

International Math Olympiad Handbook – Grade 1

This handbook covers topics for Grade 1 students (Age 6–7).

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Introduction

Grade 1 students are introduced to basic mathematical concepts, developing problem-solving skills, logical thinking, and curiosity for numbers.

Curriculum Topics

- Numbers and Counting
- Addition and Subtraction
- Basic Shapes
- Measurement (Length, Weight, Volume)
- Patterns and Sorting
- Comparing Numbers
- Ordinal Numbers
- Simple Word Problems

Detailed Explanations with Examples

- **Numbers and Counting:** Learn numbers from 1 to 100 and counting objects.

Example: Count 7 pencils and 5 erasers \rightarrow total = 12

- **Addition:** Add numbers up to 20.

Example: $8 + 6 = 14$

- **Subtraction:** Subtract numbers up to 20.

Example: $15 - 9 = 6$

- **Basic Shapes:** Identify circles, squares, triangles.

Example: Draw a triangle and label its sides

- **Measurement:** Compare length, weight, volume.

Example: Which pencil is longer?

- **Patterns and Sorting:** Recognize and create patterns.

Example: Red, blue, red, blue... what comes next?

- **Comparing Numbers:** Learn greater than, less than.

Example: $7 < 10$

- **Ordinal Numbers:** First, second, third.

Example: The 3rd student in line

- **Simple Word Problems:** Solve small problems.

Example: If you have 3 apples and get 2 more, how many apples now?

Practice Problems

1. $7 + 5 = ?$
2. $12 - 4 = ?$
3. Draw a circle.
4. Count 10 pencils.
5. Complete the pattern: ■ □ ■ □ ?

6. Compare: $8 ? 12$
7. Who is first, second, third?

Summary & Key Formulas

- Addition: $a + b$
- Subtraction: $a - b$
- Basic Shapes: Circle, Square, Triangle
- Measurement Units: cm, m, g, kg, l