

# GATE

## *Data Science & AI*



### General Aptitude

### SPATIAL APTITUDE

Lecture No.- 02



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# Recap of Previous Lecture



Topic

Formation of Images





# Topics to be Covered



**Topic-1**

Paper Folding

**Topic-2**

Paper Cutting

Water Image

Mirror Image

[MCQ]



#Q. Group the given figures into three classes using each figure only once.

**A**

1, 3, 5 | 2, 4, 7 | 6, 8, 9

**B**

1, 5, 7 | 2, 3, 6 | 4, 8, 9

**C**

1, 6, 9 | 2, 4, 7 | 3, 5, 8

**D**

1, 3, 5 | 2, 6, 7 | 4, 8, 9



Assignment

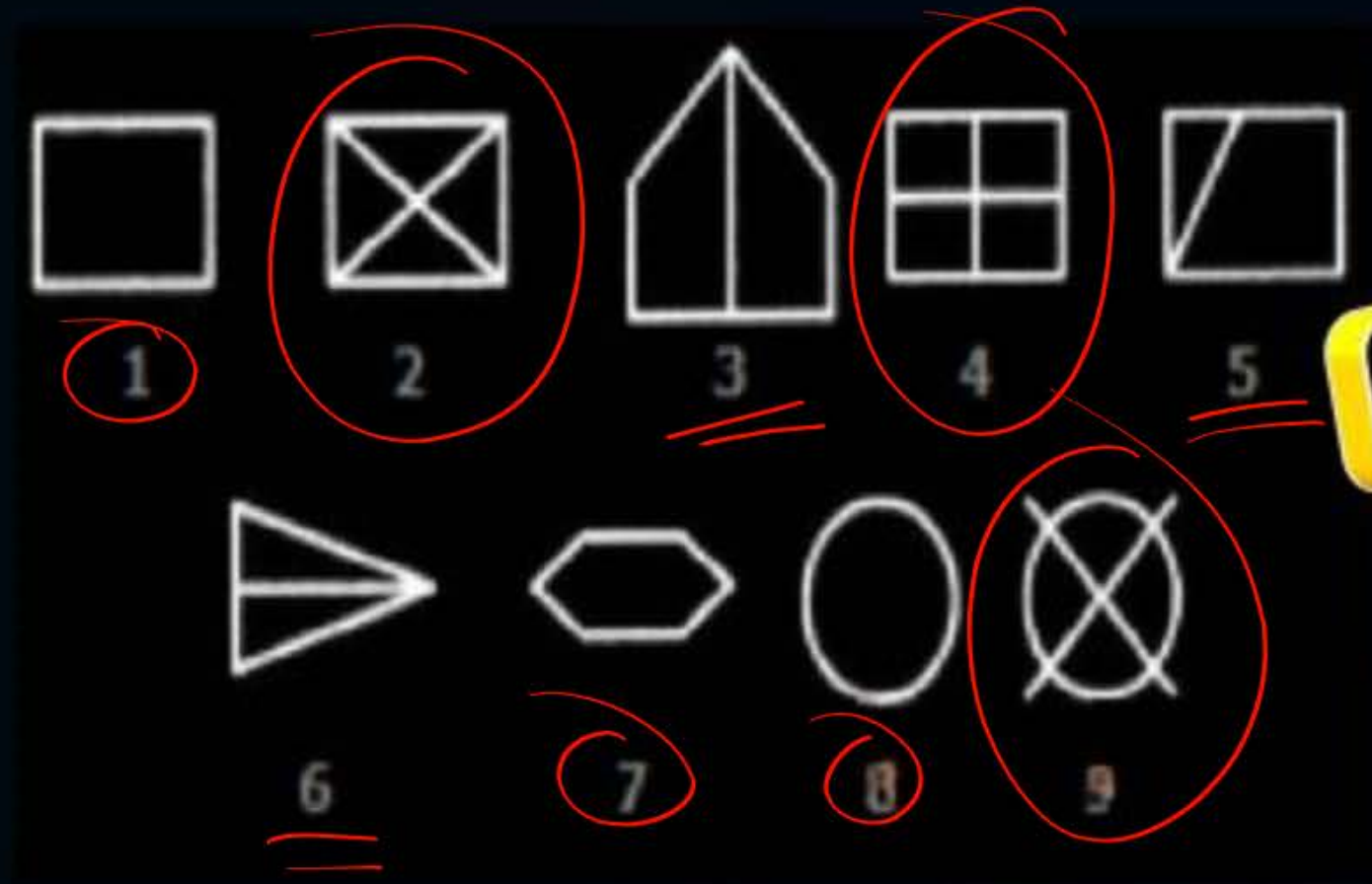


# [MCQ]



#Q. Group the given figures into three classes using each figure only once.

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



Assignment

A

1, 2, 4 | 3, 5, 6 | 7, 8, 9

B

1, 3, 4 | 2, 8, 9 | 5, 6, 7

C

1, 7, 8 | 3, 5, 6 | 2, 4, 9

D

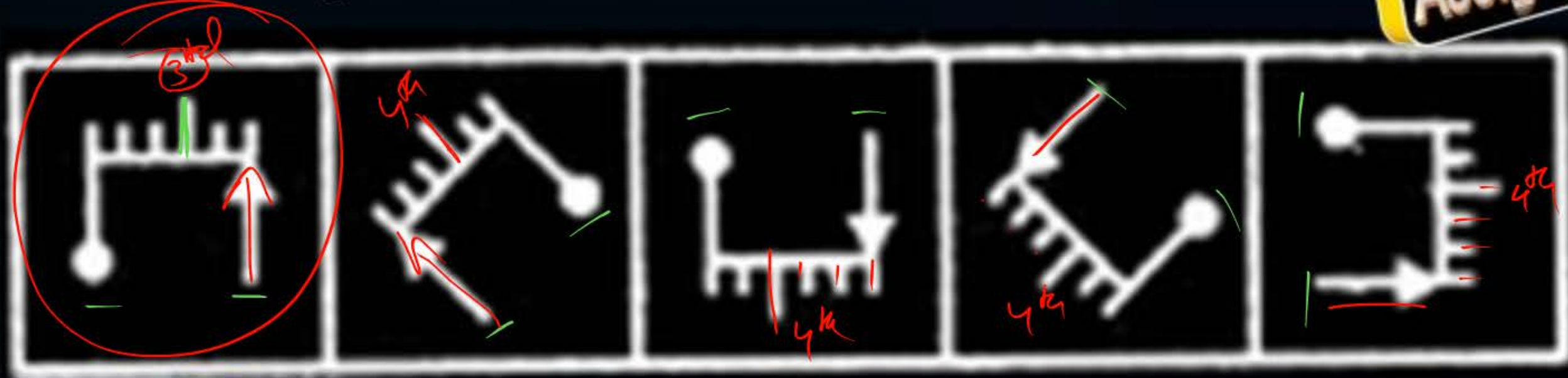
1, 7, 8 | 2, 3, 6 | 4, 5, 9

[MCQ]



Assignment

#Q. Choose the figure which is different from the rest.



**A**

**B**

**C**

**D**

**E**



[MCQ]



#Q. Choose the figure which is different from the rest.

Assignment



A

B

C

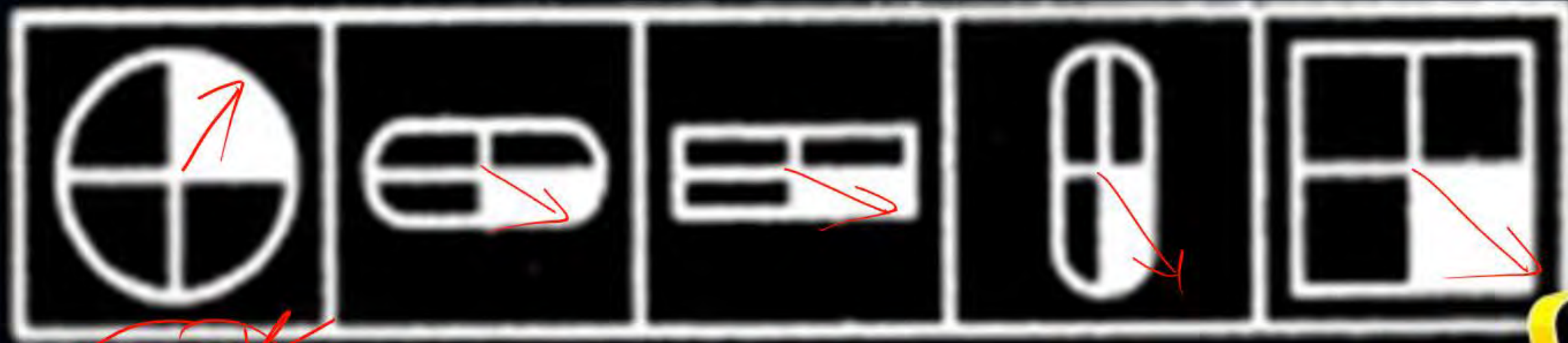
D

E

[MCQ]



#Q. Choose the figure which is different from the rest.



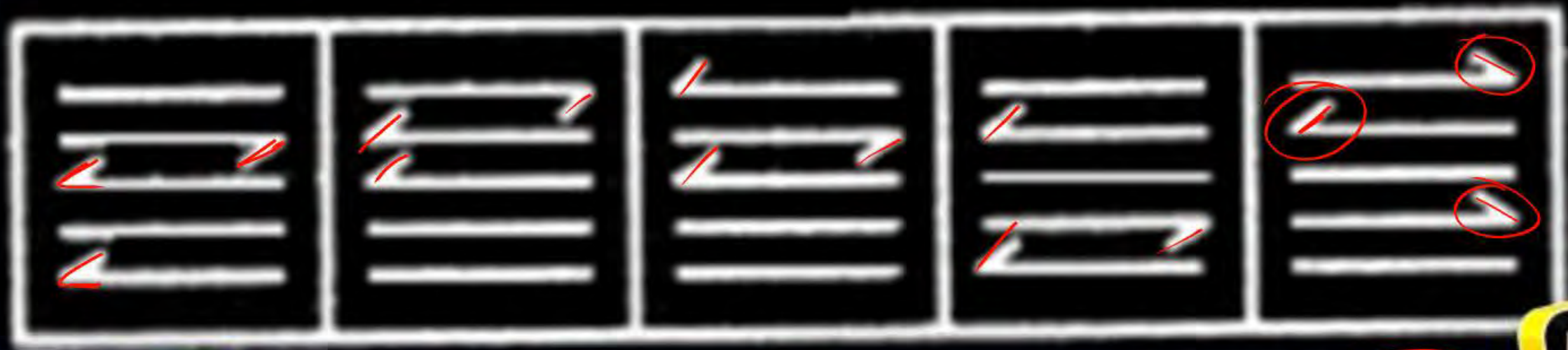
Assignment



[MCQ]



#Q. Choose the figure which is different from the rest.



**A**

**B**

**C**

**D**

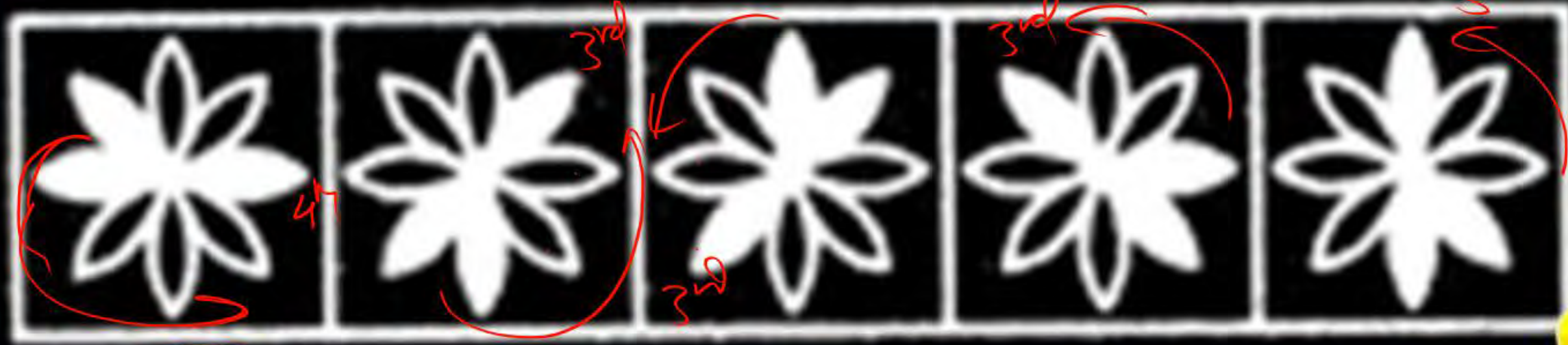
**E**

Assignment

[MCQ]



#Q. Choose the figure which is different from the rest.



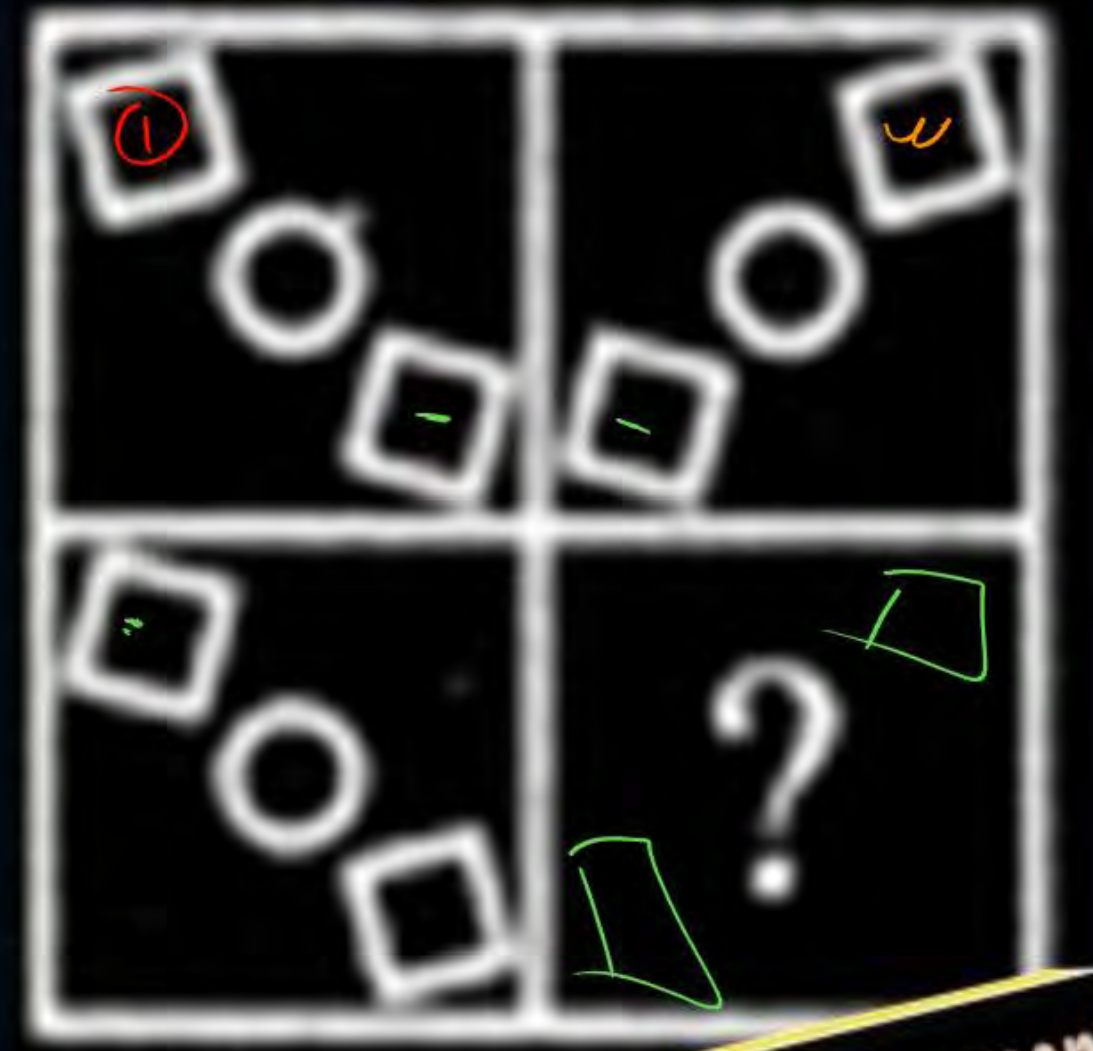
Assignment



# [MCQ]



#Q. Identify the figure that completes the pattern.



Assignment

# [MCQ]

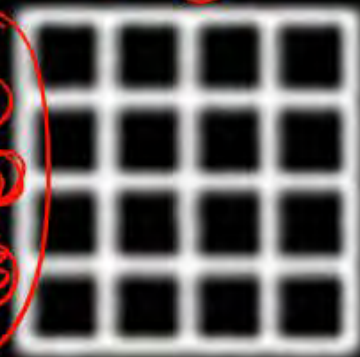


#Q. Identify the figure that completes the pattern.

**A**



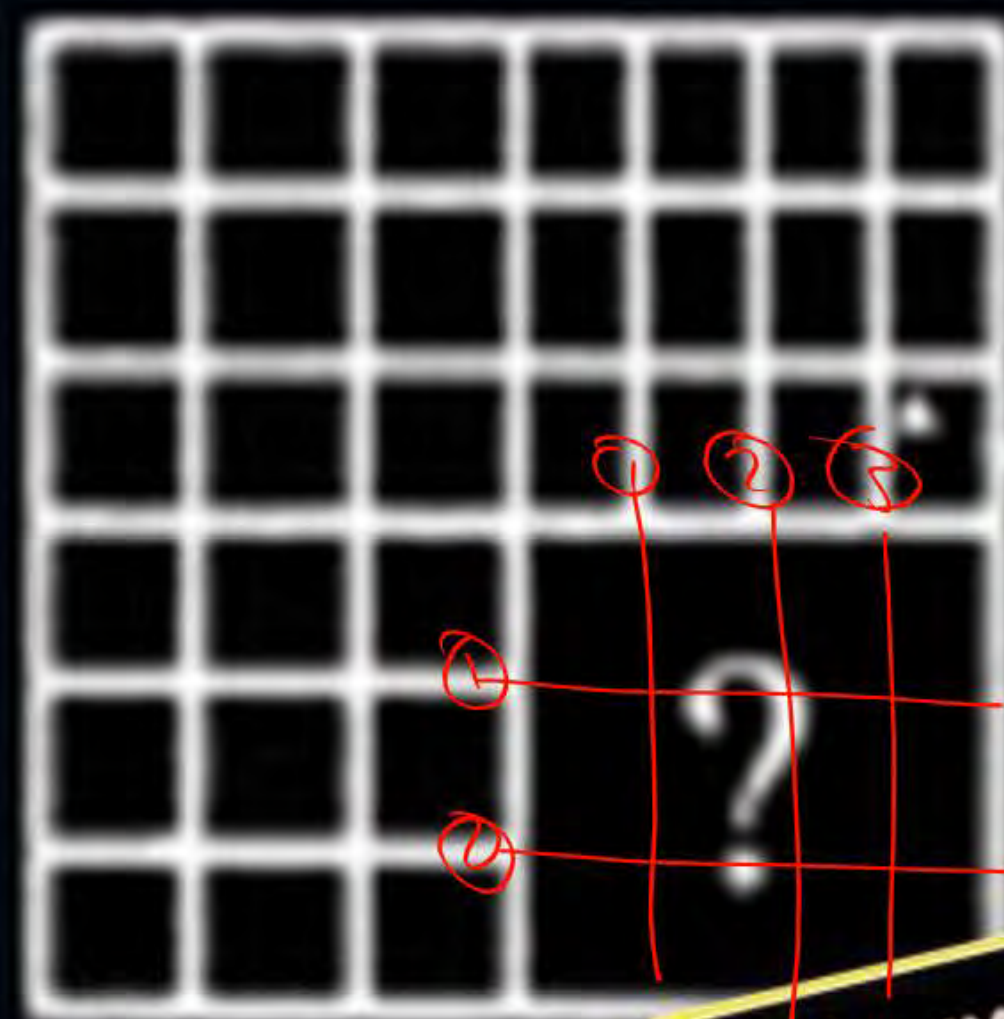
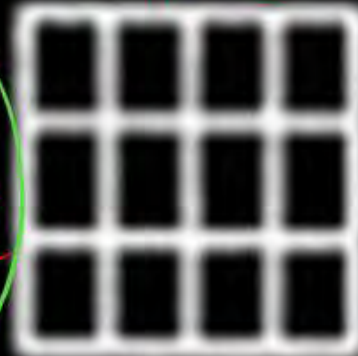
**B**



**C**



**D**



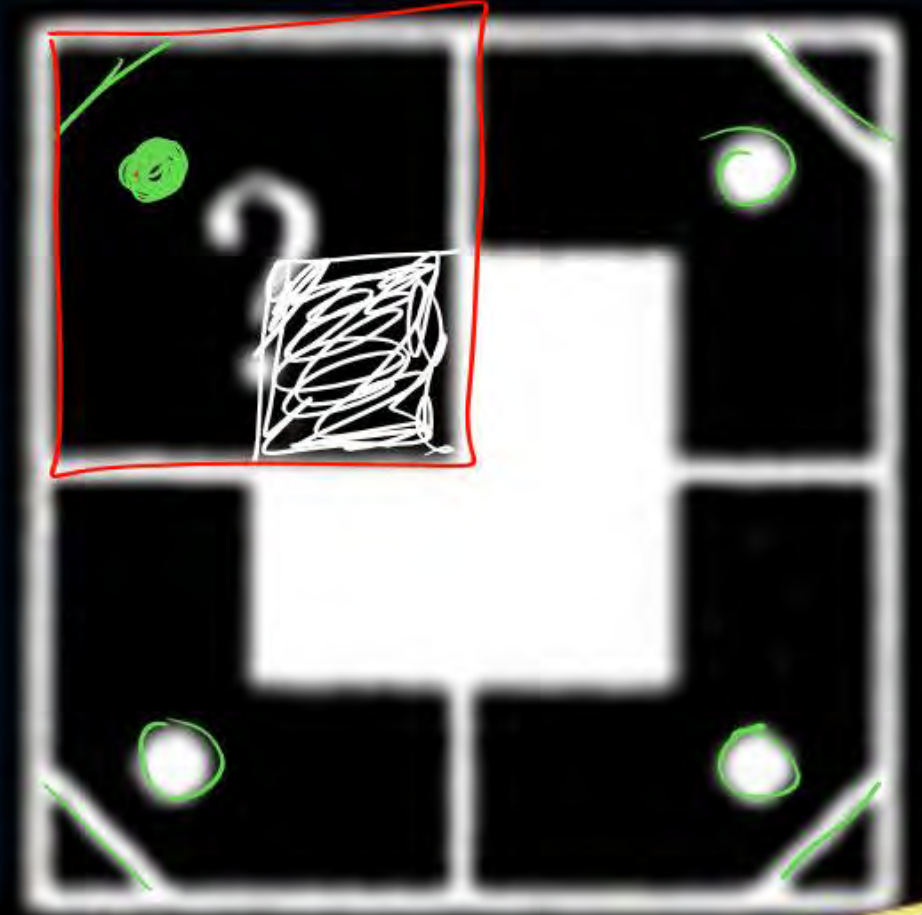
Assignment



[MCQ]



#Q. Identify the figure that completes the pattern.



Assignment



~~A~~



~~B~~



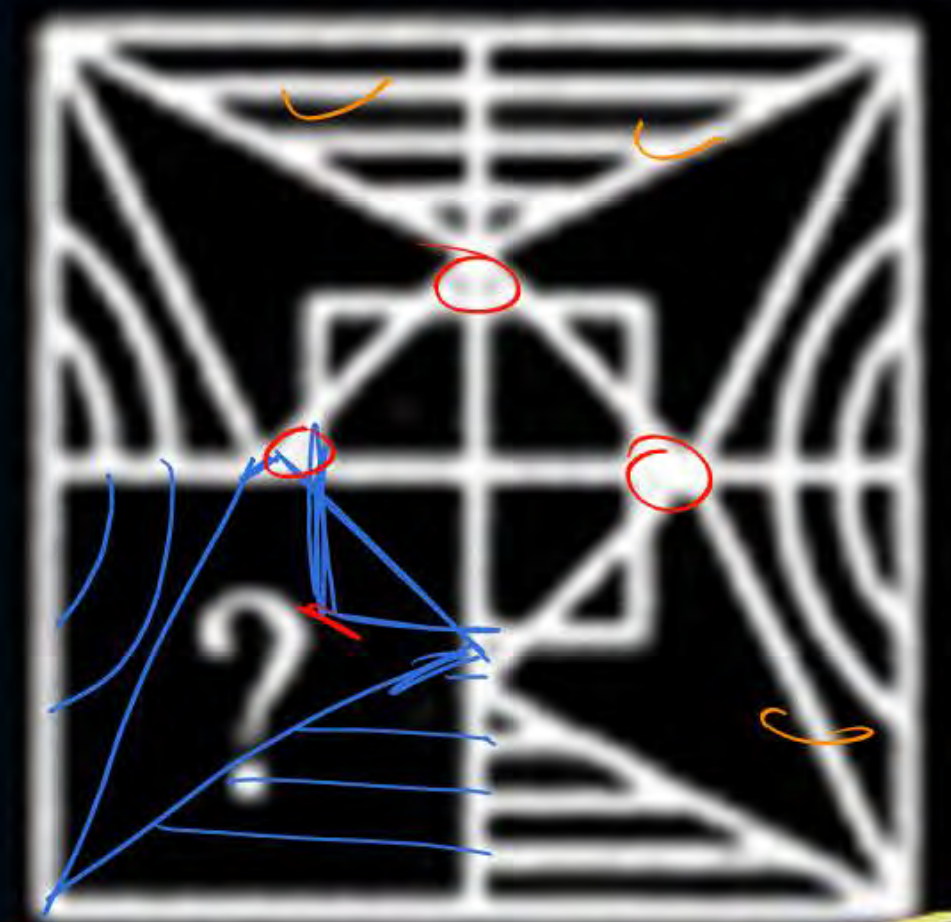
~~C~~



D

[MCQ]

#Q. Identify the figure that completes the pattern.



A



B



C



D

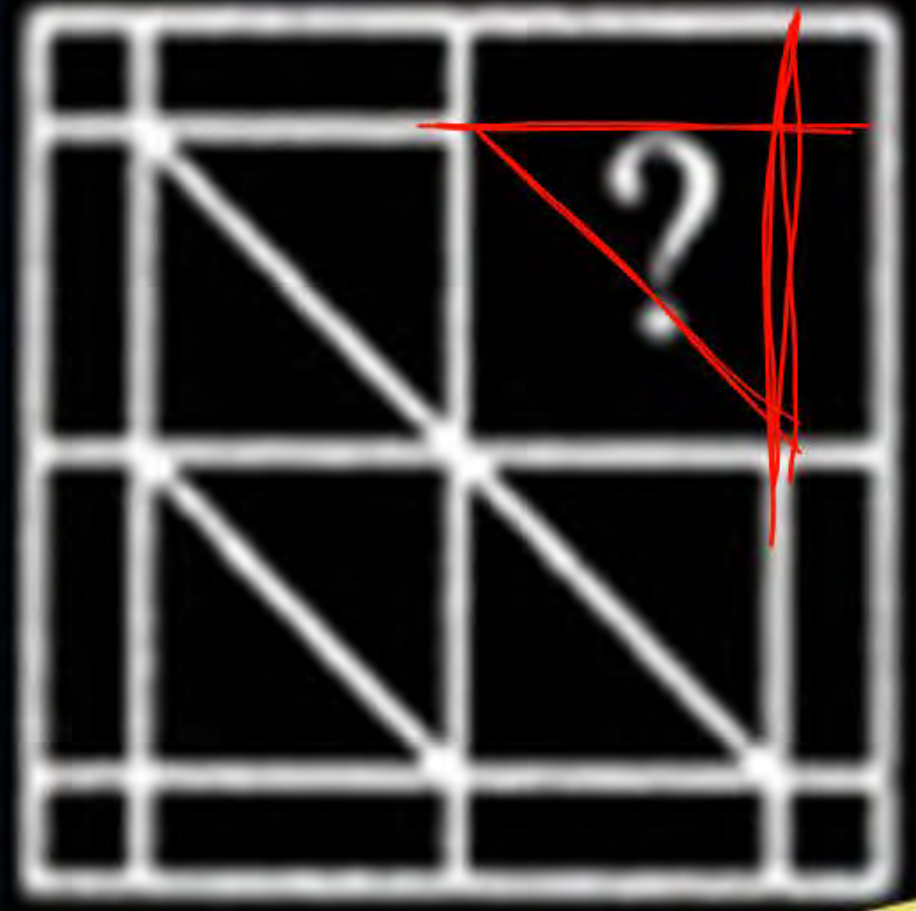
Assignment



[MCQ]



#Q. Identify the figure that completes the pattern.



Four options are shown, each with a red 'X' mark:

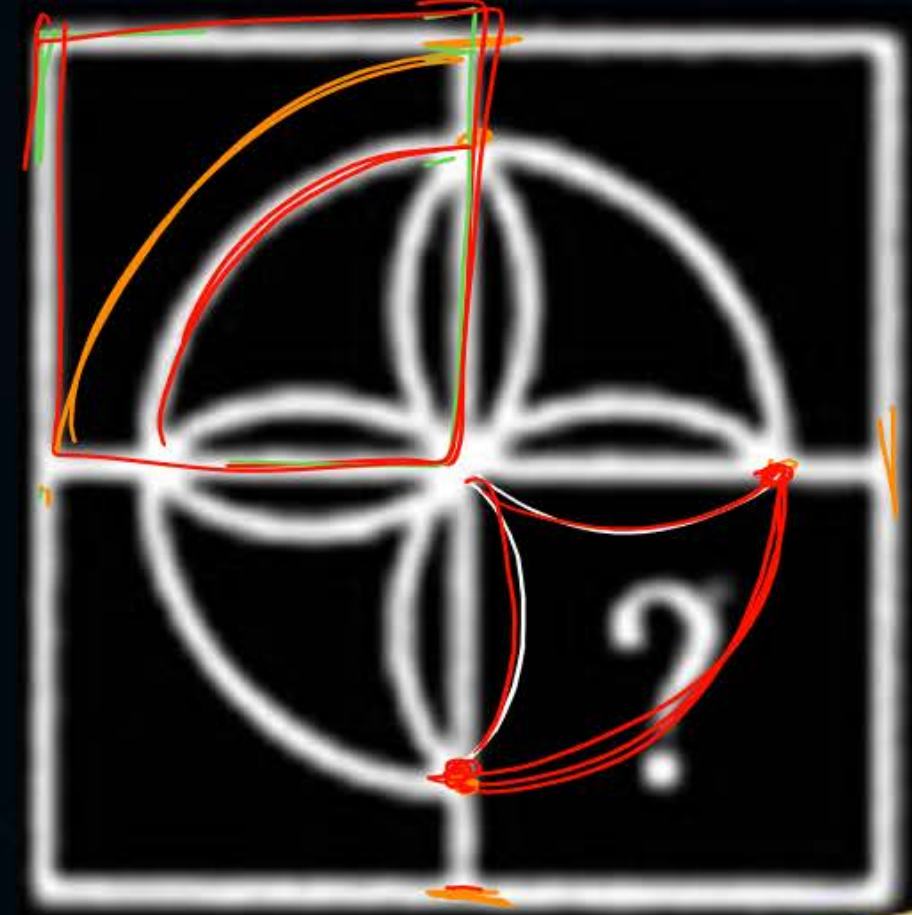
-   
**A**
-   
**B**
-   
**C**
-   
**D**

Assignment

[MCQ]



#Q. Identify the figure that completes the pattern.



**A**



**B**



**C**



**D**

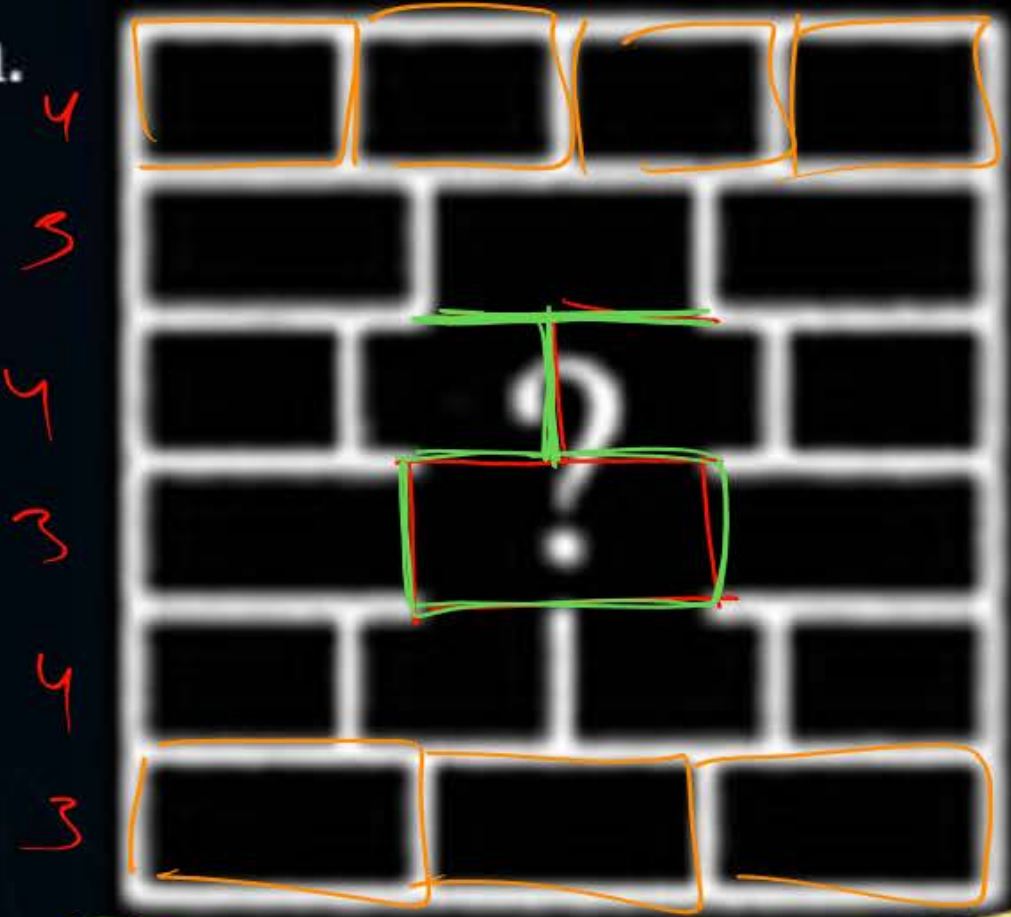
Assignment



# [MCQ]



#Q. Identify the figure that completes the pattern.



A



B



C



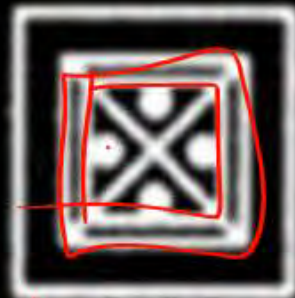
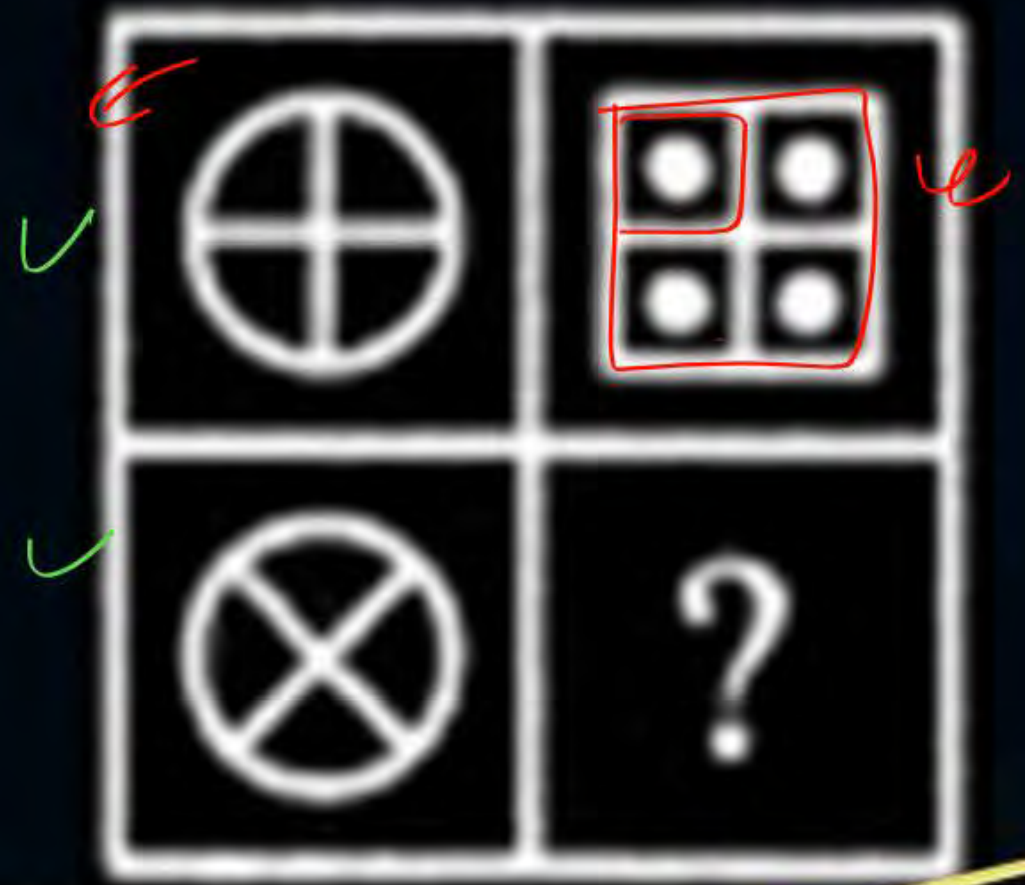
D

Assignment

[MCQ]



#Q. Identify the figure that completes the pattern.



Assignment

A

B

C

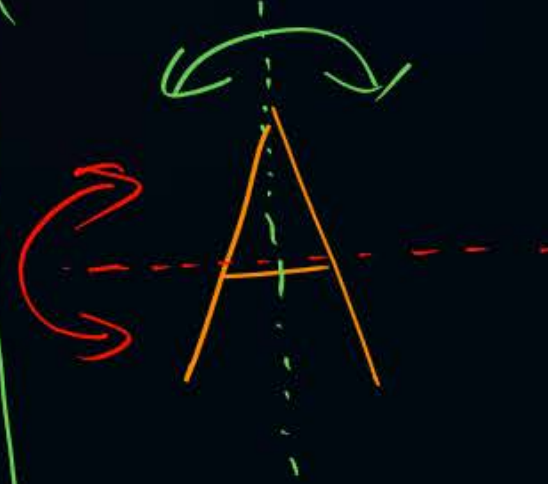
D



# Mirror & Water Images

A

y' axis (Mirror Image)



x' axis (Water Image)



Letters	Mirror Images	Letters	Mirror Images	Letters	Mirror Images
A	A	J	l	S	2
B	B	K	K	T	T
C	C	L	L	U	U
D	D	M	M	V	V
E	E	N	N	W	W
F	F	O	O	X	X
G	G	P	p	Y	Y
H	H	Q	Q	Z	Σ
I	I	R	R		



MIRROR IMAGE		MIRROR IMAGE	
Digits		Alphabet (Big)	
0	0	A	A
1	1	B	B
2	2	C	C
3	3	D	D
4	4	E	E
5	5	F	F
6	6	G	G
7	7	H	H
8	8	I	I
9	9	J	J
		K	K
		L	L
		M	M
		N	N
		O	O
		P	P
		Q	Q
		R	R
		S	S
		T	T
		U	U
		V	V
		W	W
		X	X
		Y	Y
		Z	Z
		a	a
		b	b
		c	c
		d	d
		e	e
		f	f
		g	g
		h	h
		i	i
		j	j
		k	k
		l	l
		m	m
		n	n
		o	o
		p	p
		q	q
		r	r
		s	s
		t	t
		u	u
		v	v
		w	w
		x	x
		y	y
		z	z

# [MCQ]

#Q. Choose the alternative which ~~is~~ closely resembles the mirror image of the given combination.

1965 INDOPAK

1965 INDOPAK



**A** 1965 INDOPAK

**B** 28810DN1KAP

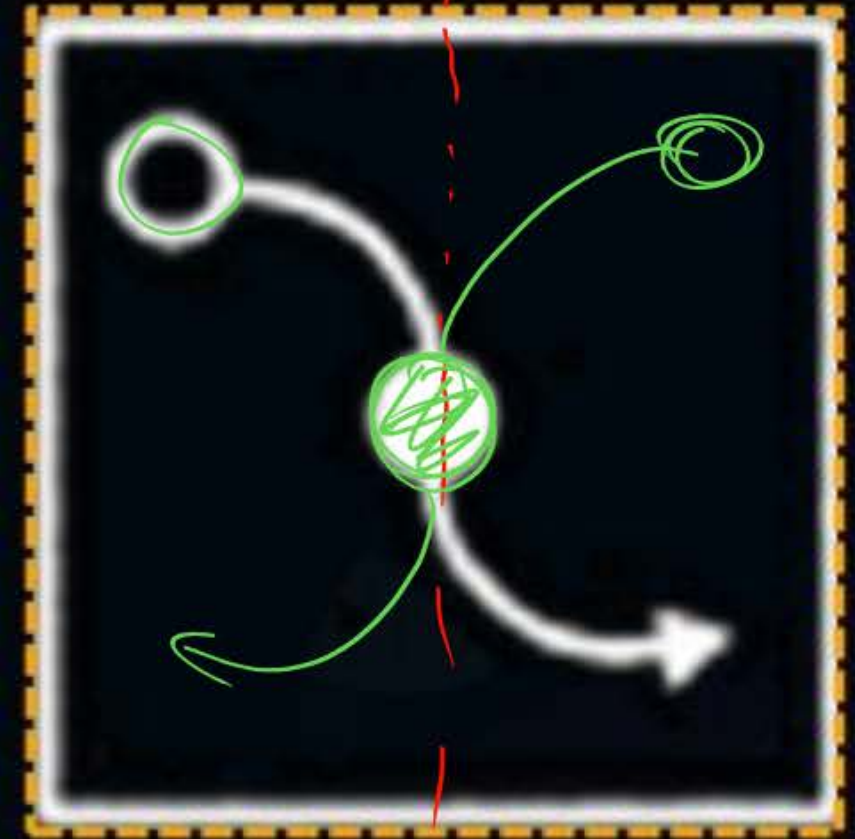
**C** 1885 INDOPAK

**D** 1965 INDOPAK



[MCQ]

#Q. Choose the alternative which ~~is~~ closely resembles the mirror image of the given combination.



A



B



C



D



[MCQ]

#Q. Choose the alternative which is closely resembles the mirror image of the given combination.

ANS 43Q12

- A** AN243Q12
- B** 2NA34Q12
- C** 21Q342NA
- D** 12Q43AN2



[MCQ]



#Q. Choose the alternative which is closely resembles the mirror image of the given combination.

T A R A I N 1 0 1 4 A

~~A~~

A 1 0 1 4 T A R A I N

B

A 4 1 0 1 N I A R A I

C ✓

A 4 1 0 1 N I A R A T

~~D~~

A 1 0 1 4 N I A R A T

# [MCQ]

#Q. Choose the alternative which is closely resembles the mirror image of the given combination.

E F F E C T I V E

A

E V I T C E F F E

B

E F F E C T I V E

C

E V I T C E F F E

D

E V I T C E F F E



[MCQ]



#Q. Choose the alternative which is closely resembles the ~~mirror~~ image of the given combination.

MALAYALAM  
MALAYALAM

- ☒ A MALAYALAM
- ☐ B MALAYALAM
- ☐ C MALAYALAM
- ☒ D MALAYALAM

[MCQ]

Assignment



#Q. Choose the alternative which is closely resembles the mirror image of the given combination.

U T Z F Y 6 K H

- A** H K 9 Y Ǝ Σ ⊥ U
- B** H K θ λ Ǝ Σ ⊥ U
- C** U ⊥ Σ Ǝ λ 9 K H
- D** H K θ Y Ǝ Σ ⊥ U



[MCQ]

Assignment



#Q. Choose the alternative which is closely resembles the mirror image of the given combination.

SUPERVISOR

- A** ʌ02IVЯƎU2
- B** Ǝ20UƆƎEƎIΛ
- C** 2UƎEƎΛI20Ǝ
- D** 2UƎEƎΛI02Ǝ

[MCQ]

Assignment



#Q. Choose the alternative which is closely resembles the mirror image of the given combination.

BR4AQ16HI

- A** BR4AQ16HI
- B** BR4AQ16HI
- C** BR4AQ19HI
- D** BR4AQ16HI



[MCQ]

Assignment



#Q. Choose the alternative which is closely resembles the mirror image of the given combination.

M A G A Z I N E

- A** MAGAZINE
- B** ENIZAGAM
- C** MAGAZINE
- D** MAGAZINE

[MCQ]

Assignment



#Q. Choose the alternative which is closely resembles the mirror image of the given combination.



A



B



C



D





[MCQ]

Assignment



#Q. Choose the alternative which is closely resembles the mirror image of the given combination.

A



B



C



D

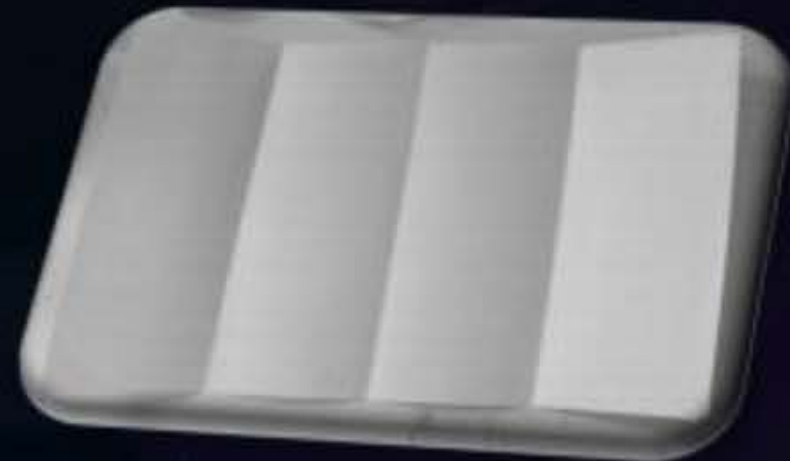


# Paper Folding





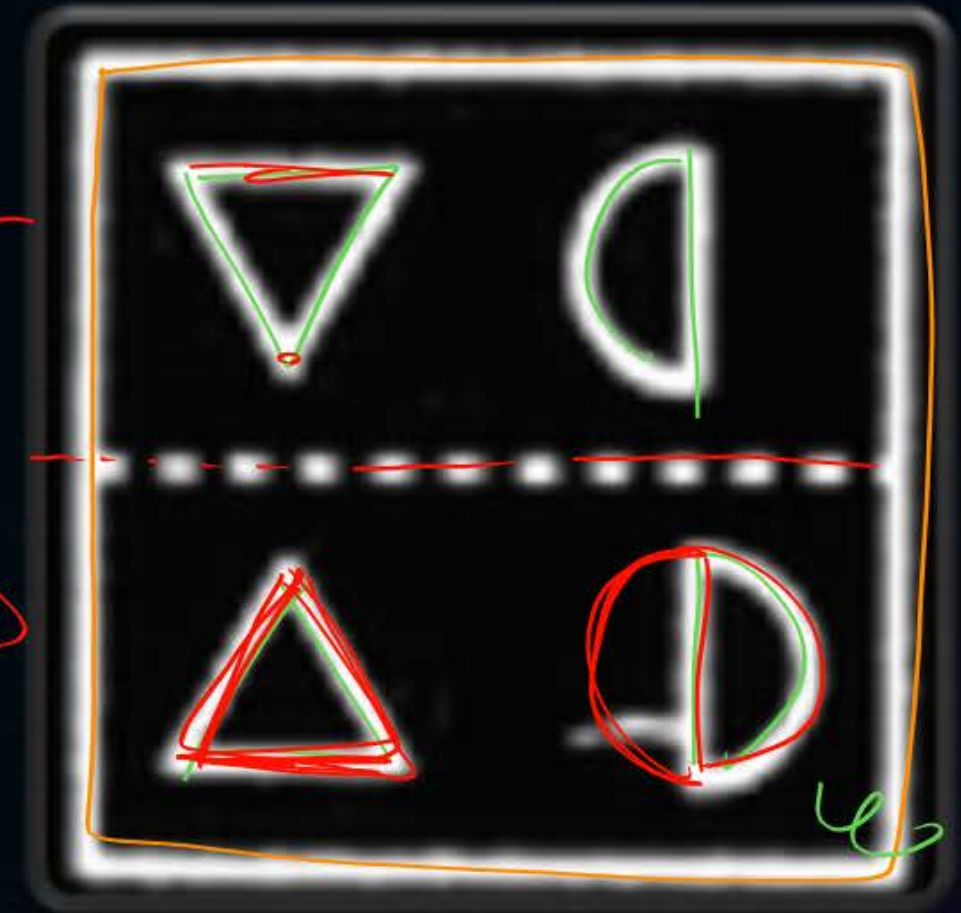
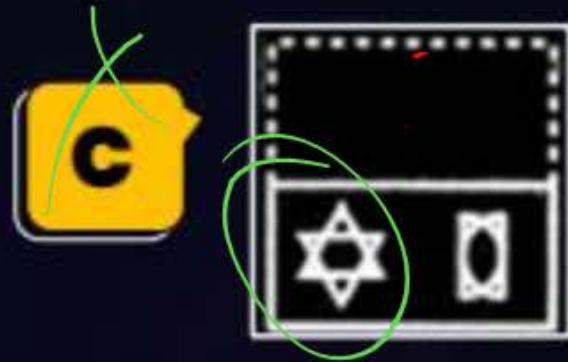
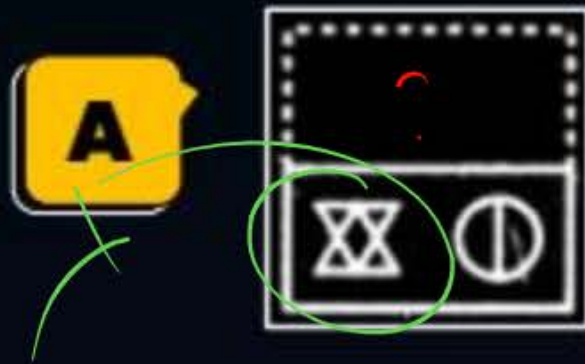
- In each of the following problems, a square transparent sheet with a pattern is given. Figure out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.



# [MCQ]



#Q. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.

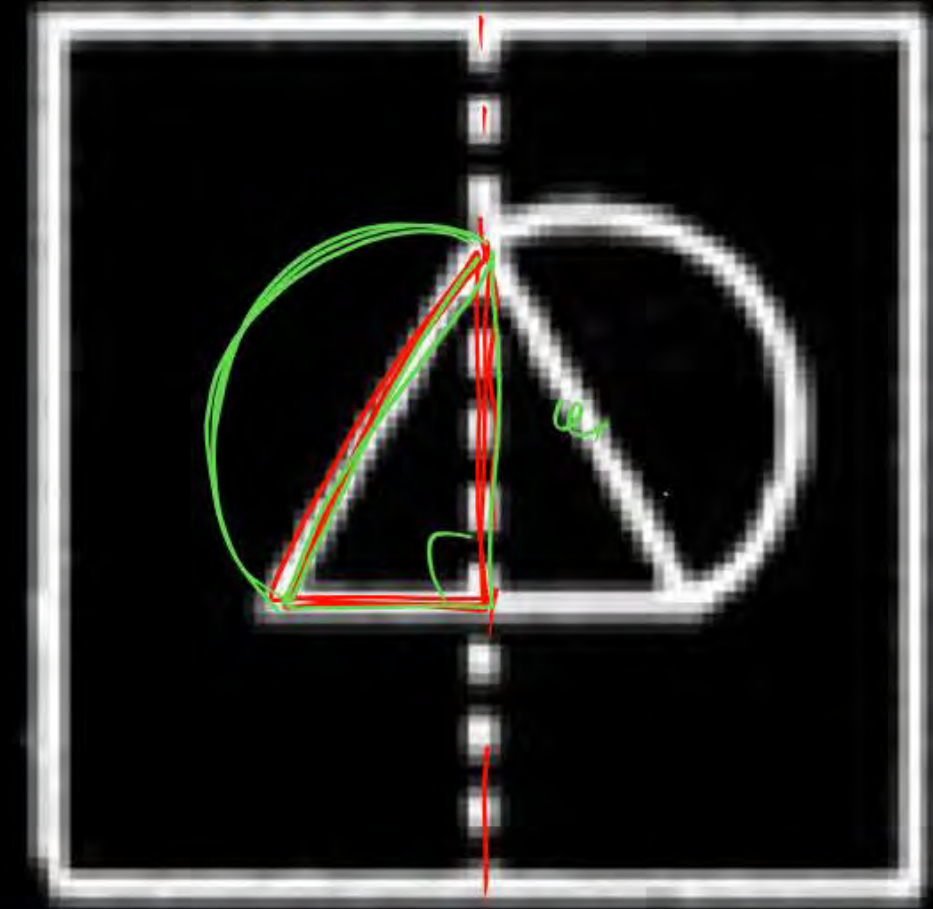




# [MCQ]



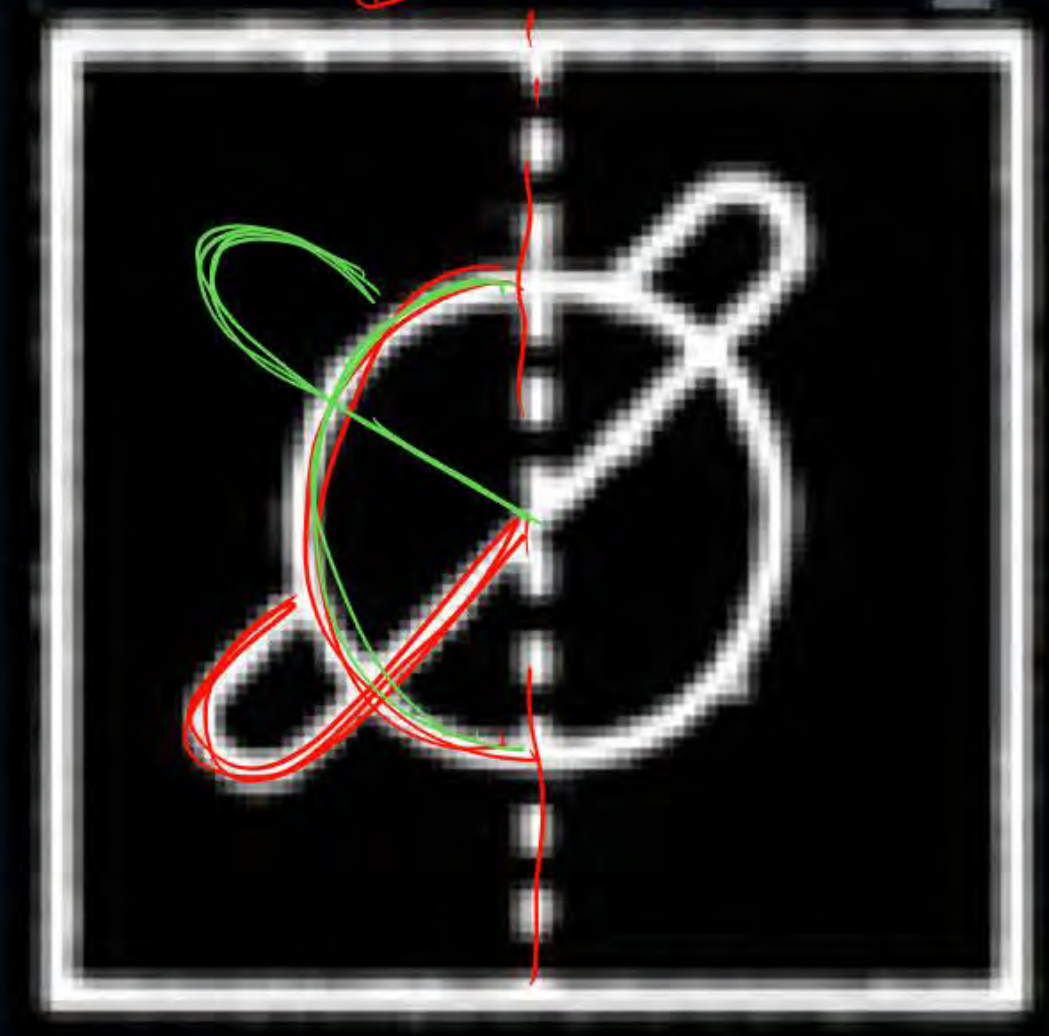
#Q. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.



# [MCQ]



#Q. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.

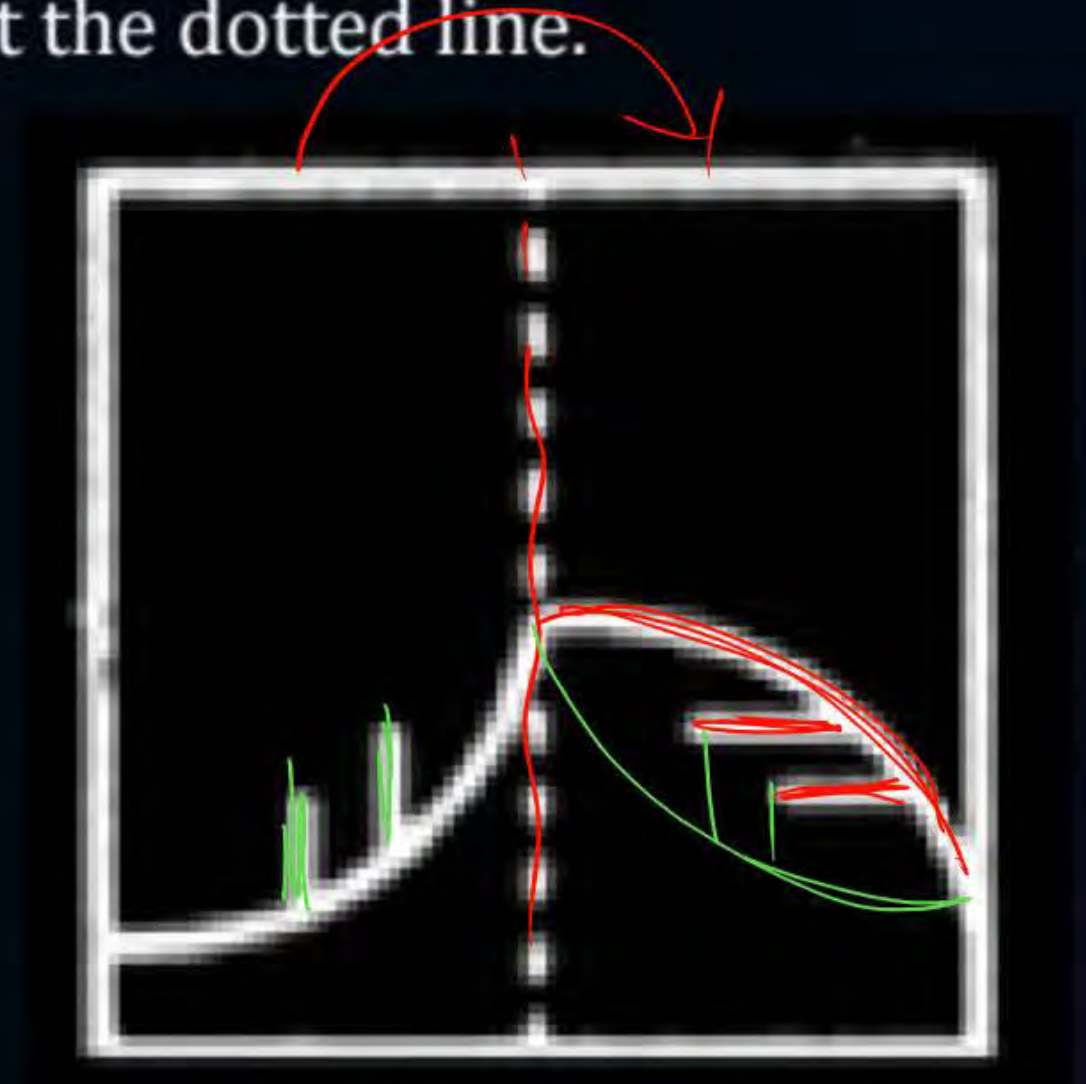




# [MCQ]



#Q. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.



[MCQ]

Assignment



#Q. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.

**A**



**B**



**C**



**D**



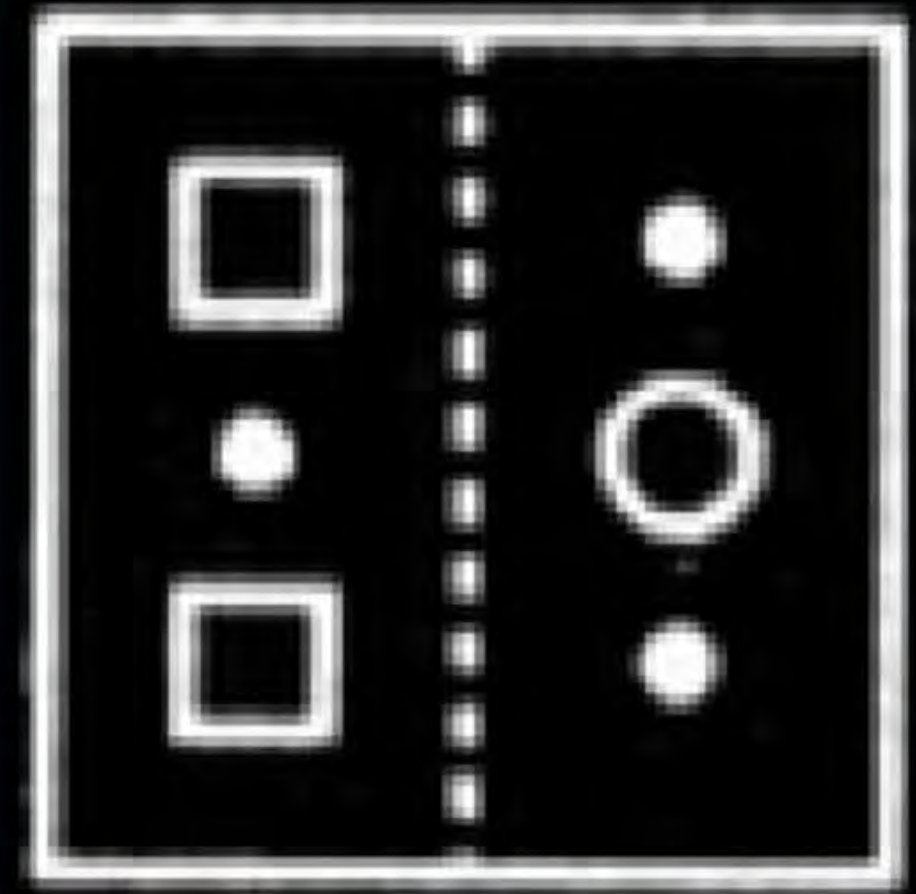


[MCQ]

Assignment



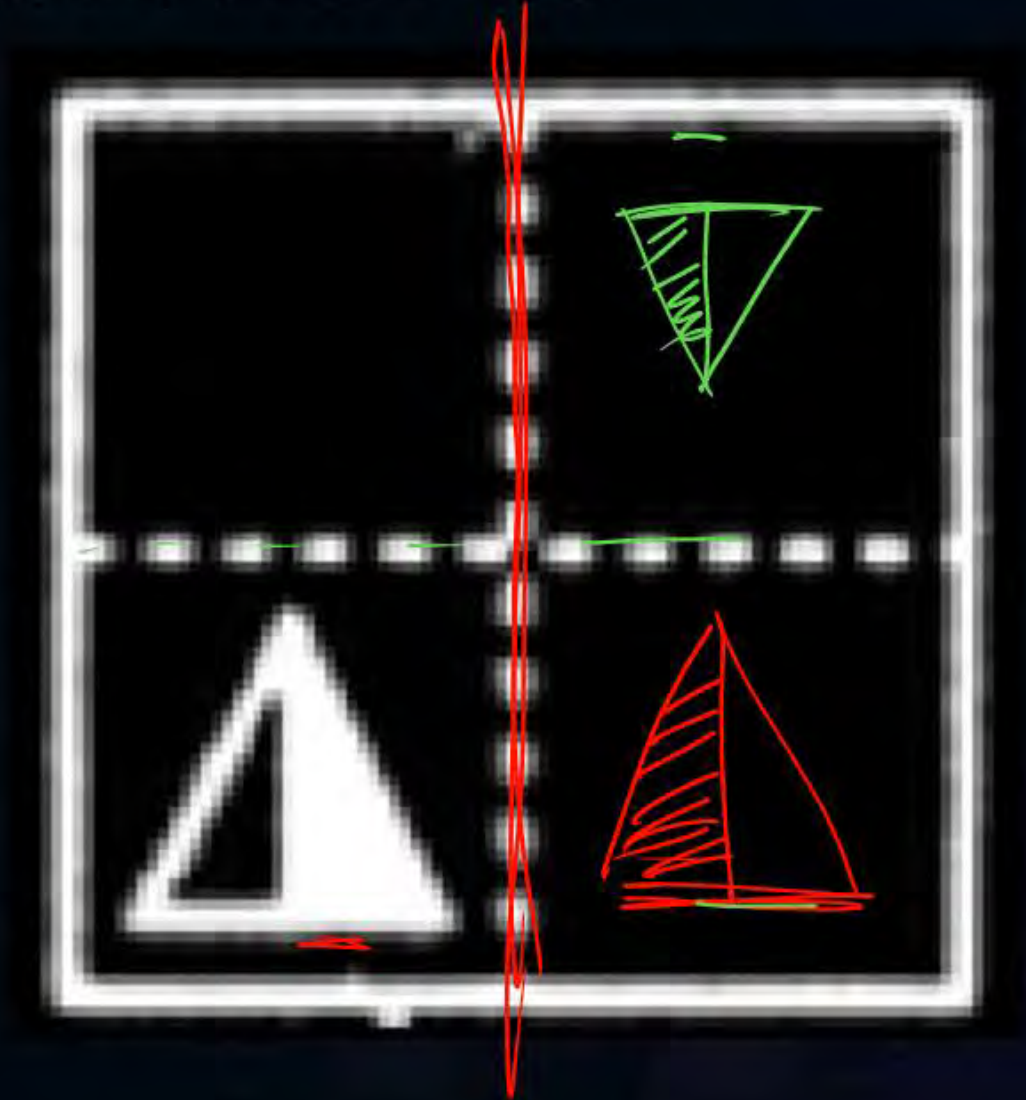
#Q. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.



# [MCQ]



#Q. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.





[MCQ]

Assignment



#Q. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.



[MCQ]

Assignment



#Q. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.

A



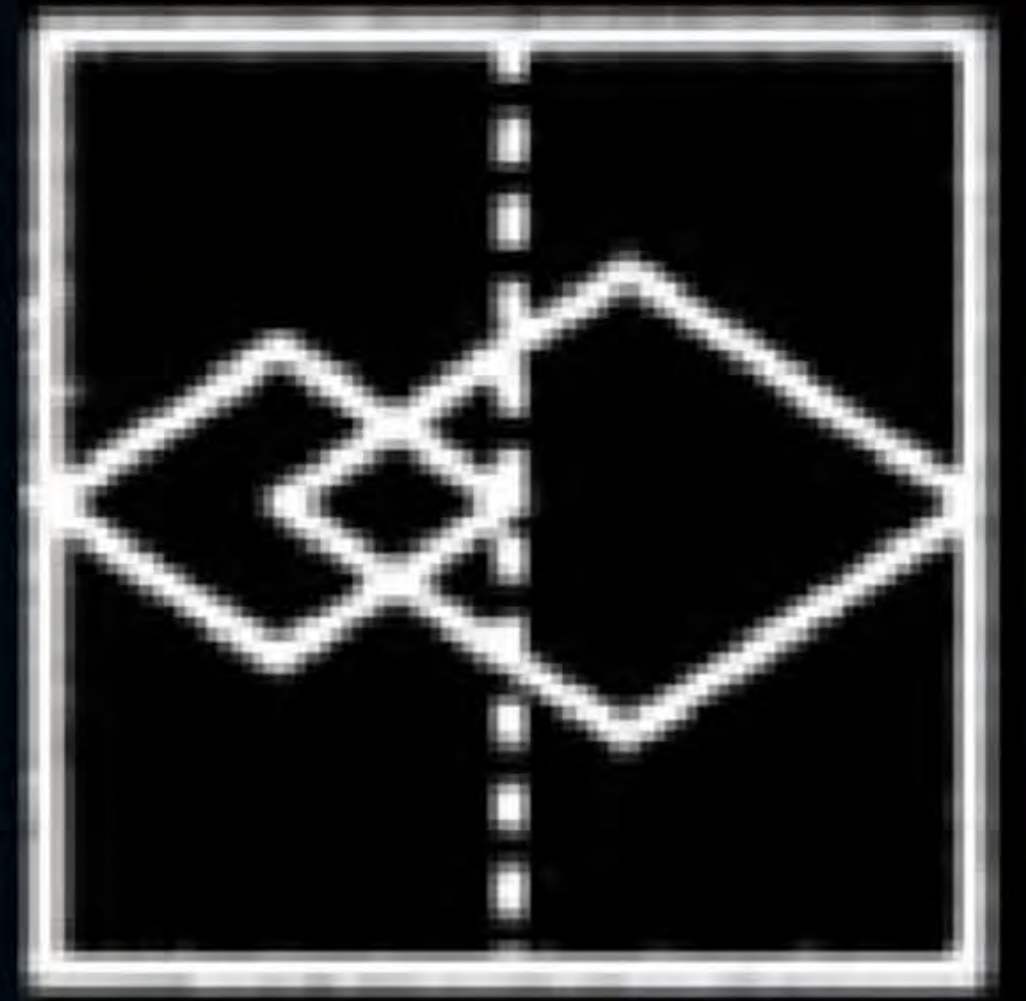
B



C



D





[MCQ]

Assignment



#Q. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.



# Paper Cutting





- Each of the following questions consists of a set of three figures X, Y and Z showing a sequence of folding of a piece of paper. Figure (Z) shows the manner in which the folded paper has been cut. These three figures are followed by four answer figures from which you have to choose a figure which would most closely resemble unfolded form of figure (Z).

[MCQ]

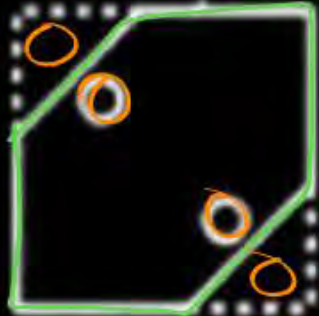
#Q. Choose a figure which would most closely resemble the unfolded form of Figure (Z).



X



Y



Z



A



B



C



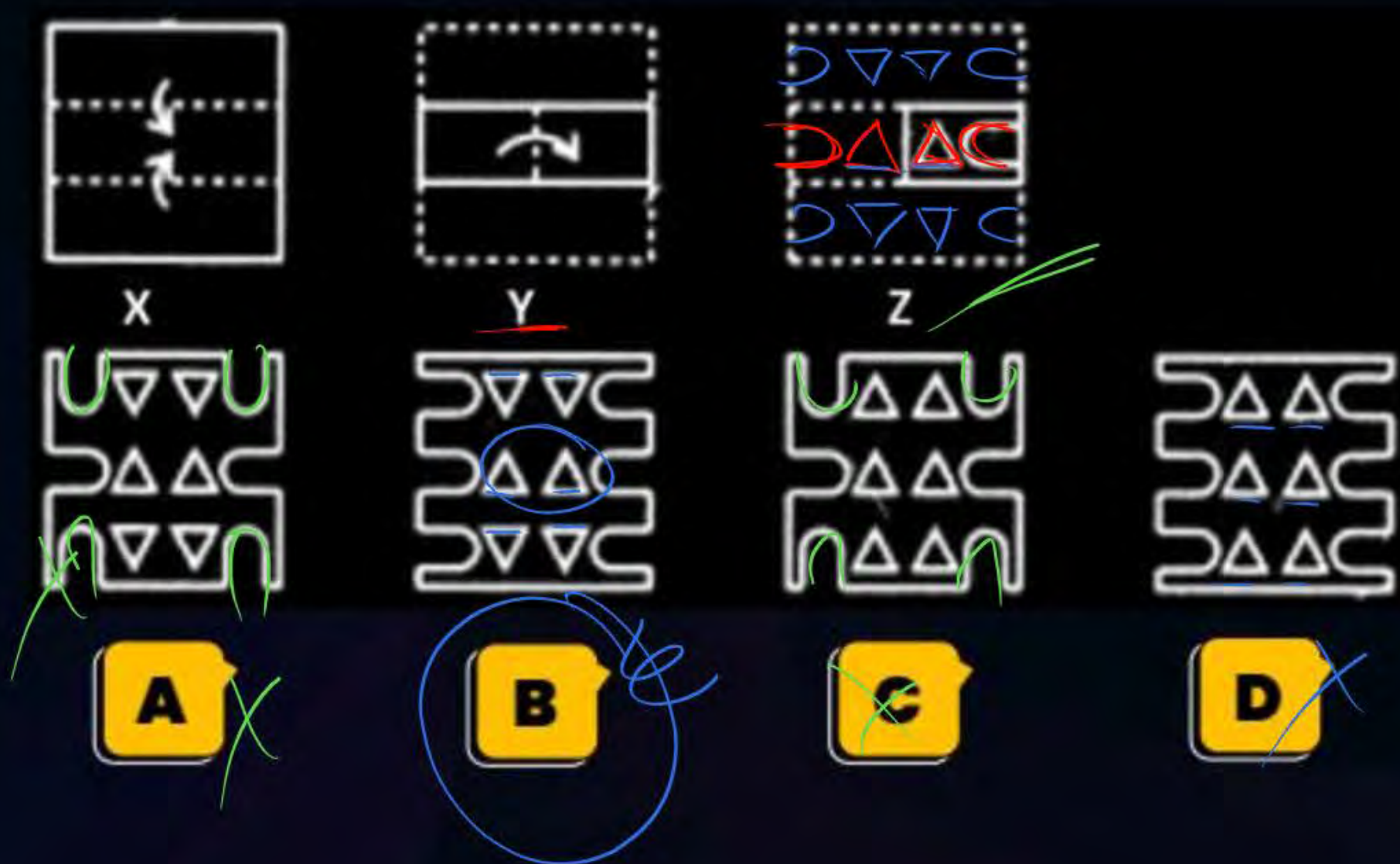
D



[MCQ]



#Q. Choose a figure which would most closely resemble the unfolded form of Figure (Z).



[MCQ]

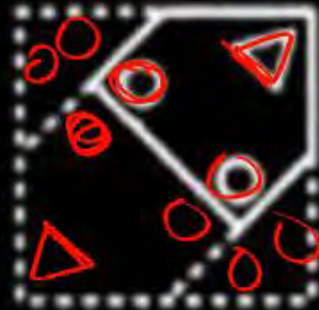
#Q. Choose a figure which would most closely resemble the unfolded form of Figure (Z).



X



Y



Z



A



B



C



D



[MCQ]

Assignment



#Q. Choose a figure which would most closely resemble the unfolded form of Figure (Z).



X



Y



Z



A



B



C



D

[MCQ]

Assignment



#Q. Choose a figure which would most closely resemble the unfolded form of Figure (Z).



X



Y



Z



**A**



**B**



**C**



**D**



[MCQ]

Assignment



#Q. Choose a figure which would most closely resemble the unfolded form of Figure (Z).



X



Y



Z



A



B



C



D

[MCQ]

Assignment



#Q. Choose a figure which would most closely resemble the unfolded form of Figure (Z).



X



Y



Z



A



B



C



D





## 2 mins Summary



**Topic**

Paper Folding & Cutting

Mirrors

Water



**THANK - YOU**