



**MISMO**  
Maarif Inter School Maths Olympiad

An initiative of



**PAK-TURK MAARIF**  
INTERNATIONAL SCHOOLS & COLLEGES



# MISMO 2022

Syllabus and Sample Questions – Grade 4

For Detailed Information Login to:  [www.mismo.pk](http://www.mismo.pk)

## MISMO Syllabus– Grade 4

### MISMO Content Assessment Percentage

Content Domains	Percentages
Numbers and Algebra	60%
Measurement and Geometry	30%
Data Handling	10%

## Numbers and Algebra

### Whole Numbers

- Demonstrate knowledge of place value (2-digit to 6-digit numbers);
- Represent whole numbers with words, diagrams, number lines, or symbols;
- Compare and order numbers.
- Add and subtract (up to 4-digit numbers), including computation in simple contextual problems.
- Multiply (up to 3-digit by 1-digit and 2-digit by 2-digit numbers) and divide (up to 3-digit by 1-digit or 2-digit numbers), including computation in simple contextual problems.
- Solve problems involving odd and even numbers, multiples and factors of numbers, rounding numbers (up to the nearest ten thousand), and making estimates.
- Identify and use relationships in a well-defined pattern (e.g., describe the relationship between adjacent terms and generate pairs of whole numbers given a rule).

### Fractions and Decimals

- Simplify mixed numbers.
- Convert between mixed numbers and improper fractions.
- Compare and order simple fractions.
- Add and Subtract two fractions with answers greater than one.
- Solve up to 2-step word problems involving addition and subtraction of fractions.
- Write and Interpret 1,2 and 3-place decimals in terms of place value.
- Compare and order decimals.
- Convert fractions to decimals and decimals to fractions.
- Add and subtract decimals, including problem in real world situations.
- Multiply and divide decimal numbers with whole numbers
- Round off decimal numbers up to specified number of decimal places

## Measurement and Geometry

### Measurement

- Solve problems involving lengths (millimeters, centimeters, meters, kilometers): mass (gram and kilogram), volume (milliliter and liter), and time (minutes and hours); identify appropriate types and sizes of units and read scales.
- Solve problems involving perimeters of polygons, areas of rectangles, areas of shapes covered with squares or partial squares, and volumes filled with cubes.


### Geometry

- Identify and draw parallel and perpendicular lines;
- identify and draw right angles and angles smaller or larger than a right angle;
- Solve problems related to finding the area and perimeter of a rectangle or square.
- Recognise and draw lines of symmetry in 2- D shapes and complete symmetrical figures with respect to a given line of symmetry.
- Find angles (in degrees) between two 8-point compass directions.
- Use an 8-point compass to name and describe directions.
- Use properties to describe, compare, and create common two-dimensional shapes (circles, triangles, quadrilaterals, and other polygons).
- Use properties to describe and compare three-dimensional shapes (cubes, rectangular solids, cones, cylinders, and spheres) and relate these with their two-dimensional representations.

## Data handling

### Reading, Interpreting and Representing Data

- Read and interpret data from tables, pictographs, bar graphs, line graphs
- Solve 1-step problems using data from tables and line graphs.

A collection of colorful mathematical tools and numbers arranged in a circle around a central light blue circle. The tools include a ruler, a protractor, a compass, and several colored geometric shapes like triangles and sectors. The numbers 0 through 9 are scattered around the circle in various colors.

MISMO 2022  
**SAMPLE QUESTIONS**

## Sample Questions MISMO 2022 – Grade 4

1. Write ten thousand five hundred and twenty-three using numbers.

- A. 10 532
- B. 15 230
- C. 10 523
- D. 100 523

2. What is the value of the 1 in 2612?

- A. One
- B. Ten
- C. Hundred
- D. Thousand

3. Round 467 to the nearest hundred.

- A. 460
- B. 470
- C. 475
- D. 500

4. The rule of the sequence is 2, 6, 10, 14 ....is

- A. Multiply by 3
- B. Add 4
- C. Multiply 4
- D. Multiply by 2 and then add 2

5. 9, 10 and 11 are consecutive numbers.

Find three consecutive numbers which add up to 15.

- A. 3, 7 and 5
- B. 4, 5 and 6
- C. 3, 5 and 7
- D. 1, 6 and 8

6. Maha turns exactly a quarter turn.

Write this amount of turn as a measurement, with the correct units.

- A. 45 m
- B.  $90^\circ$
- C. 45 cm
- D. 90 km

7. Choose the largest fraction.  $\frac{2}{5}$   $\frac{7}{10}$   $\frac{4}{5}$   $\frac{1}{2}$

- A.  $\frac{2}{5}$
- B.  $\frac{7}{10}$
- C.  $\frac{4}{5}$
- D.  $\frac{1}{2}$

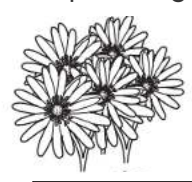
8. How many days are there in 8 weeks?

- A. 24
- B. 40
- C. 56
- D. 80

9. Mina drives 450 km each week. How many km does he drive in two weeks?

- A. 452
- B. 470
- C. 650
- D. 900

10. Laiba is planning a wedding.



Large Bouquet  
\$35.27



Buttonhole  
\$5

She orders a large bouquet and 6 buttonholes. How much change does she get from \$100?

- A. 65.27
- B. 41.27
- C. 34.73
- D. 58.73

11. There are 6 eggs in a box. How many boxes will 78 eggs fill?

- A. 13
- B. 72
- C. 84
- D. 468

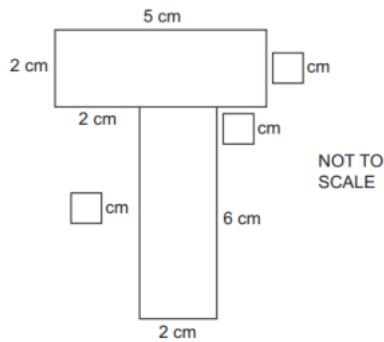
12. Bina does a calculation on her calculator. Here is her answer.



Write the answer as a fraction.

- A.  $\frac{1}{5}$
- B.  $\frac{4}{10}$
- C.  $\frac{1}{3}$
- D.  $\frac{1}{2}$

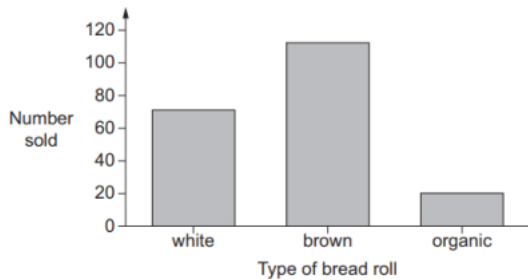
13. This shape is made up of two rectangles.



Find the perimeter of the shape.

- A. 26 cm
  - B. 15 cm
  - C. 22 cm
  - D. 17 cm
14. Sara goes to sleep at 7:30 pm. She wakes up at 6:30 am the next morning.  
For how many hours does she sleep?
- A. 10 hours
  - B. 11 hours
  - C. 12 hours
  - D. 13 hours

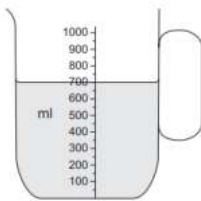
15. The bar chart shows the number of bread rolls sold at a bakery.



How many bread rolls are sold?

- A. 180
- B. 190
- C. 200
- D. 210

16. This jug contains water.



Vania pours 50 ml of this water into a drink. How much water is left in the jug?

- A. 600
- B. 650
- C. 550
- D. 500

17. A concert hall has 59 rows of seats. There are 24 seats in each row.

Estimate the number of seats in the concert hall, by rounding these numbers to the nearest ten.

- A. 1000
- B. 1100
- C. 1200
- D. 1300

18. Ali, Bina and Tina share a chocolate cake. The cake is cut into 12 pieces. Ali eats  $\frac{1}{4}$  of the cake.

Bina eats  $\frac{1}{3}$  of the cake. Tina eats  $\frac{1}{6}$  of the cake. Who eats the least cake?

- A. Bina
- B. Tina
- C. Ali
- D. All



19. Maha has 130 books. She has 70 more books than Sana. How many books do they have altogether?
- A. 170
  - B. 200
  - C. 230
  - D. 330
20. My pencil was 15 cm long. I used it for some time, and it is 3 cm shorter now.  
How long is my pencil now?
- A. 10 cm
  - B. 12 cm
  - C. 15 cm
  - D. 18 cm
21. Sixty pupils took part in a Maths quiz. There were 5 pupils in each team.  
How many teams took part in the Maths quiz?
- A. 10
  - B. 12
  - C. 15
  - D. 18
22. A water tank hold 632 litres of water. A fish tank holds 300 litres of water.  
How much more water can the water tank hold than the fish tank?
- A. 332
  - B. 532
  - C. 732
  - D. 932
23. Dinner starts at 7: 00. The food needs to be prepared for 45 minutes and baked for 1 hour.  
What time should I start preparing the food.
- A. 05 : 15
  - B. 05 : 45
  - C. 06 : 15
  - D. 06 : 45
24. The height of a tree doubles every year. Its height was 3m a year ago. How tall is the tree now?
- A. 3 m
  - B. 6 m
  - C. 9 m
  - D. 12 m