BLOOM Mathematics
Olympiad (BMO)
Question Paper 2023-24

Class 4

Total Questions: **35 + 3** (Tie-Breaking Section)

Total Time Allotted :
60 minutes

Total Marks
35

Instructions

1. There are **35 Multiple Choice Questions** in this booklet having 4 options out of which **ONLY ONE** is correct.

2. 1 Mark will be allotted for each correct answer.

3. All questions are compulsory. There is **NO negative** marking for incorrect answers.

4. Total time allotted to complete the paper is 60 minutes.

5. Please fill in your details in the space provided on this page before attempting the paper.

OMR Sheet Instructions

1. Before starting the paper, fill in all the details in the OMR Sheet.

2. Additional 10 minutes will be provided to fill up the OMR sheet, before the start of the exam.

3. Use HB Pencil to darken the circle of the correct Option in OMR sheet. The correct way to darken the circle in OMR sheet is shown below

   ⬤ ◯ ◯ ◯

4. Use black or blue ball point pen/HB pencil to fill the information in the OMR sheet. Partially filled OMR sheet will not be checked.

5. Return the OMR sheet to the invigilator after the exam.
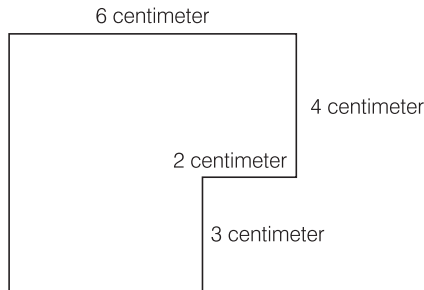
CODE#1

M4

BLOOM CAP
Founded by arihant

1. Ruhi had 64 pencils out of which she gave one-fourth to Jerry. Out of the remaining she donated one-fourth for charity. How many pencils were left with her?

(a) 36   (b) 34   (c) 38   (d) 40

2. The perimeter of the given figure is

(a) 15 centimeter   (b) 21 centimeter   (c) 26 centimeter   (d) 30 centimeter

3. A fashion designer uses one-fifth portion of a cloth to make a ribbon. If the cloth is 5 meter 15 centimeter long, then the size of one ribbon is

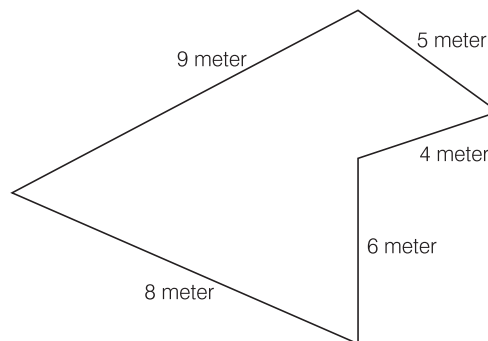(a) 100 centimeter   (b) 105 centimeter   (c) 103 centimeter   (d) 107 centimeter

4. A 2 litre bottle of luxury drink is thrice as expensive as the 250 mililitre luxury drink can. If the cost of the bottle of luxury drink is Rs. 231, then find the cost of the 250 mililitre luxury drink can

(a) Rs. 77   (b) Rs. 74   (c) Rs. 69   (d) Rs. 76

5. Ronni's mother pays the chef Rs. 350 per week. For one week in the month of February, the chef was irregular and his mother cuts Rs. 100 from his payment for that week. How much did she pay the chef in the month of February 2019?

(a) Rs. 1300   (b) Rs. 1200   (c) Rs. 1250   (d) Rs. 1150
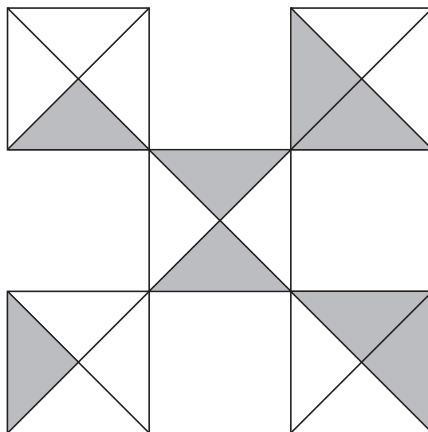
6. The perimeter of the given figure is

(a) 26 meter   (b) 28 meter   (c) 32 meter   (d) 36 meter

7. If the length of each side of a hexagon is *a* unit and its all sides are equal, then the perimeter is

(a) 5 *a* units   (b) 6 *a* units
(c) 7 *a* units   (d) 8 *a* units

8. What fraction of the given figure is shaded?

(a) $\dfrac{10}{20}$ (b) $\dfrac{12}{20}$ (c) $\dfrac{8}{20}$ (d) $\dfrac{11}{20}$

9. Amit is a weightlifter. He weights 80.5 kilogram and can lift 15 kilogram more than his own weight. Last week, he broke his personal record and lifted 4 kilogram more than his personal best. How much weight did he lift last week?

(a) 89.5 kilogram   (b) 99.5 kilogram   (c) 90 kilogram   (d) 100.5 kilogram

10. A diver is at a depth of 8 meter. At the same time, a balloon is at a height of 50 meter from the ground. Find the distance between them:

(a) 56 meter   (b) 48 meter   (c) 58 meter   (d) 38 meter

11. $(60 \div 6) \times 5 =$

(a) 15   (b) 30   (c) 50   (d) 55

12. Represent the shaded part given below as a fraction.
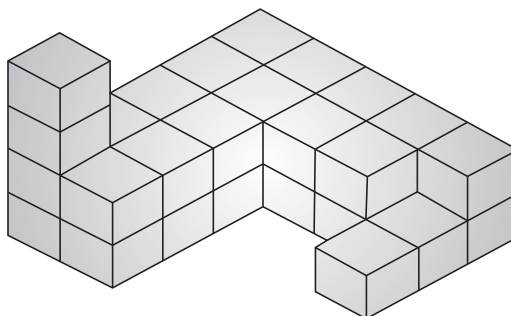

(a) $\dfrac{7}{10}$ (b) $\dfrac{8}{10}$ (c) $\dfrac{6}{10}$ (d) $\dfrac{9}{10}$

13. Look at the figure given below

How many unit cubes will be needed to build the above solid?
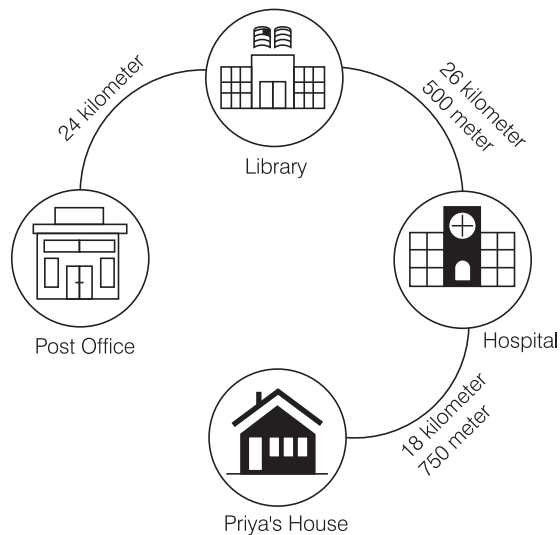
(a) 34   (b) 32   (c) 36   (d) 28

14. Look at the figure given below

Riha visits her brother at the hospital from her house, collects a book from the library and posts a letter at the post office. If she returns home by the same route, then how much distance will she travel?

(a) 50 kilometer 500 meter

(b) 68 kilometer 750 meter
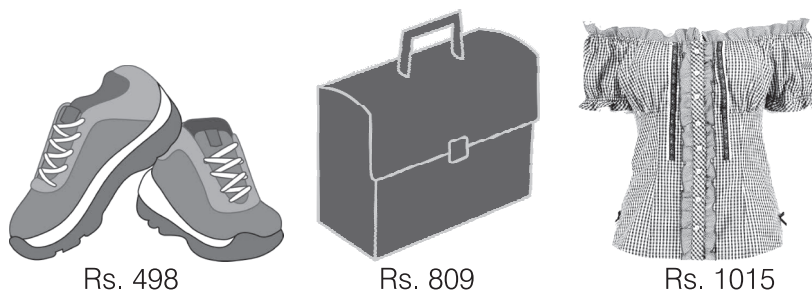
(c) 69 kilometer 250 meter

(d) 138 kilometer 500 meter

15. Rakesh spent equally on shopping, food and transport. How much did he spend on others altogether if the cost of transport was Rs. 524?

(a) Rs. 1044   (b) Rs. 1047   (c) Rs. 1048   (d) Rs. 1050

16. A teacher brings a bag of chocolates to distribute to her class of 40 children. If she plans to give 1 set of 9 chocolates to each child and have no extra chocolate in the bag, then how many chocolates should be there in the bag?

(a) 58   (b) 360   (c) 59   (d) 50

17. Deepak goes to the market with Rs.1500 and buys two of these items

Rs. 498   Rs. 809   Rs. 1015

How much money will be left with him?

(a) Rs. 324   (b) Rs. 293   (c) Rs. 193   (d) Rs. 163

18. Sonika has 18 flowers with her. If she makes a bouquet of two-third of these flowers, how many flowers will remain unused?

(a) 6   (b) 8   (c) 12   (d) 16

19. Mrs Gupta bought following ingredients to make a pizza. What is the weight of all the ingredients?

Onion – 250 gram Paneer – 500 gram Capsicum – 500 gram Tomato – 300 gram
Corn – 250 gram Cheese – 200 gram

(a) 2 kilogram (b) 1 kilogram (c) 3 kilogram (d) 2.5 kilogram

20. A cow can eat 10 kilogram of grass every day. How much grass can the cow eat in 3 weeks?

(a) 30 kilogram (b) 220 kilogram (c) 210 kilogram (d) 120 kilogram

21. Rahil bought a rifle and bullets. The cost of the bullets is one-fifth the cost of the rifle. Then, the cost of bullets if the rifle costs Rs. 600, is

(a) Rs. 100 (b) Rs. 120 (c) Rs. 150 (d) Rs. 170

22. Following table shows tha match routine of 4 players :

Players	Win	Lost	Matches played
A	4	6	10
B	3	3	6
C	5	7	12
D	8	2	10

Which player won exactly half the matches he played?

(a) A (b) B (c) C (d) D

23. Rohan does 40 minutes of cycling and 25 minutes of yoga everyday. How much more time does he spend on cycling than yoga in a week?

(a) 1 hour 15 minutes (b) 55 minutes
(c) 1 hour 45 minutes (d) 1 hour 30 minutes

24. Rohit has rowed his rowboat 2000 meter from where he started. Rohit has rowed his boat _____ centimeter.

(a) 2000 (b) 20000 (c) 200 (d) 200000

25. $4 \times 4 \times 20 \times 20 = 80 \times$ ....

(a) 120 (b) 240 (c) 80 (d) 100

26. What is the difference between the smallest number and largest number formed by the digits 0, 1, 3, 4, 6 and 8?

(a) 850642 (b) 850742 (c) 850842 (d) 850942

27. Two statements below describe the number of cats, rats and rabbit living in Neha's house.

Number of cats > Number of rabbits and

Number of rats < Number if rabbits

Which could be the number of cats, rats and rabbits respectively, living in Neha's house?

(a) 7 cats, 5 rats, 3 rabbits
(b) 6 cats, 3 rats, 5 rabbits
(c) 3 cats, 2 rats, 1 rabbit
(d) None of these

28. Ragni went for a walk every day last week. Each day, she walked half as far as she did the day before. If she walked 8 kilometre on Monday last week, how many kilometre did she walk on Friday last week?

(a) 0.25
(b) 0.5
(c) 0.75
(d) 1.05

29. Ram runs every other day. If he ran for the first-time in last month on a Monday, then he ran for the tenth time in last month on a

(a) Monday
(b) Thursday
(c) Wednesday
(d) Friday

30. Which two fractions are equivalent?

(a) $\dfrac{1}{3}$ and $\dfrac{2}{4}$
(b) $\dfrac{1}{2}$ and $\dfrac{2}{4}$

(c) $\dfrac{2}{4}$ and $\dfrac{2}{6}$
(d) $\dfrac{1}{2}$ and $\dfrac{1}{4}$

31. The radius of a circle is half the length of a side of a square. The square's perimeter is equal to the diameter of the circle multiplied by

(a) 6
(b) 8
(c) 4
(d) 12

32. In a garden, there are 18 trees in a row and 24 such rows of trees. How many trees are there in the garden?

(a) 362
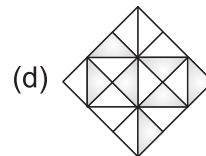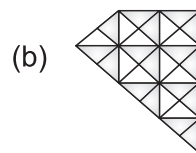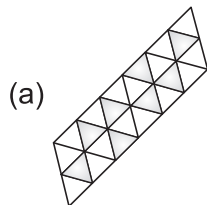(b) 384
(c) 416
(d) 432

33. Look at the following images. Which of the following options shows 1/3 shaded part?

(a)

(b)

(c)

(d)

Direction (Q. Nos. 34 - 35) Following is the schedule of trains arriving and departing from a station.

Train Name	Arrival time	Departure time
A	10 : 15 AM	10 : 25 AM
B	10 : 35 AM	10 : 45 AM
C	11 : 20 AM	11 : 35 AM
D	11 : 55 AM	12 : 05 PM

34. Robert reached the station at 10:20 AM but waits for his friend Gilly to arrive so that they can board the train together. If Gilly arrives at 11:40 AM, in which train will they board?

(a) Train A   (b) Train B
(c) Train C   (d) Train D

35. If Robert and Gilly reach the station together at 10:37 AM, in which train will they board?
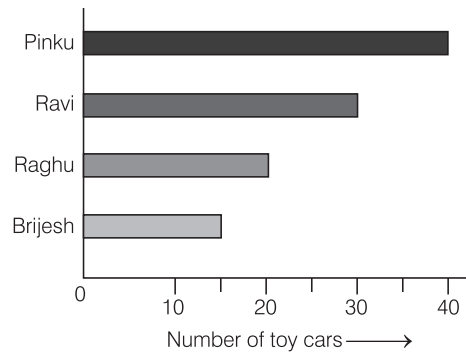
(a) Train A   (b) Train B
(c) Train C   (d) Train D

Tie-Breaking Section

Instructions
1. This section consists of 3 questions.
2. The score achieved in this section will not be included in the total marks.
3. If overall marks of two or more students are same, winner will be decided based on the score in this section.
4. Participation in this section is optional, and students may choose to attempt it or not.

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1. Pinku, Ravi, Brijesh and Raghu are friends. The graph shows the number of toy cars each of them have. What can we conclude from the given graph?

(a) Brijesh has one-third the number of toy cars Pinku has.
(b) Three children have more than 20 toy cars.
(c) Ravi has twice as many toy cars as Brijesh has.
(d) Brijesh has 1 toy car less than Raghu.

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2. Study the following statements:

- 1/2 of wire P is 80 centimeter long.

- 1/3 of wire Q is 46 centimeter long.

Which of the above statements is true?

(a) Wire P is shorter than wire Q.
(b) The length of wire P is twice that of wire Q.
(c) The two wires have the same length.
(d) Wire P is longer than wire Q.

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3. A 5 litre bucket has only 3 litre 725 mililitre of water filled in it. What fraction of the bucket is filled with water?

(a) 3005/5000   (b) 3077/5000
(c) 3750/5000   (d) 3725/5000