

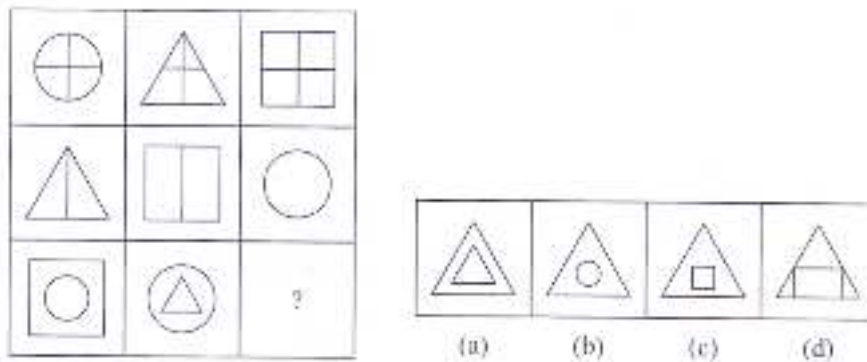
International Foundation Mathematics Olympiad(IFMO)

CLASS 8

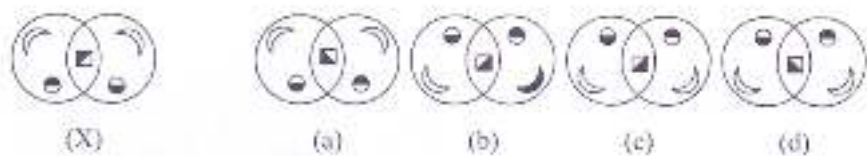
WORKSHEET – 2

SECTION-A (Logical Reasoning)

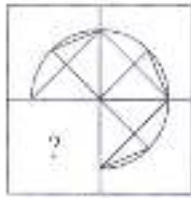
1. Arrange the given words in alphabetical order and choose the one that comes first.
 - a) Quarter
 - b) Quality
 - c) Qualify
 - d) Quarrel
2. Choose the odd one from the given group.
 - a) Dock
 - b) Park
 - c) Bus-Stand
 - d) Plat form
3. In the following questions, study the given matrix, and find the correct option for the question mark from the given four options.



4. In the following questions, choose the correct water image of the figure (X) from the given four alternatives.



5. In the following problems, select a figure from amongst the four options which when placed in the blank space of figure (X) would complete the pattern.



(X)



(a)



(b)



(c)



(d)

6. In a certain code, FILE is coded as 7465. MAN is coded as 823, then how will FEMALE be coded in that code?

- a) 785265
- b) 785266
- c) 758265
- d) 758526

7. Ankit is facing East. He turns 100° in the clockwise direction and then 145° in the anticlockwise direction. In which direction is he facing now?

- a) North East
- b) East
- c) North-West
- d) South-west

8. Find the next term in the following terms.

12, 19, 28, 39, 52, ?

- a) 65
- b) 66
- c) 67
- d) 68

9.

96	
16	12

162	
18	18

168	
?	24

- a) 12
- b) 14
- c) 16
- d) 18

10. In the series

2 5 3 4 8 7 4 2 6 7 1 5 8 3 7 4 5 3

How many pair of successive numbers have a difference of 3?

- a) 3
- b) 4
- c) 2
- d) 5

SECTION-B (Day to Day Mathematics)

11. A B C

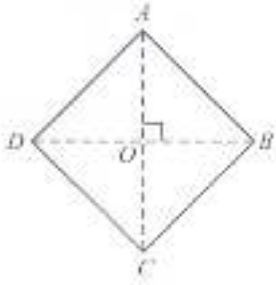
A B C

+ A B C, the value of A, B, C are digits

B B B

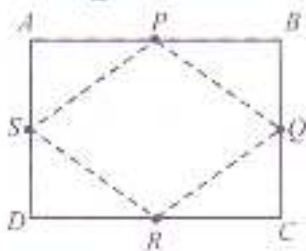
From 1 to 9. What will be value of B?

- a) 8
b) 4
- c) 1
d) 3
12. If $a : b = 1:2$, then $\frac{(a+b)^2}{ab} =$
- a) $\frac{9}{2}$
b) $\frac{9}{8}$
- c) $\frac{9}{4}$
d) $\frac{1}{6}$
13. What is the least number which must be subtracted from 6459 to make a perfect square?
- a) 56
b) 58
- c) 59
d) None of these
14. Which of the following is not a Pythagorean triplet?
- a) (3, 4, 5)
b) (6, 8, 10)
- c) (2, 3, 4)
d) (12, 35, 37)
15. What is the smallest number by which 3087 may be multiplied so that the product is a perfect cube?
- a) 2
b) 3
- c) 7
d) None of these
16. By selling 20 pens a shopkeeper gains equal to the selling price of 4 pens. What is his gain percent?
- a) 15%
b) 20%
- c) 25%
d) 30%
17. If one of the factor of $x^2 - y^2 + 2yz - z^2$ is $(x + y - z)$ then what is the other factor?
- a) $(x + y - z)$
b) $(x - y + z)$
- c) $(x + y + z)$
d) $(x - y - z)$
18. The ages of Raju and Rajan are in the ratio 5:8. If Raju was 5 years older and Rajan 4 years younger, the age of Raju would have been the same as the age of Rajan. What is the age of Raju?
- a) 15 years
b) 16 years
- c) 24 years
d) 13 years
19. ABCD is a rhombus, AC= 16 cm and BD=12 cm, then what is the measure of BC?



- a) 10 cm
- b) 12 cm
- c) 9 cm
- d) 11 cm

20. ABCD is a square, P, Q, R, S are the midpoints of AB, BC, CD and DA respectively. If the perimeter of ABCD is $16\sqrt{2}$ cm, then perimeter of PQRS is:



- a) $16\sqrt{2}$ cm
- b) $8\sqrt{2}$ cm
- c) 8 cm
- d) 16 cm

21. The area of a trapezium is 384 cm^2 . Its parallel sides are in the ratio 5:3 and the distance between them is 12 cm. What is the longer of the parallel sides?

- a) 36 cm
- b) 40 cm
- c) 42 cm
- d) 44 cm

22. What is the total surface area of a cylinder having base radius 10.5 cm and length 18 cm?

- a) 1188 cm^2
- b) 1818 cm^2
- c) 1881 cm^2
- d) None of these

23. In a pie-chart for expenditure in percent incurred in the construction of a house in a city, the central angle for cement is 72° . What is the percentage of cement expenditures?

- a) 15%
- b) 20%
- c) 25%
- d) 30%

24. A 270 m long train is running at 81 km/hr. How much time will it take to cross a 225 m long platform?

- a) 18 sec
- b) 21 sec
- c) 22 sec
- d) 24 sec

25. 14 workers can build a wall in 42 days. In how many days 21 workers can build the same wall?
- a) 21 days
 - b) 28 days
 - c) 14 days
 - d) 7 days

ANSWER IFMO CLASS 8 – WORKSHEET - 2																			
1	C	2	B	3	C	4	D	5	A	6	C	7	A	8	C	9	B	10	B
11	B	12	A	13	C	14	C	15	B	16	C	17	B	18	A	19	A	20	D
21	B	22	C	23	B	24	C	25	B										