

IMO CLASS 5

Total Questions: 50

Time: 1 hr.

Section – 1 : Patterns, Analogy and Classification, Geometrical Shapes, Mirror and Water Images, Direction Sense Test, Ranking Test, Alphabet Test, Logical Sequence of Words, Puzzle Test, Coding-Decoding.

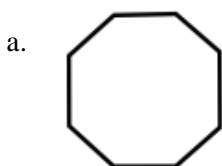
Section – 2 : Numerals, Number names and Number Sense (7 and 8 digit numbers), Computation Operations, Fractions and Decimals, Measurement of Length, Weight, Capacity, Time, Temperature and Money, Conversions, Geometrical Shapes and Solids, Angles, Perimeter of Various Shapes & Area of Rectangle and Square, Symmetry, Data Handling

Section – 3 : The syllabus of this section will be based on the Syllabus of Mathematical Reasoning.

Section – 4 : Higher Order Thinking Questions - Syllabus as per Section-2.

SECTION 01 LOGICAL REASONING

1. Which of the following figures has maximum lines of symmetry?



2. Fill in the blank:

$$2000.0051 = 2000 + \underline{\hspace{2cm}} + 0.0001$$

a. 0.050

b. 0.005

c. 0.505

d. 0.001

3. A car covers 24.5 km in 4.2 L of petrol. How much distance will it cover using 2 L of petrol?

a. 5.833 km

b. 11.67 km

c. 13.45 km

d. 16.67 km

4. What is the HCF of 210, 350 and 546?

a. 14

b. 28

c. 7

d. 1

5. Which of the given options have a vertical line of symmetry?



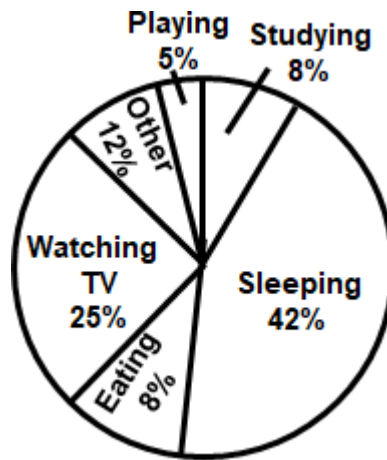
a. 1 and 2

b. 2 and 3

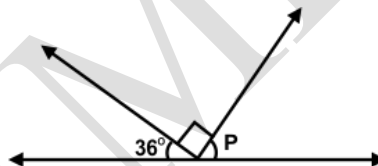
c. 3 and 4

d. 1, 2 and 4

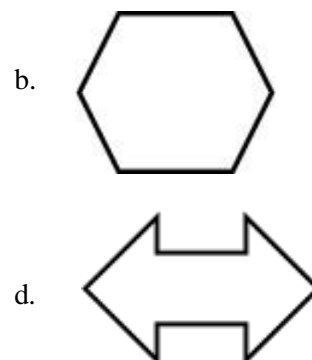
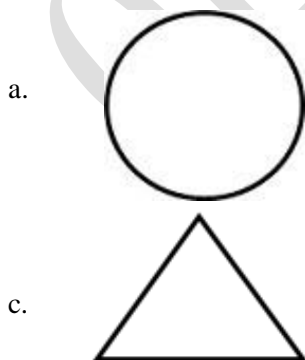
6. Ahek spends his Sunday doing many activities as shown in the pie chart. How much time does he spend on watching TV?



- a. 6 hours
b. 4 hours
c. 5 hours
d. 2 hours 10 minutes
7. Find the distance covered by a train in the month of October, if it is travelling without stopping for a single minute continuously at the speed of 68 km/hour
- a. 37,290 km
b. 50,592 km
c. 12,740 km
d. 64,280 km
8. Find the measure of $\angle p$ in the given figure:



- a. 63°
b. 54°
c. 90°
d. 144°
9. Which of the given shapes can have only 3 lines of symmetry?



10. Find the value of the following:

$$- 53 \times 27 - (- 462) + 294.50 - (- 2135.80)$$

- | | |
|------------|-----------|
| a. 1532.8 | b. 1461.3 |
| c. 1789.33 | d. 1964.9 |

11. Which of the given options shows how the given figure would look if it is quarterly rotated in the clockwise direction?



- | | |
|---|--|
| a.  | b.  |
| c.  | d.  |

12. Rehan was given a test of 3 hours. Due to an emergency, he left after just 20 minutes. What fraction of time did he sit for the exam?

- | | |
|------------------|------------------|
| a. $\frac{1}{9}$ | b. $\frac{1}{2}$ |
| c. $\frac{8}{9}$ | d. $\frac{1}{4}$ |

13. Where will the hour hand of a clock stop if it shows 8 o'clock and turns one right angle clockwise?

- | | |
|-----------------|---------------|
| a. 8:15 o'clock | b. 11 o'clock |
| c. 9:15 o'clock | d. 12 o'clock |

14. Solve the following:

$$4\frac{1}{4} + 12/5 + 5.75 - 8.25$$

- | | |
|----------|----------|
| a. 9.85 | b. 4.15 |
| c. 12.25 | d. 37.55 |

15. What is $72,190,842 + 4,372,074 - 28,108,356$ rounded off to nearest thousands?

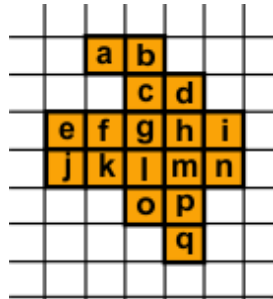
- | | |
|---------------|---------------|
| a. 48,455,000 | b. 72,647,000 |
| c. 34,379,000 | d. 24,282,000 |

SECTION02 MATHEMATICAL REASONING

16. Peil went to the beach with her family. It took them 7 hours 24 minutes to reach there. On the way back from the beach, they took a shortcut that took 1 hour 53 minutes less. If they left the beach at 11:15 a.m., then when did they reach home?

- a. 12:00 p.m.
- b. 5:31 p.m.
- c. 4:46 p.m.
- d. None of the given options

17. Removing which block would not change the perimeter of the given shape?



- a. Q
- b. a
- c. c
- d. j

18. Find the value of a in $(-26 \times a) \div 4 = 364$.

- a. 26
- b. - 37
- c. 78
- d. - 56

19. A rectangle measuring 12 cm x 84 cm is divided into 7 parts such that each part is a square. Find the area of 3 of these parts.

- a. 254 cm^2
- b. 432 cm^2
- c. 756 cm^2
- d. 374 cm^2

20. James bought two watches for his parents. The cost of his mother's watch is 7990 cents more than his father's watch. If he spent a total of 28,000 cents on the watches, then find the cost of his mother's watch.

- a. 20,010 cents
- b. 15,999 cents
- c. 10,005 cents
- d. 17,995 cents

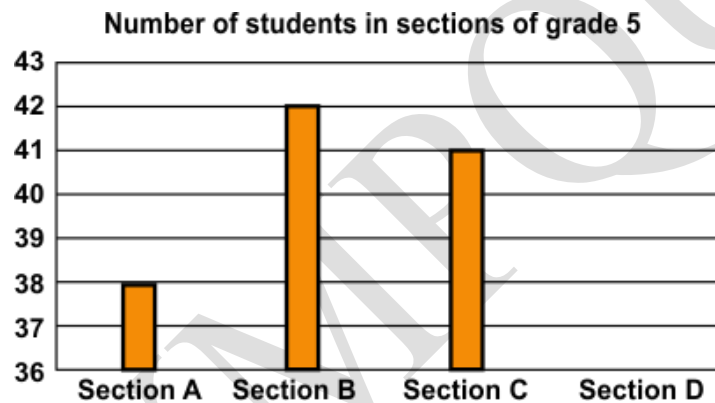
21. While running a marathon of 22 km, the distance covered by a runner is one-fourth of the distance she has yet to cover. Find the distance she has covered.

- a. 6.1 km
- b. 5 km
- c. 4.4 km
- d. 5.5 km

- 22.** The given table shows the amount spent in cents by a family. Find the ratio of the amount spent on laundry to the amount spent on groceries.

Categories	Grocery	Rent	Laundry	Educations	Others
Expenditure	8570	20,000	1000	10,000	15,000

- a. 100/857
b. 857/100
c. 10/857
d. 857/1000
- 23.** Simplify:
 $590 - [2 \times \{20 \times (9 \times 2 - 3 \times 6)\}]$
- a. 570
b. 0
c. 590
d. 100
- 24.** If the total number of students in four sections of grade 5 is 160, then find the number of students in section D.



- a. 42
b. 41
c. 40
d. 39
- 25.** For a project, Reh has to go and live in a different city. He left on 14th March and stayed there for 59 days (including the day he left). When did he come back?
- a. 18th May
b. 11th May
c. 30th April
d. None of the above
- 26.** Arrange 0.34 km, 56000 cm, 310000 mm and 1600 m in descending order:
- a. $1600 \text{ m} > 0.34 \text{ km} > 310000 \text{ mm} > 56000 \text{ cm}$
b. $56000 \text{ cm} > 0.34 \text{ km} > 1600 \text{ m} > 310000 \text{ mm}$
c. $1600 \text{ m} > 56000 \text{ cm} > 0.34 \text{ km} > 310000 \text{ mm}$
d. $0.34 \text{ km} > 310000 \text{ mm} > 1600 \text{ m} > 56000 \text{ cm}$



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SECTION 03 EVERYDAY MATHEMATICS

36. The decimal from of $6708/100$ is_____.

- a. 67.08
- b. 670.08
- c. 6.708
- d. 670

37. Which of the following alphabets has only a horizontal line of symmetry?

- a. W
- b. E
- c. A
- d. P

38. The simplified value of $[18 \div 6 + \{2 \times (8 - 7 \text{ of } 3) + 17 \times 5\}]$ is:

- a. -42
- b. 62
- c. 65
- d. 85

39. If one-third of one-fourth of a number is 15, then how much is three-tenth of that number?

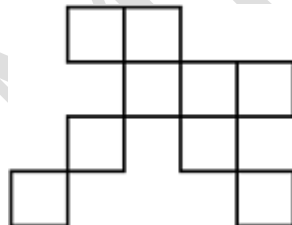
- a. 35
- b. 36
- c. 45
- d. 54

40. Find the value of x:

$$301.01 - 0.101 = x + 198.01$$

- a. 103.119
- b. 103.101
- c. 102.901
- d. 102.899

41. If the side of each square in the given figure is 8 m, then find the area and the perimeter:

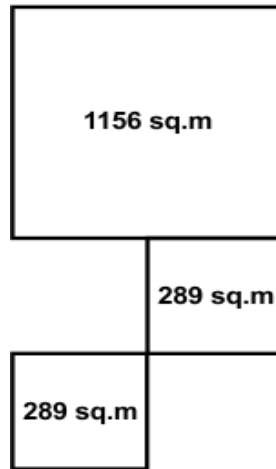


- a. 194 m^2 , 128 m
- b. 72 m^2 , 156 m
- c. 576 m^2 , 208 m
- d. 676 m^2 , 256 m

42. If $A \times B = AB(A - B)$, then find the value of 509×218 :

- a. 3,75,29,355
- b. 8,64,29,574
- c. 2,34,65,482
- d. 3,22,89,942

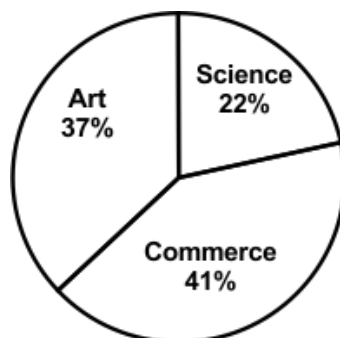
43. Find the perimeter of the given figure. The figure is made up of squares with the areas as mentioned:



- a. 352 m
b. 336 m
c. 284 m
d. 238 m
44. Solve the following equation:

$$\begin{aligned} \star + \star + \star + \bigcirc + \bigcirc + \bigcirc + \bigcirc + \bigcirc &= \bigcirc + 2917 \\ \star + \star + \star &= 297 \\ \star + \bigcirc + \bigcirc &= ? \end{aligned}$$

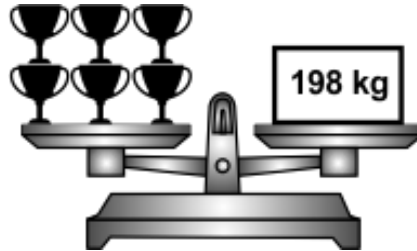
- a. 1,310
b. 1, 234
c. 1,409
d. 1,574
- SECTION04 ACHIEVER SECTION**
45. While cooking a curry, the mass of it reduced from 1 kg to 850 g. Find the % reduction in the weight of the curry.
- a. 30%
b. 20%
c. 15%
d. 50%
46. 850 students passed class 10th in a school. They choose different streams for their further studies as shown in the given pie chart. Find the number of students who did not choose the science stream.



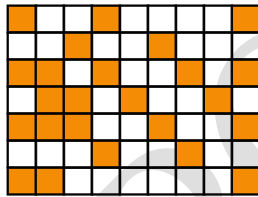
- a. 500
b. 663
c. 298
d. 375

- 47.** On the basis of the given figure, few statements are made. Choose the correct option with respect to the statements:

Statement 1: The weight of 3 trophies is 66 kg more than the weight of 1 trophy. Statement 2: The weight of 4 trophies is more than 150 kg.



- a. Both the statements are correct
b. Both the statements are incorrect
c. Only statement 1 is correct
d. Only statement 2 is correct
- 48.** How many more blocks need to be shaded in the given figure to represent a fraction of $\frac{3}{7}$?



- a. 3 more blocks
b. 5 more blocks
c. 10 more blocks
d. 7 more blocks
- 49.** Choose the correct option: Consider the following statements:
A. The sum of two prime numbers is always a prime number.
B. The product of two primes is a prime number. Which of these statements is/are correct?
- a. Neither A nor B
b. A alone
c. B alone
d. Both A and B
- 50.** Which of the following statements is not true?

- a. $518 - (-2459) > (-687) - (-1040)$
b. $-584 - (347) < 960 - (-728)$
c. $6250 + (-3012) > 6240 - (-271)$
d. $-888 + (3002) > 1001 - (-13)$