

3. Write down the place value of the digits in red boxes and the face value of the digits in blue boxes.

	Place Value	Face Value
a. $\underline{5}4,9\underline{7}1$	70	5
d. $\underline{1}, 8\underline{2}, 649$	1, 00, 000	2

4. Write numbers for the given number names and match them with the right ice cream.

a. Sixty-nine thousand eight hundred seventy-four	<u>69, 874</u>
c. Two lakh six hundred one	<u>2, 00, 601</u>

5. Read the clues and match with the correct numbers.

Clue	Number
a. My ones digit is an even number and tens digit is 0.	41,508
c. The face value of my thousands digit is 3.	9, 13, 074

Exercise 1.2

1. Write the expanded form of the following numbers.

- a. $16,438 = 10,000 + 6,000 + 400 + 30 + 8$
- d. $2, 61, 000 = 2,00,000 + 60,000 + 1,000$
- e. $1, 23, 987 = (\text{H.W.})$

2. Junaid has written the standard forms for the following expanded forms. Check if he has got them right. If the standard form is not correct, write it correctly in the given box.

a. $3 \times 10,000 + 4 \times 1000 + 8 \times 100 + 9 \times 1 = 3489$

Ans. Incorrect 34, 809

b. $2 \times 1,00,000 + 6 \times 1000 + 1 \times 100 + 9 \times 10 + 4 \times 1 = 2,06,194$

Ans. Correct

❖ SUCCESSOR AND PREDECESSOR (Notebook work)

Successor = Number + 1	Predecessor = Number - 1
------------------------	--------------------------

Exercise 1.3

1. Write the predecessors for all the even numbers and the successors for the odd numbers.

b. $8, 91, 315 = (\text{odd})$ $8, 91, 315 + 1 = 8, 91, 316$

c. $43, 528 = (\text{even})$ $43, 528 - 1 = 43, 527$

d. $9, 17, 822 (\text{even})$ $9, 17, 822 - 1 = 9, 17, 821$

2. Compare the following numbers by putting the 'greater than (>)', 'lesser than (<)' or '(=)' sign.

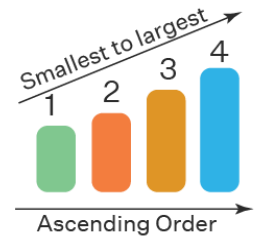
d. $9, 02, 131$ $\textcircled{>}$ $45, 328$

e. $10, 342$ $\textcircled{<}$ $29, 044$

f. $6, 87, 651$ $\textcircled{=}$ $6, 87, 651$

3. Arrange the following numbers in ascending order.

a.	29, 126	29, 763	23, 714	28, 915	20, 961
Ans.	20, 961	23, 714	28, 915	29, 126	29, 763
d.	6, 12, 041	6, 15, 104	5, 31, 325	4, 06, 219	6, 18, 046
Ans.	4, 06, 219	5, 31, 325	6, 12, 041	6, 15, 104	6, 18, 046
c. (H.W.)	2, 39, 872	39, 931	5, 64, 213	22, 231	14, 113



4. Arrange the following numbers in descending order.

a.	79, 420	78, 611	79, 007	79, 138	78, 532
Ans.	79, 420	79, 138	79, 007	78, 611	78, 532
c.	5, 84, 201	5, 93, 215	5, 60, 825	5, 89, 134	5, 99, 911
Ans.	5, 99, 911	5, 93, 215	5, 89, 134	5, 84, 201	5, 60, 825
d. (H.W.)	2, 78, 945	65, 012	35, 468	2, 24, 577	47, 836



Exercise 1.4

❖ **FORMING LARGEST AND SMALLEST NUMBERS**

1. Form the smallest and the greatest 5-digit and 6-digit numbers using each of these digits only once.

Sr. no.	Digits	Smallest number	Greatest number
a.	2, 9, 5, 3, 1	12, 359	95, 321
d.	1, 0, 4, 9, 5, 3	1, 03, 459	9, 54, 310

2. Circle the numbers that would round up to the nearest 100s to give us the number in the box.

- b. 2, 91, 653 2, 91, 613 2, 91, 317 291700
- c. 31, 909 32, 363 32, 308 32400

❖ **ROUNDING NUMBERS:** Rules (To be explained from the textbook page no. 09)

3. Round off the following numbers to the nearest 10.

- a. 35, 467
 Ans. 35, 467 → 35, 470 (Ones place 7 > 5, round up)
- c. 4, 68, 565
 Ans. 4, 68, 565 → 4, 68, 570 (Ones place 5 = 5, round up)
- d. 49, 595 (H.W.)

4. Round off the 5-digit numbers to the nearest 100s and 6-digit numbers to the nearest 1000s.

a. 8, 52, 715

Ans. 8, 52, 715 → 8, 53,000 (Hundreds place 7 > 5, round up)

b. 94, 103

Ans. 94, 103 → 94, 100 (Tens place 0 < 5, round down)

d. 9, 13, 842 (H.W.)

❖ **ROMAN NUMERALS:** Rules (To be explained from the textbook page no. 11)

(Notebook work)

HINDU ARABIC	1	5	10	50	100	500	1000
ROMAN NUMERAL	I	V	X	L	C	D	M

Write 1 to 20 in Roman Numerals: (Notebook work)

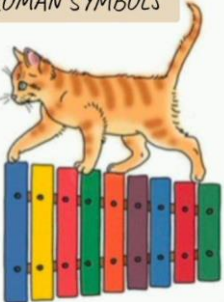
1 = I	11 = XI
2 = II	12 = XII
3 = III	13 = XIII
4 = IV	14 = XIV
5 = V	15 = XV
6 = VI	16 = XVI
7 = VII	17 = XVII
8 = VIII	18 = XVIII
9 = IX	19 = XIX
10 = X	20 = XX

(Explanation)

MNEMONIC TO MEMORISE THE VALUE ORDER OF ROMAN SYMBOLS

**My Dear Cat Loves Xtra
Vitamins Intensely**

M (1,000), D (500), C (100), L (50),
X (10), V (5), I (1)



Exercise 1.5

1. Write these Hindu-Arabic numbers as roman numerals.

a. 35 - XXXV

d. 61- LXI

f. 138 - CXXXVIII

e. 111- (H.W.)

2. Write these Roman numerals as Hindu-Arabic numbers.

a. LXII - 62

b. CI- 101

e. XL- 40

f. XXV - (H.W.)

3. Identify the mistakes in the Roman numbers and correct them.

a. XXXX = 40

Ans. 40 = XL

b. $VVV = 15$

Ans. $XV = 15$

c. $XL = 60$ (H.W.)

COMPETENCY BASED QUESTIONS

I. Choose the correct option.

1. In the equation below, a digit is missing from the short form. Find the value of A.

$$50,000 + 4000 + A + 9 = 54,309$$

- a. 550 b. 80 c. **300** d. 190

2. Arjun is planning to treat his friends on his birthday. He buys 2 ice cream cones, each costing ₹ 14. What is the total cost when rounded off to the nearest ten?

- a. 50 b. 99 c. 100 d. **30**

II. Answer in one word.

1. Which is greater?

Number A: $9,000 + 900 + 9$

Number B: Nine thousand ninety-nine.

Solution: Number A: $9000+900+9 = 9909$, Number B: Nine thousand ninety-nine = 9099
 $9909 > 9099$

2. I am the number 54, 209. If you decrease my ten-thousands digit by 2 and increase my hundreds digit by 5. What is my new number?

Solution:

TTh	Th	H	T	O
3	4	7	0	9

III. Solve the following.

1. Represent the half of XII as Roman numeral.

Solution: XII = 12, half of XII is VI.

2. Write the number of boys and girls in your class (as per the class strength) in Roman numerals. Find the total strength in Roman numerals.

Solution: (Example) Total boys: 20 = XX, Total girls: 15 = XV
Total strength = 20 + 15 = 35
35 = XXXV

IV. Case study.

A wildlife sanctuary is an area where animal habitats and their surroundings are protected from any sort of disturbance. The capturing, killing and poaching of animals is strictly prohibited in these regions.

The following data show the area occupied by wildlife sanctuaries in different states of India and answer the given questions:

Name of the state	Area occupied by wildlife sanctuary
Gujarat	9,618
Andhra Pradesh	6,771
Karnataka	7,923
Madhya Pradesh	7,046
Uttar Pradesh	5,822
Maharashtra	7,861

1. Write the predecessor of Karnataka state.

Solution: 7922

2. What is the difference between the area occupied by the largest and smallest state.

Solution: Gujarat 9618 – Uttar Pradesh 5822 = 3796

3. Compare the sanctuary areas of Maharashtra and Andhra Pradesh using <, > or =.

Solution: Maharashtra 7861 $\textcircled{>}$ Andhra Pradesh 6771

4. What is the place value and face value of 6 in Andhra Pradesh?

Solution: 6771 Place value = 6000, Face value = 6

GOOGLE LINK FOR PRACTICE:

<https://forms.gle/462PUQb5CiQxikcf7>

CHAPTER – 2 ADDITION AND SUBTRACTION

Key points: (Notebook work)

1. When you add two or more numbers, it is called addition.
2. The numbers which are added are called addends.
3. The answer to addition is called the sum.

Exercise 2.1

1. Arrange the numbers in columns and solve the sums.

a. 1, 05, 031 + 43, 253

	L	TTH	TH	H	T	O
	1	0	5	0	3	1
+		4	3	2	5	3
	1	4	8	2	8	4

c. 1, 34, 343 + 7, 21, 232

	L	TTH	TH	H	T	O
	1	3	4	3	4	3
+	7	2	1	2	3	2
	8	5	5	5	7	5

f. 5, 62, 120 + 2, 36, 767

(H.W.)

2. Add the following.

c. 52, 174 + 23, 813

	TTH	TH	H	T	O
	5	2	1	7	4
+	2	3	8	1	3
	7	5	9	8	7

d. 3, 13, 097 + 4, 99, 883

	L	TTH	TH	H	T	O
	3	1	3	0	9	7
+	4	9	9	8	8	3
	8	1	2	9	8	0

3. Fill in the missing numbers.

a.

	TTH	TH	H	T	O
	1	<u>9</u>	8	<u>1</u>	7
+	<u>8</u>	0	1	7	2
	9	9	<u>9</u>	8	<u>9</u>

d.

	L	TTH	TH	H	T	O
	7	8	<u>5</u>	5	<u>4</u>	5
+	0	1	3	<u>4</u>	4	<u>1</u>
	7	<u>9</u>	8	9	8	6

f. (H.W.)

	L	TTH	TH	H	T	O
		7	2	4	5	
+	2			3		5
	9	8	4		7	9

Exercise 2.2

1. Add the following.

a. $51,045 + 34,562 + 45,346$

	L	TTH	TH	H	T	O
		5	1	0	4	5
		3	4	5	6	2
+		4	5	3	4	6
	1	3	0	9	5	3

c. $93,456 + 18,234 + 11,983$

	L	TTH	TH	H	T	O
		9	3	4	5	6
		1	8	2	3	4
+		1	1	9	8	3
	1	2	3	6	7	3

f. $4,44,895 + 1,50,668 + 26,358$

	L	TTH	TH	H	T	O
	4	4	4	8	9	5
	1	5	0	6	6	8
+		2	6	3	5	8
	6	2	1	9	2	1

2. Arrange the numbers in columns and solve the sums.

a. $65,031 + 43,563 + 12,345$

	L	TTH	TH	H	T	O
		6	5	0	3	1
		4	3	5	6	3
+		1	2	3	4	5
	1	2	0	9	3	9

d. $1,27,564 + 56,789 + 54,203$

	L	TTH	TH	H	T	O
	1	2	7	5	6	4
		5	6	7	8	9
+		5	4	2	0	3
	2	3	8	5	5	6

f. $3,45,607 + 1,72,341 + 90,235$

	L	TTH	TH	H	T	O
	3	4	5	6	0	7
	1	7	2	3	4	1
+		9	0	2	3	5
	6	0	8	1	8	3

3. Find the sum.

a. $16,665 + 93,068 + 37,804$

	L	TTH	TH	H	T	O
		1	6	6	6	5
		9	3	0	6	8
+		3	7	8	0	4
	1	4	7	5	3	7

d. $5,46,901 + 2,66,348 + 6,64,590$

	TL	L	TTH	TH	H	T	O
		5	4	6	9	0	1
		2	6	6	3	4	8
+		6	6	4	5	9	0
	1	4	7	7	8	3	9

SUBTRACTION

Key points: (Notebook work)

1. The answer of subtraction is called **difference**.
2. The number which is subtracted is called **subtrahend**.
3. The number from which you subtract is called the **minuend**.

Exercise 2.3

1. Subtract.

a. $98,765 - 87,654$

	TTH	TH	H	T	O
	9	8	7	6	5
-	8	7	6	5	4
	1	1	1	1	1

d. $6,54,064 - 3,40,031$

	L	TTH	TH	H	T	O
	6	5	4	0	6	4
-	3	4	0	0	3	1
	3	1	4	0	3	3

2. Arrange the numbers in columns and solve the sums.

a. $87,654 - 67,023$

	TTH	TH	H	T	O
	8	7	6	5	4
-	6	7	0	2	3
	2	0	6	3	1

c. $6,75,465 - 4,60,355$

	L	TTH	TH	H	T	O
	6	7	5	4	6	5
-	4	6	0	3	5	5
	2	1	5	1	1	0

e. $4,56,055 - 2,32,033$

	L	TTH	TH	H	T	O
	4	5	6	0	5	5
-	2	3	2	0	3	3
	2	2	4	0	2	2

3. Fill in the missing numbers.

a.

	TTH	TH	H	T	O
	9	8	7	6	4
-	2	4	3	9	6
	7	4	3	6	8

d.

	L	TTH	TH	H	T	O
	8	4	5	7	3	2
-	5	5	5	6	1	0
	2	9	0	1	2	2

e.

	TTH	TH	H	T	O
	7	5	4	0	6
-	2	0	6	6	8
	5	4	7	3	8

❖ **PROPERTIES OF ADDITION: - (Explanation) Refer page no. 25 in T.B.**

- Order Property: When we add any two numbers, the sum remains the same, even if we change the order of the numbers.
- Zero Property: When we add 0 to a number, the sum is the number itself.
- Successor Property: When we add 1 to a number, the sum is the successor of that number.
- Grouping Property: When we add three numbers in any order, the answer is the same.

❖ **PROPERTIES OF SUBTRACTION: - (Explanation) Refer page no. 25 in T.B.**

1. Predecessor Property: When we subtract 1 from a number, the answer is the predecessor of that number.
2. Zero Property: When we subtract 0 from a number, the answer is the number itself.

Exercise 2.4

Fill in the blanks.

1. $2748 - 1 = \underline{2747}$
2. $0 + 1728 = \underline{1728}$
4. $6427 - 0 = 6427$
6. $8291 + 2192 + 3819 = 2192 + 3819 + \underline{8291}$
9. $1200 + \underline{5656} = 5656 + \underline{1200}$

Exercise 2.5

Subtract and verify your answers.

FORMULA: DIFFERENCE + SUBTRAHEND = MINUEND

1. 98,765 – 45,643

	TTH	TH	H	T	O
	9	8	7	6	5
-	4	5	6	4	3
	5	3	1	2	2

CHECK		TTH	TH	H	T	O
		5	3	1	2	2
+		4	5	6	4	3
		9	8	7	6	5

3. 9, 87, 655 – 2, 34, 522 (H.W.)

4. 4, 56, 023 – 1, 45, 012

	L	TTH	TH	H	T	O
	4	5	6	0	2	3
-	1	4	5	0	1	2
	3	1	1	0	1	1

CHECK		L	TTH	TH	H	T	O
		3	1	1	0	1	1
+		1	4	5	0	1	2
		4	5	6	0	2	3

THINKING SKILLS

MONTH: APRIL CHAPTER – 1 PATTERNS

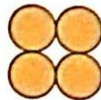


1. How many circles will be there in the 10th set of the pattern shown?

1st



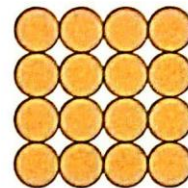
2nd



3rd



4th



(a) 40

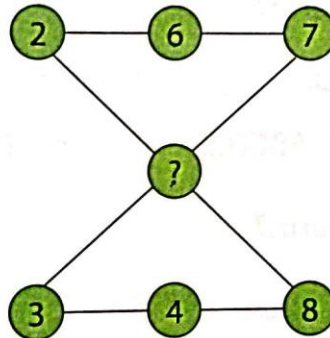
(b) 50

(c) 80

(d) 100

$10 \times 10 = 100$

2. What is the missing number?



$2 + 6 + 7 = 15$

$3 + 4 + 8 = 15$

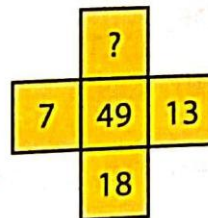
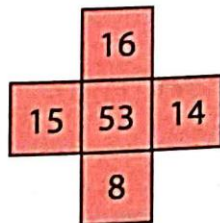
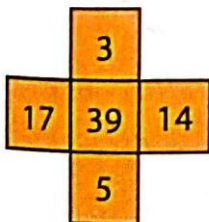
(a) 17

(b) 16

(c) 15

(d) 19

3. What is the missing number?



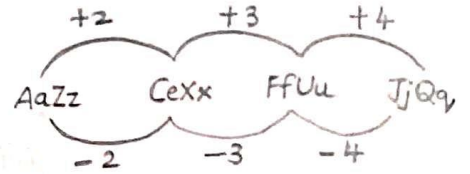
$7 + 11 + 13 + 18 = 49$

(a) 9

(b) 11

(c) 13

(d) 17

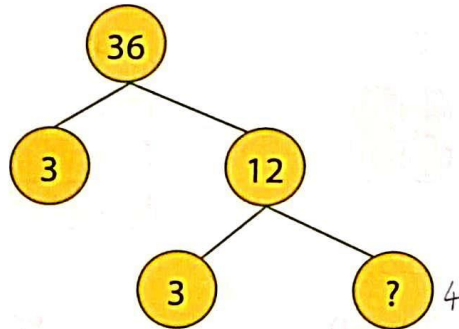


4. What is the next term in the given series?

AaZz, CcXx, FfUu, ?

- (a) liXx (b) JjQq (c) LIKk (d) BbHh

5. What is the missing number?



- (a) 1 (b) 2 (c) 3 (d) 4

6. What is the missing term?

A, ABB, ABCC, ABCDD, ABCDEE

- (a) ABCDD (b) ABCDEE (c) BCDFE (d) ABCEE

7. What is the missing term?

A1B, B2C, C3D, D4E, E5F, F6G

- (a) D5E (b) E4F (c) E5F (d) E6F

8. What is the next term in the given series?

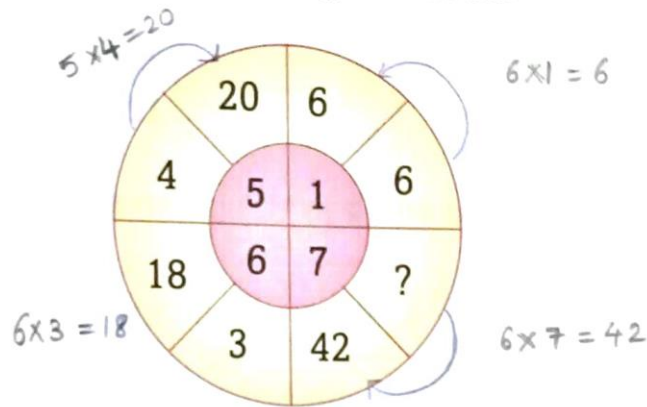
AAB, BBC, CCD, DDE, EEF

- (a) DDE (b) CDE (c) FFG (d) EEF

9. Complete the pattern: 16, 21, 26, 31, 36, 41, 46

- (a) 30, 32, 38, 44 (b) 31, 36, 41, 46
 (c) 29, 35, 48, 57 (d) 31, 33, 35, 37

10. What is the missing number in the given circle?



- (a) 1 (b) 6 (c) 3 (d) 7

11. What is the missing number in the given series?

0, 1, 1, 2, 3, 5, 8

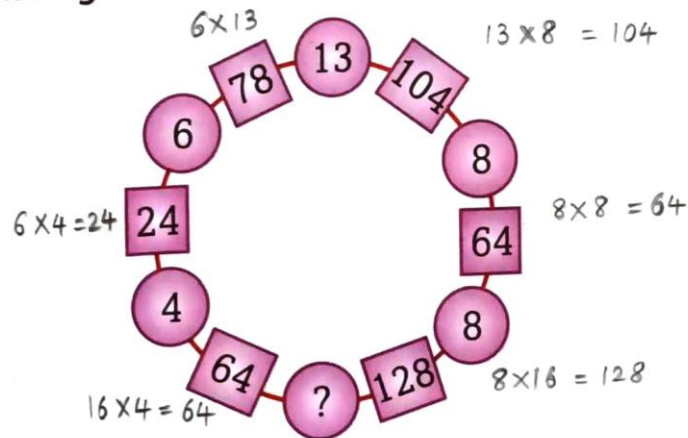
- (a) 2 (b) 3 (c) 5 (d) 4

12. What is the 14th term of the given series?

1, 2, 2, 3, 3, 3, 4, 4, 4, 4, 5

- (a) 3 (b) 4 (c) 5 (d) 6

13. What is the missing number?



- (a) 12 (b) 16 (c) 24 (d) 32

14. Complete the series: 75, 90, 105, 120, 135, 150, 165

- (a) 120, 135, 150, 165 (b) 110, 115, 120, 125
 (c) 115, 125, 135, 145 (d) 120, 130, 140, 150

15. What are the values of a and b in the given series?

$(1)^2 (2)^2 (3)^2 (4)^2 (5)^2 (6)^2 (7)^2$
 1, 4, 9, a , 25, b , 49

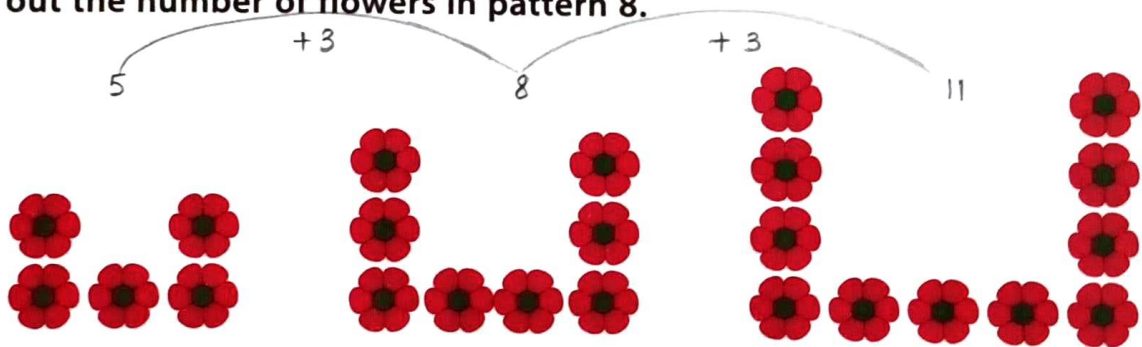
- (a) 36, 44 (b) 49, 69
 (c) 81, 96 (d) 16, 36

16. Kunal made the input-output table as shown below. What rule did he use to find the output?

Input	Output
25	5
40	8
35	7
10	2
15	3

- $25 \div 5 = 5$ (a) Input divided by 4
 $40 \div 8 = 5$ (b) Input multiplied by 4
 $35 \div 7 = 5$ (c) Input divided by 5
 $10 \div 2 = 5$ (d) Input multiplied by 5
 $15 \div 3 = 5$

17. Observe the given pattern carefully and the rule followed here. Then find out the number of flowers in pattern 8.



- Pattern 1 Pattern 2 Pattern 3
- (a) 30 (b) 28 (c) 26 (d) 22

18. What is the missing number in the given table?

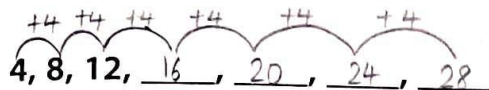
1	2	3
4	5	6
7	8	9
27	38	?

→ 63

$\frac{34}{14}$ $\frac{53}{28}$ $\frac{81}{31}$

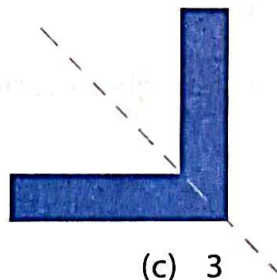
- (a) 47 (b) 51 (c) 57 (d) 63

19. Write the missing numbers in the given pattern.



- (a) 16, 20, 24, 28 (b) 18, 24, 28, 30
 (c) 14, 20, 26, 30 (d) 18, 24, 28, 32

20. How many line(s) of symmetry is/are there in the given figure?



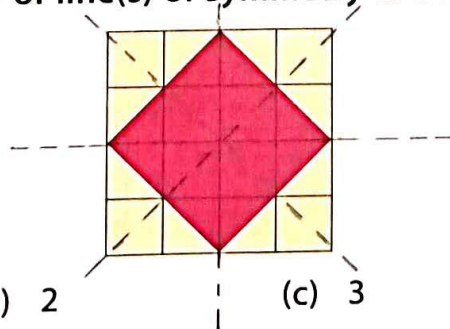
- (a) 1 (b) 2 (c) 3 (d) 4

21. How many line(s) of symmetry does a semicircle have?

- (a) 0 (b) 1 (c) 2 (d) 3



22. What is the number of line(s) of symmetry in the given figure?

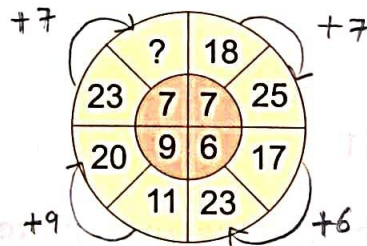


- (a) 1 (b) 2 (c) 3 (d) 4

23. Which of the following letters does not have a line of symmetry?

- (a) C (b) W (c) G (d) H

24. What is the missing number?



- (a) 12 (b) 14 (c) 30 (d) 20

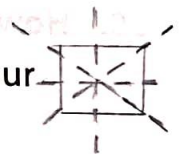
25. Which of the following letters has a vertical line of symmetry?

- (a) E (b) Z (c) O (d) S



26. How many line(s) of symmetry are there in a square?

- (a) One (b) Two (c) Three (d) Four



27. Find the missing term in the given series.

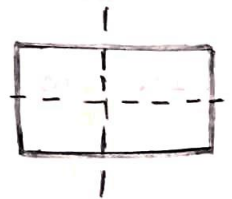
12, 13, 15, 17, 19, 21, 23, 25

except for number 12, the next number is obtained by skipping one number in between

- (a) 20 (b) 22 (c) 24 (d) 23

28. How many line(s) of symmetry does a rectangle have?

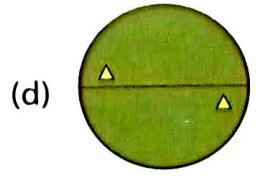
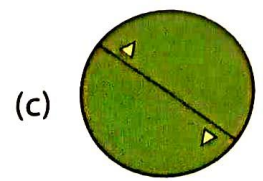
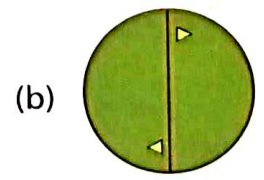
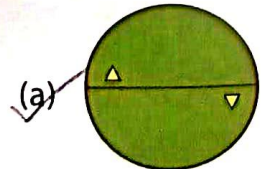
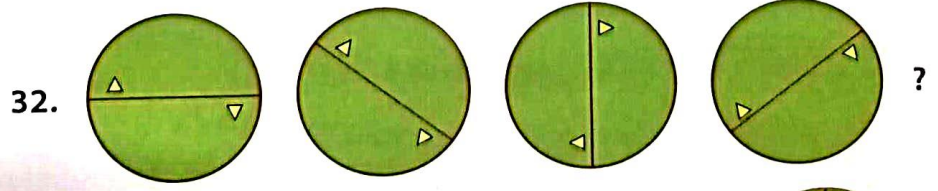
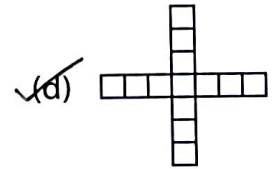
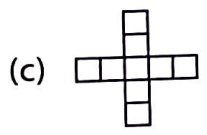
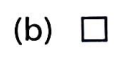
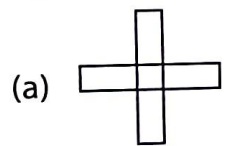
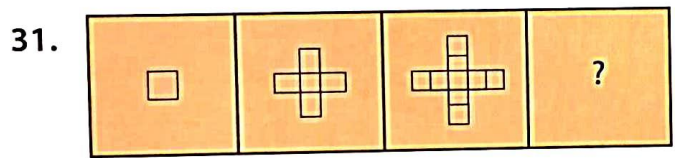
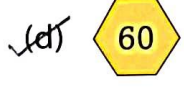
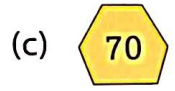
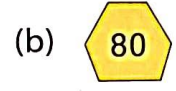
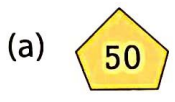
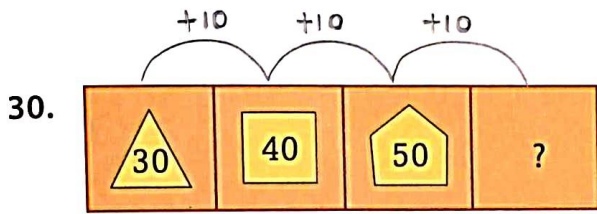
- (a) 1 (b) 2 (c) 3 (d) 4



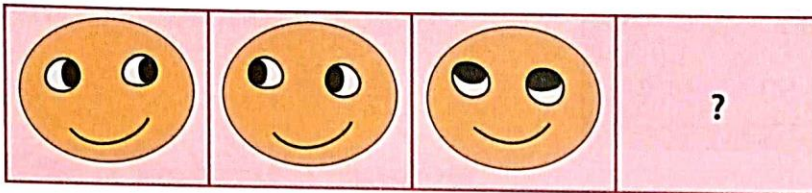
29. Find the missing figure.

$\begin{matrix} + & - \\ \div & \times \end{matrix}$	$\begin{matrix} \div & + \\ \times & - \end{matrix}$	$\begin{matrix} \times & \div \\ - & + \end{matrix}$	$\begin{matrix} - & \times \\ + & \div \end{matrix}$?
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- (a) $\begin{matrix} \times & \div \\ - & + \end{matrix}$ (b) $\begin{matrix} + & - \\ \div & \times \end{matrix}$ (c) $\begin{matrix} \div & + \\ \times & - \end{matrix}$ (d) $\begin{matrix} - & \times \\ + & \div \end{matrix}$



33.

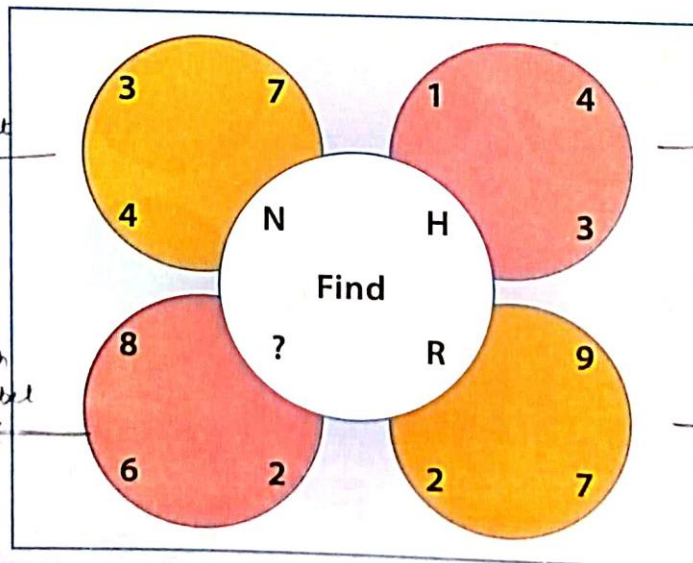


BRAIN BOOSTER

1. What will you do if you have to make SEVEN even, without using any mathematical operations?
2. What will be the missing term?

$7 + 4 + 3 = 14$
 $= 14^{\text{th}}$
 alphabet
 $= N$

$8 + 6 + 2 = 16$
 $= 16^{\text{th}}$
 alphabet
 $= P$



$1 + 3 + 4 = 8$
 $= 8^{\text{th}}$
 alphabet
 $= H$

$9 + 7 + 2 = 18$
 $= 18^{\text{th}}$
 alphabet
 $= R$

~~(a)~~ P

(b) Q

(c) R

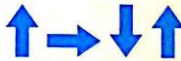
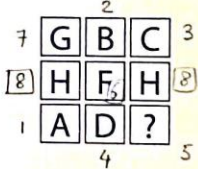
(d) S



REASON AND ASSERTION

Two statements—assertion (statement of fact) and reason (explanation of assertion) are given. Choose the correct answer for each of the following pairs of statements.

- (a) Both A and R are true, and R is the correct explanation of A.
 (b) Both A and R are true but R is not the correct explanation of A.
 (c) A is true but R is false. (d) A is false but R is true.

- Assertion (A): Only number can be set in patterns. a
Reason (R): Image, letters and numbers can be put in patterns.
- Assertion (A): In the series AAb, BBc, DDe, _____, EEf will come next. a
Reason (R): The given series follows a pattern such that the first two letters are capital and repeating, and the third letter is the letter that comes after the first two letters.
- Assertion (A): In the series A, z, B, _____, y is the missing letter. c
Reason (R): This series does not follow a pattern.
- Assertion (A): The series F, G, J, L, N, P, Q, R, S is not a pattern. d
Reason (R): The letters in the given series do not have any lines of symmetry.
- Assertion (A): The series 2, 4, 16, 132 is not a pattern. d
Reason (R): Each number is square of the previous number.
- Assertion (A): The third arrow is pointing in the wrong direction.  a
Reason (R): The arrows are moving in the clockwise direction.
- Assertion (A): The missing letter in the given figure is E. c
Reason (R): The given figure has letters written in boxes. 
- Assertion (A): Out of the 26 English letters, only 3 letters have 2 lines of symmetry. d
Reason (R): The line of symmetry cuts a figure into equal and identical parts.
- Assertion (A): The missing letter in the series A, C, E, G, I, _____ is L. d
Reason (R): Each letter in the pattern is obtained by skipping one letter.
- Assertion (A): A square is symmetrical. a
Reason (R): A square can be divided into two equal parts in two ways.