CLASS 4

MTP 1

I M O

SOF INTERNATIONAL MATHEMATICS OLYMPIAD

Name:...

Section:............. SOF Olympiad Roll No.:...................................... Contact No.:...................................

1. Find the mirror image of the given figure, if mirror is placed to the right.

A. B. C. D.

2. Which of the following options is exactly embedded in the given figure as one of its parts?

A. B. C. D.
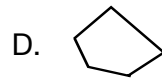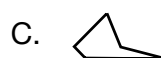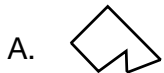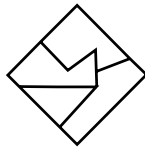
3. Find the missing number, if same rule is followed in all the three figures.
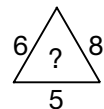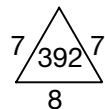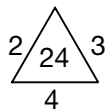
A. 180 B. 160 C. 420 D. 240

4. Which of the following options will complete the given figure pattern?

?

A. B. C. D.

5. Find the number that will come on Teddy Bear 20.

First

A. 5   B. 7   C. 9   D. 6

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6. If 'Room' is called 'Bed', 'Bed' is called 'Window', 'Window' is called 'Flower' and 'Flower' is called 'Cooler', then on what would a man sleeps?

A. Window   B. Bed   C. Flower   D. Cooler

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7. Select the combination of numbers so that letters are arranged accordingly to form a meaningful English word.

<div align="center">

U I T M E N
1 2 3 4 5 6

</div>

A. 4, 3, 1, 6, 5, 2   B. 4, 2, 6, 1, 3, 5   C. 1, 2, 4, 6, 5, 3   D. 3, 5, 2, 6, 1, 4

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8. A puppy was born on November 7.

<div align="center">

| November, 20XX						
Sun	Mon	Tues	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

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How many days old was the puppy on November 22?

A. 11   B. 15   C. 16   D. 22

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9. Anjali is facing the School. She first makes a $\frac{3}{4}$ turn to the left and then a $\frac{1}{2}$ turn to the right. What will she be facing now?

A. School   B. Park   C. Shopping Mall   D. House

10. There are 5 girls standing in a row.
    - Nisha is second girl from last.
    - Shreya is between Manju and Nitika.
    - Payal is just after Nisha.
    - Manju is in the middle.
    Who is at the first position?
    A. Manju   B. Shreya   C. Nitika   D. Payal

MATHEMATICAL REASONING

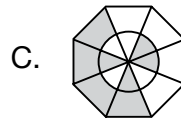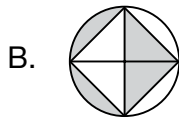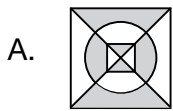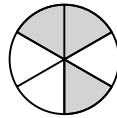11. Which of the following figures has fraction of unshaded part less than the fraction of shaded part of the given figure?
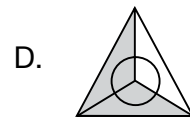
    A.   B.   C.   D.

12. If ☕ + 🍔 = 326 and ☕ + ☕ = 230, then find the value of 🍔 + 🍔.

    A. 414   B. 430   C. 420   D. 422

13. The smallest 4-digit number which is a multiple of 13 also is _____.
    A. 1000   B. 9999   C. 1013   D. 1001

14. Compare and fill the box.

    XLIV − XX ☐ XV + XXXIX
    A. >   B. <
    C. =   D. Can't be determined

15. The perimeter of the given figure (not drawn to scale) is 49 cm. Find the length of CD.

    A. 5 cm

    B. 12 cm

    C. 9 cm

    D. 8 cm

16. The difference between eight thousands five hundreds nine ones and three thousands fifty seven ones is _____.
    A. 5880   B. 5452   C. 5228   D. 5128

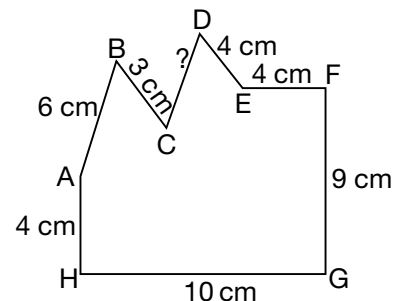17. Find the difference between the smallest 5-digit even number and the greatest 5-digit odd number formed by using all the digits 2, 5, 8, 7 and 3.
    A. 23578   B. 63945   C. 63954   D. 87523

18. In 2013, the age of Priyanka is less than 70 years and is a multiple of 7. In 2014, her age is a multiple of 6. Which of the following is her age in 2014?
    A. 36 years   B. 42 years
    C. 60 years   D. 66 years

19. A performance began at 19:45. It lasts for 1 hour 25 minutes. At what time did it end?
    A. 20:10   B. 20:25   C. 21:05   D. 21:10

20. Find the sum of the first 6 multiples of 6.
    A. 84   B. 105   C. 126   D. 147

EVERYDAY MATHEMATICS

21. Mohan's mother had 4 apples. She gave each one of Mohan's three friends half an apple to eat. What fraction of the 4 apples was remained?

    A. 1   B. $1\frac{1}{2}$ C. 2   D. $2\frac{1}{2}$

22. Mohit earns ₹ 5503 in a month. Every month, he spends ₹ 2186 and saves the rest. How much will he save in 2 years?
    A. ₹ 90150   B. ₹ 12848   C. ₹ 97608   D. ₹ 79608

23. Rajni bought a story book worth ₹ 2483 and two drawing books worth ₹ 1926 each. Find the estimated amount of money paid by her (rounded to the nearest tens).
    A. ₹ 6340   B. ₹ 4630   C. ₹ 4460   D. ₹ 6344

24. Amit went for a walk and returned home at 7:00 a.m. If it took him 2 hours and 45 minutes, then at what time did he start to walk ?
    A. 4:45 a.m.   B. 4:30 a.m.   C. 4:15 a.m.   D. 3:45 a.m.

25. Akshi worked for 8 hours at the exhibition. She was paid ₹ 95 for an hour. How much did she earn?

   A. ₹ 760   B. ₹ 670   C. ₹ 700   D. ₹ 750

26. 1 kg of onions costs ₹ 25. If 3 kg of onions cost as much as 5 kg of potatoes, then how much will it cost to buy 12 kg each of potatoes and onions altogether ?

   A. ₹ 400   B. ₹ 180   C. ₹ 480   D. ₹ 300

27. The total length of 2 pieces of ribbon is 220 cm. If the length of one piece of ribbon is 180 cm longer than the other, then find the length of the longer piece.

   A. 20 cm   B. 40 cm   C. 200 cm   D. 400 cm

28. Manya is 13 years old. Kavya is 15 years older than Manya. Akshita is half of Kavya's age. Find the age of Akshita.

   A. 16 years   B. 12 years   C. 14 years   D. 18 years

29. Mr Sharma and his family is on their holiday, they spent ₹ 3458 on petrol; ₹ 3765 on food; and ₹ 2900 on stay. They also spent ₹ 1050 on sight seeing. How much did their holiday cost them?

   A. ₹ 11107   B. ₹ 11170   C. ₹ 17100   D. ₹ 11173

30. Vivan bought 6 kg 500 g of wheat from one shop and 3 kg 850 g of wheat from another shop. How much wheat did he buy altogether?

   A. 16 kg 300 g   B. 15 kg 170 g
   C. 10 kg 900 g   D. 10 kg 350 g

ACHIEVERS SECTION

31. Find the value of $\dfrac{P-Q}{R}$.

   A. 1

   B. $\dfrac{1}{3}$

   C. 0

   D. 2

$$\begin{array}{r} \boxed{P}61 \\ 35\overline{)\,9148} \\ -\underline{70} \\ 214 \\ -\underline{2\boxed{Q}0} \\ 48 \\ -\underline{35} \\ 1\boxed{R} \end{array}$$

32. A basket with 30 pears weighs 11 kg 200 g. The same basket with 18 pears weighs 7 kg. If each pear in the basket has the same weight,

   (a) What is the weight of 1 pear?

(b) If cost of basket with 1 kg pears is ₹ 24, what is the cost of basket with 12 kg pears?

	(a)	(b)
A.	280 g	₹ 264
B.	350 g	₹ 264
C.	280 g	₹ 288
D.	350 g	₹ 288

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33. Study the given bar graph showing marks scored by a student in different subjects and answer the following question.
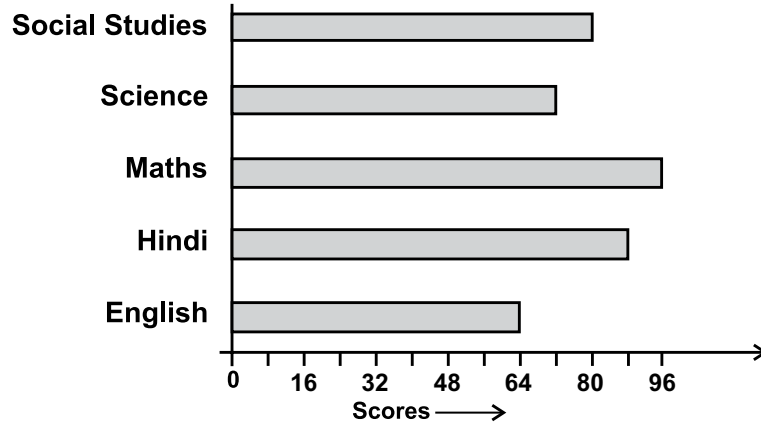
Find the difference between the highest marks scored and total number of marks scored in Maths and Hindi.

A. 80　　　　　　　B. 88　　　　　　　C. 96　　　　　　　D. 184

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34. If ☆ + ☆ + ☆ + ☆ + ☾ = 2780 and ☆ + ☆ + ☾ = 1690, then find the value of ☆ + ☆ + ☆ + ☾ + ☾ + ☾.

A. 4506　　　　　B. 4560　　　　　C. 9450　　　　　D. 3435

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35. Which of the following figures has the largest perimeter?