

Spatial Aptitude [200% → 2 min]

→ Mirror Image, water Image

→ Paper → folding

folding punched ↓

→ Figure - Series

— Analogy

— Odd Man out

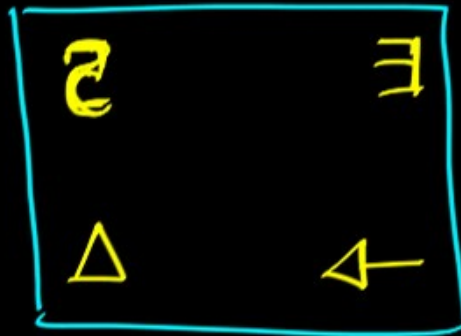
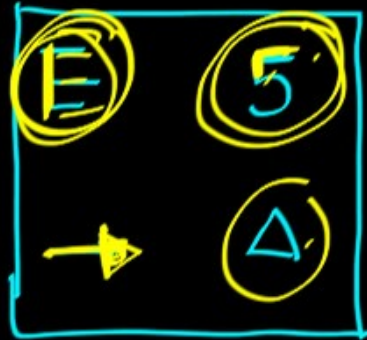
— Completion ✓

— hidden / Embed

→ Figure - Matrix

→ diagrammatic
logical Thinking

Minimal Image



there is change

$\Leftarrow \Rightarrow$ Right
only.

$\Leftarrow \Rightarrow$ Right

but

Top of the figures
appears Top only

Bottom of the figures
bottom only.

For letter

A
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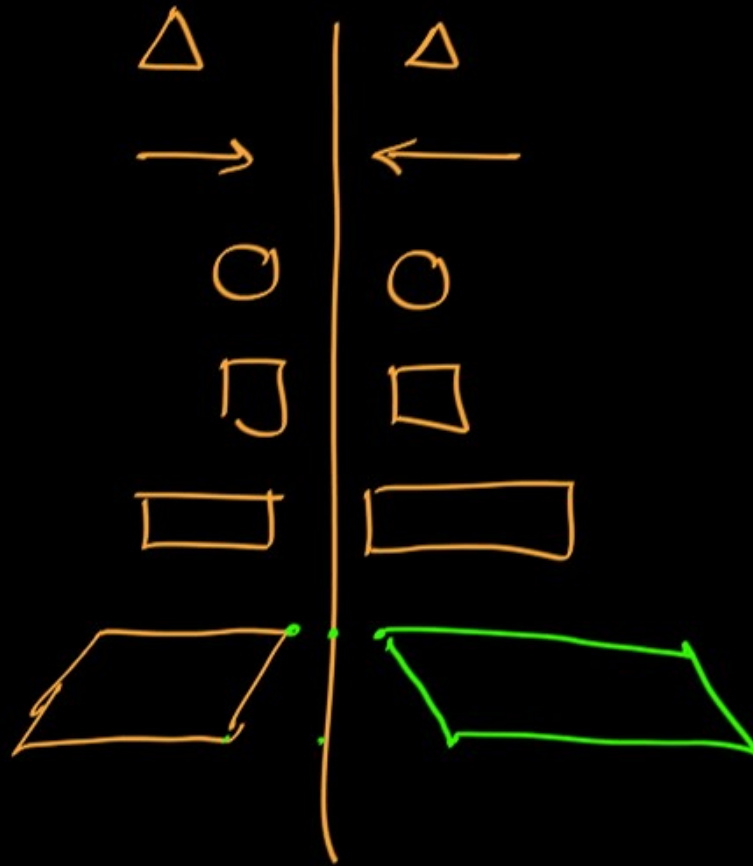
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F&L Numbers

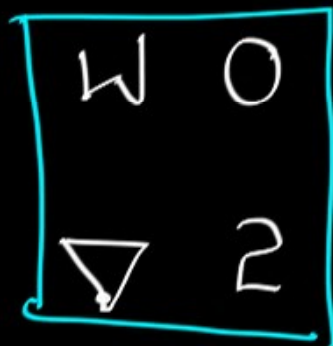
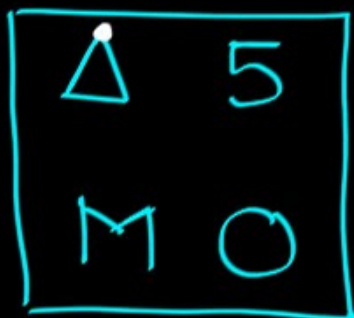
1	↑
2	S
3	m
4	4
5	m
6	o
7	L
8	o
9	o

F&L plane figures:



water Image

Top \Leftrightarrow Bottom



Remember:

Left side of figures
appear left only

Right side of figure
right only

there is change

In Top \rightarrow bottom

bottom \rightarrow Top

TOP OF THE FIGURE APPEARS AT BOTTOM
BOTTOM OF THE FIGURE APPEARS AT TOP

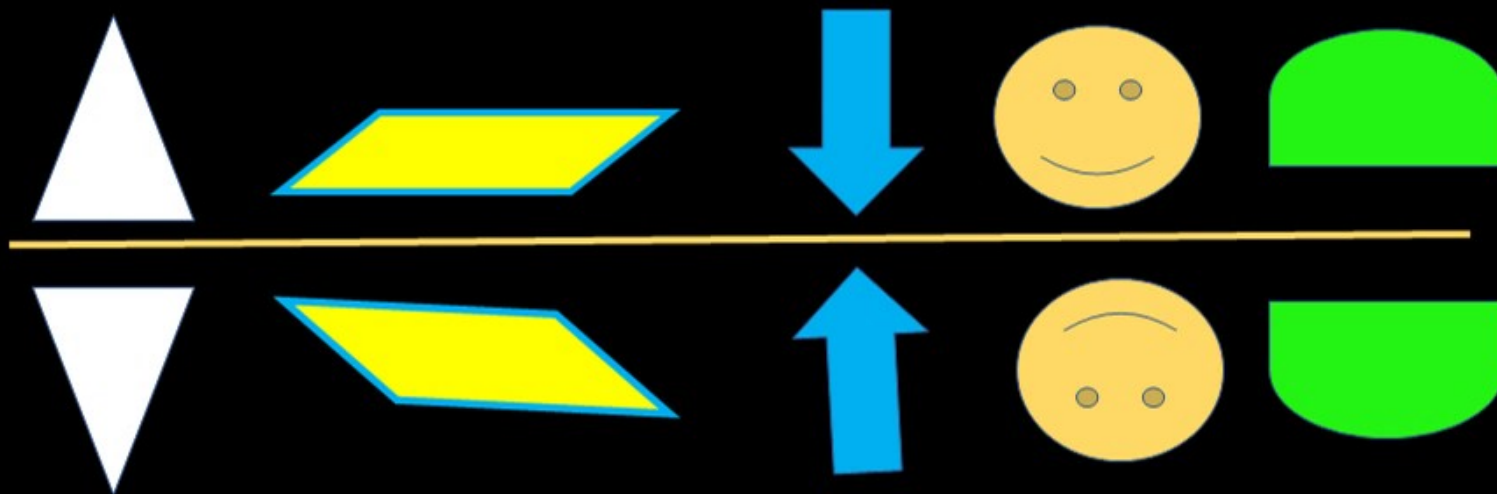
TOP  **BOTTOM**

Letters	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Water Image	∨	B	C	D	E	Ǝ	Ɔ	H	I	ɹ	K	Γ	W	И
Letters	O	P	Q	R	S	T	U	V	W	X	Y	Z		
Water Image	0	Ԁ	Ɔ	ԁ	2	┐	U	Λ	M	X	λ	Σ		

FOR NUMBERS

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

FOR PLANE FIGURES



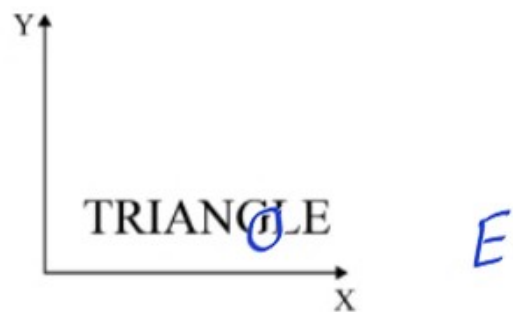
REMEMBER

**TOP OF THE FIGURE APPEARS AT BOTTOM
BOTTOM OF THE FIGURE APPEARS AT TOP ONLY**

BUT

LEFT SIDE POSITION OF THE FIGURE APPEARS AT LEFT ONLY
RIGHT SIDE OF THE FIGURE RIGHT ONLY

13.



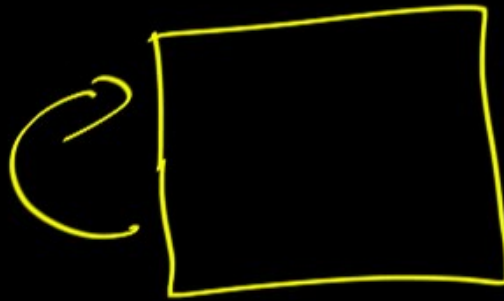
The mirror image of the above text about the X-axis is

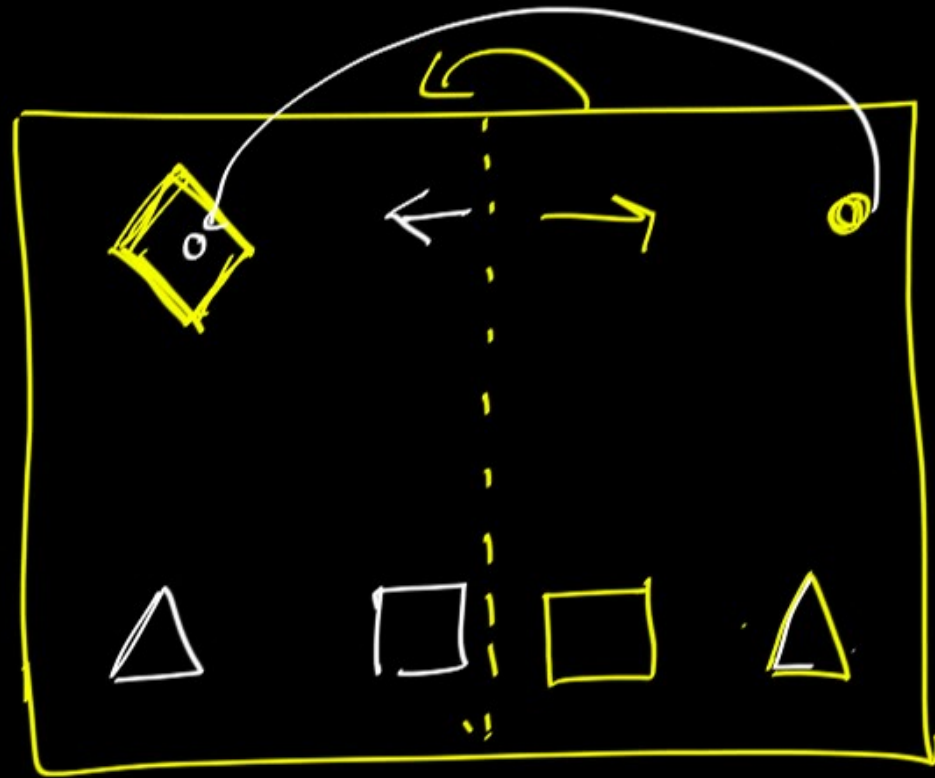
(a) TRIANGLE

(b) TRIANGLE

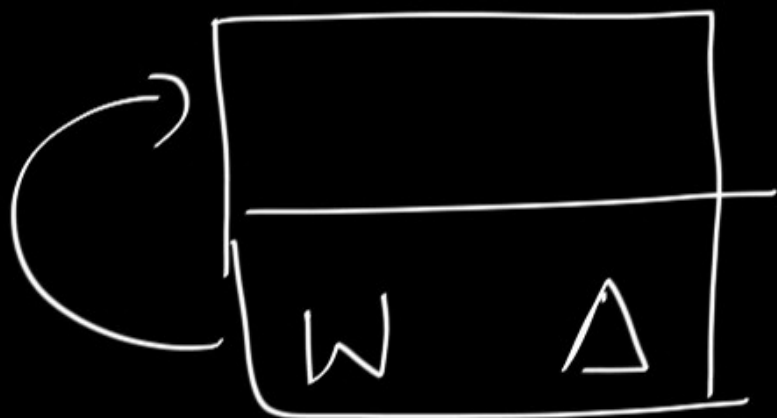
(d) TRIANGLE

Paper folding





If the paper is folded left to right }
right to left } mirror image.



If the paper is folded Bottom \Leftrightarrow Top,



then
will be as water Image

Paper folding & punched



LIFO

$C \rightarrow B \rightarrow A$

folding operations $A \rightarrow B \rightarrow C \rightarrow D$

unfolding operations

$D \rightarrow C \rightarrow B \rightarrow A$

LIFO

last in first out

If the paper is

unfolded $\text{left} \leftrightarrow \text{right} \Rightarrow$ ^{worked} as Mirror Image.

Bottom \Rightarrow Top, worked as

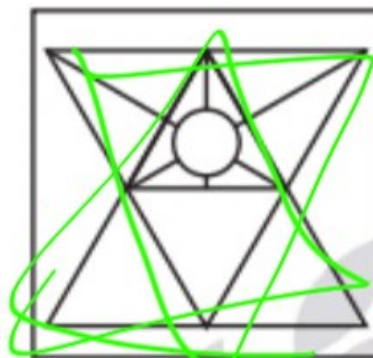
water Image

Rotation

01.



(X)



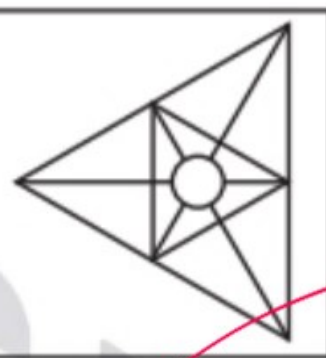
(a)



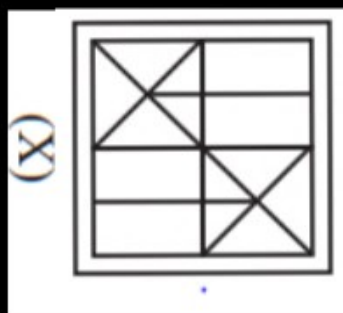
(b)



(c)



(d)



S.cuts

How many numbers having from 10 to 100⁹, all of
whose digits are Even?

20	40	60	80
22	42	62	82
24	44	64	84
26	46	66	86
28	48	68	88

20

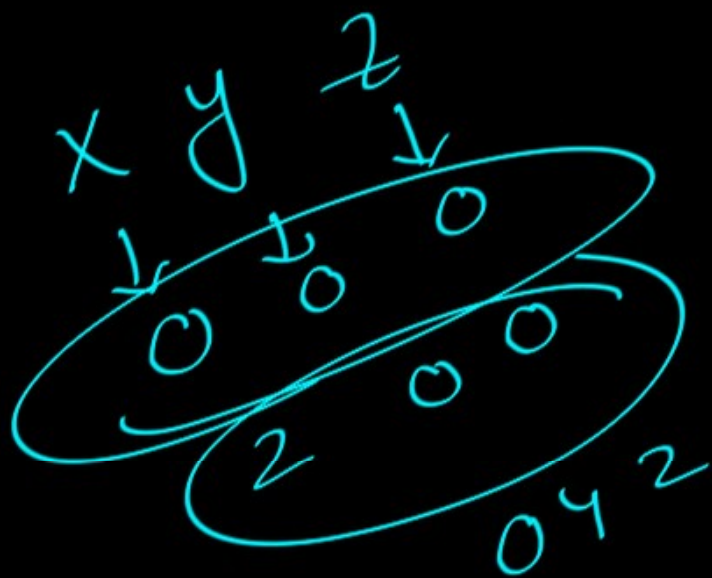
S.C

x	y
0	0
2	2
4	4
6	6
8	8

$$4 \times 5 = 20$$

GATE

How many numbers having
whole digits are Even.



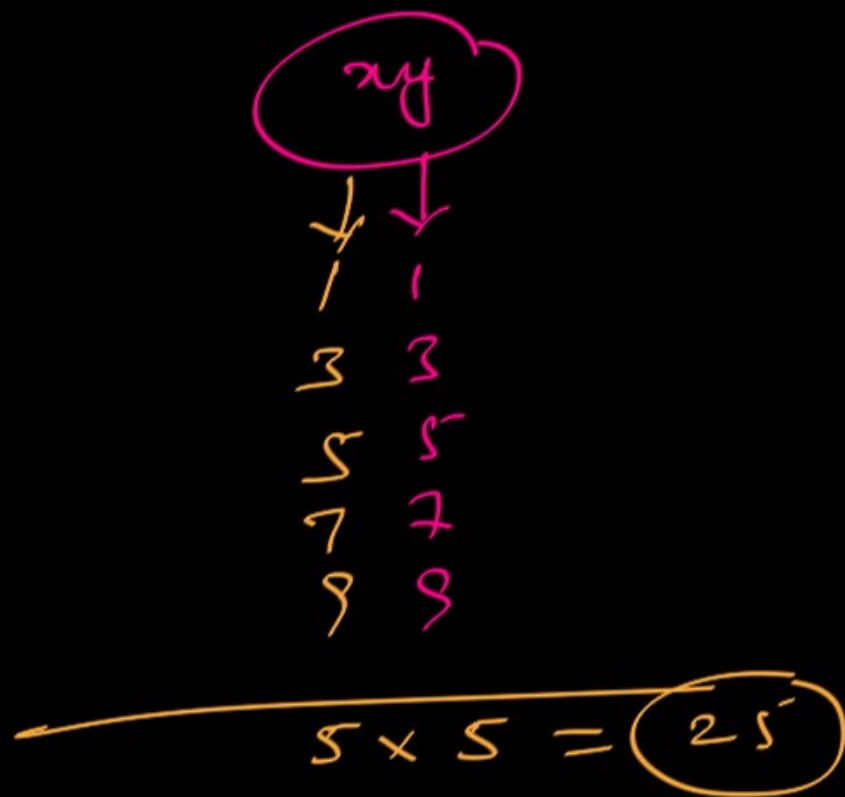
from 100 to 1000 all of

x y z
~~1~~ 0 0
2 2 2
4 4 4
6 6 6
8 8 8

$$4 \times 5 \times 5 = 100$$

042

How many numbers having from 10 to 100, all of whose digits are odd.



② GATE-2019

unit digit for $\sum n!$

$$1! = 1$$

$$1! + 2! = 1 + 2 \\ = \underline{\underline{3}}$$

$$1! + 2! + 3! \Rightarrow 1 + 2 + 6 \\ \Rightarrow \underline{\underline{9}}$$

$$1! + 2! + 3! + 4! \\ = 1 + 2 + 6 + 24 \\ = 3(3) \Rightarrow 3 \checkmark$$

$$[1! + 2! + 3! + 4!] + 5!$$

$$3 + 0 \\ = \underline{\underline{3}} \checkmark$$

$$[1! + 2! + 3! + 4!] + 5! + 6!$$

$$\Rightarrow 3 + 0 + 0 \\ \Rightarrow 3 \checkmark$$

$$1! + 2! + 3! + 4! + 5! + 6! + 7! = 3$$

$$1! + 2! + \dots + 100! \Rightarrow 3 \checkmark$$