Chapter 1: Complete The Two Words

Example 1:
Identify the letter that will end the first word and start the second word.

R O P (?) V E R

(A) D   (B) O   (C) E   (D) L

Answer: (C)
Explanation: The answer is "E" because it completes the word "ROPE" and also begins the second word "EVER"

Example 2:
Identify the letter that will end the first word and start the second word.

M A N (?) A R D

(A) L   (B) Y   (C) T   (D) K

Answer: (B)
Explanation: The answer is "Y" because it completes the word "MANY" and also begins the second word "YARD"

HOMEWORK

1. S E A (?) U R N
(A) L   (B) Y   (C) Q   (D) T

2. B U O (?) E A R
(A) T   (B) G   (C) Y   (D) B

3. W A R (?) E X T
(A) D   (B) T   (C) N   (D) S

4. S T A (?) E A D
(A) T   (B) R   (C) L   (D) G

5. D E A (?) O A D
(A) O   (B) J   (C) A   (D) L

Example 1:
Find the number in place of (?) in the multiplication table below

X	5	7	[ ]
[ ]	[ ]	56	16
6	30	?	[ ]

(A) 40   (B) 42   (C) 52   (D) 12

Answer: (B)

Explanation:

X	5	7	2
8	40	56	16
6	30	42	12

HOMEWORK

1.

X	8	11	[ ]
[ ]	[ ]	44	12
5	40	[ ]	?

(A) 46   (B) 15   (C) 55   (D) 32

2.

X	9	7	?
[ ]	[ ]	77	99
9	81	[ ]	[ ]

(A) 9   (B) 11   (C) 17   (D) 16

3.

X	7	6	[ ]
?	[ ]	[ ]	80
1	7	[ ]	8

(A) 8   (B) 80   (C) 6   (D) 10

4.

X	7	[ ]	3
[ ]	35	25	[ ]
[ ]	[ ]	?	21

(A) 35   (B) 25   (C) 21   (D) 27

Chapter 3: Where is it hidden?

OBJECTIVE:
- To challenge your mathematical skill in recognizing shapes hidden in unfamiliar patterns
- For better understanding or identification, trace over the give shape and place it over each option in turn
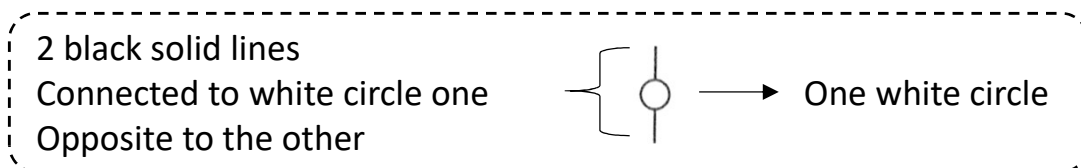
Example 1:
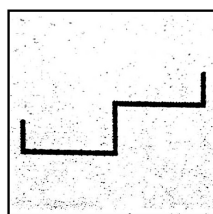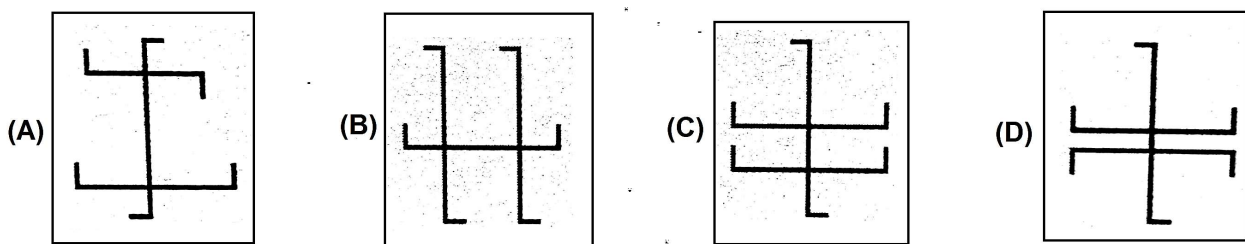In which larger shape is the small shape is hidden?
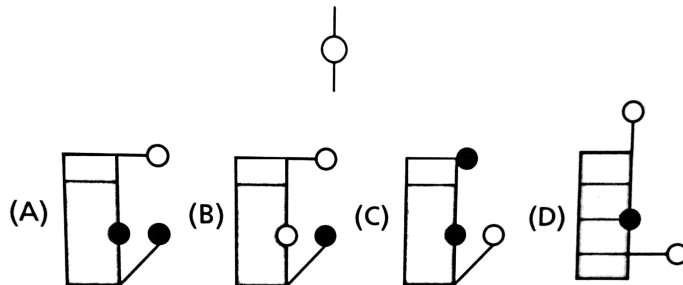
Answer: (B)

Explanation: One of the most effective strategies for question of hidden shape is to break the given shape into small sections and looks closely at how it is constructed.

2 black solid lines
Connected to white circle one
Opposite to the other → One white circle

Example 2:
In which larger shape is the small shape (X) is hidden?

(X)
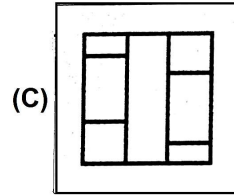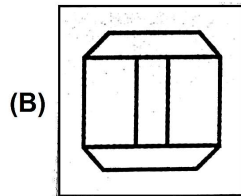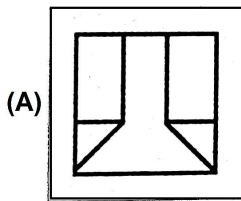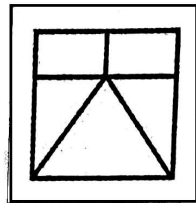
(A)   (B)   (C)   (D)

Answer: (C)

HOMEWORK

1. In which larger shape is the small shape (X) is hidden?

(X)

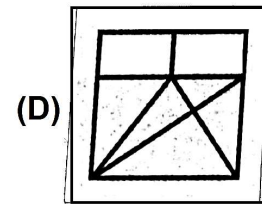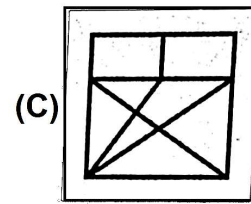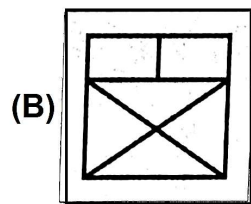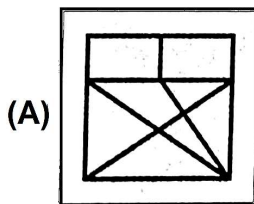(A)   (B)   (C)   (D)

2. In which larger shape is the small shape (X) is hidden?

(X)

(A)   (B)   (C)   (D)
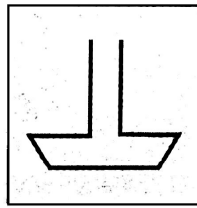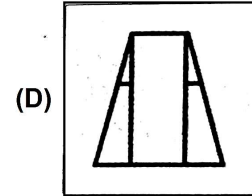
3. In which larger shape is the small shape (X) is hidden?

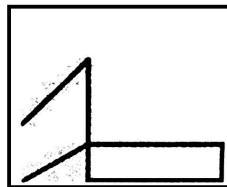(X)

(A)   (B)   (C)   (D)

HOMEWORK

4. In which larger shape is the small shape (X) is hidden?
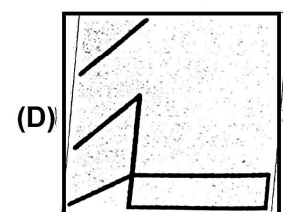
(X)

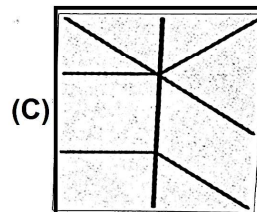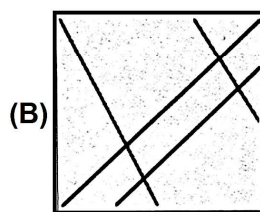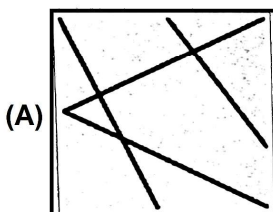(A) (B) (C) (D)
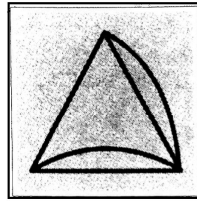
5. In which larger shape is the small shape (X) is hidden?

(X)

(A) (B) (C) (D)

6. In which larger shape is the small shape (X) is hidden?

(X)

(A) (B) (C) (D)
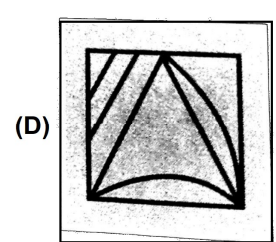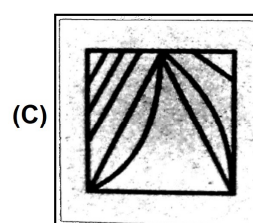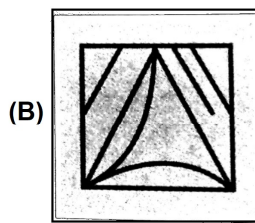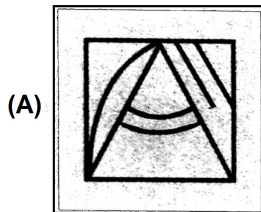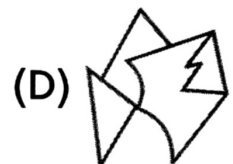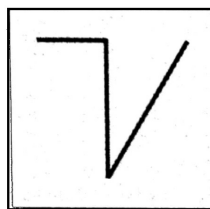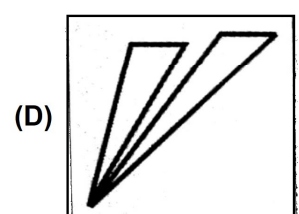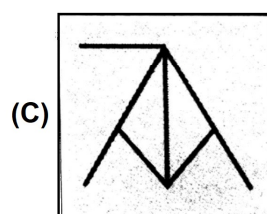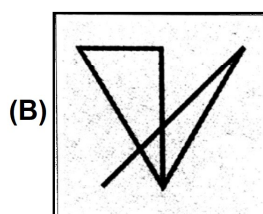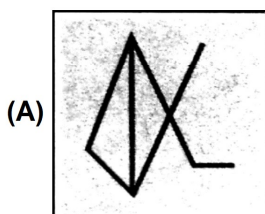
Chapter 4: Mathematical Reasoning

OBJECTIVE:
- To unravel mathematical puzzles through reasoning, observation and substitution.
- To trace out numerals following certain conditions.

Example 1:

How many such 5's are there in the following number sequence each of which is immediately preceded by 3?

3 5 9 5 4 5 5 3 5 8 4 5 6 7 3 5 7 5 5 4 5 2 3 5 1 0

(A) 5   (B) 11   (C) 4   (D) 2

Answer: (C)

Explanation:

3 5 9 5 4 5 5 3 5 8 4 5 6 7 3 5 7 5 5 4 5 2 3 5 1 0
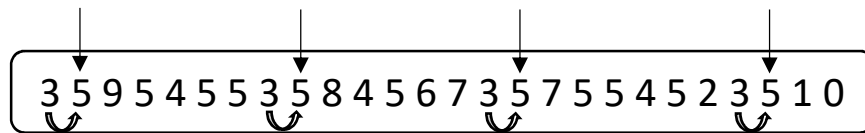
Example 2:

How many such 5's are there in the following number sequence each of which is immediately preceded by 3 and followed by 7 or 9?

3 5 9 5 4 5 5 3 5 8 4 5 6 7 3 5 7 5 5 4 5 2 3 5 1 0

(A) 4   (B) 2   (C) 1   (D) 3

Answer: (B)

Explanation:

3 5 9 5 4 5 5 3 5 8 4 5 6 7 3 5 7 5 5 4 5 2 3 5 1 0
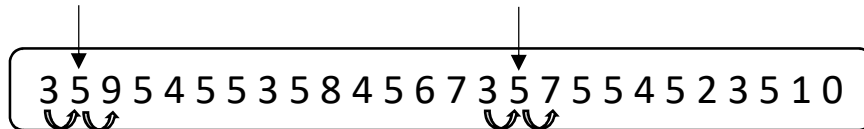
Example 3:

In the series given below, many 8's are there each of which is exactly divisible by its immediate preceding as well as succeeding numbers?

2 8 3 8 2 4 8 2 4 8 6 8 2 8 2 4 8 3 8 2 8 6

(A) 9   (B) 3   (C) 5   (D) 2

Answer: (D)

Explanation:

2 8 3 8 2 **4 8 2** 4 8 6 8 **2 8 2** 4 8 3 8 2 8 6

1. How many 7's are there in the following series which are immediately preceded by 5 and followed by 4?

> 1 5 7 3 4 7 5 7 4 8 5 7 4 3 2 1 7 7 1 5 7 9 1 7 4

(A) 8   (B) 4   (C) 1   (D) 2

2. How many number are there in the following series which are divided by 4?

> 7 5 1 6 4 9 2 3 8 2 7 4 9 6 8 6 2 1 7 9 7 4 5 3 2

(A) 5   (B) 2   (C) 8   (D) 3

3. How many number are there in the following series which are odd numbers and are not divided by 3?

> 2 3 1 8 9 2 7 6 5 3 9 8 5 7 9 8 6 1 9 3 4 6 2 1 4

(A) 11   (B) 10   (C) 5   (D) 7

4. How many number are there in the following series which are preceded by a number which can be divided by either 3 or 5 and followed by the number which is divided only by 3?

> 1 5 6 2 9 5 2 5 3 4 6 2 8 5 2 9 5 3 2

(A) 6   (B) 5   (C) 4   (D) 1

5. How many 5's are there which are followed by 0 and preceded by 0 in the series?

> 1 5 7 0 5 0 7 0 0 5 1 2 5 1 5 0 5 0 0 5 0

(A) 0   (B) 1   (C) 2   (D) 3

6. How many 5's are there which are preceded by 0 and not followed by 0 in the series?

> 1 5 7 0 5 0 7 0 0 5 1 2 5 1 5 0 5 0 0 5 0

(A) 0   (B) 1   (C) 2   (D) 3

OBJECTIVE:
- To test if the reflection is the same as the original and to enhance your logical approach from different angles
- To develop your visualisation power

Normal	Mirror	Normal	Mirror	Normal	Mirror	Normal	Mirror
A	A	J	∪	S	Ƨ	1	∿
B	ᗸ	K	⋊	T	T	2	ϛ
C	Ɔ	L	⅃	U	U	3	Ɛ
D	ᗡ	M	M	V	V	4	ᖴ
E	Ǝ	N	И	W	W	5	ϛ
F	Ⅎ	O	O	X	X	6	ə
G	ᗺ	P	ꟼ	Y	Y	7	ⱱ
H	H	Q	Ọ	Z	Ƨ	8	8
I	I	R	Я	0	0	9	ǝ

Example 1:

Find the mirror image of '145689'.

(A) ∿ᖴ5ɘ8ǝ   (B) ǝ8ɘϛᖴ∿   (C) 986541   (D) ǝ8654∿

Answer: (B)
Explanation:

Step: 1

Take mirror image of each digit separately.

$$1 \rightarrow \text{∿}$$
$$4 \rightarrow \text{ᖴ}$$
$$5 \rightarrow \text{ϛ}$$
$$6 \rightarrow \text{ə}$$
$$8 \rightarrow 8$$
$$9 \rightarrow \text{ǝ}$$

Arrange all the mirror images of digits of the number '145689' in reverse order.

Reverse order = 08ðⱣⱠ

So, option (B) is the answer

Example 2:

Choose the correct mirror image of the word 'FIXING' from the options.

(A) FIXING (B) ƎNIXIF (C) ƎИIXI꓾ (D) GNIXIF

Answer: (C)
Explanation:

Take the mirror image of each word separately.

F ⟶ ꓵ
I ⟶ I
X ⟶ X
I ⟶ I
N ⟶ И
G ⟶ Ə

To get the mirror image of FIXING arrange all the mirror images of the word in reverse order.

Reverse order = ƎИIXI꓾

So, option (C) is the answer.

HOMEWORK

Find the mirror images of the given words and numbers

1. WHITE

   (A) ꟽHITE   (B) ƎTIHꟽ   (C) ƎTIHW   (D) ETIHW

2. VERBAL

   (A) LABREV   (B) LRVEBA
   (C) REVBAL   (D) ⅃AᙠᴚƎV

3. MAHAVIR

   (A) RIVAHAM   (B) RMAHAVI
   (C) ᴚIVAHAM   (D) HAMAVIR

4. NATIONAL

   (A) ⅃AИOITAИ   (B) ⅃AИOITAᴎ

   (C) ⅃AИOITAᴎ   (D) LAИOITAᴎ

5. 84569

   (A) 96548   (B) ઘટ૬Ⴤ8   (C) 69Ⴤ૬8   (D) 845ઘઘ

*************************** ALL THE BEST ***************************