DO NOT OPEN THIS BOOKLET UNTIL ASKED TO DO SO

Name:……

Arifinkidz Roll No:……

Total Questions: 50 Time: 1hr

SMO
SUMMER MATHEMATICS OLYMPIAD

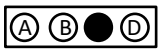
Arifinkidz Summer Mathematics Olympiad 2023

CLASS 5

SET-A

Guidelines for the Candidate

- You will get additional 5 minutes to fill up information about yourself on the OMR Sheet, before the start of the exam.
- Write your **Name, School** and **Arifinkidz Roll No.** clearly on the OMR Sheet.
- The Question Paper comprises four sections:
  Logical Reasoning (15 Questions), **Mathematical Reasoning** (20 Questions), **Everyday Mathematics** (10 Questions) and **Achievers Section** (5 Questions).
  Each question in Achiever Section carries 3 marks, whereas all other questions carry one mark each.
- All questions are compulsory. There is no negative **(-)** marking.
- All questions are (MCQ) types. There is only ONE correct answer. Choose only ONE option for an answer.
- To mark your choice of answer by darkening the circles on the OMR Sheet, Use **HB Pencil** or **Blue/Black ball point pen** only. E.g.
  Question: Riya has 35 roses, which are 12 more than the number of roses Radhika has. How many roses Radhika has?
  A. 20 B. 15 C. 23 D. 22
  As the correct answer is option C, you must darken the circle corresponding to option C on the OMR Sheet.



- Rough work should be done in the blank space provided in the booklet.
- Return the OMR Sheet to the invigilator at the end of the exam.

1. In a certain code language 'ORANGE' is coded as 'PQBMHD', then 'APPLE' is coded as

(A) BQQMF (B) BOQKF (C) KQOMF (D) BQONF

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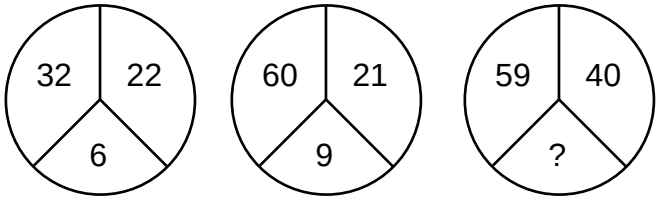
2. Find the missing number, if same rule is followed in all the three figures?



(A) 11 (B) 9 (C) 6 (D) 13

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3. Find the odd one out.

(A) BEH (B) QTW (C) NQT (D) CFH

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4. In a line of 52 Students, Ramesh ranked 26^{th} from top and Rohit ranked 13^{th} from the bottom. How many students are there between Ramesh and Rohit?

(A)13 (B) 14 (C) 17 (D) 12

---

5. 'A' is older than 'B'. 'C' is younger than 'D' and 'E'. 'E' is not as old as 'B'. Who is the oldest among all?

(A) B (B) A (C) F (D) C

---

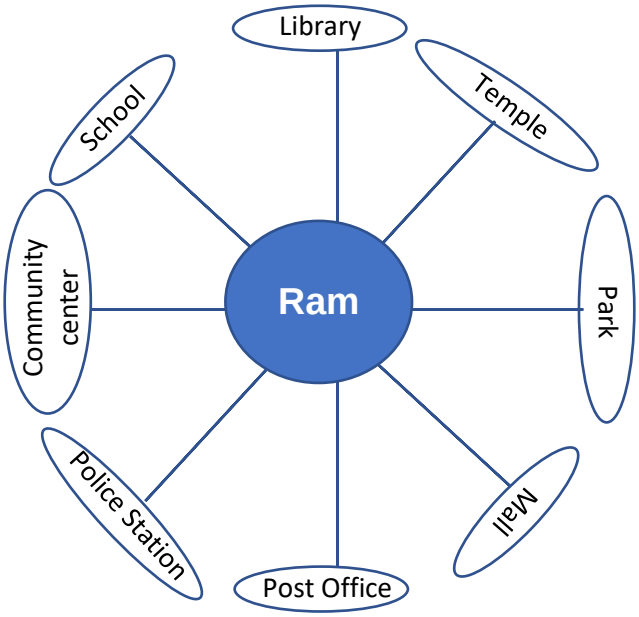
6. Find the missing number if a certain rule is followed row-wise or column-wise ?

2	**13**	**3**
4	**41**	**5**
7	**?**	**9**

(A)16 (B) 58 (C) 138 (D) 130

SPACE FOR ROUGH WORK

7. Ram is facing the mall. What will he be facing if he turns 270˚ clockwise?



(A) Library (B) Park (C) Temple (D) School

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8. X started to walk straight towards south. After walking 5 m he turned to the left and walked 3 m. After this he turned to the right and walked 5 m. Now in which direction X is facing?

(A) North-East (B) South (C) North (D) South-West

---

9. Find the next number.

3, 5, 9, 15, _____

(A)32 (B) 19 (C) 23 (D) 41

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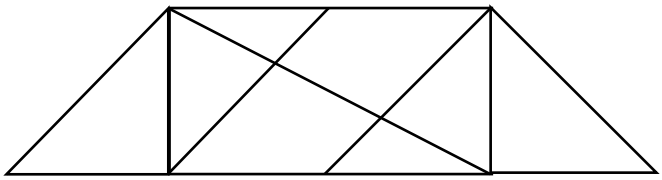
10. Find the number of triangles in the given figure?



(A)10 (B) 14 (C) 8 (D) 12

SPACE FOR ROUGH WORK

11. Select the figure from the options which forms the correct mirror image of Fig. (x), if mirror is placed along MN?

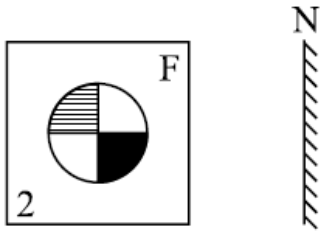
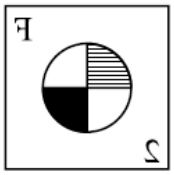
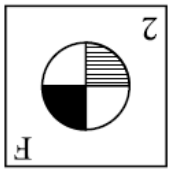
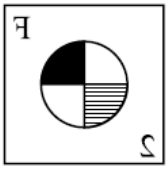
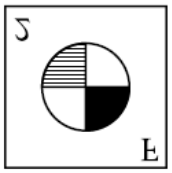


Fig. (X)

(A) 

(B) 

(C) 

(D) 

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12. Select a figure from the options in which Figure (X) is embedded as one of its part.

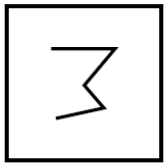
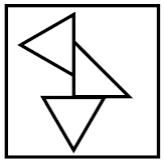
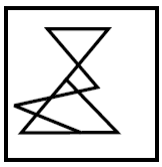


Figure (X)

(A) 

(B) 

(C) 

(D) 

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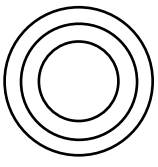
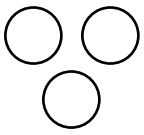
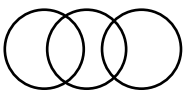
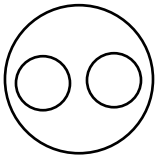
13. Which of the following diagrams indicates the best relation between Tables, Chairs and Furniture?

(A) 

(B) 

(C) 

(D) 

SPACE FOR ROUGH WORK

14. Pointing towards a lady, a man said “The only sister of your brother is my mother”. How is the man related to the woman?

(A) Father (B) Son (C) Brother (D) Nephew

---

15. If 27th March, 2011 was Sunday, what was the day on 27th June, 2011?

(A) Sunday (B) Tuesday (C) Monday (D) Saturday

MATHEMATICAL REASONING

16. Find the Roman numerals of 2628?

(A) MMCDXXVIII (B) MMCLXXVIII (C) MMDCXXVIII (D) MDCLXXVIII

---

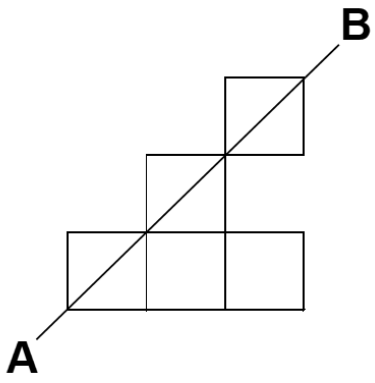
17. O + O + O + □ + O + O = 135 and 2□ = 30, then the value of

□ + O =_____

(A) 15 (B) 24 (C) 39 (D) 12

---

18. What is the least number of squares that must be added, so that the line AB becomes a line of symmetry?



(A) 3 (B) 4 (C) 1 (D) 2

SPACE FOR ROUGH WORK

19. What is the missing fraction?

3 x _____ = $\frac{3}{5} \div 23$

(A) $\frac{3}{7}$ (B) $\frac{1}{125}$ (C) $\frac{1}{115}$ (D) $\frac{3}{115}$

---

20. What is the reciprocal of $5\frac{3}{7}$?

(A) $5\frac{7}{3}$ (B) $\frac{7}{32}$ (C) $\frac{7}{38}$ (D) $\frac{38}{7}$

---

21. What is the value of 40 x 9 ÷ 3 + 72 – 33

(A) 159 (B) 169 (C) 179 (D) 42

---

22. Find the sum of $5\frac{2}{3}$ and $\frac{1}{5}$?

(A) $5\frac{1}{2}$ (B) $5\frac{3}{8}$ (C) $5\frac{13}{15}$ (D) $6\frac{3}{8}$

---

23. Which of the following in not a pair of twin primes ?

(A) (11, 13) (B) (23, 29) (C) (71, 73) (D) (59, 61)

---

24. Find the largest 3-digit number that is divisible by 8?

(A)108 (B) 999 (C) 993 (D) 992

---

25. Find the greatest number which divides 36 and 84 leaving no remainder in each case.

(A) 18 (B) 6 (C) 12 (D) 3

---

26. Which list shows all the prime numbers between 1 and 50 ?

(A) 1, 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47

(B) 2, 3, 5, 7, 9, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47

(C) 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47

(D) 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47

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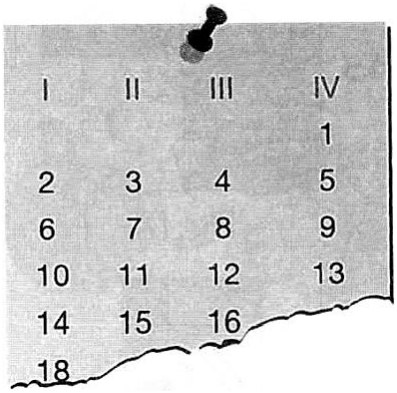
27. Hundred million is equal to

(A) 1 crore (B) 10 crores (C) 10 Lakhs (D) 1 billion

SPACE FOR ROUGH WORK

28. A piece of paper is torn. In which column did the number 1000 appear?

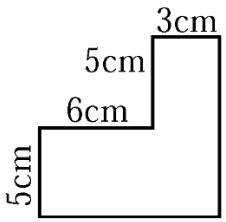


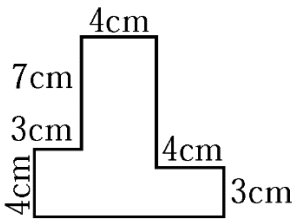
(A) I (B) II

(C) III (D) IV

---

29. Find the difference in perimeters between the two figures given below. (Figures are not drawn to scale)





(A) 2 cm (B) 5 cm (C) 6 cm (D) 8 cm

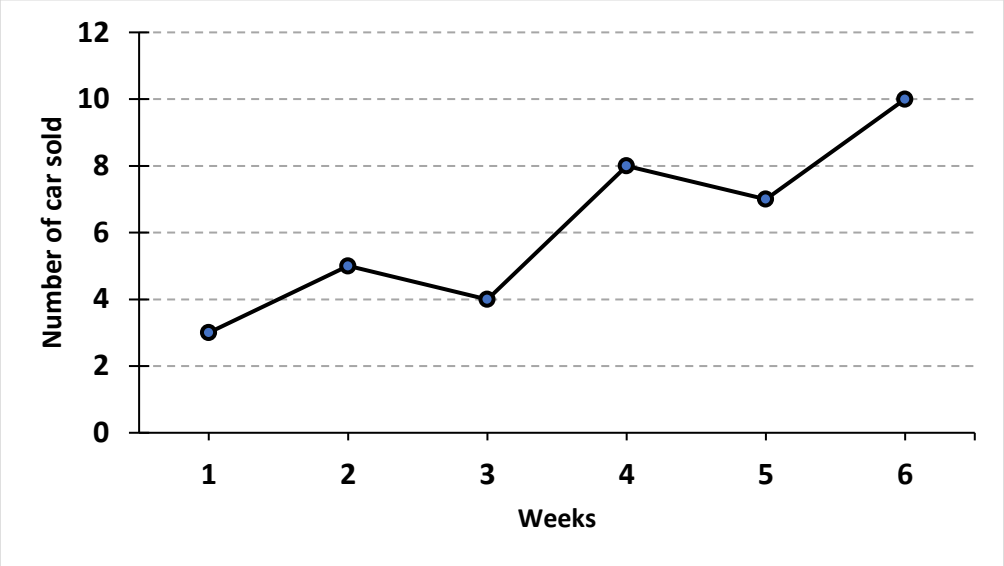
---

30. I am an even number. You will find me in the table of 7. I am less than 100 but more than 80. Who am I?

(A) 91 (B) 82 (C) 96 (D) 84

SPACE FOR ROUGH WORK

Direction (31-35): The line graph given below shows the number of cars Sushil sold over the past 6 weeks.



31. How many more cars did he sell in the last 3 weeks than in the first 2 weeks?

(A) 17 (B) 15 (C) 18 (D) 20

---

32. How many less cars did he sell in the 3rd and 4th week than 5th and 6th week?

(A) 7 (B) 5 (C) 8 (D) 4

---

33. If he got Rs.10,000/- for every car sold, then what is the total amount he made over the past 6 weeks?

(A)390000 (B) 37000 (C) 370000 (D) 270000

---

34. What is the total number of cars sold in 4th week & 6th week together?

(A) 18 (B) 15 (C) 12 (D) 16

---

35. It he got Rs.12500/- for every car sold in the first week and the 4th week, then what is the amount he got in 1st and 4th week together?

(A)1,37,500/- (B) 2,37,500 (C) 1,27,599 (D) 1,57,400

SPACE FOR ROUGH WORK

36. Ram had Rs.65/-. He spent $\frac{4}{5}$ of it on a birthday gift. How much had he left?

(A) Rs.52 (B) Rs.13 (C) Rs.50 (D) Rs.62

---

37. 23 cakes were baked using 103.5 kg of flour. How much flour is needed to bake 17 cakes?

(A) 76.5 kg (B) 72.9 kg (C) 76 kg (D) 71.7 kg

---

38. The height of a book is 13.48 cm. Find the approximate height of 21 similar books stacked on top of each other?

(A) 279 cm (B) 283 cm (C) 267 cm (D) 169 cm

---

39. Ram earns Rs.2000 a day. His wife earns Rs.350 less. What is the ratio of the daily earnings of Ram & his wife ?

(A) 2000:350 (B) 40: 7 (C) 8:7 (D) 40 : 33

---

40. Shyam is 65 years old and his daughter is 36 years old. How many years ago was Shyam's age is twice the age of his daughter?

(A)7 (B) 12 (C) 8 (D) 6

---

41. Ram started painting a picture at 9 am. He stopped for launch at 11:30 am and resumed painting an hour later. How long did he actually spend in painting if he finished at 1 pm?

(A) 4 h (B) 3.5 h (C) 3 h (D) 2 h

---

42. Subham bought $\frac{3}{8}$ m of cloth. He used $\frac{1}{5}$ m of the cloth. What length of the cloth is left?

(A) $\frac{7}{40}$ (B) $\frac{2}{3}$ (C) $\frac{5}{3}$ (D) $\frac{9}{40}$

---

43. Ramesh left the office 2 h 25 min before noon. What time did Ramesh leave the office?

(A) 9:25 am (B) 10: 35 am (C) 9:35 am (D) 10: 15 am

SPACE FOR ROUGH WORK

44. There were 32 boys and 4 times as many girls in a physical fitness camp. How many more girls than boys were there?

(A) 128 (B) 96 (C) 64 (D) 32

---

45. A rectangular playground is 128 m long and 74 m wide. If a boy walks around it 3 times, how much distance does he cover?

(A) 202 m (B) 404 m (C) 606 m (D) 1212 m

ACHIEVERS SECTION

46. Find the value of C – A x B ?

(i) 123.58 ÷ 7.4 = A

(ii) B + 8.24 = 17.35

(iii) 732.59 – C = 391.05

(A) 189.403 (B) 189.413 (C) 289.403 (D) 321.403

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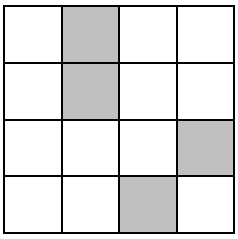
47. The minimum number of Squares that must be Shaded, so that the figure has a line of symmetry is _____.



(A) 0 (B) 1 (C) 2 (D) 3

---

48. The table shows the number of students in five primary classes. Each students donated Rs.12/- to the foundation for the elderly. How much did they donate altogether?

Class	1	2	3	4	5
No.of Students	39	41	52	48	61

(A)1892 (B) 2892 (C) 3892 (D) 2492

SPACE FOR ROUGH WORK

49. Omkar rented an electric vehicle for 5 hours. How much did he pay?

First hour:	Rs. 11.25
Every additional ½ hour:	Rs. 7.75

(A) Rs.72.75 (B) Rs.68.25 (C) Rs.73.25 (D) Rs.71.75

---

50. Find the value of A + B from the following addition. A and B represent different digits between 0 and 9.

$$\begin{array}{rr} & A \\ + & A \\ + & A \\ \hline B & A \end{array}$$

(A) 6 (B) 5 (C) 9 (D) 0

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK