

# MATHS OLYMPIAD

PRACTICE BOOK



GRADE  
4

The Math Olympiad series is an initiative of International Society for Olympiad (ISFO)

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# Preface

Our education system effectively provides an introduction to the concepts of Math and Science and helps us understand the underlying concepts. But in its overly generalized approach, which aims to enlighten and test all students of varying caliber and interests, it leaves the exploration of application of all these concepts completely on the students.

This workbook is designed to enable students to explore Maths effectively. Designed in accordance with the requirements of the Maths Olympiads, the workbook is an efficient tool to achieve comprehensive success at the **ISFO – Maths Olympiad**.

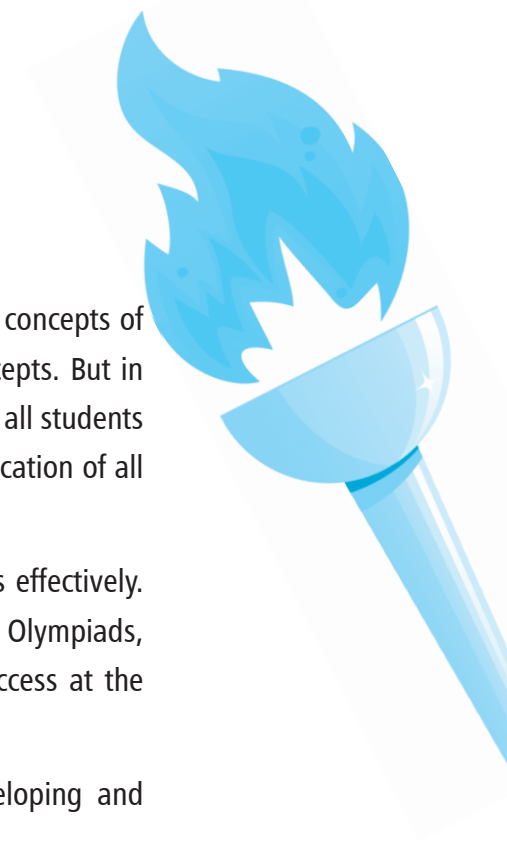
The main aim of this workbook is to assist students in developing and improving their ability to solve problems.

Each chapter of the book consists of 3 sets of questions.

- **Section A** (Mathematical Reasoning) : This section is created to test the knowledge of mathematical concepts and topic pertaining to the respective grades.
- **Section B** (Everyday Maths) : This section deals with the application.
- **Section C** (BrainBox) : Questions to prepare students with HOTS (Higher Order Thinking Skills) based on the syllabus provided.

**Logical Reasoning** section is provided to equip students with verbal and non-verbal analysis and reasoning skills.

**Sample Test Papers** and Answer keys have been provided to accelerate the learning process.





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## SECTION - A : MATHEMATICAL REASONING

1. Which of the following does not represent 97?
  - a. 9 tens 7 ones
  - b.  $90 + 7$
  - c. 8 tens 17 ones
  - d.  $9 + 7$
2. If  $9999 = 9000 + \underline{\hspace{2cm}} + 9$ , then what is the missing number?
  - a. 990
  - b. 99
  - c. 9
  - d. 909
3. What is the rule for the given number pattern?  
1, 1, 2, 6, 24, 120
  - a. Add 0, then add 1, then add 2 and so on
  - b. Multiply by 1, then multiply by 2, then multiply by 3 and so on
  - c. Multiply by 1, then add 1
  - d. Multiply by two, then subtract 1
4. There are          tens in 36520.
  - a. 12
  - b. 36
  - c. 365
  - d. 3652
5. What is the next pair of numbers in the given pattern?

(12, 24)	(13, 26)	(14, 28)	(15, 30)	( <u>  </u> , <u>  </u> )
----------	----------	----------	----------	---------------------------

  - a. 16, 32
  - b. 16, 34
  - c. 17, 34
  - d. 18, 36
6. 9468 is same as          hundreds and 68 ones.
  - a. 94
  - b. 46
  - c. 40
  - d. 4
7. If 253 is less than the greatest 4-digit even number, then the number is
  - a. 9645
  - b. 9745
  - c. 9754
  - d. 9654
8. What is the difference between the greatest odd number between 51 and 61 and the smallest even number between 11 and 21?
  - a. 47
  - b. 48
  - c. 49
  - d. 50
9. If  $9 \times 9 = 72 + \underline{\hspace{2cm}}$ , then what is the missing number?
  - a. 6
  - b. 7
  - c. 8
  - d. 9

10. If we subtract 1000 from the product of the smallest 4-digit number and 3, then the result is
- a. 1000                      b. 2000  
c. 3000                      d. 4000
11. Which of the following is the largest?
- a.  $9 + 9 + 9 + 9$   
b.  $81 \div 9$   
c.  $81 - 9$   
d.  $9 \times 9$
12. In the sum of 5268 and 329, the digit 9 is in which place?
- a. Ones  
b. Tens  
c. Hundreds  
d. Thousands
13. How is 23,456 rounded off to obtain 23,500?
- a. To the nearest tens  
b. To the nearest hundreds  
c. To the nearest thousands  
d. To the nearest ten thousands
14. If we interchange the positions of the digits 3 and 5 in the number 3256, which of the following statements is correct?
- a. The number does not change.  
b. The number increases.  
c. The number decreases.  
d. The number has more number of digits.
15. The difference between the place values of '8' and '4' in 78045 is
- a. 7690                      b. 7000  
c. 7960                      d. 7900
16. Which of these is same as  $6 \times 7$ ?
- a.  $3 \times 3 \times 7$   
b.  $2 \times 3 \times 7$   
c.  $3 \times 4 \times 6$   
d.  $2 \times 2 \times 3$
17. What is the value of  $(14 + 5) - (5 - 2)$ ?
- a. 14                          b. 15  
c. 16                          d. 17
18. Which two numbers add up to a sum, greater than 1000?
- a. 450 and 545  
b. 999 and 1  
c. 893 and 100  
d. 989 and 12
19. In numbers from 1 to 100, the digit '0' appears \_\_\_\_\_ times.
- a. 11                          b. 10  
c. 9                            d. 12
20. A number when divided by 9, gives a quotient 83 and a remainder 1. What is the number?
- a. 748  
b. 747  
c. 93  
d. 84

## SECTION - B : EVERYDAY MATHS

21. There are 2389 coins in container A and 2531 coins in container B. How many coins from container B must be put in container A so that there will be 120 more coins in container B than in container A?
- a. 22 coins                      b. 12 coins  
c. 13 coins                      d. 14 coins
22. In a train, there were 189 passengers. At a stop, another 51 passengers boarded the train. So, now if there are three times as many men as women on the train, then how many more men than women are there in the train?
- a. 120                              b. 140  
c. 160                              d. 180
23. Town A has a population of 2906 adults and 1856 children. The total population of town B is the same as the number of adults in town A. The number of children in town B is 102 fewer than the number of children in town A. How many adults are there in town B?
- a. 1052                              b. 1152  
c. 1512                              d. 1125
24. Mr Thomas wanted to pack 486 mangoes into 7 identical baskets and 2 identical boxes. He packed 68 mangoes into each of the boxes and the remaining mangoes equally into 7 baskets. How many mangoes did he pack into each basket?
- a. 30                                  b. 40  
c. 50                                  d. 60
25. Mrs Lal had some books. Of which, she gave away 12 books and bought 6 more books. Now, she had 50 books in all. How many books did she have initially?
- a. 52                                  b. 54  
c. 56                                  d. 58

## SECTION - C : BRAINBOX

26. Janie uses the rule: 'add 5 and subtract 3 alternatively' to make the number pattern given below. What will be the missing number?
- 12, 17, 14, 19, 16, ?
- a. 18                                  b. 20  
c. 21                                  d. 24
27. I am greater than 20 but less than 26. I am an even number and when you double 11, you will not get me. What number am I?
- a. 24                                  b. 22  
c. 18                                  d. 26

28. Janet has 15 stickers. She wants to put all of them on the cover of her maths project. In which of the following ways can she put the stickers on the cover?
- 3 rows of 5 stickers
  - 3 rows of 4 stickers
  - 5 rows of 2 stickers
  - None of these
29. Which number will replace each of the two boxes to make the given number sentences true?
- $$6 \times \square = 30 \quad \text{and} \quad 30 \div \square = 6$$
- 3
  - 4
  - 5
  - 6
30. Mike had 13 cookies. To distribute the cookies equally among three of his friends, he used the rule:  $13 = 3 \times 4 + R$ . What does R stands for?
- Number of cookies Mike had after distributing to his friend.
  - Number of cookies which were given to each friend.
  - Total number of cookies which Mike gave to his friend.
  - None of these

Darken your choice with HB pencil

- |                    |                     |                     |                     |
|--------------------|---------------------|---------------------|---------------------|
| 1. (a) (b) (c) (d) | 9. (a) (b) (c) (d)  | 17. (a) (b) (c) (d) | 25. (a) (b) (c) (d) |
| 2. (a) (b) (c) (d) | 10. (a) (b) (c) (d) | 18. (a) (b) (c) (d) | 26. (a) (b) (c) (d) |
| 3. (a) (b) (c) (d) | 11. (a) (b) (c) (d) | 19. (a) (b) (c) (d) | 27. (a) (b) (c) (d) |
| 4. (a) (b) (c) (d) | 12. (a) (b) (c) (d) | 20. (a) (b) (c) (d) | 28. (a) (b) (c) (d) |
| 5. (a) (b) (c) (d) | 13. (a) (b) (c) (d) | 21. (a) (b) (c) (d) | 29. (a) (b) (c) (d) |
| 6. (a) (b) (c) (d) | 14. (a) (b) (c) (d) | 22. (a) (b) (c) (d) | 30. (a) (b) (c) (d) |
| 7. (a) (b) (c) (d) | 15. (a) (b) (c) (d) | 23. (a) (b) (c) (d) |                     |
| 8. (a) (b) (c) (d) | 16. (a) (b) (c) (d) | 24. (a) (b) (c) (d) |                     |




## SECTION - A : MATHEMATICAL REASONING

1. What is the value of  $n$  if  $9 \times n = 153$ ?
  - a. 27
  - b. 15
  - c. 17
  - d. 19
2. Twice of a certain number is 58. Four times that number will be
  - a.  $4 \times 29$
  - b.  $29 + 4$
  - c.  $29 \times 2$
  - d.  $8 \times 29$
3. What is  $5 \div 0$ ?
  - a. 5
  - b. 0
  - c. 1
  - d. Undefined or infinity
4. Radha reads the same number of pages of a book each day. If she is able to read 224 pages of the book in a week, then how many pages did she read each day?
  - a. 42
  - b. 34
  - c. 36
  - d. 32
5. For the given factor tree, the missing number is
 

```

graph TD
    36((36)) --- 2a((2))
    36 --- 18((18))
    18 --- 2b((2))
    18 --- 9((9))
    9 --- 3((3))
    9 --- Q((?))
      
```

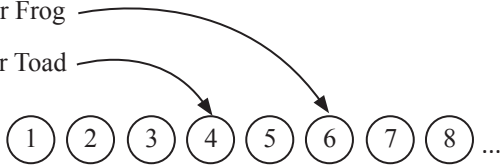
  - a. 2
  - b. 4
  - c. 6
  - d. 3
6. The common factors of 12 and 16 are
  - a. 1, 2, 3, 4, 6
  - b. 1, 2, 4, 6, 12
  - c. 12, 4, 16
  - d. 1, 2, 4
7. A car travels a distance of 180 km in three hours. How much distance will the car travel in 32 minutes?
  - a. 32 km
  - b. 50 km
  - c. 21 km
  - d. 28 km
8. Which of the following is not true?
  - a.  $13 \times 86 = 86 \times 13$
  - b.  $13 \times 86 = 13 \times (80 + 6)$
  - c.  $13 \times 86 = (10 + 3) \times 86$
  - d.  $13 \times 86 = (13 \times 8) + (13 \times 6)$

9. If  $\Delta + \Delta + \Delta = 330$  and  $500 - \Delta = \square$ , then the value of  $\square - \Delta$  is
- a. 380                      b. 110  
c. 280                      d. 830
10. Which of the following is incorrect?
- a.  $XV + XXVI = 41$   
b.  $LX - XVII = 43$   
c.  $CX + XC = 220$   
d.  $XL - XXIX = 11$
11. The largest factor of a number is
- a. the number itself      b. 1  
c. 0                          d. 10
12. If we estimate  $123 + 685$ , then the sum is between
- a. 400 and 600  
b. 700 and 900  
c. 1000 and 1200  
d. 1300 and 1500
13. The sum of the 6th multiple of 9 and 12 is
- a. 72                      b. 126  
c. 648                    d. 108
14. Look at the pattern given below.
- 
- If the pattern continues, how many dots will be there in the next triangle?
- a. 5                      b. 10  
c. 15                    d. 20
15. What do you get if you increase 16 by 50?
- a. 16                      b. 50  
c. 66                      d. 800
16. Look at the fact family of 3, 8 and 24 given below. Which of the following is a missing fact?
- $3 \times 8 = 24$ ;  $8 \times 3 = 24$ ;  $24 \div 8 = 3$ ;  
\_\_\_\_\_.
- a.  $24 \div 4 = 6$           b.  $24 \div 3 = 8$   
c.  $24 + 3 = 27$         d.  $24 - 4 = 20$
17. Tim bought 8 packets of sugar candies. If each packet contains 115 candies then, how many candies does Tim have in all?
- a. 920                      b. 123  
c. 8120                    d. 8840
18. Mark has a stamp collection. He has 22 stamps of Japan, 34 of Canada and 17 of Mexico. How many stamps does he have in all?
- a. 53                      b. 63  
c. 73                      d. 83
19. What should be added to  $7 \times 42$  to get  $7 \times 43$ ?
- a. 1                      b. 7  
c. 4                      d. 6
20. What is the value of  $19 - 18 + 17 - 16 + 15 - 14 + 13 - 12$ ?
- a. 124                      b. 48  
c. 4                      d. 1

## SECTION - B : EVERYDAY MATHS

21. John has 45 stickers. Mary has 20 more stickers than John. How many stickers must Mary give to John so that both of them have an equal number of stickers?
- a. 5                                      b. 10  
c. 25                                      d. 55
22. Harvey has ₹16.25. He wants to buy gifts for his father that costs ₹35.90 and a gift for his sister that costs ₹52.50. How much more money does he need in order to buy the gifts?
- a. ₹88.40                                b. ₹104.65  
c. ₹72.15                                d. ₹72.25
23. There are 1582 chicken eggs and 475 duck eggs in a basket. 128 chicken eggs and duck eggs were broken. How many eggs were not broken?
- a. 2157                                      b. 1929  
c. 2003                                      d. None of these
24. A shopkeeper purchased 480 oranges. He sold 148 of them and 15 of them were spoilt. How many oranges were now left for sale?
- a.  $480 - 15 - 148$   
b.  $480 + 15 - 148$   
c.  $480 + 15 + 148$   
d.  $480 - 15 + 148$
25. Jay is 86 cm tall. His father is twice as tall as him. How tall is Jay's mother if she is 18 cm shorter than his father?
- a. 1 m 90 cm                              b. 1 m 72 cm  
c. 1 m 54 cm                              d. 1 m 66 m

## SECTION - C : BRAINBOX

26. Mr Frog jumps 6 stones at a time and Mr Toad jumps 4 stones at a time. On which stone among the following do both of them meet each other, if they jump as far as they can each time?
- Mr Frog →  
Mr Toad →
- 
- a. 3rd                                      b. 4th  
c. 24th                                      d. 12th
27. Four people—Jamila, Loura, Carla and Paul are standing in a line. Jamila is standing 3 metres behind Loura and 2 metres ahead of Carla while Paul is standing 4 metres ahead of Loura. What is the distance between Carla and Paul?
- a. 9 m  
b. 5 m  
c. 4 m  
d. 2 m

28. P, Q, R and S are 4-digit numbers. Each number have the digit 9 only once in the place as shown below. Which of the following statements about P, Q, R and S is correct?

P	9				Q		9		
R			9		S				9

- S is the smallest of the four numbers.
- P is the largest of the four numbers.
- Q is larger than R.
- S is the only odd number among the four numbers.

29. Tom and Bob together have a total of 49 toys. If Bob has 5 more toys than Tom, then how many toys does each one of them have?

- 24, 29
- 30, 35
- 22, 27
- 23, 28

30. In the given division problem, the value of  $P + Q - R$  is

$$\begin{array}{r}
 3\overline{)469907} \\
 \underline{-39} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\
 079 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\
 \underline{-78} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\
 19 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\
 \underline{-13} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\
 60 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\
 \underline{-52} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\
 0\overline{)7} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\
 \underline{-78} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\
 0\overline{)7} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0}
 \end{array}$$

- 4
- 7
- 3
- 5

Darken your choice with HB pencil

- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d

- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
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- ☐ a ☐ b ☐ c ☐ d

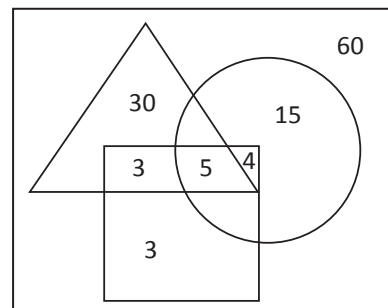
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d

- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d
- ☐ a ☐ b ☐ c ☐ d

## SECTION - A : MATHEMATICAL REASONING

1. In a farm,  $\frac{1}{3}$  of total animals are goats and rest are chickens. If there are total 240 legs of the animals, then the number of chickens is
  - a. 160
  - b. 60
  - c. 80
  - d. 240
2. In a school, 40 out of 200 students opted for chess,  $\frac{2}{8}$  of the remaining students opted for football, and the rest opted for music and dance. The fraction of students who opted for music and dance is
  - a.  $\frac{3}{5}$
  - b.  $\frac{1}{5}$
  - c.  $\frac{2}{5}$
  - d. 28
3. Jayesh spent ₹1200 on an item from his income. He spent  $\frac{3}{5}$  of the remaining amount on food and expenditure. If his total income is ₹1500, then how much money was he left with?
  - a. ₹180
  - b. ₹120
  - c. ₹300
  - d. ₹60
4. Which of the following completes the given pattern?
$$\frac{2}{7}, \frac{5}{7}, 1\frac{1}{7}, 1\frac{4}{7}, \text{---}, 2\frac{3}{7}.$$
  - a.  $1\frac{1}{7}$
  - b. 2
  - c. 3
  - d. 1
5.  $2\frac{1}{4}$  loaf of a bread is equal to
  - a.  $\frac{225}{100}$
  - b.  $\frac{225}{400}$
  - c.  $\frac{225}{10}$
  - d.  $\frac{225}{1000}$
6. In a box,  $2\frac{1}{3}$  of the total marbles are blue. Radhika puts  $\frac{7}{12}$  of these blue marbles in each box. How many boxes did she use?
  - a. 9 boxes
  - b. 8 boxes
  - c. 6 boxes
  - d. 4 boxes
7. Which of the following makes the given number sentence true?
$$\frac{2}{5} \square \frac{1}{4}$$
  - a. >
  - b. <
  - c. =
  - d. Can't be determined

8. Rakesh solved 130 questions out of 150 in an IMO exam. If he answered  $\frac{3}{5}$  of the questions correctly then, how many questions did he answer incorrectly?
- a. 100                      b. 80  
c. 30                        d. 52
9. In the above question, if 2 marks are given for every correct answer and 0.25 marks are deducted for every incorrect answer, then how many marks did Rakesh score in the exam?
- a. 200                      b. 253  
c. 140                      d. 143
10. How many two-thirds are there in  $\frac{12}{18}$ ?
- a. 16                        b. 3  
c. 1                         d. 8
11. What fraction should be subtracted from  $\frac{5}{6}$  to get three times of  $\frac{2}{9}$ ?
- a.  $\frac{1}{6}$                         b.  $\frac{2}{6}$   
c.  $\frac{3}{6}$                         d.  $\frac{4}{6}$
12. Ritu has 400 marbles. She sold  $\frac{5}{8}$  of them and gave 72 marbles to her friend. How many marbles is she left with?
- a. 78                        b. 68  
c. 80                        d. 72
13. How many one-ninths are there in  $7\frac{2}{3}$ ?
- a. 79                        b. 69  
c. 102                      d. 83
14. Karan had 150 papayas. He sold  $\frac{3}{5}$  of them at ₹3 each. How much did he earn?
- a. ₹240                    b. ₹250  
c. ₹260                    d. ₹270
15. If  $\frac{3}{4} + 1\frac{1}{12} - \frac{5}{4} = P - \frac{1}{4}$ , then the value of P is
- a.  $\frac{5}{6}$                         b.  $\frac{5}{12}$   
c.  $1\frac{1}{4}$                       d.  $1\frac{5}{12}$
16. The given diagram shows the result of a survey conducted on 60 students. Here, the circle, the square and the triangle represents the number of students interested in medical, singing and engineering professions, respectively. Which fraction among the following represents the number of students interested in medical and singing but not engineering?



- a.  $\frac{1}{15}$                       b.  $\frac{2}{15}$   
c.  $\frac{3}{15}$                       d.  $\frac{4}{15}$

17. At a party of 4500 people,  $\frac{4}{9}$  were men. There were 500 more women than men. The fraction of women at the party is

- a.  $\frac{2}{3}$                       b.  $\frac{5}{9}$   
c.  $\frac{1}{3}$                       d.  $\frac{8}{9}$

18. Rahul finished  $\frac{1}{3}$  of his work on Monday. He finished  $\frac{1}{2}$  of the remaining work on Tuesday. What fraction of the work is left with him?

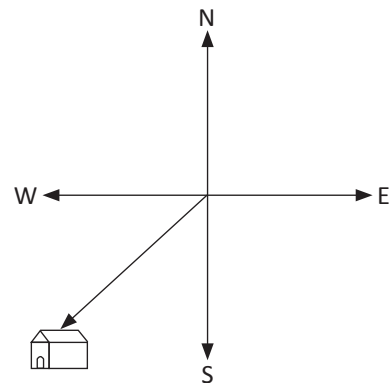
- a.  $\frac{1}{6}$                       b.  $\frac{5}{6}$   
c.  $\frac{2}{6}$                       d.  $\frac{4}{6}$

19. Rahul deposits  $\frac{2}{5}$  of his earnings in the bank and spends  $\frac{2}{3}$  of the

remaining on buying an item. What fraction of money is he left with now?

- a.  $\frac{4}{5}$                       b.  $\frac{3}{4}$   
c.  $\frac{2}{5}$                       d.  $\frac{1}{5}$

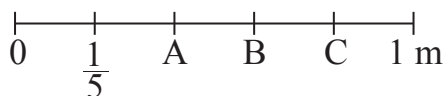
20. Rajesh is facing towards the East. His friend's house is in the South-West direction. By what fraction should he turn to face his friend's house?



- a.  $\frac{3}{8}$                       b.  $\frac{5}{8}$   
c.  $\frac{4}{8}$                       d.  $\frac{2}{5}$

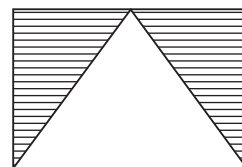
## SECTION - B : EVERYDAY MATHS

21. In the given figure, each metre has been divided into equal parts. Which fraction amongst the following does letter A represent?



- a.  $\frac{2}{5}$                       b.  $\frac{3}{5}$   
c.  $\frac{4}{5}$                       d.  $\frac{5}{5}$

22. Look at the given figure. What fraction of the given figure is the shaded region?

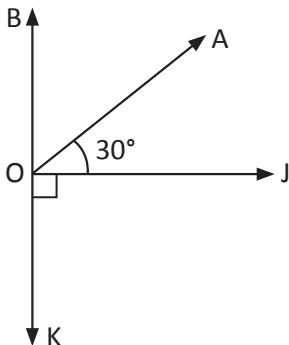


- a.  $\frac{2}{3}$                       b.  $\frac{1}{4}$   
c.  $\frac{1}{3}$                       d.  $\frac{1}{2}$

23. If a bigger square is made up of four equal-sized small squares, then what fraction of the bigger square is each small square?

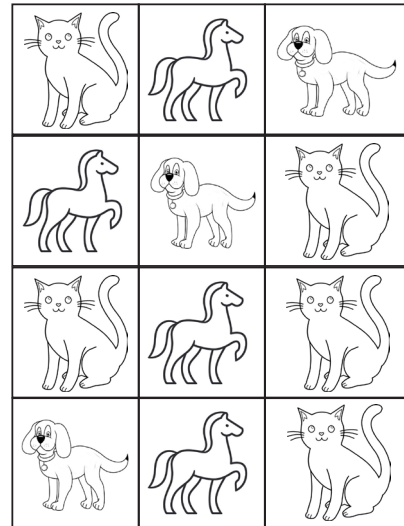


- a.  $\frac{1}{4}$                       b.  $\frac{2}{4}$   
c.  $\frac{3}{4}$                       d. None of these
24. In the given figure,  $\angle AOJ = 30^\circ$ ,  $\angle BOJ = 90^\circ$ ,  $\angle BOK = 180^\circ$ . What fraction of  $\angle BOK$  is  $\angle AOB$ ?



- a.  $\frac{1}{2}$                       b.  $\frac{2}{3}$   
c.  $\frac{4}{5}$                       d.  $\frac{4}{6}$

25. Mohit has some animal cards as shown below. What fraction of the cards are cat cards?



- a.  $\frac{1}{12}$                       b.  $\frac{5}{12}$   
c.  $\frac{6}{12}$                       d.  $\frac{4}{9}$

### SECTION - C : BRAINBOX

26.  $x$  is a decimal number. When  $x$  is converted into a fraction, it gives  $6\frac{1}{4}$ . The value of  $x$  is
- a. 6.25  
b. 62.5  
c. 625  
d.  $\frac{625}{10}$
27. The daily consumption of milk in a family is  $2\frac{1}{5}$  litres. The quantity of milk consumed by the family in the month of June is
- a. 12 litres  
b. 26 litres  
c. 96 litres  
d. 66 litres



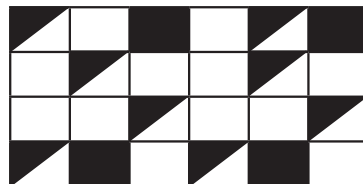
28. Rajeev bought 500 g of flour for baking a cake. He used  $\frac{2}{5}$  of it in making pudding, and  $\frac{5}{6}$  of the remaining for baking the cake. How much flour is he left with now?

- a. 50 g                      b. 200 g  
c. 150 g                    d. 300 g

29. In an exam, Rahul got 30 out of 40 marks. What fraction of marks did he score?

- a.  $\frac{2}{4}$                       b.  $\frac{5}{4}$   
c.  $\frac{3}{4}$                       d.  $\frac{1}{4}$

30. In the given figure, some part of the rectangle is shaded. What fraction of the rectangle is shaded?



- a.  $\frac{2}{3}$                       b.  $\frac{1}{3}$   
c.  $\frac{1}{5}$                       d.  $\frac{1}{6}$

Darken your choice with HB pencil

1. (a) (b) (c) (d)  
2. (a) (b) (c) (d)  
3. (a) (b) (c) (d)  
4. (a) (b) (c) (d)  
5. (a) (b) (c) (d)  
6. (a) (b) (c) (d)  
7. (a) (b) (c) (d)  
8. (a) (b) (c) (d)

9. (a) (b) (c) (d)  
10. (a) (b) (c) (d)  
11. (a) (b) (c) (d)  
12. (a) (b) (c) (d)  
13. (a) (b) (c) (d)  
14. (a) (b) (c) (d)  
15. (a) (b) (c) (d)  
16. (a) (b) (c) (d)

17. (a) (b) (c) (d)  
18. (a) (b) (c) (d)  
19. (a) (b) (c) (d)  
20. (a) (b) (c) (d)  
21. (a) (b) (c) (d)  
22. (a) (b) (c) (d)  
23. (a) (b) (c) (d)  
24. (a) (b) (c) (d)

25. (a) (b) (c) (d)  
26. (a) (b) (c) (d)  
27. (a) (b) (c) (d)  
28. (a) (b) (c) (d)  
29. (a) (b) (c) (d)  
30. (a) (b) (c) (d)

# Time, Money, Length, Mass and Volume

## SECTION - A : MATHEMATICAL REASONING

1. 75 minutes + 83 seconds is same as

a. 158 min  
b. 1 hour 15 min 13 sec  
c. 1 hour 16 min 23 sec  
d. 158 sec

2. Yamini wants to write the time as shown in the digital clock given below, using a 12-hour clock.

Which of the following represents the correct time using the 12-hour clock?

21 : 30

a. 9:30 a.m.      b. 7:30 a.m.  
c. 9:30 p.m.      d. 7:30 p.m.

3. Varun went to the mall with his cousin at 8:15 p.m. His mother told him to be back home in 2 hours 15 minutes. At what time does Varun need to be at home?

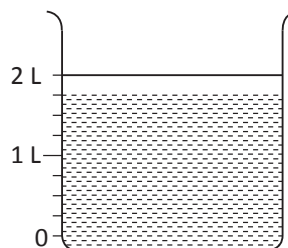
a. 4:40 p.m.      b. 7:30 p.m.  
c. 8:30 p.m.      d. 10:30 p.m.

4. Rita attended a monthly cooking class, with 10 lessons altogether. The last lesson ended on 10th July 2017. In which month did she start her class?

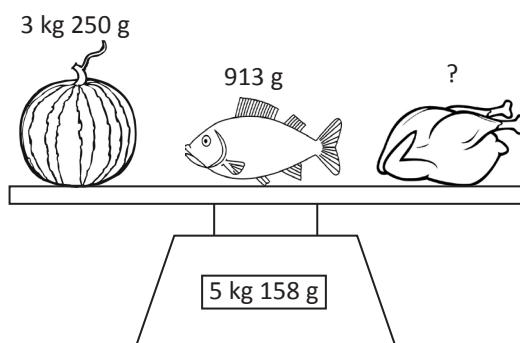
a. October, 2016  
b. November, 2016  
c. December, 2016  
d. January, 2016

5. In the given figure, how much more water is needed, to fill the container to the 2 L mark?

a. 250 mL  
b. 450 mL  
c. 650 mL  
d. 750 mL

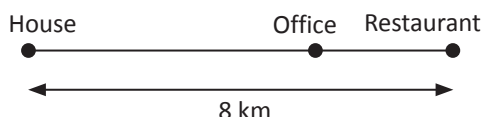


6. Mrs Sam went to the market and bought the items shown below. What is the mass of the chicken?



a. 913 g      b. 995 g  
c. 813 g      d. 895 g

7. The distance from Cherry's house to the restaurant is 5 times the distance from her office to the restaurant. The distance between the restaurant and her house is 8 km. What is the distance from her house to her office?



- a. 7 km 600 m  
b. 6 km 400 m  
c. 400 m  
d. 6 km
8. Three bottles—A, B and C are filled with water. Bottle A contains 5 times as much water as in bottle B. Bottle C contains  $\frac{1}{3}$  of the water in bottle B. If bottle A contains 72 mL more water than bottle B, then how much water do all the three bottles contain?
- a. 96 mL                      b. 110 mL  
c. 114 mL                    d. 132 mL
9. Riddhima's music class starts at 7:30 p.m. If it takes 35 minutes to reach the music studio, then by what time Riddhima should leave her house so that she can be at her studio on time?
- a. 18:55 hrs                b. 18:30 hrs  
c. 17:45 hrs                d. 16:30 hrs

10. A school organises a debate competition. The team participating in the debate competition meets on the third Thursday of each month for practice. On which date will they meet in the month of May if 1st May falls on a Tuesday?

- a. 10th May                b. 13th May  
c. 17th May                d. 19th May

11. A man can pack 20 apples in 10 minutes. How many apples can he pack in 1 hour?
- a. 110 apples  
b. 120 apples  
c. 100 apples  
d. 140 apples
12. Siya's tuition class starts at 19:00 hours daily. It takes 1 hour for Siya to reach to the tuition class. If, on a particular day, she reaches to her tuition class 20 minutes early, then at what time did she leave her house?
- a. 17:20 hrs  
b. 17:30 hrs  
c. 17:40 hrs  
d. 17:50 hrs
13. The time duration between 8:25 a.m. and 1:40 p.m. is of
- a. 3 hrs 40 min            b. 5 hrs 10 min  
c. 4 hrs 45 min            d. 5 hrs 15 min

14. Anil took 56 seconds and Bunty took 4 seconds less to solve a mathematics question. How much time did they take to solve the question altogether?

- a. 52 sec
- b. 1 min 8 sec
- c. 1 min 48 sec
- d. 1 min 56 sec

15. In how many seconds will the second hand of a clock make three quarters' turn round the clock?

- a. 40 sec
- b. 45 sec
- c. 50 sec
- d. 55 sec

16. Ram has eight coins of 25 paise and Rohan has five coins of 50 paise. How much amount do they have altogether?

- a. ₹4.00
- b. ₹3.50
- c. ₹5.00
- d. ₹4.50

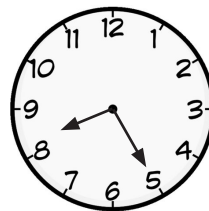
17. Ajay bought a computer for ₹42,800. He gave 86 notes of ₹500 to the shopkeeper. How much money did the shopkeeper return?

- a. ₹100
- b. ₹150
- c. ₹200
- d. ₹500

18. Nine poles are arranged in a row with equal spacing between them. If the distance between the first pole and the last pole is 72 m, then what is the distance between each pole? (Assume the thickness of each pole to be negligible.)

- a. 8 m
- b. 9 m
- c. 63 m
- d. 81 m

19. In the morning, Priya looked at the clock and the time shown below is what she saw. If the clock was 1 hour 55 minutes slow, then what was the actual time?



- a. 10:20 a.m.
- b. 10:00 a.m.
- c. 9:25 a.m.
- d. 10:10 a.m.

20. After 2 hours from now, it will be 01:00 p.m. What is the time right now?

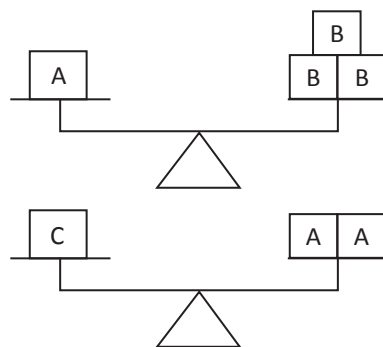
- a. 23:00 hrs
- b. 22:00 hrs
- c. 21:00 hrs
- d. 20:00 hrs

## SECTION - B : EVERYDAY MATHS

21. Trees are planted at an equal distance along a footpath. The distance between the first and the second tree is 50 m. How far apart is the first tree from the seventh tree?
- a. 3500 m                      b. 3000 m  
c. 350 m                      d. 300 m
22. Ingredients for making a lemonade are:
- 50 mL of lemon juice
  - 1 L 150 mL of water
  - 440 mL of sugar syrup
- Mahi mixed all the ingredients together. She then poured the lemonade equally into 8 cups. What was the volume of lemonade in each cup?
- a. 150 mL                      b. 200 mL  
c. 250 mL                      d. 205 mL
23. An aeroplane departed from Singapore at 10 past 8 in the morning and reached India at quarter to 11 in the morning. How long was the whole journey?
- a. 1 hr 35 min              b. 2 hrs 35 min  
c. 2 hrs 40 min              d. 3 hrs 35 min
24. Harry's mother gave him six notes of ₹50. He gave ₹250 to the shopkeeper. How much money is left with him?
- a. ₹40                              b. ₹50  
c. ₹60                              d. ₹300
25. Tom celebrates his father's birthday on Sunday at 19:45 hours. The celebration lasted for 5 hours 30 minutes. On which day and at what time did the celebration end?
- a. Monday, 01:15 hrs  
b. Monday, 01:20 hrs  
c. Monday, 02:15 hrs  
d. Monday, 01:00 hrs

## SECTION - C : BRAINBOX

26. Anny saves ₹5,160 every month and Sony saves ₹2,945 every month. How much money will they save altogether in 6 months?
- a. ₹38,630  
b. ₹40,000  
c. ₹48,000  
d. ₹48,630
27. Study the diagrams given below.



If the mass of  C is 5 kg 700 g,  
then the mass of  B is

- a. 2850 g
- b. 950 g
- c. 900 g
- d. 850 g

28. Jack is 20 years old. He is twice as old as his sister. How old will he be when his sister is 21 years old?

- a. 11 years old
- b. 21 years old
- c. 31 years old
- d. 41 years old

29. Alice had 7 tins of paint. Each tin contains 3 L of paint. She used 18 L 85 mL to paint her house. How much paint was the left with?

- a. 10 L 20 mL      b. 20 L 15 mL
- c. 2 L 915 mL      d. 12 L 30 mL

30. Tom took 12 hours 30 minutes to build a model car. John took 5 hours 45 minutes less to build an identical car. How long did John take to build the model car?

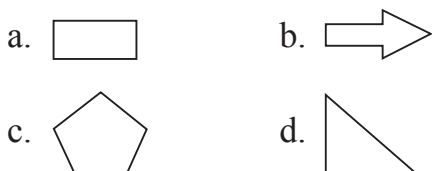
- a. 5 hrs 30 min      b. 6 hrs 20 min
- c. 6 hrs 30 min      d. 6 hrs 45 min

Darken your choice with HB pencil

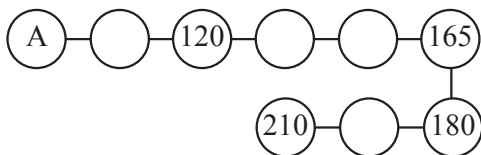
- |  |   |   |   |
|--|---|---|---|
| 1. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 9. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d  | 17. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 25. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d |
| 2. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 10. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 18. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 26. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d |
| 3. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 11. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 19. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 27. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d |
| 4. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 12. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 20. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 28. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d |
| 5. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 13. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 21. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 29. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d |
| 6. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 14. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 22. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 30. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d |
| 7. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 15. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 23. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d |   |
| 8. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 16. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d | 24. <input type="radio"/> a <input type="radio"/> b <input type="radio"/> c <input type="radio"/> d |   |

## SECTION - A : MATHEMATICAL REASONING

1. Which figure does not have a right angle as an interior angle?

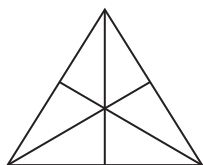


2. Observe the following pattern of numbers.



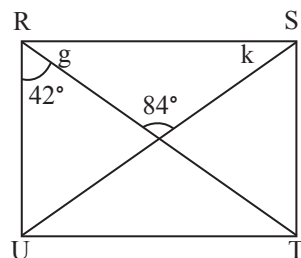
Which of the following numbers would replace A?

- a. 95  
b. 100  
c. 90  
d. 105
3. How many triangles are there in the given figure?



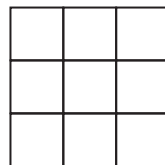
- a. 9  
b. 12  
c. 15  
d. 16

**Study the given figure and answer Q4 and Q5.**



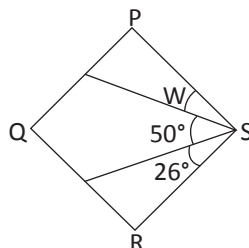
4. RSTU is a rectangle. The value of  $\angle k$  is
- a.  $51^\circ$                       b.  $61^\circ$   
c.  $48^\circ$                       d.  $38^\circ$
5. The value of  $\angle g + \angle k$  is
- a.  $96^\circ$                       b.  $119^\circ$   
c.  $109^\circ$                       d.  $110^\circ$
6. In the given figure, a large square is made up of small squares. How many squares are there in all?

- a. 9  
b. 10  
c. 11  
d. 14

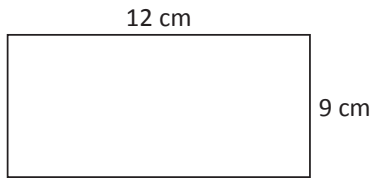


7. PQRS is a square. The value of  $\angle W$  is

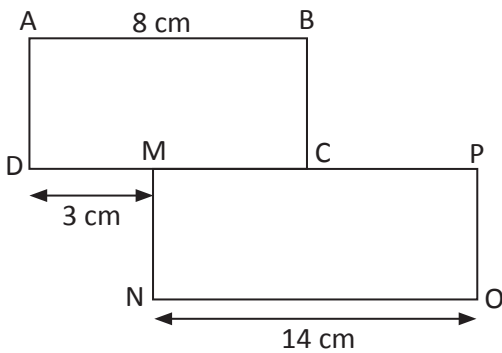
- a.  $20^\circ$   
b.  $18^\circ$   
c.  $16^\circ$   
d.  $14^\circ$



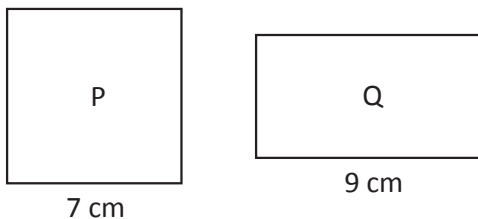
8. The perimeter of the rectangle shown below is



- a. 21 cm                      b. 108 cm  
c. 42 cm                      d. 216 cm
9. ABCD and MNOP are two rectangles. The length of CP is



- a. 5 cm                      b. 9 cm  
c. 7 cm                      d. 6 cm
10. The perimeter of square P and rectangle Q are equal. The breadth of the rectangle Q is

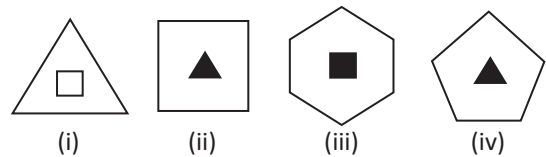


- a. 5 cm                      b. 7 cm  
c. 9 cm                      d. 5 cm

11. are all

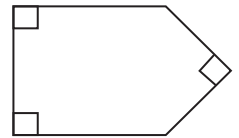
- a. Quadrilaterals  
b. Triangles  
c. Polygons  
d. None of these

12. Which figure is different from the rest?



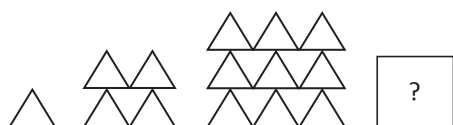
- a. (ii)                      b. (i)  
c. (iii)                      d. (iv)

13. Which of the following statements is false about the given figure?



- a. The number of sides is 2 more than the number of right angles.  
b. There are two obtuse angles.  
c. There are 3 angles altogether in the figure.  
d. There is no acute angle.

14. Observe the given pattern. How many triangles should there be in the box?

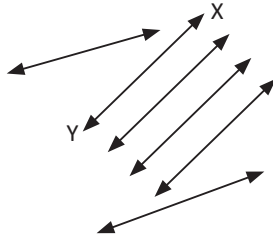


- a. 12                      b. 13  
c. 14                      d. 16

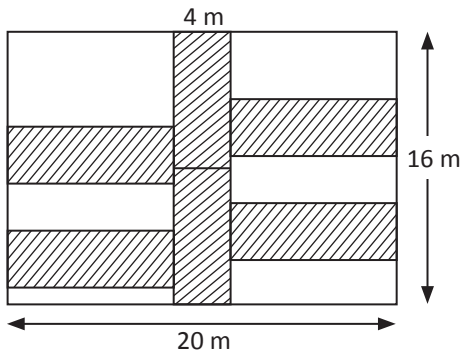


15. How many lines are parallel to the line XY in the given figure?

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

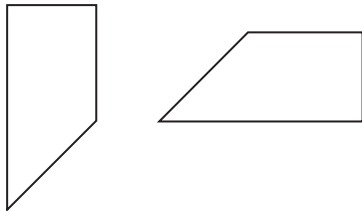


16. The given figure shows a rectangular garden with dimensions 16 m by 20 m. The garden has six identical flower beds each of width 4 m. What is the perimeter of a single flower bed?



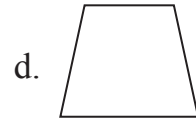
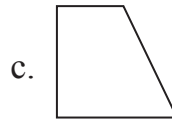
- a. 8 m
- b. 24 m
- c. 32 m
- d. 36 m

17. A square piece of paper has been cut into three pieces. Two of them are shown below.

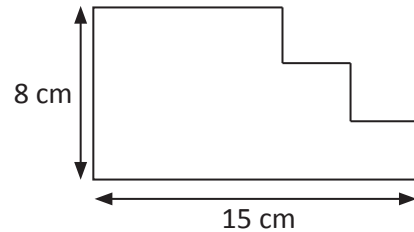


Which of the following pieces will be the third one?

- a.
- b.

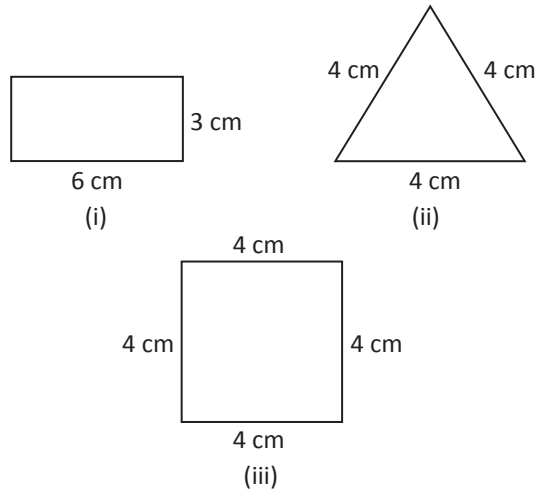


18. The perimeter of the given figure is



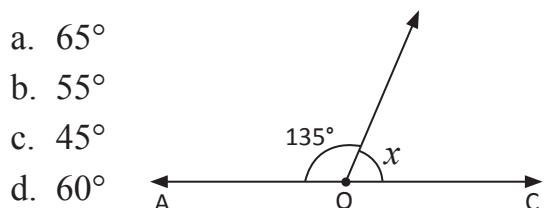
- a. 30 units
- b. 38 units
- c. 46 units
- d. 54 units

19. Which of the following figures has the greatest perimeter?



- a. (i)
- b. (ii)
- c. (iii)
- d. None of these

20. In the figure given below, AOC is a straight line. The value of  $\angle x$  is



- a.  $65^\circ$
- b.  $55^\circ$
- c.  $45^\circ$
- d.  $60^\circ$

## SECTION - B : EVERYDAY MATHS

21. Ramesh plans to fence the boundary of a garden. What should Ramesh know to make sure he buys enough fence?

- a. Length of the garden
- b. The perimeter of the garden
- c. Area of the garden
- d. None of these

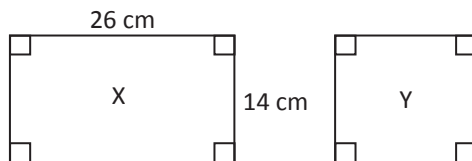
22. Ruby jogs around a square park of side 65 m, 2 times. How much distance did she cover in all?

- a. 130 m
- b. 260 m
- c. 240 m
- d. 520 m

23. For a project, Raju cuts a piece of paper into a shape of 4 sides, but none of the sides are of the same length. What is the shape?

- a. Rectangle
- b. Pentagon
- c. Square
- d. Quadrilateral

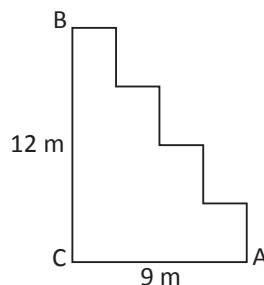
24. Seema used a wire to form a rectangle X as shown below. The same length of wire is used to form a square Y.



The side of the square Y is

- a. 24 cm
- b. 26 cm
- c. 28 cm
- d. 20 cm

25. An ant crawls from point A to point B using the staircase. How much distance will it cover to reach point B?



- a. 20 m
- b. 30 m
- c. 21 m
- d. 42 m

## SECTION - C : BRAINBOX

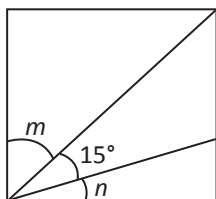
26. Which of the following figures have line of symmetry?



- a. A and C only

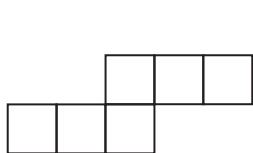
- b. A and D only
- c. A, C and D only
- d. A, B, C and D

27. The figure given below shows a square. Given that,  $\angle m$  is 4 times the  $\angle n$ . The value of  $\angle m$  and  $\angle n$  are

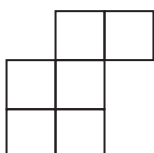


- a.  $15^\circ, 60^\circ$       b.  $15^\circ, 45^\circ$   
c.  $60^\circ, 15^\circ$       d.  $45^\circ, 15^\circ$

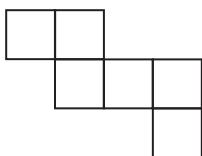
28. Which of the following cannot be folded to form a cube?



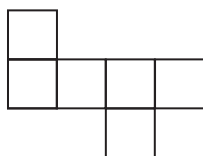
(A)



(B)



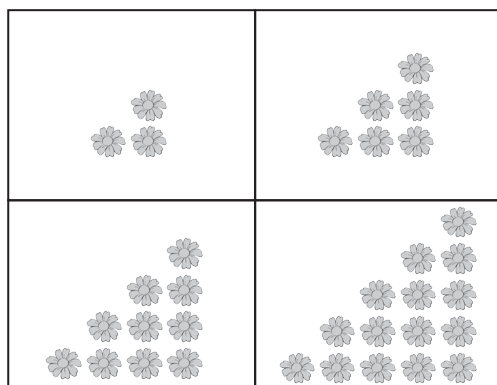
(C)



(D)

- a. B and D only  
b. C only  
c. B only  
d. A and B only

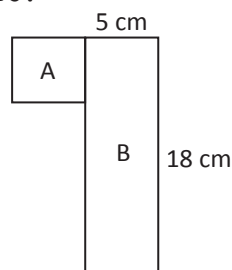
29. Study the pattern given below.



How many flowers should there be in the 6th box?

- a. 25      b. 26  
c. 28      d. 30

30. The figure given below is made up of square A and rectangle B. The breadth of rectangle B is as long as the length of square A. What is the perimeter of the figure?



- a. 54 cm  
b. 23 cm  
c. 56 cm  
d. 60 cm

Darken your choice with HB pencil

1. (a) (b) (c) (d)

2. (a) (b) (c) (d)

3. (a) (b) (c) (d)

4. (a) (b) (c) (d)

5. (a) (b) (c) (d)

6. (a) (b) (c) (d)

7. (a) (b) (c) (d)

8. (a) (b) (c) (d)

9. (a) (b) (c) (d)

10. (a) (b) (c) (d)

11. (a) (b) (c) (d)

12. (a) (b) (c) (d)

13. (a) (b) (c) (d)

14. (a) (b) (c) (d)

15. (a) (b) (c) (d)

16. (a) (b) (c) (d)

17. (a) (b) (c) (d)

18. (a) (b) (c) (d)

19. (a) (b) (c) (d)

20. (a) (b) (c) (d)

21. (a) (b) (c) (d)

22. (a) (b) (c) (d)

23. (a) (b) (c) (d)

24. (a) (b) (c) (d)

25. (a) (b) (c) (d)

26. (a) (b) (c) (d)

27. (a) (b) (c) (d)

28. (a) (b) (c) (d)

29. (a) (b) (c) (d)







30. (a) (b) (c) (d)

**Directions (Q1 to Q2):** The following table shows the number of books borrowed by each pupil and the number of pupils. Study the table and answer the questions that follow.

No. of books borrowed by each pupil	0	1	2	3	4
No. of pupils	98	136	184	95	28

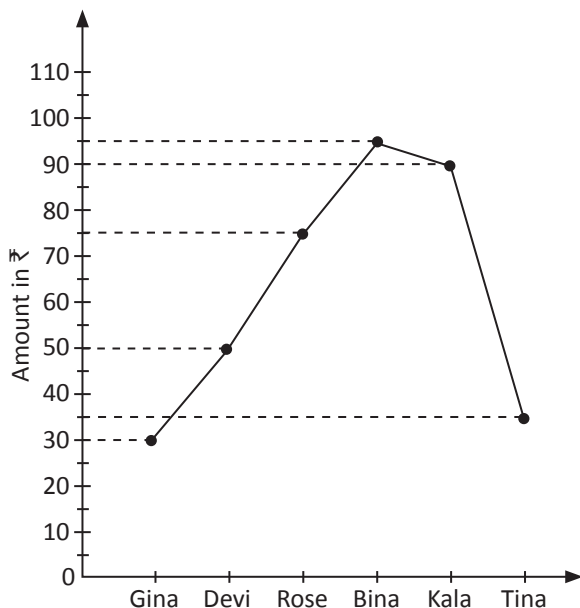
- How many pupils borrowed more than two books?
  - 133
  - 123
  - 418
  - 320
- How many pupils borrowed exactly one book?
  - 98
  - 136
  - 184
  - 95

**Directions (Q3 to Q5):** This pictograph tells us about the kind of books Anuj has read. Study it and answer the questions that follow.

	Books Anuj has read
Horror	
Adventure	
Mystery	
Fantasy	
Detective	
 = 6 books	

- How many books did Anuj read in all?
  - 90
  - 54
  - 15
  - 75
- How many fantasy books did he read?
  - 5
  - 45
  - 54
  - 30
- What is the total number of detective and adventure books read by Anuj?
  - 30
  - 4
  - 24
  - 18
- A graph drawn using vertical bars is called a
  - line graph
  - pictograph
  - pie graph
  - bar graph

**Directions (Q7 to Q10):** The graph given below shows the amount spent by six girls. Study it carefully and answer the questions that follow.

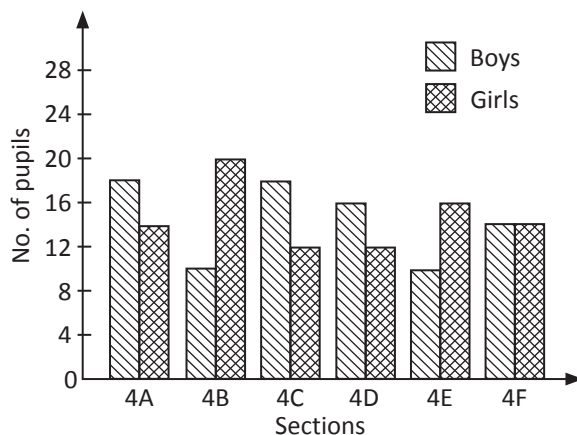


7. Which girl spent ₹75?
  - a. Gina
  - b. Tina
  - c. Rose
  - d. Devi
8. What was the total amount spent by Bina and Tina?
  - a. ₹185
  - b. ₹130
  - c. ₹135
  - d. ₹125
9. Which two girls spent more than Rose?
  - a. Gina and Devi
  - b. Devi and Tina
  - c. Bina and Kala
  - d. Gina and Tina

10. What was the total amount spent by all the 6 girls?

- a. ₹375
- b. ₹385
- c. ₹395
- d. ₹365

**Directions (Q11 to Q14):** The bar graph given below shows the number of boys and girls in six sections of class 4 in a school. Study it to answer the questions.

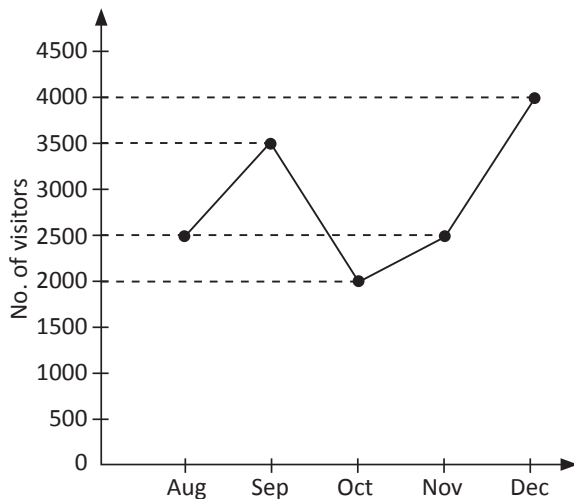


11. Which class has the maximum number of pupils?
  - a. 4A
  - b. 4B
  - c. 4D
  - d. 4F
12. The number of boys is half the number of girls in class
  - a. 4B
  - b. 4D
  - c. 4E
  - d. 4F
13. There are two classes that have an equal number of girls. The total number of boys in those classes is
  - a. 24
  - b. 34
  - c. 28
  - d. 30

14. How many fewer boys are there than the girls in class 4 ?

- a. 2                      b. 5  
c. 6                      d. 4

**Directions (Q15 to Q19):** The line graph given below shows the number of visitors at a theme park in the past five months. Study it carefully and answer the questions that follow.



15. How many visitors were there in October?

- a. 2500                      b. 2000  
c. 3500                      d. 1500

16. In which month there were 3500 visitors?

- a. December              b. August  
c. September              d. October

17. What was the increase in the number of visitors from August to September?

- a. 2500                      b. 3500

- c. 6000                      d. 1000







18. What was the decrease in the number of visitors from September to October?

- a. 3500                      b. 1500  
c. 2000                      d. 5000

19. What was the difference between the number of visitors in September and December?

- a. 500                      b. 4000  
c. 3500                      d. 7500

**Directions (Q20 to Q23):** The following pictograph shows the number of different fruit trees in an orchard. Study it to answer the questions.

Fruits	Number of trees
Apple	
Guava	
Mango	
Orange	
Pear	
One  represents 150 trees	

20. What is the total number of fruit trees in the orchard?

- a. 4500                      b. 4950  
c. 4900                      d. 33

21. How many orange trees are there in the orchard?
- a. 1050                      b. 1200  
c. 900                        d. 1300
22. How many more apple trees are there than the mango trees?
- a. 300                        b. 900  
c. 600                        d. 1500
23. The number of Guava trees in the orchard is equal to the sum of the number of two types of trees. Which of the following two types of tree correctly match with the given condition?
- a. Apple and Orange  
b. Orange and Mango  
c. Apple and Pear  
d. Mango and Apple
24. In which of the following subjects, the student has shown the maximum improvement.
- a. Hindi  
b. Science  
c. Social Science  
d. Maths
25. In which of the following subjects the student has shown the least improvement?
- a. Hindi  
b. Maths  
c. English  
d. Science
26. What are the total marks obtained in the second term?
- a. 490  
b. 390  
c. 323  
d. 380
27. In which of the following subjects did the student get the lowest marks in the first term and the second term, respectively?
- a. English and Social Science  
b. Maths and Science  
c. Hindi and English  
d. Maths and English

**Directions (Q24 to Q27):** The performance of a student in 1st term and 2nd term examinations is given below. Read it carefully to answer the questions.

Subject	1st term (out of 100)	2nd term (out of 100)
English	60	62
Hindi	70	75
Maths	18	82
Science	81	85
Social Science	94	86

**Directions (Q28 to Q32):** The table given below shows the number of 50 paise and 20 paise sweets, four children bought from a sweet machine. Read it to answer the questions.

Child	Number of 50 paise sweets	Number of 20 paise sweets
Ajay	8	10
Madhvi	4	12
Kalpna	6	7
Roy	3	5

28. Who bought the maximum number of sweets?

- a. Madhvi                      b. Kalpna  
c. Ajay                         d. Roy

29. Who spent the least amount of money on the sweets?

- a. Madhvi                      b. Roy  
c. Kalpna                      d. Ajay

30. How much amount was spent by Madhvi and Kalpna together?

- a. ₹4.40                      b. ₹10.40  
c. ₹8.80                      d. ₹6.80

31. Which two children spent equal amount on sweets?

- a. Madhvi and Roy  
b. Kalpna and Ajay  
c. Ajay and Roy  
d. Kalpna and Madhvi

32. If Kalpna had ₹5, then how much did she have after buying the sweets?

- a. ₹0.30  
b. ₹0.40  
c. ₹0.60  
d. ₹0.50

Darken your choice with HB pencil

1. (a) (b) (c) (d)

2. (a) (b) (c) (d)

3. (a) (b) (c) (d)

4. (a) (b) (c) (d)

5. (a) (b) (c) (d)

6. (a) (b) (c) (d)

7. (a) (b) (c) (d)

8. (a) (b) (c) (d)

9. (a) (b) (c) (d)

10. (a) (b) (c) (d)

11. (a) (b) (c) (d)

12. (a) (b) (c) (d)

13. (a) (b) (c) (d)

14. (a) (b) (c) (d)

15. (a) (b) (c) (d)

16. (a) (b) (c) (d)

17. (a) (b) (c) (d)

18. (a) (b) (c) (d)

19. (a) (b) (c) (d)

20. (a) (b) (c) (d)

21. (a) (b) (c) (d)

22. (a) (b) (c) (d)

23. (a) (b) (c) (d)

24. (a) (b) (c) (d)

25. (a) (b) (c) (d)

26. (a) (b) (c) (d)

27. (a) (b) (c) (d)

28. (a) (b) (c) (d)

29. (a) (b) (c) (d)

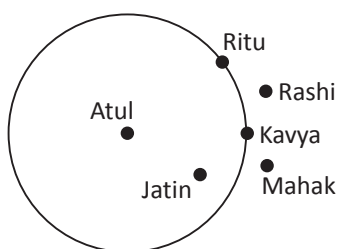
30. (a) (b) (c) (d)

31. (a) (b) (c) (d)

32. (a) (b) (c) (d)



1. Six children drew a circle to play a game. At the start of the game, they sat at different points as shown below. Atul was at the centre of the circle.



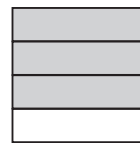
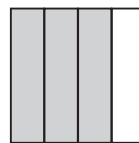
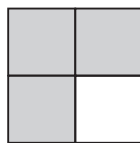
Which two children were at the same distance from Atul?

- Rashi and Jatin
  - Kavya and Ritu
  - Ritu and Mahak
  - Rashi and Ritu
2. The table given below shows sunglasses manufactured by two factories in 4 weeks.

Weeks	Factory A	Factory B
1	20	30
2	35	50
3	40	35
4	50	40

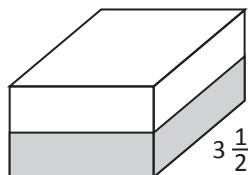
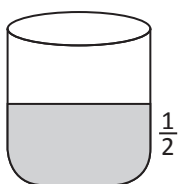
Which of the following statements is true?

- In the first and the last week, factory A manufactured fewer sunglasses than factory B.
  - In first two weeks, factory B manufactured more sunglasses than factory A.
  - In last three weeks, factory A manufactured more sunglasses than factory B.
  - In last two weeks, factory A manufactured fewer sunglasses than factory B.
3. Raju, Nita and Ritu are painting three identical walls. Who has painted a greater part?



- Raju
  - Ritu
  - Nita
  - All three of them painted equal parts of the walls.
4. A mug and a container of equal heights is shown below. Both are filled as shown in the given picture. If the capacity of the mug is half the

capacity of the container, then to what level the water will rise in the container after pouring the water of the mug into the container?



- a.  $\frac{1}{4}$
- b.  $\frac{1}{2}$
- c.  $\frac{3}{4}$
- d. It will remain same.

5. A number pattern is given as:

355, 465, 575, 685, ? ...

Which of the following numbers is the next in this pattern?

- |        |        |
|--------|--------|
| a. 785 | b. 705 |
| c. 765 | d. 795 |

6. + + + = 32

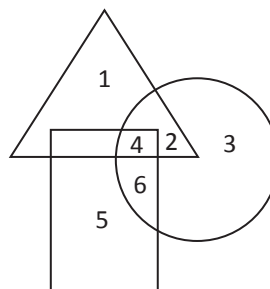
= + +

= ?      = ?

- |          |           |
|----------|-----------|
| a. 4, 12 | b. 12, 18 |
| c. 4, 14 | d. 24, 32 |
7. If  $M = 34$ ,  $O = 23$ ,  $N = 45$ ,  $K = 21$ ,  $E = 7$  and  $Y = 24$ , then what is the value of  $K \div E \times Y - M + O$ ?

- a. 45
- b. 25
- c. 75
- d. None of these

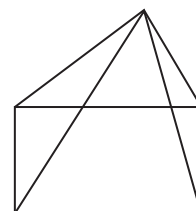
8. Which of the following numbers lies in the triangle and the rectangle but not in the circle?



- |      |                  |
|------|------------------|
| a. 6 | b. 4             |
| c. 2 | d. None of these |
9. If  $\square \times 4 = \triangle$  and  $\triangle - \square = 330$ , then  $\triangle + \square = ?$
- |        |        |
|--------|--------|
| a. 110 | b. 440 |
| c. 550 | d. 990 |
10. There are \_\_\_\_\_ tens in 25620.

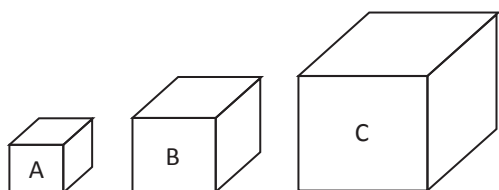
- a. 56
- b. 2
- c. 62
- d. 2562

11. How many vertices does a square pyramid have?



- a. 4
- b. 6
- c. 5
- d. 7

12. A has  $\frac{1}{3}$  mass of B and B has  $\frac{1}{2}$  mass of C. If C has a total mass of 1 kg 200 g, then the mass of A is

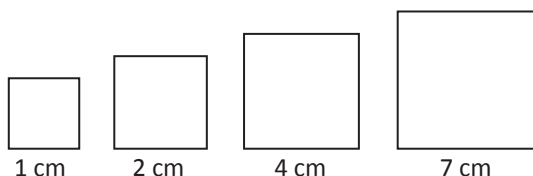


- a. 800 g                      b. 400 g  
c. 200 g                      d. 600 g
13. A carpenter buys 232 meters of mango wood to build 29 doors. How many meters would he have to buy if he wants to build 11 doors?
- a. 77 meters                      b. 88 meters  
c. 51 meters                      d. 99 meters

14. How many triangles are there in this figure?

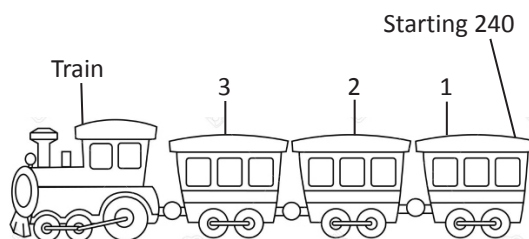


- a. 5                                  b. 3  
c. 7                                  d. 6
15. The squares shown below are increasing in size from left to right. If the pattern continues, then how long will be the each side of the next square?



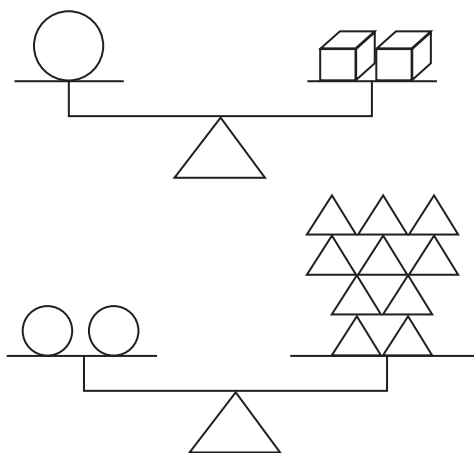
- a. 8 cm                                  b. 10 cm  
c. 11 cm                                  d. 10 cm

16. There are 240 passengers in a train. The train passes through three stations. If at each station the number of passengers is doubled, then the total number of passengers at station 3 would be



- a. 1120  
b. 960  
c. 720  
d. None of these

17.




In the figure given above, 1 sphere balances 2 cubes and 2 spheres balances 10 triangles, then 6 cubes is equal to

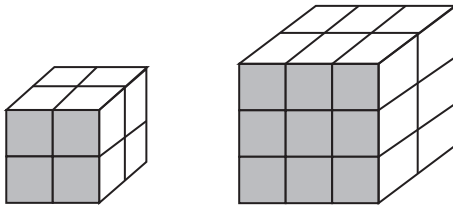
- a. 15 triangles  
b. 40 triangles  
c. 35 triangles  
d. 20 triangles

18. Which of the following numbers will continue the given series?

70, 68, 64, 58, 50, \_\_\_\_\_

- a. 42                      b. 40  
c. 44                      d. 38

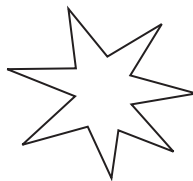
19. If each  weighs 2 kg, then the total weight of the given cubes is



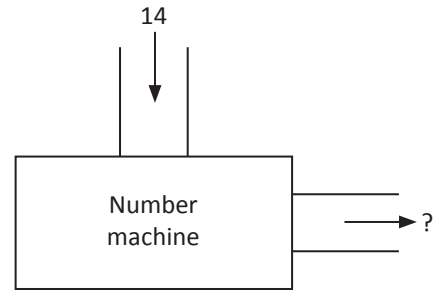
- a. 52 kg  
b. 30 kg  
c. 40 kg  
d. 60 kg

20. How many corners are there in the given shape?

- a. 8  
b. 15  
c. 14  
d. 7

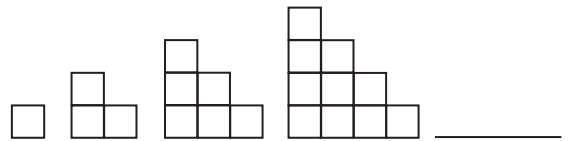


21. When a number is put into a machine given below, a different number comes out. If 2 goes in, 6 comes out. If 4 goes in, 12 comes out. If 6 goes in, 18 comes out. If 8 goes in, 24 comes out. If 14 goes in, then what number should come out?



- a. 12                      b. 48  
c. 42                      d. 40

22. How many blocks will be there in the next figure?



- a. 10                      b. 15  
c. 20                      d. 21

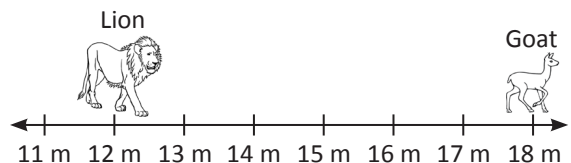
23. If  $\triangle + \triangle + \triangle + \triangle = 1000 \text{ mL}$  and

$$\text{Cylinder} = \triangle + 150 \text{ mL}, \text{ then}$$

$$\text{Cylinder} + \text{Cylinder} + \text{Cylinder} + \text{Cylinder} + \text{Cylinder} \text{ is equal to}$$

- a. 1000 mL                      b. 2000 mL  
c. 1500 mL                      d. 3000 mL

24. A lion is chasing a goat



The lion starts at 12 m and jumps 2 m every time. The goat starts at 18 m and jumps 1 m every time. If they both start at the same time, then

after how many jumps would the lion reach the goat?

- a. after 5 jumps    b. after 6 jumps  
c. after 3 jumps    d. after 2 jumps

25. In a lawn, Raju notices that there are 46 legs. How many people and cats are there in the lawn?

- a. 7 people and 7 cats  
b. 7 people and 8 cats  
c. 7 people and 9 cats  
d. 6 people and 8 cats

26. In the evening, the hour hand of a clock is pointing between 5 and 6 and the minute hand is pointing at 3. What is the current time?

- a. 9:15 a.m.            b. 5:15 a.m.  
c. 5:15 p.m.            d. 9:15 p.m.

27. If all the letters of the English alphabet are written in reverse order, then the letter at the 7th place to the right of letter Q will be

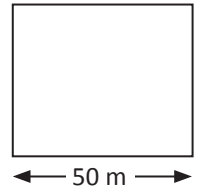
- a. L                            b. J  
c. K                            d. I

28. A dog takes 5 rounds of the field shown below. The distance it covers in one round around this square garden is P. So, if

$5 \times P = Q$  m = R km, then the

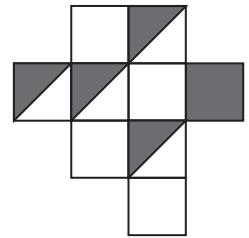
value of P, Q and R are

- a. 50, 200, 1  
b. 200, 1000, 1  
c. 50, 200, 1000  
d. 50, 200, 2000



29. What fraction of the figure is shaded?

- a.  $\frac{5}{9}$   
b.  $\frac{6}{9}$   
c.  $\frac{2}{3}$   
d.  $\frac{1}{3}$



30. Choose the odd one out.

- a. **A**                            b. **Q**  
c. **U**                            d. **E**

Darken your choice with HB pencil

1. (a) (b) (c) (d)  
2. (a) (b) (c) (d)  
3. (a) (b) (c) (d)  
4. (a) (b) (c) (d)  
5. (a) (b) (c) (d)  
6. (a) (b) (c) (d)  
7. (a) (b) (c) (d)  
8. (a) (b) (c) (d)

9. (a) (b) (c) (d)  
10. (a) (b) (c) (d)  
11. (a) (b) (c) (d)  
12. (a) (b) (c) (d)  
13. (a) (b) (c) (d)  
14. (a) (b) (c) (d)  
15. (a) (b) (c) (d)  
16. (a) (b) (c) (d)

17. (a) (b) (c) (d)  
18. (a) (b) (c) (d)  
19. (a) (b) (c) (d)  
20. (a) (b) (c) (d)  
21. (a) (b) (c) (d)  
22. (a) (b) (c) (d)  
23. (a) (b) (c) (d)  
24. (a) (b) (c) (d)

25. (a) (b) (c) (d)  
26. (a) (b) (c) (d)  
27. (a) (b) (c) (d)  
28. (a) (b) (c) (d)  
29. (a) (b) (c) (d)  
30. (a) (b) (c) (d)

# Answers

## Chapter 1: Number Sense

1.	c	2.	a	3.	b	4.	d	5.	a	6.	a	7.	b	8.	a	9.	d	10.	b
11.	d	12.	b	13.	b	14.	b	15.	c	16.	b	17.	c	18.	d	19.	a	20.	a
21.	a	22.	a	23.	b	24.	c	25.	c	26.	c	27.	a	28.	a	29.	c	30.	a

## Chapter 2: Operations on Numbers

1.	c	2.	c	3.	d	4.	d	5.	d	6.	d	7.	a	8.	d	9.	c	10.	c
11.	a	12.	b	13.	b	14.	c	15.	c	16.	b	17.	a	18.	c	19.	b	20.	c
21.	b	22.	c	23.	b	24.	a	25.	c	26.	c	27.	a	28.	b	29.	c	30.	d

## Chapter 3: Fractions

1.	b	2.	a	3.	b	4.	b	5.	a	6.	d	7.	a	8.	d	9.	d	10.	c
11.	a	12.	a	13.	b	14.	d	15.	a	16.	a	17.	b	18.	c	19.	d	20.	a
21.	a	22.	d	23.	a	24.	a	25.	b	26.	a	27.	d	28.	a	29.	c	30.	b

## Chapter 4: Time, Money, Length, Mass and Volume

1.	c	2.	c	3.	d	4.	a	5.	a	6.	b	7.	b	8.	c	9.	a	10.	c
11.	b	12.	c	13.	d	14.	c	15.	b	16.	d	17.	c	18.	b	19.	a	20.	a
21.	d	22.	d	23.	b	24.	b	25.	a	26.	d	27.	b	28.	c	29.	c	30.	d

## Chapter 5: Geometry

1.	c	2.	c	3.	d	4.	c	5.	a	6.	d	7.	d	8.	c	9.	b	10.	d
11.	c	12.	b	13.	c	14.	d	15.	b	16.	b	17.	b	18.	c	19.	a	20.	c
21.	b	22.	d	23.	d	24.	d	25.	c	26.	c	27.	c	28.	c	29.	c	30.	c

## Chapter 6: Data Handling

1.	b	2.	b	3.	a	4.	d	5.	c	6.	d	7.	c	8.	b	9.	c	10.	a
11.	a	12.	a	13.	b	14.	a	15.	b	16.	c	17.	d	18.	b	19.	a	20.	b
21.	b	22.	a	23.	d	24.	d	25.	c	26.	b	27.	d	28.	c	29.	b	30.	c
31.	d	32.	c																

## Chapter 7: Logical Reasoning

1.	b	2.	b	3.	c	4.	a	5.	d	6.	a	7.	d	8.	d	9.	c	10.	d
11.	c	12.	c	13.	b	14.	d	15.	c	16.	b	17.	a	18.	b	19.	a	20.	c
21.	c	22.	b	23.	b	24.	b	25.	b	26.	c	27.	b	28.	b	29.	d	30.	b

## My Notes

[illegible]

## My Notes

[illegible]



## My Notes

[illegible]