



| Janison
Assessments.



2025

 **ICAS ASSESSMENTS™**
Mathematics

High Distinction

LIU ZIAN

Secondary 2

Meridian Secondary School

Sujata Stead

Sujata Stead
CEO

ACADEMIC ACHIEVEMENT RECORD

LIU ZIAN

2025 ICAS - Mathematics

You scored 38 out of 40. Your score was in the top 1 percent of Secondary 2 participants in Singapore.

ANALYSIS BY QUESTION

The following table shows the questions you answered correctly and shades the questions that you answered incorrectly . The questions are ranked from hardest at the top to easiest at the bottom.

| | Question content | Area assessed | Question number | Your answer | Students correct in SG |
|---------------------|---|---------------------|-----------------|-------------|------------------------|
| Difficult Questions | Solve a problem involving a congruent triangle and its transformation inside a circle | Space & Geometry | 39 | ✓ | 4% |
| | Solve a problem using formulas for the area of a circle and a rhombus | Measures & Units | 37 | ✓ | 18% |
| | Solve a problem using index laws, powers of three and remainders | Number & Arithmetic | 40 | ✓ | 19% |
| | Determine the number of choices needed for an event to occur | Chance & Data | 30 | ✓ | 20% |
| | Solve a problem by finding the equations of two lines | Algebra & Patterns | 38 | ✓ | 21% |
| | Use an algorithm involving squaring and adding | Number & Arithmetic | 33 | ✓ | 22% |
| | Find the area of five faces on a prism and calculate a cost | Measures & Units | 21 | ✓ | 25% |
| | Solve a problem using equations and substitution | Algebra & Patterns | 38 | x | 25% |
| | Solve a problem by finding the point of intersection of two lines | Algebra & Patterns | 29 | x | 27% |
| | Compare the mean, median and mode of frequency histograms | Chance & Data | 19 | ✓ | 28% |
| | Solve a problem involving the volume of a prism | Measures & Units | 31 | ✓ | 29% |
| | Determine the number of faces and vertices of a 3D shape | Space & Geometry | 7 | ✓ | 31% |
| | Identify a net used to make a cube | Space & Geometry | 26 | ✓ | 32% |
| | Use angle properties of triangles and parallel lines to solve a problem about... | Space & Geometry | 28 | ✓ | 32% |
| | Use a table of values to determine a missing element in a pattern | Algebra & Patterns | 34 | ✓ | 32% |
| | Solve an equation and calculate a probability using a Venn diagram | Chance & Data | 35 | ✓ | 35% |
| | Use properties of arithmetic to determine an algebraic expression | Algebra & Patterns | 23 | ✓ | 42% |
| | Interpret a timetable using 12 and 24-hour time | Measures & Units | 9 | ✓ | 44% |
| | Determine the probability of a multi-stage event | Chance & Data | 32 | ✓ | 45% |
| | Convert square kilometres to hectares | Measures & Units | 13 | ✓ | 50% |
| | Use proportion of sides in similar triangles to find a length | Space & Geometry | 15 | ✓ | 52% |
| | Use substitution to evaluate an algebraic expression with index notation | Algebra & Patterns | 27 | ✓ | 56% |
| | Compare coordinate values of points on a line | Algebra & Patterns | 10 | ✓ | 60% |
| | Interpret and compare the slope of lines on a travel graph | Algebra & Patterns | 14 | ✓ | 60% |
| | Use a scale to find a distance on a map | Space & Geometry | 12 | ✓ | 62% |
| | Use Pythagoras' Theorem and determine a perimeter | Measures & Units | 25 | ✓ | 67% |
| | Solve a problem involving cost, profit and selling price | Number & Arithmetic | 18 | ✓ | 72% |
| | Solve a problem involving capacity and conversion of units | Measures & Units | 22 | ✓ | 75% |
| | Determine the possible number of elements in a sample space | Chance & Data | 24 | ✓ | 75% |
| | Order and compare decimals | Number & Arithmetic | 3 | ✓ | 81% |
| | Select integers that add to a given total | Number & Arithmetic | 8 | ✓ | 82% |
| | Calculate and compare the angle size of sectors in a sector graph | Chance & Data | 11 | ✓ | 82% |
| | Find the sum of two algebraic fractions | Algebra & Patterns | 16 | ✓ | 82% |
| | Find the size of an angle using the angle sum of a straight line | Space & Geometry | 17 | ✓ | 83% |
| | Find a fraction of an amount and express the fraction as a percentage | Number & Arithmetic | 6 | ✓ | 86% |
| | Interpret a double-sided bar graph | Chance & Data | 2 | ✓ | 90% |
| | Determine the next number in a sequence of fractions | Algebra & Patterns | 4 | ✓ | 90% |
| | Convert units of length and find a distance | Measures & Units | 5 | ✓ | 90% |
| | Determine the view from the top of a composite solid | Space & Geometry | 1 | ✓ | 93% |
| | Solve a ratio problem | Number & Arithmetic | 20 | ✓ | 94% |