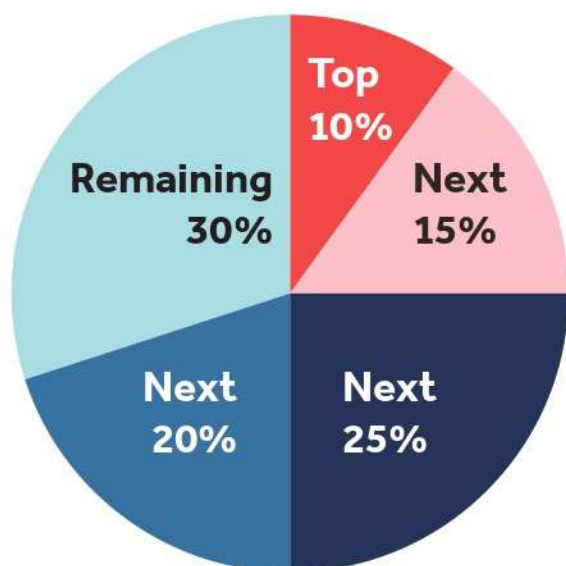
The table below shows the number of siblings that 40 students have.

Number of siblings	0	1	2	3	4	5
Number of students	10	6	x	8	y	4

If the median is given to be 2.5, find the mean of this distribution.
Multiply the mean by 100 and state the result.

Awards

Awards for SINGAPORE MATH GLOBAL FINALS



Students who have scored **FULL MARKS** will be awarded a **Perfect Score certificate**.

Awards Allocation

- The top 50% of the participants will receive an award certificate and medal.
- Winners of Silver and above awards in SMGF are invited to compete at [SIMOC 2025](#)

Medals

- Personalized medallion for Perfect Scorers.
- Medals for Gold, Silver and Bronze winners.



SINGAPORE MATH GLOBAL FINALS Overall Championship Awards

SINGAPORE MATH GLOBAL FINALS Overall Championship awards are given to the top 3 winners per grade level from grades 1 to 10 based on the their individual score*.

They will be announced during the Online Award Ceremony.

In the event of any ties, we will give the winners the same position. For example, if two contestants score 90 points and the third contestant scores 87 points, we will grant 2 overall champions and an overall 2nd runner-up. And the awards will be split between the 2 winners.

Awards (SIMCC VOUCHER)

- Overall Champion worth SGD600 (SIMCC Voucher) – SIMOC 2024 contest plus training package
- Overall Runner-up worth SGD300 (SIMCC Voucher)
- Overall 2nd Runner-up worth SGD100 (SIMCC Voucher)

*In cases where any grade level has less than 50 contestants, we reserve the rights not to award overall championship.



Certificates

Schools and participants will receive the following:

1. Certificates for Perfect Scorers, Gold, Silver and Bronze winners.
2. E-certificates are also given to participants who qualify for Honorable Mention and attain Certificate of Participation.



Performance Statistical Report

Performance by Questions

Table below shows which questions student got correct.

Q1	Correct	✓	Q2	Correct	✓	Q3	Correct	✓	Q4	N/A	Q5	Correct	✓	
Q6	Correct	✓	Q7	Correct	✓	Q8	Correct	✓	Q9	Correct	✓	Q10	Correct	✓
Q11	Correct	✓	Q12	N/A		Q13	Correct	✓	Q14	N/A	Q15	Incorrect	✗	
Q16	Correct	✓	Q17	Correct	✓	Q18	Correct	✓	Q19	Correct	✓	Q20	Correct	✓
Q21	Correct	✓	Q22	Correct	✓	Q23	N/A		Q24	Correct	✓	Q25	Correct	✓
Q26	Correct	✓	Q27	Incorrect	✗	Q28	Incorrect	✗	Q29	Incorrect	✗	Q30	N/A	

Performance by Topics

Percentage on top: Student's average by topics | Percentage middle: School average by topics | Percentage below: National average by topics.

ARITHMETIC AND NUMBER CONCEPTS 100% 76% 76%	ALGEBRAIC THINKING AND PATTERNS 50% 45% 45%	REASONING AND PROBLEM SOLVING 71% 43% 43%	ART OF COUNTING 43% 29% 29%	GEOMETRIC AND SPATIAL REASONING 67% 27% 27%
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Grade Performance Analysis

Topic	Your Score	School Range	Average
ARITHMETIC AND NUMBER CONCEPTS	30	18 - 30	22

All participants will receive an online performance report which analyses their capabilities across different topics and benchmarks their performance with other participants in the same grade and country / territory.

Home

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Student and Competition Info

Name	Index No	Competition Year	Competition Name
GOH ZHUO	060220002191	2022	SASMO 2022

Task's Results Info

Number of Tasks	Number of Correct Answer	Number of Wrong Answer	Number of Blank Answer
25	10	14	1

Detail Report

Task ID	Task order	Topic	Result	Level of Difficulty	% global correct ratio	% cont
1	1	NUMBER SENSE , NUMBER THEORY	Wrong	Easy	38.43%	4
2	2	NUMBER SENSE , NUMBER THEORY	Wrong	Easy	32.65%	2
3	3	ALGEBRA , EXPRESSIONS , PATTERNS , SEQUENCES	Correct	Easy	50.97%	5
4	4	ALGEBRA , EXPRESSIONS , PATTERNS , SEQUENCES	Correct	Easy	49.19%	5
5	5	NUMBER SENSE , NUMBER THEORY	Correct	Easy	29.38%	2
6	6	NUMBER SENSE , NUMBER THEORY	Correct	Easy	39.65%	4
7	7	ALGEBRA , EXPRESSIONS , PATTERNS , SEQUENCES	Wrong	Easy	42.62%	4
8	8	ALGEBRA , GEOMETRY , PYTHAGOREAN THEOREM , SIMILAR TRIANGLES	Correct	Easy	41.37%	3
9	9	GEOMETRY , SPATIAL REASONING	Wrong	Easy	21.59%	2
10	10	HARD TO CLASSIFY , OTHER TOPICS	Wrong	Easy	42.62%	3
11	11	NUMBER SENSE , NUMBER THEORY	Correct	Easy	24.33%	2
12	12	ALGEBRA , EXPRESSIONS , PATTERNS , SEQUENCES	Wrong	Easy	34.04%	1
13	13	LOGIC , REASONING	Correct	Easy	51.93%	6
14	14	DATA ANALYSIS , PROBABILITY , STATISTICS	Correct	Easy	32.22%	4
15	15	GEOMETRY , SPATIAL REASONING	Wrong	Easy	22.81%	2
16	16	ALGEBRA , EXPRESSIONS , PATTERNS , SEQUENCES	Wrong	Medium	18.03%	1

Award

BRONZE

Score

35

Global Rank

global_rank	Population	MAX	AVG	MIN	MED
BRONZE 294	3029	100.00	29.81	0.00	18.00

Country Rank

country_rank	Population	MAX	AVG	MIN	MED
25	87	97.00	28.93	0.00	22.00

School Rank

school_rank	Population	MAX	AVG	MIN	MED
1	1	35.00	35.00	35.00	35.00

Topic vs Result

Result

Blank Correct Wrong

ALGEBRA , EXPRESS...	1	3	6
NUMBER SENSE , N...	4	2	
ALGEBRA , GEOMET...	1	2	
GEOMETRY , SPATIC...	3		
DATA ANALYSIS , PR...	1		
HARD TO CLASSIFY ...	1		
LOGIC , REASONING	1		

No of Questions



Registration and Assessment Information



Competition Date	Platform	Fee
2nd March 2025	online	Rs. 4150

Registration

Kindly check with your country partner for registration and competition details. For more information visit the country partner official website, at <https://olympiadindia.in/>

Refund Policy

The contest fees paid by students to the competition are non-refundable. To host the competition, our organization invests a significant amount of time and resources, not to mention the various charges incurred to process the payments and registration.

As a social enterprise, SIMCC operates with a very lean team and limited resources to keep our operating costs low in order to make our competition affordable to all students. Hence, we will not be able to offer any refunds for competition fees to students who withdraw or cancel beyond our control.

If any student has been wrongly charged by SIMCC, or we cancel an event due to reasons under our control, we will happily refund the fees paid by the students.



Singapore International Mastery Contests Center

Acquire Skills, Recognition, and Scholarships for SUCCESS