INTERNATIONAL SOCIETY FOR OLYMPIAD

Empowering children to become Global Olympiad Champions

Eupheus Learning | 21st Century Learning Solutions

MATHS OLYMPIAD

PRACTICE BOOK

GRADE 3

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

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Any errors or omissions are unintentional. We would be grateful for notification of corrections that should be incorporated in the future reprints.

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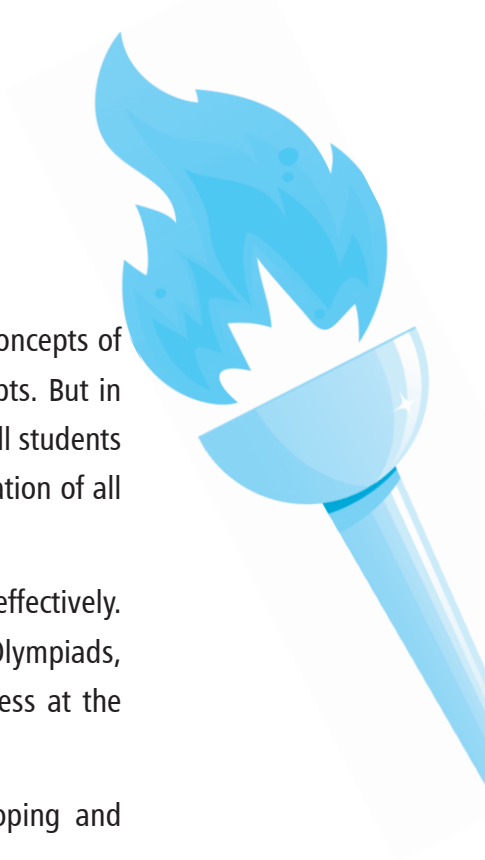
Preface



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.

Contents

Chapter

1

Numbers to 10000

SECTION - A : MATHEMATICAL REASONING

1. 5894 = 5000 + _____ 90 + 4

   The missing value in the given number sentence is

   a. 80

   b. 800

   c. 8000

   d. 8

2. Which of the following is the smallest odd number?

   a. 5793

   b. 5739

   c. 5379

   d. 5937

3. Which of the following complete the given number pattern?
   6318, 6328, 6338, _____ .

   a. 6824

   b. 6348

   c. 6842

   d. 6828

4. Find the difference between the place values of the digit 3 in 3286 and 4135.

   a. 0 b. 849

   c. 2970 d. 3030

5. Which of the following is incorrect?

   a. 4900 = 49 hundreds

   b. 3666 = 3000 + 600 + 6

   c. 2096 = 2 thousand 9 tens and 6 ones

   d. 7815 = seven thousand, eight hundred and fifteen

6 6593 is same as

   a. six thousand five hundred ninety-three

   b. six thousand nine hundred fifty-three

   c. six hundred ninety-three

   d. six thousand three hundred fifty-nine

7. Given below are 4 cards from a deck of number cards. Which is the largest possible 4-digit number that can be formed using all the cards?

5	6	8	2

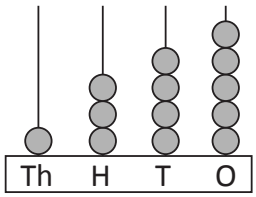
   a. 8652

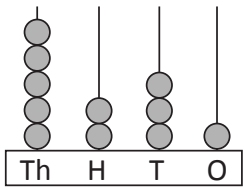
   b. 8562

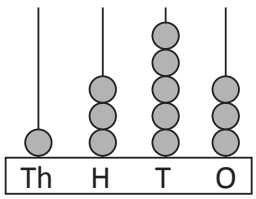
   c. 9652

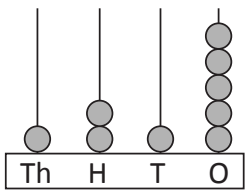
   d. 9562

8. Which of the following abacuses shows the number less than 1345?

a. 

b. 

c. 

d. 

9. The numeral for seven thousand five hundred eighty-three is

a. 7835 b. 7853

c. 7583 d. 8753

10. Which of the following will be the next pair of numbers in the given pattern?

(16, 30)	(22, 34)	(28, 38)	(34, 42)	(__, __)

a. 40, 46 b. 42, 48

c. 44, 50 d. 46, 52

11, Find the sum of A and B in the given number pattern.

4378	A	4178	B	3978

a. 7456

b. 8356

c. 8456

d. 8756

12. In 9542, the product of the digit in the tens place and the digit in the thousands place is same as

a. 23 + 16 b. 6 × 6

c. 9 twos d. 60 – 15

13. There are _____ odd numbers between 15 hundreds and 151 tens.

a. 5 b. 15

c. 50 d. 51

14. Add 47 hundreds to a number. The result is the number that comes just after 7509. What is the number?

a. 2610

b. 2710

c. 2810

d. 2910

15. Choose the correct option to complete the following:

6853 ☐ 5386

a. >

b. <

c. =

d. ≥

SECTION - B : EVERYDAY MATHS

16. Alison has a favourite 4-digit number. Every digit in the 4-digit number is different. The last 2 digits are the same as the odd number just after 79. The sum of the first 3 digits is 16. The digit in the hundreds place stands for 30 tens. Which of the following is Alison's favourite number?

    a. 5385 b. 5381

    c. 6377 d. 5383

17. The teacher wrote a number on the black board as shown below.

5	8	

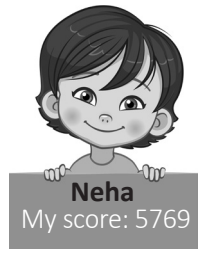
    If this number is formed with three different digits, then which of the following digits could fill the blank to make it the smallest number.

    a. 1 b. 9

    c. 7 d. 0

18. The following children share the points scored by them in a video game. Who has the greatest score?

a. 

b. 

c. 

d. 

19. 20 hundreds 15 tens 78 ones comes just before X. Y and X adds up to 5000. The value of Y is

    a. 2772 b. 2771

    c. 4571 d. 4572

20. Which of the following is the short form for 2000 + 600 + 8?

    a. 2680

    b. 2608

    c. 26008

    d. 2688

SECTION - C : BRAINBOX

21. If ☆ ☆ ☆ stands for 3,

    △ ☆ ☆ stands for 7,

    ☺ ☺ stands for 20,

    and ♥ stands for 100,

    what does ♥ ♥ ☺ ☺ ☺ ☺ △ △ ☆ ☆ ☆ ☆ stand for?

    a. 259

    b. 257

    c. 255

    d. 253

22. Identify the number using the given clues. “I am an even number with the greatest one digit number in the tens place, an odd number in the hundreds place and my thousand digit is the least even number.”

a. 2394

b. 3294

c. 3924

d. 3942

23. If 20 tens are added to the second smallest 4-digit even number, then the number is

a. 1200

b. 1202

c. 1204

d. 1020

24. W is 30 tens more than V. V is 10 hundreds less than 7230. The value of W is

a. 6530

b. 6930

c. 7930

d. 8530

25. Using the given digits, find the difference between the sum of the largest 4-digit number and the smallest 3-digit number, and the sum of the smallest 4-digit number and the largest 3-digit number.

4	1	7	2	7

a. 5545 b. 5645

c. 5845 d. 5745

Darken your choice with HB pencil

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

Chapter 2

Addition and Subtraction

SECTION - A : MATHEMATICAL REASONING

1. The difference between 5381 and 2323 is
   a. 8035
   b. 8350
   c. 3058
   d. 3085

2. The sum of 2357 and _____ is 8946.
   a. 5689
   b. 6589
   c. 8965
   d. 6598

3. The difference 6473 and 52 ☐ 2 is 1261. What is the missing number?
   a. 1 b. 2
   c. 3 d. 4

4. The difference between 5130 and the sum of 7103 and 2501 is
   a. 4447 b. 7444
   c. 4744 d. 4474

5. A number 'X' is added to 54, the sum is the largest 2-digit even number. The value of 'X' is
   a. 54 b. 44
   c. 64 d. 34

6. What number should be subtracted from 10000 to get the greatest 4-digit number?
   a. 4 b. 2
   c. 1 d. 3

7. The sum of all the odd numbers between 18 and 26 is
   a. 8 b. 44
   c. 84 d. 88

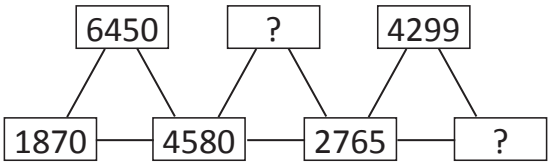
8. There are 389 cookies in a box. If the box can hold 3160 cookies, how many more cookies can be added in the box?
   a. 2771
   b. 2717
   c. 2761
   d. 2716

9. Which of the following digits can complete the given subtraction problem?

$$\begin{array}{r} 7\ 2\ \square\ 3 \\ -\ 1\ 6\ 4\ 1 \\ \hline 5\ 5\ 7\ 2 \end{array}$$

   a. 3 b. 1
   c. 5 d. 7

10 Study the following number pattern.



The sum of the missing numbers is

a. 1534 b. 7345

c. 8879 d. 10000

11 80 hundreds 56 ones – 45 hundreds 23 tens =

a. 2126 b. 2288

c. 3326 d. 4263

12 How much is 453 less than 4478?

a. 5024 b. 4205

c. 4025 d. 2405

13. 14 years ago, Joya was 39 years old. It will be 2023 in 8 years time. In which year was Joya born?

a. 1962 b. 1978

c. 1990 d. 2006

14. The sum of 431 tens and _____ is 9546.

a. 5362

b. 5236

c. 2536

d. 5326

15. Which of the following numbers will replace the box in the given addition problem.

a. 1 b. 2

c. 4 d. 3

$$\begin{array}{r} 4\,3\,\square\,2 \\ +\,2\,5\,7\,8 \\ \hline 6\,8\,9\,0 \end{array}$$

SECTION - B : EVERYDAY MATHS

16. Karan has 856 stickers. Jaya has 35 fewer stickers than Karan. How many stickers does Jaya have?

a. 821 b. 811

c. 791 d. 781

17. Heena had twice as much money as Simon. Nancy had ₹ 120 less than Heena. The three people had ₹ 380 altogether. How much did Nancy have?

a. 80 b. 60

c. 40 d. 20

18. Paul sold 537 cars in January. He sold 69 fewer cars in February than in January. How many cars did he sell in two months?

a. 1005 cars b. 1003 cars

c. 1006 cars d. 1001 cars

19. There are 9900 people at a parade. Out of which, 3560 are girls, 4015 are boys and some are adults. How many adults are there?

a. 2523 b. 1523

c. 2325 d. 1325

20. 19 hundreds 18 ones – ☆ = 584

Which of the following gives the value of ☆ ?

a. 834 + 500 b. 1838 – 500

c. 668 + 665 d. 2664 – 1329

SECTION - C : BRAINBOX

21. The sale of flowers in a flower shop was ₹1023 on Monday, ₹1294 on Tuesday and ₹3129 on Wednesday. What was the total sale of flowers in these three days?

    a. ₹5644 b. ₹5464

    c. ₹5446 d. ₹5000

22. On a straight road, a lorry was 1370 m behind a bus and a car was 1380 m ahead of the bus. How far apart was the lorry from the car?

    a. 2350 b. 2550

    c. 2750 d. 2950

23. Mrs. Negi baked 1674 cookies on Friday. On Saturday, she baked 256 fewer cookies than Friday. On Sunday, she baked as many cookies as she did on both Friday and Saturday. How many cookies did Mrs. Negi bake altogether?

    a. Twice of 3092

    b. Thrice of 3092

    c. Three-fourth of 3092

    d. None of these

24. Jeffrey is 24 years younger than his mother. His son is 21 years younger than him. How old is his mother now, if his son was 7 year old last year?

    a. 29

    b. 41

    c. 43

    d. 53

25. The difference between two numbers is 197. Add 50 to the smaller number and subtract 50 from the greater number. Find their difference now.

    a. 97

    b. 100

    c. 197

    d. 103

Darken your choice with HB pencil

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

Chapter 3

Multiplication and Division

SECTION - A : MATHEMATICAL REASONING

1. 4 x 0 =

   a. 4 b. 0

   c. 40 d. 42

2. Which of the following statements is true?

   a. Multiplication is the process of repeated addition.

   b. 0 divided by any number results in 0.

   c. Any number multiplied by 1 is the number itself.

   d. All the above

3. ★ × 7 = 7 + 7 + 7 + 7

   The value of ★ × 6 is

   a. 10 b. 24

   c. 42 d. 58

4. The product of 4 and 2 gives the same result as _____ divided by 3.

   a. 3 + 18 b. 7 + 15

   c. 11 + 12 d. 18 + 6

5. □ × 8 = 56,

   □ + □ + □ + □ + □ is equal to

   a. 21 b. 28

   c. 35 d. 42

6. Which sign in the box will make the number sentence true?

   54 □ 6 = 9

   a. + b. –

   c. x d. ÷

7. Which of the following numbers will complete the given steps?

   □ → multiplied by 4 → 2 tens and 4 ones

   a. 6 b. 4

   c. 3 d. 2

8. Divide the product of 7 and 6 by 5. The product of the quotient and the remainder is

   a. 8

   b. 2

   c. 12

   d. 16

9. A number gives a quotient of 7 when divided by 8 but it gives a remainder of 6 when divided by 9. The number is

   a. 56 b. 58

   c. 60 d. 61

10 Subtract the product of 45 and 9 from 999. How many nines are there in the result?

a. 44 b. 55

c. 66 d. 77

11 $6 \times 7 = 42$

$7 \times 7 = 42 +$ _____

Which of the following missing numbers will complete the given number sentence?

a. 1 b. 2

c. 6 d. 7

12 Which of the following is the same as 8×4?

a. $8 + 4$ b. $8 + 8 + 8 + 8$

c. $8 - 4$ d. $8 \times 8 \times 8 \times 8$

13 There are 12 cows in old Medonald's Farm. How many legs of cows are there in all?

a. 16 b. 48

c. 52 d. 32

14 The product of the missing digits is

?	4	?	×	6	=	8	7	6

a. 1 b. 2

c. 4 d. 6

15.  stands for 28 girls.

How many girls does  stand for?

a. 16 b. 12

c. 8 d. 4

SECTION - B : EVERYDAY MATHS

16. There are 5 tables. If the chairs are double than the number of tables, how many legs of chairs are there in all?

a. 40 b. 30

c. 20 d. 50

17. Each notebook costs ₹8. How many notebooks one can buy for ₹672?

a. 80 b. 84

c. 88 d. 92

18. Sharon distributed 620 stamps equally to her 4 friends. How many stamps will each friend receive?

a. 155 b. 160

c. 165 d. 170

19. A fruit seller sold 9 boxes of apples in January. He sold thrice as many boxes of apples in February than in January. How many boxes of apples did he sell in February?

a. 12 b. 18

c. 27 d. 36

20. Ali had 4 times money than Suman had. Bobby had ₹65 less than Suman. If Ali had ₹736, then Bobby has

a. ₹111 b. ₹113

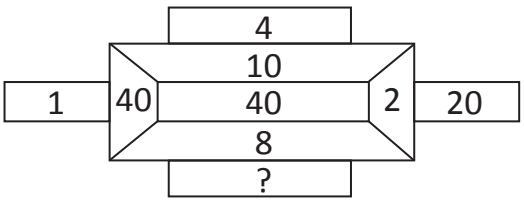
c. ₹117 d. ₹119

SECTION - C : BRAINBOX

21. The value of ♥ is double than the value of ★. What is the value of ♥, if ★ + 30 = 94?

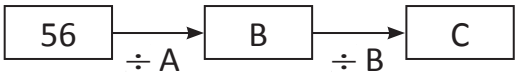
a. 128
b. 64
c. 146
d. 138

22. The missing number in the diagram shown below is



a. 58
b. 48
c. 32
d. 5

23. If the value of B is twice the value of C, what is the sum of A, B and C?



a. 29
b. 31
c. 33
d. 35

24. A number when divided by 9 gives a quotient of 83 and a remainder of 1. What is the number?

a. 748
b. 747
c. 93
d. 84

25. 189 passengers were in a train. Another 51 passengers boarded the train at the next stop. There are 3 times as many men as women on the train now. How many more men than women are there now?

a. 210
b. 120
c. 150
d. 180

Darken your choice with HB pencil

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

Chapter

4

Money

SECTION - A : MATHEMATICAL REASONING

1. _____ is the Indian Currency.

   a. Rupee b. Dinar

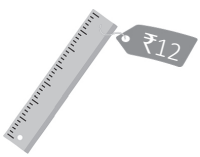
   c. Dollar d. Dollar

2. If you had ₹10, what could you buy?

   a. 

   b. 

   c. 

   d. 

3. The total amount of money is _____.

   a. ₹19 b. ₹15

   c. ₹18 d. ₹20

4. Riya had ₹150. She bought two books for ₹65 each. How much money is she left with?

   a. ₹60 b. ₹100

   c. ₹15 d. ₹20

5. Which of the following statements is true?

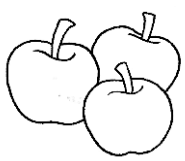
   a. 200 paise is same as ₹2.

   b. ₹50 equal to 5000 paise.

   c. 2000 paise + 200 paise equal to ₹22

   d. All the above

6. The fruit seller sells 3 apples for ₹30.



   Mira paid the fruit seller ₹100 for some apples. She got back ₹10. How many apples did she buy?

   a. 9 b. 12

   c. 8 d. 4

7. The amount of money in set A is exchanged for 2-rupee notes and that in set B is exchanged for

1-rupee coins. How many notes and coins are there altogether?

Set A

Set B

a. 35 b. 45

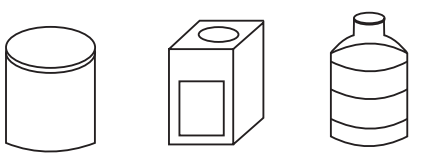
c. 40 d. 30

8. A packet of potato chips costs ₹3.50. Hudson bought 10 packets. Thereafter, he is left with ₹2. How much did he have originally?

a. ₹35 b. ₹37

c. ₹40 d. ₹39

9. Study the information given below and answer the questions.



Milk powder ₹25.90 | Biscuit ₹24.50 | Cooking oil ₹18.90

Two tins of biscuits costs _____ more than a cost of tin of milk powder and a bottle of cooking oil.

a. ₹4.20 b. ₹4.40

c. ₹4.60 d. ₹4.80

10. Devika has ₹57. How much money is she left with if she buys a tin of milk powder and a tin of biscuits?

a. ₹6.50 b. ₹6.60

c. ₹6.40 d. ₹6.30

11. Two shirts and one belt costs ₹1300. One shirt and one belt costs ₹800. The cost of one belt is

a. ₹300 b. ₹250

c. ₹275 d. ₹260

12. Four hundred thirteen rupees forty-five paise can be written as

a. ₹413.54 b. ₹413.45

c. ₹431.45 d. ₹431.54

13. How many 5-rupee coins are there in ₹100?

a. 15 b. 30

c. 25 d. 20

14. Five 100-rupee notes and four 10-rupee notes will amount to

a. ₹640 b. ₹740

c. ₹540 d. ₹470

15. There are two types of dictionaries —hardcover and paperback editions. The hardcover edition costs ₹25.70 while the paperback edition costs ₹19.90. How much more do two hardcover editions cost than two paperback editions?

a. ₹11.60 b. ₹11.30

c. ₹11.20 d. ₹11.10

SECTION - B : EVERYDAY MATHS

16. Bharti went shopping with six 20-rupee notes. After buying some groceries, she was left with ₹38.40. How much did she spend on the groceries?

a. ₹81.80 b. ₹81.60

c. ₹81.20 d. ₹82.60

17. Rolly exchanged ₹30 for some two-rupee notes and she puts the notes into boxes P and Q. There were four 2-rupee notes in box Q. How many more two-rupee notes were there in box P than in box Q?

a. 7 b. 8

c. 9 d. 11

18. □ + □ + □ + ◇ = ₹56

□ + □ + ◇ + ◇ = ₹64

The value of ◇ + ◇ is

a. ₹50 b. ₹20

c. ₹40 d. ₹10

19. Ramesh has 5 times as much money as Lokesh. Sohan had ₹60. The three children had ₹300 altogether. How much money did Ramesh have?

a. ₹100 b. ₹200

c. ₹300 d. ₹400

20. A packet of fruit cake costs ₹25 Rubina bought 10 packets and was left with ₹100. How much did she have originally?

a. ₹510 b. ₹250

c. ₹350 d. ₹530

SECTION - C : BRAINBOX

21. During a sale, story books were sold at 4 for ₹20. Deepak had ₹130 in his pocket. What was the maximum number of books he could buy?

a. 12 b. 24

c. 10 d. 8

22. Rohit has some 20-paise and 10-paise coins worth ₹1.60. He has four 10-paise coins. How many 20-paise coins does he have?

a. 12 b. 8

c. 6 d. 4

23. Rohit earns ₹8 for selling 1 pen. Whenever he sells 4 pens, he is given an extra ₹13. How much will he earn if he sells 14 pens?

a. ₹151 b. ₹141

c. ₹131 d. ₹121

24. ★ + ₹72.30 = ₹282.40 – ₹91.90
Subtracting _____ from ★ gives ₹50.

a. ₹68.00
b. ₹68.20
c. ₹68.40
d. ₹68.80

25. Three metres of cloth costs ₹550. Two metres of cloth is needed to sew a dress. How much does Akash need to pay, if he wants to sew 9 dresses?

a. ₹3300
b. ₹3030
c. ₹3303
d. ₹3003

Darken your choice with HB pencil

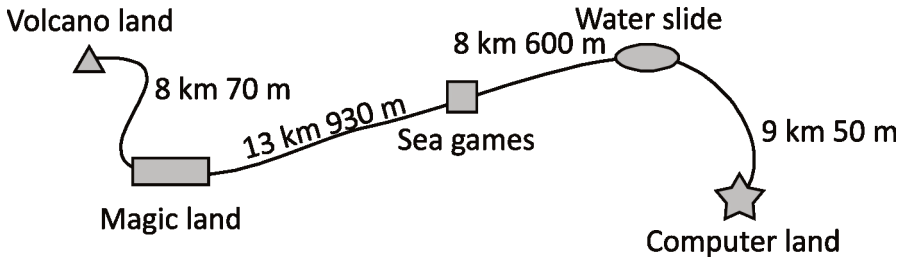
1.	(a) (b) (c) (d)	8.	(a) (b) (c) (d)	15.	(a) (b) (c) (d)	22.	(a) (b) (c) (d)
2.	(a) (b) (c) (d)	9.	(a) (b) (c) (d)	16.	(a) (b) (c) (d)	23.	(a) (b) (c) (d)
3.	(a) (b) (c) (d)	10.	(a) (b) (c) (d)	17.	(a) (b) (c) (d)	24.	(a) (b) (c) (d)
4.	(a) (b) (c) (d)	11.	(a) (b) (c) (d)	18.	(a) (b) (c) (d)	25.	(a)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

Chapter 5

Length

SECTION - A : MATHEMATICAL REASONING

Look at the picture given below and answer (Q1 to Q6).



1. The distance between the magic land and the computer land is ☐ km ☐ m.
   a. 21 km 850 m
   b. 31 km 580 m
   c. 31 km 750 m
   d. 31 km 650 m

2. The distance between the water slide and the volcano land is ☐ km ☐ m.
   a. 30 km 600 m
   b. 30 km 580 m
   c. 30 km 750 m
   d. 30 km 650 m

3. The distance between sea games and ☐ is 8600 m.
   a. Computer land
   b. Magic land
   c. Volcano land
   d. Water slide

4. Sea games is ☐ km far from volcano land.
   a. 11 km b. 17 km
   c. 19 km d. 22 km

5. Water slide is ☐ m nearer to sea games than to computer Land.
   a. 450 m b. 550 m
   c. 650 m d. 750 m

6. The total distance between volcano land and the computer land is ☐ km ☐ m.
   a. 39 km 650 m
   b. 39 km 550 m
   c. 39 km 750 m
   d. 39 km 850 m

7. 413 cm + 187 cm =
   a. 7 m
   b. 6 m
   c. 5 m
   d. 10 m

8. 3613 m + 4387 m =
   a. 5 km
   b. 8 km
   c. 9 km
   d. 1 km

9. To sew a dress, 2 m cloth is required. Ritu wants to stitch 8 such dresses. How many metres of cloth does she need?
   a. 16 m
   b. 12 m
   c. 10 m
   d. 28 m

10. 4 km 45 m =
   a. 445 m
   b. 4045 m
   c. 454 m
   d. 4540 m

11. 7 km 13 m + 2 km 5 m =
   a. 9 km 5 m
   b. 9 km 18 m
   c. 91 km 8 m
   d. 9 km 81 m

12. 1 km 78 m less than 2 km 100 m is ⬡ . ⬡ is _____ m longer than 800 m.
   a. 111
   b. 222
   c. 333
   d. 444

13. A school is located between a hawker centre and a community centre. The school is 489 m away from the hawker centre and 123 m away from the community centre. How far is the hawker centre from the community centre?
   a. 366 m
   b. 376 m
   c. 512 m
   d. 612 m

14. ⊘ + ⊘ = 180 cm

    ⊘ – 55 cm = _____ cm
   a. 31
   b. 33
   c. 35
   d. 37

15. A gardener arranges four pots of roses on a horizontal rack. If each pot is 30 cm apart from the next pot, then the rack is at least _____ long.
   a. 60 cm
   b. 90 cm
   c. 120 cm
   d. 150 cm

SECTION - B : EVERYDAY MATHS

16. A squared paper of sides 18 cm is cut into 4 identical smaller squares. What is the length of each smaller square?

    a. 3.5 cm b. 4.5 cm

    c. 5.5 cm d. 9 cm

17. Sharon had a ribbon. She cuts it into 3 equal pieces—X, Y and Z. She cuts ribbon X further into 5 equal pieces. The length of each piece of ribbon X is 32 cm. What was the original length of the ribbon?

    a. 380 cm b. 480 cm

    c. 580 cm d. 680 cm

18. Last year, John was 1 m 25 cm tall. This year, John is 12 cm more taller than the last year. How much taller is John than Tina now, if Tina is 1 m 8 cm tall?

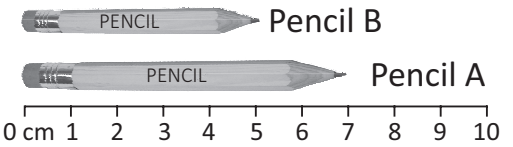
    a. 13 cm

    b. 17 cm

    c. 21 cm

    d. 29 cm

19. In the figure given below, pencil A is longer than pencil B by



    a. 0 cm

    b. 2 cm

    c. 1 cm

    d. 3 cm

20. Ramya had a ribbon of length 10 m. If it takes 200 cm to tie one gift box, how many gift boxes can she tie?

    a. 2 b. 5

    c. 4 d. 3

SECTION - C : BRAINBOX

21. A wire is 67 cm longer than a rope and 1 m 9 cm shorter than a string. The string is _____ longer than the rope.

    a. 43 cm

    b. 1 m 23 cm

    c. 1 m 76 cm

    d. 2 m 57 cm

22. A man is standing on the branch of a tree. The distance of his head from the ground is 4 m 3 cm. He is 175 cm tall. How far are his legs from the ground?

    a. 2 m 28 cm

    b. 2 m 38 cm

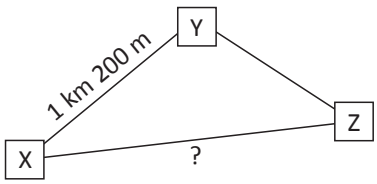
    c. 2 m 48 cm

    d. 2 m 58 cm

23. ☐ – 2 km 35 m + 1007 m = 962 m. Find the length represented by ☐.

a. 66 m b. 1990 m c. 2080 m d. 4004 m

Look at the diagram below and answer (Q24 and Q25).



24. The distance from X to Z is 850 m longer than the distance from X to Y. The distance from X to Z is

a. 2 km 850 m

b. 1 km 50 m

c. 1 km 250 m

d. 2 km 50 m

25. Z is 1400 m nearer to Y than to X. A man walked from X to Z while a woman walked from X to Y and then to Z. Who took the shorter route?

a. Woman

b. Man

c. Both A and B

d. None of these

Darken your choice with HB pencil

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

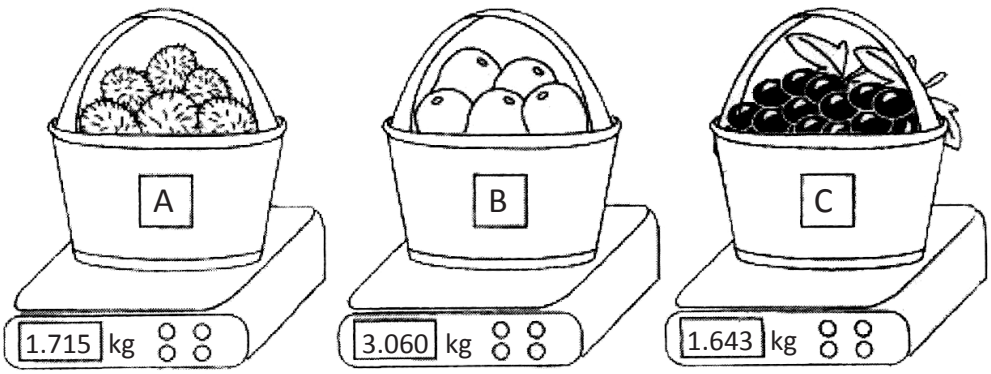
Chapter

6

Mass

SECTION - A : MATHEMATICAL REASONING

Look at the pictures given below and answer (Q1 to Q3).



1. Basket B is heavier than basket C by
   a. 1217 g
   b. 1317 g
   c. 1417 g
   d. 1517 g

2. Basket C is lighter than basket A by
   a. 0 kg 72 g
   b. 1 kg 72 g
   c. 1 kg 82 g
   d. 1 kg 92 g

3. The total mass of the lightest and the heaviest basket is
   a. 4 kg 693 g
   b. 4 kg 703 g
   c. 4 kg 713 g
   d. 4 kg 723 g

4. 5.7 kg is equivalent to
   a. 57 g
   b. 570 g
   c. 5700 g
   d. 750 g

5. 4017 g is equivalent to
   a. 4.7kg
   b. 4.17 kg
   c. 4.017kg
   d. 4 kg

6. The value of 6539 g + 1063 g is
   a. 7 kg 62 g
   b. 7 kg 602 g
   c. 76 kg 2 g
   d. 760 kg 2 g

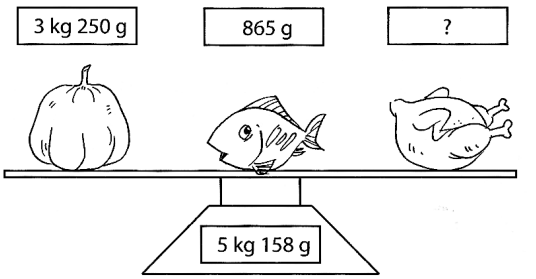
7. Arya carried a bag of 7 kg atta from the grocery store to his car whereas Rohit carried 3 bags weighing 2 kg each. Arya carried a greater load by
   a. 7 kg b. 6 kg
   c. 1 kg d. 3 kg

8. A durian and a papaya have a mass of 3694 g. The durian has a mass of 2694 g. The mass of the papaya in kilograms is
   a. 1 kg b. 2 kg
   c. 3 kg d. 4 kg

9. 8 kg 80 g – ☐ = 7 kg 230 g.
   Which of the following is the missing mass?
   a. 850 g
   b. 1570 g
   c. 950 g
   d. 1507 g

10. 5 kg 900 g is less than _____ by 1 kg 275 g.
    a. 7 kg 500 g
    b. 7 kg 175 g
    c. 7 kg 900 g
    d. 7 kg

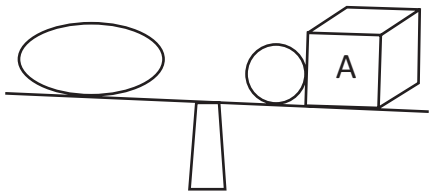
11. Amit went to the market and bought the items given below.



What was the mass of the chicken?
   a. 850 g
   b. 1043 g
   c. 950 g
   d. 1507 g

12. The total mass of 9 exercise books and 1 storybook is 1 kg 405 g. Each exercise book has a mass of 92 g. What is the mass of the storybook?
    a. 540 g
    b. 563 g
    c. 577 g
    d. 580 g

13. The mass of 17 packets of sugar is 25500 g. What is the mass of each packet of sugar?
    a. 1.5 kg
    b. 0.15 kg
    c. 15 kg
    d. None of these

14. 

The mass of ◯ is 2 kg 250 g.

The mass of ◯ and box A can be _____ and _____, respectively.

a. 40 g and 2110 g

b. 45 g and 2200 g

c. 50 g and 2200 g

d. 55 g and 2200 g

15. The mass of a gift box with 10 chocolates is 800 g. If the mass of each chocolate is 75 g. What is the mass of the empty gift box?

a. 50 g

b. 100 g

c. 750 g

d. 1 kg

SECTION - B : EVERYDAY MATHS

16. Esha's mass is 46 kg. Divya is 12 kg lighter than Esha. Pinky is 8 kg heavier than Esha. The total mass of three girls is

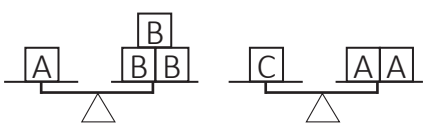
a. 120 kg

b. 128 kg

c. 130 kg

d. 134 kg

17. Study the diagrams below carefully.



If [C] weighs 5 kg 700 g, the mass of [B] is

a. 950 g

b. 900 g

c. 850 g

d. 800 g

18. If ☺ + ☺ = 1 kg and ☆ – ☺ = 1 kg 500 g then ☆ =

a. 1 kg b. 2 kg

c. 2 kg 500 g d. 3 kg 500 g

19. If 4 ☆ – 300 g = 3 ☆, then 10 ☆ = _____ kg.

a. 1 kg b. 2 kg

c. 3 kg d. 4 kg

20. The mass of 2 chickens and 3 ducks is the same as the mass of 6 ducks. The mass of 2 chickens and 5 ducks will be the same as the mass of _____ ducks.

a. 8

b. 9

c. 10

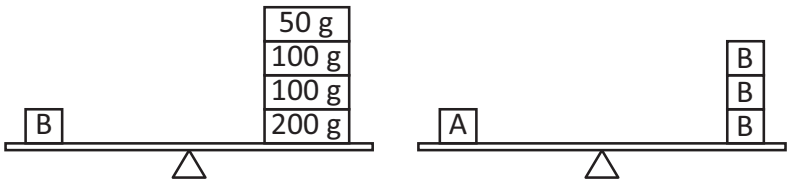
d. 11

SECTION - C : BRAINBOX

21. Rani had a bag of 5 kg bird seeds. She puts 425 g bird seeds in the bird feeder everyday. How much bird seeds is she left with by the end of nine days?

a. 350 g b. 1 kg 900 g c. 1 kg 750 g d. 1 kg 175 g

Study the diagram given below and answer (Q22 to Q24).



22. The mass of [B] is _____ heavier than 380 g.

a. 70 g b. 60 g

c. 50 g d. 40 g

23. The mass of [A] [A] is

a. 2 kg 400 g b. 2 kg 500 g

c. 2 kg 600 g d. 2 kg 700 g

24. How many [100 g] must be added to side Y so that side X and side Y can be balanced?

a. 5 b. 10

c. 24 d. 20

25. Tony mixed 358 kg of small pebbles and 127 kg of big pebbles together and then packed them into nine 10 kg packets and the remaining pebbles into 5 kg packets. How many more 5 kg packets than 10 kg packets did he pack?

a. 55 b. 60 c. 65 d. 70

Darken your choice with HB pencil

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

Chapter 7

Capacity

SECTION - A : MATHEMATICAL REASONING

1. 3 L 750 mL equals

   a. 3000 mL b. 3075 mL

   c. 375 mL d. 3750 mL

2. 2 L 170 mL + 3 L 105 mL is greater than

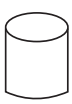
   a. 5 L b. 9 L

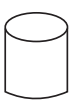
   c. 8 L d. 10 L

3. 3 L 350 mL – 1 L 850 mL = _____ groups of 500 mL

   a. 1 b. 2

   c. 3 d. 4

4.  –  = 980 mL.

   2 L 350 mL –  = 1 L 900 mL

   What is the volume of  ?

   a. 1 L 430 mL b. 530 mL

   c. 1 L 530 mL d. 10 L 430 mL

5. On adding _____ to 3 L 650 mL, we get half of 10 L.

   a. 1 L 350 mL b. 2 L 350 mL

   c. 6 L 350 mL d. 7 L 350 mL

6. Dev brought 6500 mL of milk carton. He used 1 L 700 mL to make a pudding for her family and 3 L 950 mL to feed his dogs and cats. How much milk was he left with?

   a. 750 mL b. 1 L

   c. 950 mL d. 850 mL

7. A tank was half filled with water. 5 L of water overflowed when 20 L of water was poured into the tank. The amount of water the tank could hold is

   a. 10 L b. 30 L

   c. 40 L d. 50 L

8. Swati had a pail containing 5 L of water. She used 1 L 385 mL for watering the plants and 2 L 48 mL to wash the dishes. How much water was left with her?

   a. 1 L 135 mL b. 1 L 567 mL

   c. 3 L 347 mL d. 3 L 615 mL

9. On subtracting 1 L 50 mL from  , we get twice of 3450 mL. What is the value of  ?

   a. 7 L 950 mL b. 7 L 850 mL

   c. 7 L 750 mL d. 7 L 650 mL

10. The difference between 3 L 230 mL and 2040 mL is _____ more than 800 mL.

a. 390 mL b. 410 mL

c. 430 mL d. 510 mL

11. What is the total capacity of the largest container and the smallest container?

a. 8 L 320 mL

b. 8 L 230 mL

c. 7 L 680 mL

d. 7 L 860 mL

Container	Capacity
Jug	925 mL
Pail	8 L 20 mL
Mug	300 mL
Bottle	480 mL

12. If ☆ + ◇ = 7 L 100 mL and ◇ – 3 L 820 mL = 1 L 40 mL, then ☆ = _____ .

a. 1 L 880 mL b. 2 L 240 mL

c. 4 L 320 mL d. 4 L 680 mL

13. 2 L 760 mL – 2 L 450 mL = ? The missing volume is _____ less than 1 L.

a. 710 mL b. 690 mL

c. 670 mL d. 790 mL

14. If ✚ + ◇ – 43 L = 51 L and ✚ – 5 L = 30 L, then ◇ = _____ L

a. 95 b. 59

c. 35 d. 53

15. Jasmine added 300 mL of sugar solution into 2 L of soya bean milk. The mixture was, then, poured into 3 bottles. Each bottle can hold 700 mL of liquid. How much mixture was she left with?

a. 120 mL b. 160 mL

c. 180 mL d. 200 mL

SECTION - B : EVERYDAY MATHS

16. Study the recipe below.
Ingredients for making a lemon tea
- 50 mL of lemon juice
- 1 L 150 mL of tea
- 440 mL of sugar syrup

Monika mixed all the ingredients together to make some lemon tea. She, then, poured the lemon tea equally into 8 cups. What was the volume of the lemon tea in each cup?

a. 205 mL b. 210 mL

c. 215 mL d. 220 mL

17. Swati has two buckets. Capacity of bucket P is twice the capacity of bucket Q. If bucket P is used 30 times to fill the drum, then how many times will both the buckets P and Q be used to fill the empty drum?

a. 30

b. 10

c. 15

d. 5

18. A bowl contained 980 mL of water. Some water from the bowl was transferred to 3 cups such that each cup was completely filled. If each cup could hold 120 mL of water, how much water was left in the bowl?

    a. 620 mL

    b. 720 mL

    c. 820 mL

    d. 920 mL

19. Hemant bought 5500 mL of juice. He drank 1825 mL and his brother drank 585 mL more than him. How much juice was he left with?

    a. 2 L 410 mL

    b. 1 L 265 mL

    c. 1 L 256 mL

    d. 3 L 90 mL

20. Mr Tarun bought 6 tins of paint, each containing 9 L of paint. There was 3 L of paint left after painting his house. How much paint was used to paint the house?

    a. 51 L

    b. 52 L

    c. 53 L

    d. 54 L

SECTION - C : BRAINBOX

21. Ajay drinks 450 mL of water every day. If he drinks the same amount of water everyday, how much does he drink in a month?

    a. 15 L b. 14 L 39 mL

    c. 13 L 500 mL d. 15 L 900 mL

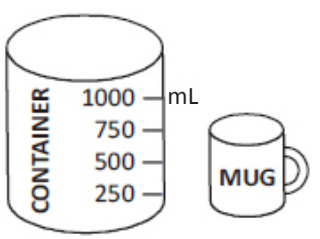
22. A container can hold 5 times the amount of water that a mug can hold. The least number of mugs needed to fill the container with 800 mL of water are

    a. 5

    b. 6

    c. 3

    d. 4



23. Two bottles X and Y contains some detergent. 800 mL of detergent was left in bottle X after 500 mL of the detergent was poured into bottle Y. There was 900 mL of detergent in bottle Y in the end. How much more detergent did bottle X contain than bottle Y originally?

    a. 900 mL

    b. 750 mL

    c. 600 mL

    d. 450 mL

24. A bottle contains 350 mL of medicine. Oliver takes 15 mL of the medicine three times a day. How much medicine is left after 5 days?

a. 45 mL

b. 125 mL

c. 30 mL

d. None of these

25. There are 2 jars of 2 L pineapple juice and 5 jars of 5 L watermelon juice. How many jars of fruit juice are there if there are 6 L more watermelon juice than pineapple juice?

a. 6 b. 8

c. 5 d. 2

Darken your choice with HB pencil

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

Chapter

8

Time

SECTION - A : MATHEMATICAL REASONING

1. 2 hours 35 minutes = _____ minutes.

   a. 145

   b. 155

   c. 165

   d. 175

2. The time is 6:19 now. 20 minutes later, it will be

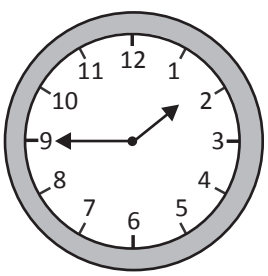
   a. 7:29

   b. 6:39

   c. 6:50

   d. 7:30

3. The time shown in the clock is



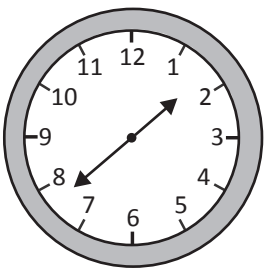
   a. 15 min to 2

   b. 15 min past 1

   c. 15 min to 3

   d. 15 min past 2

4. The time is 1:38 now. ☐ minutes later, it will be 2:00.



   a. 12

   b. 32

   c. 22

   d. 42

5. 2 hours 36 minutes + 3 hours 48 minutes = ☐ hours ☐ minutes.

   a. 6 hrs 24 min

   b. 6 hrs 14 min

   c. 5 hrs 24 min

   d. 5 hrs 14 min

6. 8 hours 5 minutes – 5 hours 52 minutes = ☐ hours ☐ minutes.

   a. 2 hrs 3 min b. 2 hrs 8 min

   c. 2 hrs 13 min d. 2 hrs 18 min

7. How much time is there between 9:25 a.m. and 2:40 p.m.?

9:25 a.m. 2:40 p.m.

a. 5 hrs 15 min

b. 5 hrs 30 min

c. 5 hrs 40 min

d. 5 hrs 35 min

8. Riya practices dance for 2 hours daily. How many minutes does she spend every day?

a. 60 min

b. 30 min

c. 120 min

d. 90 min

9. It will be 5:25 p.m., 160 minutes later. What is the time now?

a. 2:45 p.m.

b. 3:25 p.m.

c. 7:25 p.m.

d. 8:05 p.m.

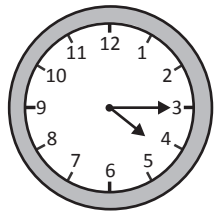
10. In the given subtraction problem, the missing number is

	?	min	30 s
–	9	min	30 s
	15	min	00 s

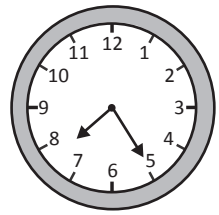
a. 48 b. 24

c. 36 d. 12

11. Clock A shows 5:15 p.m. on 5th June while clock B shows 7:25 a.m. on 7th June. The difference in hours and minutes between the two clocks is



A



B

a. 38 hrs 10 min

b. 36 hrs 10 min

c. 34 hrs 10 min

d. 32 hrs 10 min

12. When the time in Sydney is 10 a.m., the time in London is 1 a.m. What is the time in London, if the time in Sydney is 6:45 p.m.?

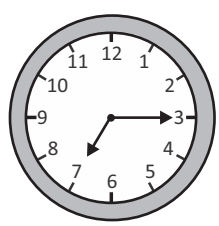
a. 4:45 a.m.

b. 9:45 a.m.

c. 4:45 p.m.

d. 6:45 p.m.

13. Which of the following options show 15 minutes less than the time shown in the clock?



a. 5:00 b. 7:00

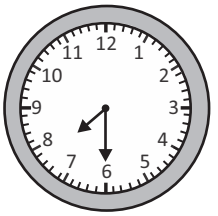
c. 4:00 d. 6:00

14. It takes 25 minutes for Ronit to finish reading a comic book. If he starts reading at 7:10 p.m., then at what time will he finish reading two comic books?

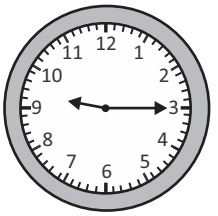
a. 9:00 p.m. b. 10:00 p.m.

c. 8:00 p.m. d. 7:00 p.m.

15. The given clock shows the time at which Rohan starts and finishes his homework in the evening.



Starts homework



Finish homework

How long does he take to complete his home work?

a. 1 hr 25 min b. 1 hr 30 min

c. 1 hr 45 min d. 2 hrs

SECTION - B : EVERYDAY MATHS

16. An aeroplane departed from Singapore at 15 minutes to 6 in the morning. If it landed in Indonesia at 10 minutes past 8 in the morning, then how long was the whole journey?

a. 2 hrs 10 min

b. 2 hrs 15 min

c. 2 hrs 20 min

d. 2 hrs 25 min

17. Mother took 2 hours 20 minutes to cook dinner. Dinner was ready at 6:50 p.m. At what time did she start cooking?

a. 4:30 p.m. b. 4:20 p.m.

c. 4:15 p.m. d. 4:10 p.m.

18. Amit took 3 hours 10 minutes to jog around the park. Tom took 48 minutes faster to jog around the same park. How long did Tom take to jog around the park?

a. 2 hrs 2 min b. 2 hrs 12 min

c. 2 hrs 22 min d. 2 hrs 32 min

19. 1 hour 25 minutes equals _____ seconds.

a. 125 b. 1250

c. 5100 d. 5010

20. Mohan earned ₹7 per hour for driving a tour bus. The schedule shows the number of hours he spent from Monday to Wednesday driving the tour bus. How much did he earn in three days?

a. ₹103

b. ₹113

c. ₹123

d. ₹133

Schedule
Monday
6:00 a.m. – 12 noon
Tuesday
7:00 a.m. – 11:00 a.m.
Wednesday
1:30 p.m – 10:30 p.m

SECTION - C : BRAINBOX

21. The time table shows the activities of an ape in a zoo.

Time	Activity
9:30 a.m. to 9:50 a.m.	Eating
9:50 a.m. to 10:15 a.m.	Performing
10:15 a.m. to 12:15 p.m.	Playing
12:15 p.m. to 1:00 p.m.	Performing

How much time is spent on performing by the ape in a day?

a. 1 hr 10 min b. 1 hr 20 min
c. 1 hr d. 55 min

22. Mohan left for school at 6:45 a.m. If he took 35 minutes to walk to the school, then at what time did he reach the school?

a. 7:35 a.m. b. 7:20 a.m.
c. 7:10 a.m. d. 7:00 a.m.

23. Kapil took 2 hours 45 minutes and Lokesh took 10 minutes more to travel from Delhi to Agra. They reached Agra at 1:15 p.m. At what time did Lokesh depart from Delhi?

a. 10:20 a.m. b. 10:30 a.m.
c. 10:40 a.m. d. 10:50 a.m.

24. _____ is 100 minutes before 7 p.m. and _____ hours after 11:20 a.m.

a. 4:20 p.m., 6 hrs
b. 5:20 p.m., 6 hrs
c. 5:20 p.m., 5 hrs
d. 5:20 p.m., 4 hrs

25. A bus departed from X interchange at 9:35 a.m. and reached Y interchange at 10:15 a.m. It took the same duration to travel from Y interchange to X interchange, after a half an hour break. At what time did it reach X interchange?

a. 11:20 a.m.
b. 11:25 a.m.
c. 11:30 a.m.
d. 11:35 a.m.

Darken your choice with HB pencil

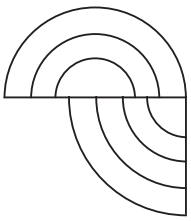
1.	(a) (b) (c) (d)	8.	(a) (b) (c) (d)	15.	(a) (b) (c) (d)	22.	(a) (b) (c) (d)
2.	(a) (b) (c) (d)	9.	(a) (b) (c) (d)	16.	(a) (b) (c) (d)	23.	(a) (b) (c) (d)
3.	(a) (b) (c) (d)	10.	(a) (b) (c) (d)	17.	(a) (b) (c) (d)	24.	(a) (b) (c) (d)
4.	(a) (b) (c) (d)	11.	(a) (b) (c) (d)	18.	(a) (b) (c) (d)	25.	(a)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

Chapter 9

Geometry

SECTION - A : MATHEMATICAL REASONING

1. Which of the following statements is not true about the given figure?



a. I can see 3 semicircles
b. I can see 4 quarter circles
c. It has no straight lines
d. It has seven curved lines

2. Look at the given pattern of numbers. Choose the next number from the following options.

61, 69, 77, 85, _____

a. 95 b. 93
c. 103 d. 100

3. Which of the following numbers complete the given number series?

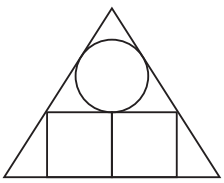
112, 102, 92, _____, 72, 62

a. 52 b. 42
c. 82 d. 32

4. A rectangle has _____ lines of symmetry.

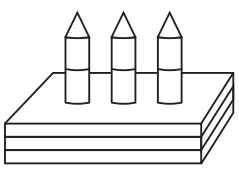
a. 3 b. 2
c. 4 d. 1

5. In the triangle below, there are 2 squares and 1 circle. How many squares and circles will there be in 5 such triangles?



a. 8 squares and 5 circles
b. 10 squares and 3 circles
c. 8 squares and 2 circles
d. 10 squares and 5 circles

6. Which of the following solids can not be found in the given figure?



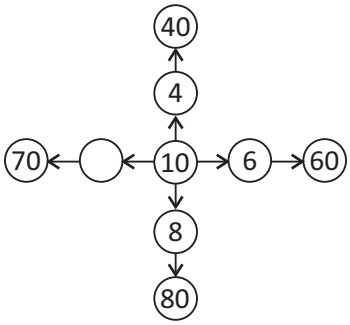
a. cubes b. cones
c. cylinders d. cuboids

7. Which of the following numbers complete the given number pattern?

3	5		9
9	25	49	81

a. 4 b. 7
c. 8 d. 6

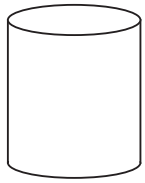
8. Look at the pattern given below. The correct missing number from the following options is



a. 5 b. 4

c. 7 d. 3

9. Which of the following statements is not true about the given figure?



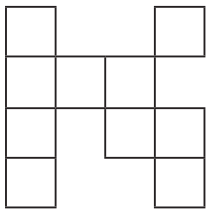
a. A cylinder is made up of straight lines and curved lines

b. The top and bottom of the cylinder are circular faces

c. A cylinder has one circular face

d. A cylinder has no vertices

10. In the figure given below, how many more small squares are needed to make one large square?



a. 6

b. 5

c. 7

d. 8

11. How many more straight lines are there in figure 1 than figure 2?

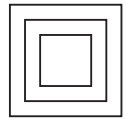


Figure 1

Figure 2

There are _____ more straight lines in figure 1 than in figure 2.

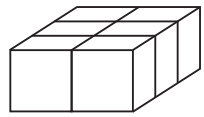
a. 2

b. 3

c. 4

d. 5

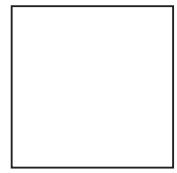
12. 8 cubes are joined together to form a cuboid. If the outer sides of the solid are painted, then how many squares are painted?



a. 12 b. 16

c. 18 d. 20

13. What is the least number of triangles needed to form the shape given below?



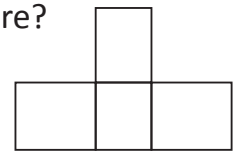
a. 2

b. 4

c. 6

d. 8

14. How many rectangles are there in the given figure?



a. 2

b. 4

c. 8

d. 6

15. The number of sides in the given figure is

a. 6 b. 8

c. 10 d. 12

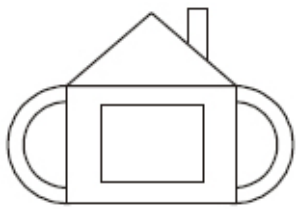
16. Which of the following shapes is not found in the diagram given below?

a. Semicircles

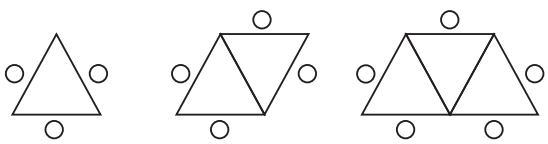
b. Squares

c. Rectangles

d. Triangles



17. Study the pattern carefully.



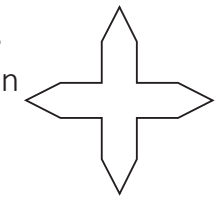
Pattern 1 Pattern 2 Pattern 3

How many more circles than triangles will be there in pattern 4?

a. 2 b. 1

c. 3 d. 4

18. Look at the figure given below and read the statements that follow.



Statement 1: If 4 triangles are used to make the given figure, then 5 squares are used to complete the figure.

Statements 2: If 1 square is used to make the given figure, then 14 triangles are used to complete the figure.

Which of the following is the correct option?

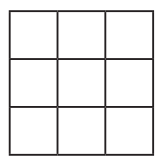
a. Statement 1 is true and statement 2 is false

b. Statement 1 is false and statement 2 is true

c. Both the statements are true

d. Both the statements are false

19. How many squares are there in the figure below?



a. 9 b. 10

c. 14 d. 12

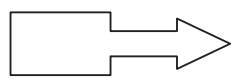
20. The number of straight lines required to draw the given figure is

a. 12

b. 11

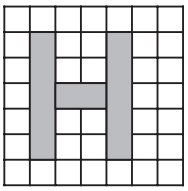
c. 13

d. 10



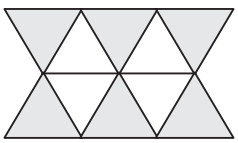
SECTION - B : BRAINBOX

21. The number of straight lines needed to make the shaded figure is



a. 11
b. 12
c. 14
d. 10

22. How many triangles are there in the given figure?



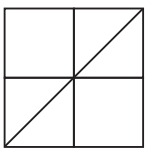
a. 10
b. 11
c. 12
d. 14

23. Which of the following shapes is the face of the cuboid?

a. Rectangle
b. Circle
c. Triangle
d. None of these

Study the figures carefully and answer (Q24 and Q25).

24. How many more triangles than squares are there in the figure below?



a. 2
b. 1
c. 3
d. 4

25. Which of the following shapes do not make the figure given below?

a. Square
b. Semicircle
c. Rectangle
d. Triangle

Darken your choice with HB pencil

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

Chapter
10 Graph

SECTION - A : MATHEMATICAL REASONING

The pictograph given below shows the number of concert tickets sold by a group of pupils. Use the information given by the graph to answer (Q1 and Q2).

Number of tickets	Number of pupils
0	☺☺
10	☺☺☺☺☺
20	☺☺☺☺
30	☺☺☺☺
Each ☺ stands for 2 pupils.	

1. _____ tickets were sold by the maximum number of pupils.

   a. 10 b. 20

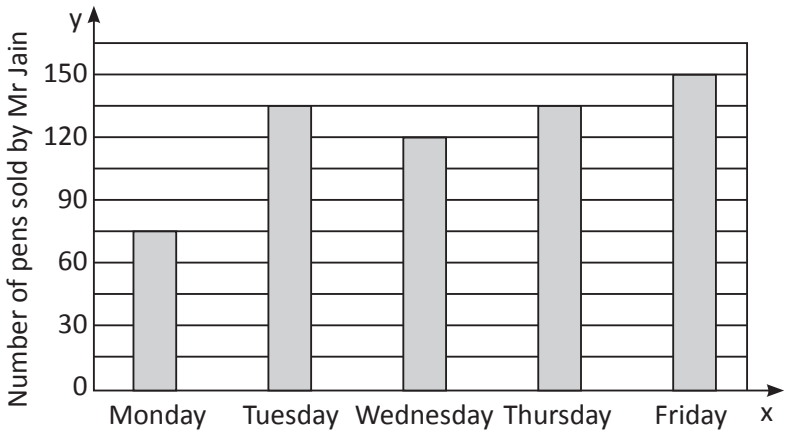
   c. 30 d. 0

2. The total number of tickets sold by the group of pupils is

   a. 200 b. 300

   c. 400 d. 500

The graph given below shows the number of pens sold by Mr Jain. Study it carefully and answer (Q3 to Q8).



3. Mr Jain sold the least number of pens on ☐.

   a. Monday b. Tuesday
   c. Wednesday d. Thursday

4. He sold ☐ fewer pens on Monday than on Tuesday.

   a. 40 b.50
   c. 60 d. 70

5. He sold ☐ pens on Thursday and Friday altogether.

   a. 285 b. 295
   c. 300 d. 305

6. He sold twice as many pens on Friday as on ☐.

   a. Monday b. Tuesday
   c. Wednesday d. Thursday

7. He sold 45 fewer pens on Monday than on ☐.

   a. Monday b. Tuesday
   c. Wednesday d. Thursday

8. He sold ☐ pens in five days altogether.

   a. 615 b. 609
   c. 606 d. 604

---

9. If  represents 12 fish, then   represents _____ fish.

   a. 48 b. 44 c. 40 d. 4

10. If ⊕ ⊕ stands for 120 balls, then ⊕ ⊕ ⊕ stands for _____ balls.

    a. 140 b. 160 c. 180 d. 200

Look at the pictograph which shows the favourite fruit of a group of children and answer (Q11 and Q12).

Fruits	Number of children
Pineapple	☺☺
Mango	☺☺☺☺
Grapes	☺☺☺☺☺☺☺☺
Litchi	☺☺☺
Orange	☺
Each ☺ stands for 3 children.	

11. Which fruit is the least popular?

a. Mango b. Litchi

c. Orange d. Pineapple

12. How many children like grapes?

a. 24 b. 18

c. 27 d. 15

The pictograph given below shows the number of different flowers sold by a florist. Use the information given by the graph to answer (Q13 and Q14).

Number of flowers sold			
			
Carnations	Sunflowers	Roses	Orchids
Each ✿ stands for 1 flower.			

13. How many orchids were sold by the florist?

a. 12 b. 8

c. 6 d. 4

14. He sold _____ more carnations than roses.

a. 12 b. 8

c. 5 d. 4

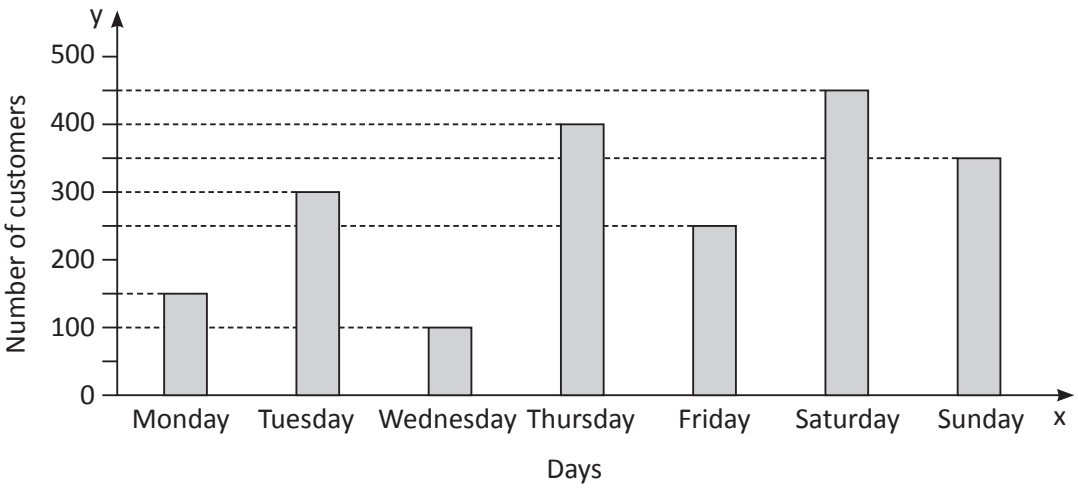
The pictograph given below shows the number of beads collected by four children.

Fiona	
Gina	
Hawk	
Irene	

15. They collected a total of 360 beads altogether. How many beads does each  stand for?

a. 60 b. 50 c. 40 d. 30

The bar graph given below shows the number of people who patronised restaurant ABC in a week. Use the information given by the graph to answer (Q16 to Q20).



16. There were _____ more people who patronised the restaurant on Thursday than on Wednesday.
    a. 100
    b. 300
    c. 400
    d. 500

17. There were _____ more people who patronised the restaurant on Saturday than on Tuesday and Wednesday.
    a. 10
    b. 30
    c. 40
    d. 50

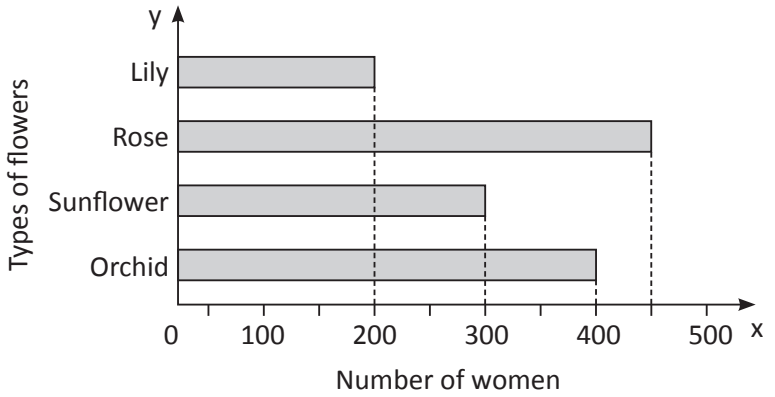
18. There were 250 fewer people who patronised the restaurant last week How many people patronised the restaurant last week?
    a. 1750 b. 1650
    c. 1550 d. 1450

19. How many more people patronised the restaurant during the weekdays than during the weekend?
    a. 100 b. 400
    c. 300 d. 200

20. Restaurant XYZ, a competitor of restaurant ABC, had 300 more customers during the same weekend. How many people patronised the restaurant XYZ during the same weekend?
    a. 1100 b. 1000
    c. 900 d. 800

SECTION - C : BRAINBOX

The bar graph given below shows the number of women who like four different types of flowers the most. Use the information given by the graph to answer questions 21 and 22.



21. There were _____ fewer women who liked orchids than lilies and sunflowers.

    a. 100 b. 200

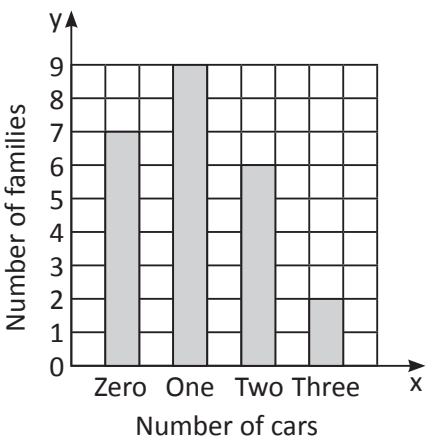
    c. 300 d. 400

22. There were twice as many women who liked _____ as those who like _____.

    a. orchids, lilies b. lilies, orchids

    c. rose, sunflower d. sunflower, rose

23. Each family who owns three cars spends ₹1000 on petrol every month. How much do these families spend on petrol altogether every month?



    a. ₹1500

    b. ₹2000

    c. ₹3000

    d. ₹4000

24. If  + ▼ + ◯ stand for 56 cats, + ▼ stand for 26 cats, and ▼ + ◯ stand for 40 cats, then + ◯ stand for _____ cats.

a. 46 b. 36

c. 26 d. 56

25. If  +  + ▼ stand for 190 bags, and  +  + ▼ + ▼ + ▼ stand for 290 bags, then  stands for ☐ bags.

a. 70 b. 60

c. 50 d. 40

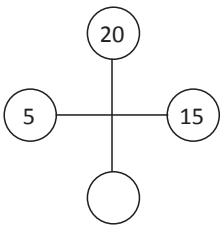
Darken your choice with HB pencil

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

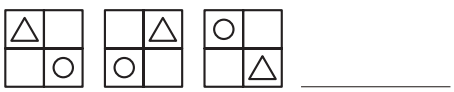
Chapter
11 Logical Reasoning

1. 11 , 20 , 29 , 38 , 47 , ___ , ____
The missing two numbers in the given pattern are ____ and ____.
a. 50 , 60 b. 56 , 65
c. 53 , 64 d. 59 , 60

2. Which of the following numbers will complete the blank circle given pattern?
a. 10
b. 5
c. 25
d. 30



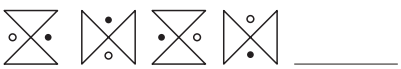
3. Study the pattern carefully and choose the correct option.



a.  b. 

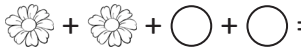
c.  d. 

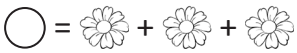
4. Which of the following comes to complete the given next pattern?



a.  b. 

c.  d. 

5.  = 32



What does  and ◯ stand for?

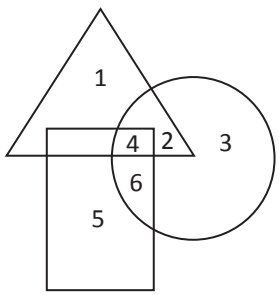
a. 4, 12 b. 12, 18
c. 4, 14 d. 24, 32

6. 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. 61

7. Which number lies in the triangle and the rectangle but not in the circle?



a. 6 b. 4
c. 2 d. None of these

8. If □ × 4 = △, and △ – □ = 330 then △ + □ =

a. 110 b. 440

c. 550 d. 990

9. There are _____ tens in 25620.

a. 56

b. 2

c. 62

d. 2562

10. Mr Anurag brings 11 boys and 13 girls to visit the zoo. How many tickets do they need to buy?

a. 25

b. 24

c. 22

d. 26

11. The father of Rahul is the brother of Mohit. Suman is the grand mother of Rahul. How is Suman related to Mohit?

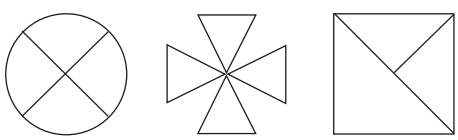
a. Mother

b. Daughter

c. Grandmother

d. Wife

12. Eva has some stickers.



There are _____ squares in the stickers altogether.

a. 6 b. 8

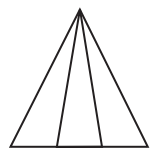
c. 10 d. 1

13. If Jaya places small match boxes, one above the other, then which of the following shapes will she get?

a. Cylinder b. Sphere

c. Cuboid d. Cone

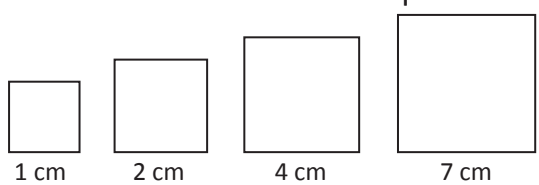
14. How many triangles are there in this figure?



a. 5 b. 3

c. 7 d. 4

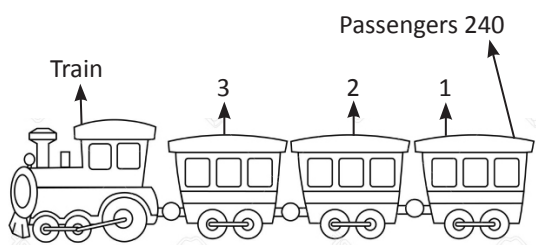
15. The squares given below increases in size from left to right if the pattern continues, then what will be the side of the next square?



a. 8 cm b. 10 cm

c. 11 cm d. 12 cm

16. A train passes through 3 stations. The number of passengers is doubled at each station. In the beginning, it has 240 passengers, then the total number of passengers at the third station is



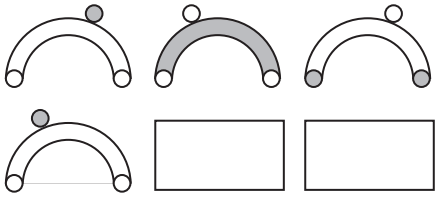
a. 1120

b. 1920

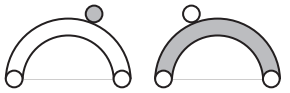
c. 720

d. None of these

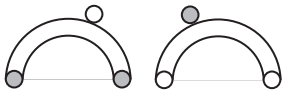
17. Study the pattern given below.



Which of the following completes the above pattern?

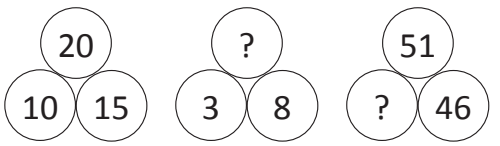
a. 

b. 

c. 

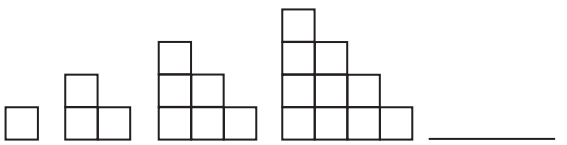
d. 

18. Which of the following completes the given pattern?



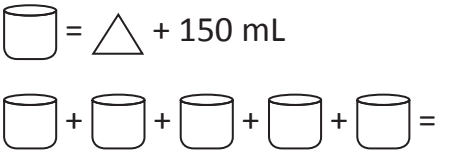
a. 9 , 59
b. 11 , 15
c. 10 , 43
d. 13 , 41

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



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

20. △ + △ + △ + △ = 1000 mL



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

21. 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

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

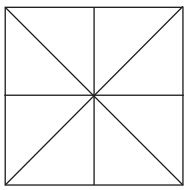
a. 9:15 a.m.
b. 5:15 p.m.
c. 5:15 p.m.
d. 9:15 p.m.

23. 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

24. How many triangles can you spot in the given figure?

a. 4
b. 14
c. 12
d. 16



25. Bread is related to wheat in the same way as brick is related to ___.

a. clay
b. fire
c. cement
d. building

Darken your choice with HB pencil

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

Answers

Chapter 1: Numbers to 10000

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

Chapter 2: Addition and Subtraction

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

Chapter 3: Multiplication and Division

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

Chapter 4: Money

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

Chapter 5: Length

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

Chapter 6: Mass

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

Chapter 7: Capacity

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

Chapter 8: Time

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

Chapter 9: Geometry

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

Chapter 10: Graph

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

Chapter 11: Logical Reasoning

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

My Notes

My Notes

My Notes