

FREE PRACTICE PACK · EDITION 1

Class 4 Mathematics Olympiad practice

16 original questions + explained answers

For students preparing for SOF IMO.

Inside this pack

Eight topic-practice questions and an eight-question, 20-minute mini-mock.

Topics selected for practice

- Place value and operations
- Fractions and decimals
- Geometry and measurement
- Data and reasoning

How to use it

Try the practice first. Complete the mini-mock in one sitting. Check the explanations, mark mistakes, and retry them the next day.

This pack covers selected topics. It is original BodhiScore material, independent of SOF, and is not an official paper or a full-length exam. Check the official syllabus for the complete scope.

Topic practice

Work through these eight questions without a timer. Explain your choice before checking the solutions.

1. Place value and operations

What is $4,208 + 1,795$?

A. 6,003

B. 6,093

C. 5,903

D. 5,993

2. Fractions and decimals

Which fraction is equal to $\frac{3}{4}$?

A. $\frac{4}{6}$

B. $\frac{5}{8}$

C. $\frac{2}{3}$

D. $\frac{6}{8}$

3. Geometry and measurement

A rectangle is 12 cm by 7 cm. What is its perimeter?

A. 38 cm

B. 42 cm

C. 84 cm

D. 19 cm

Topic practice (continued)

4. Data and reasoning

A pattern begins 2, 6, 18, 54. What operation repeats?

- | | |
|-------------------------|------------------|
| A. Multiply by 3 | B. Add 12 |
| C. Multiply by 2 | D. Add 4 |
-

5. Place value and operations

A number rounded to the nearest hundred is 3,600. Which could be the number?

- | | |
|-----------------|-----------------|
| A. 3,499 | B. 3,549 |
| C. 3,612 | D. 3,702 |
-

6. Fractions and decimals

A jug contains 2.5 L. Another 1.75 L is poured in. How much is there?

- | | |
|------------------|------------------|
| A. 3.25 L | B. 4.15 L |
| C. 4.25 L | D. 4.75 L |
-

Topic practice (continued)

7. Geometry and measurement

A square has perimeter 36 cm. What is one side length?

A. 8 cm

B. 9 cm

C. 12 cm

D. 6 cm

8. Data and reasoning

A survey gets 12 votes for cats, 9 for dogs and 7 for birds. How many votes total?

A. 28

B. 29

C. 21

D. 26

Timed mini-mock

Set a 20-minute timer for these eight questions. Score 1 point per correct answer; there is no penalty for an incorrect answer. This is BodhiScore's practice scoring.

9. Place value and operations

What is $8,000 - 2,735$?

A. 5,165

B. 5,265

C. 5,275

D. 6,265

10. Fractions and decimals

A ribbon is $\frac{3}{5}$ m long. How many centimetres is that?

A. 80 cm

B. 30 cm

C. 50 cm

D. 60 cm

11. Geometry and measurement

How many lines of symmetry does a non-square rectangle have?

A. 4

B. 0

C. 1

D. 2

Timed mini-mock (continued)

12. Data and reasoning

Four consecutive even numbers begin at 10. What is their sum?

- | | |
|--------------|--------------|
| A. 50 | B. 52 |
| C. 54 | D. 48 |
-

13. Place value and operations

A machine adds 125 to each input. What output comes from 2,875?

- | | |
|-----------------|-----------------|
| A. 3,125 | B. 2,900 |
| C. 3,000 | D. 3,100 |
-

14. Fractions and decimals

A class eats $\frac{2}{8}$ of a cake in the morning and $\frac{3}{8}$ later. What fraction remains?

- | | |
|-------------------------|--------------------------|
| A. $\frac{7}{8}$ | B. $\frac{3}{8}$ |
| C. $\frac{5}{8}$ | D. $\frac{5}{16}$ |
-

Timed mini-mock (continued)

15. Geometry and measurement

A square tile has area 49 cm^2 . What is its perimeter?

- | | |
|-----------------|-----------------|
| A. 49 cm | B. 14 cm |
| C. 28 cm | D. 36 cm |
-

16. Data and reasoning

A number is multiplied by 4, then 3 is added, giving 35. What was the number?

- | | |
|-------------|--------------|
| A. 9 | B. 11 |
| C. 7 | D. 8 |
-

Answers and explanations

Check why the answer works, then retry any question you missed.

1. A - 6,003

$$4,208 + 1,795 = 6,003.$$

2. D - 6/8

Multiplying numerator and denominator of $\frac{3}{4}$ by 2 gives $\frac{6}{8}$.

3. A - 38 cm

$$\text{Perimeter} = 2 \times (12 + 7) = 38 \text{ cm}.$$

4. A - Multiply by 3

Each term is three times the previous term.

5. C - 3,612

Numbers from 3,550 through 3,649 round to 3,600, so 3,612 works.

6. C - 4.25 L

$$2.50 + 1.75 = 4.25 \text{ L}.$$

7. B - 9 cm

All four sides are equal, so 36 divided by 4 is 9 cm.

8. A - 28

$$12 + 9 + 7 = 28 \text{ votes}.$$

Answers and explanations (continued)

9. B - 5,265

$$8,000 - 2,735 = 5,265.$$

10. D - 60 cm

$\frac{3}{5}$ of 100 cm is 60 cm.

11. D - 2

Its horizontal and vertical midlines are two symmetry lines.

12. B - 52

$$10 + 12 + 14 + 16 = 52.$$

13. C - 3,000

$$2,875 + 125 = 3,000.$$

14. B - $\frac{3}{8}$

They eat $\frac{5}{8}$, leaving $\frac{8}{8} - \frac{5}{8} = \frac{3}{8}$.

15. C - 28 cm

Its side is 7 cm because $7 \times 7 = 49$; perimeter is $4 \times 7 = 28$ cm.

16. D - 8

Undo 3 to get 32, then divide by 4: the number is 8.

Topic scope checked against SOF syllabus: [SOF IMO Class 4 syllabus](#)