GATE

ALL BRANCHES

General Aptitude

SPATIAL APTITUDE

Lecture No.- 01

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Recap of Previous Lecture

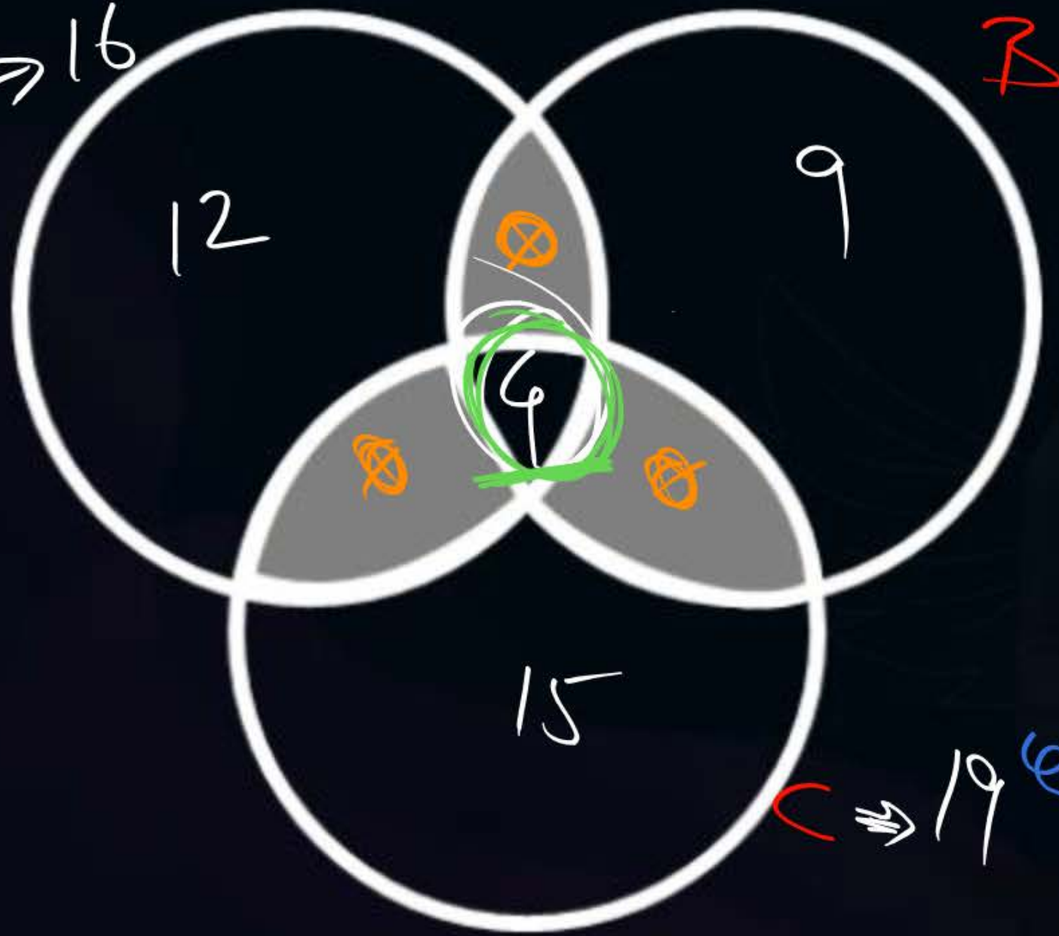
Topic Venn Diagrams

Topics to be Covered

Topic-1 Formation of Images

[MCQ]

#Q. There are 40 students in a class. They have to watch movies from A, B and C. They either watch one or all three movies. 16 students watch A, 13 students watch B, 19 students watch C. How many students watched all three movies?



A ⇒ 16

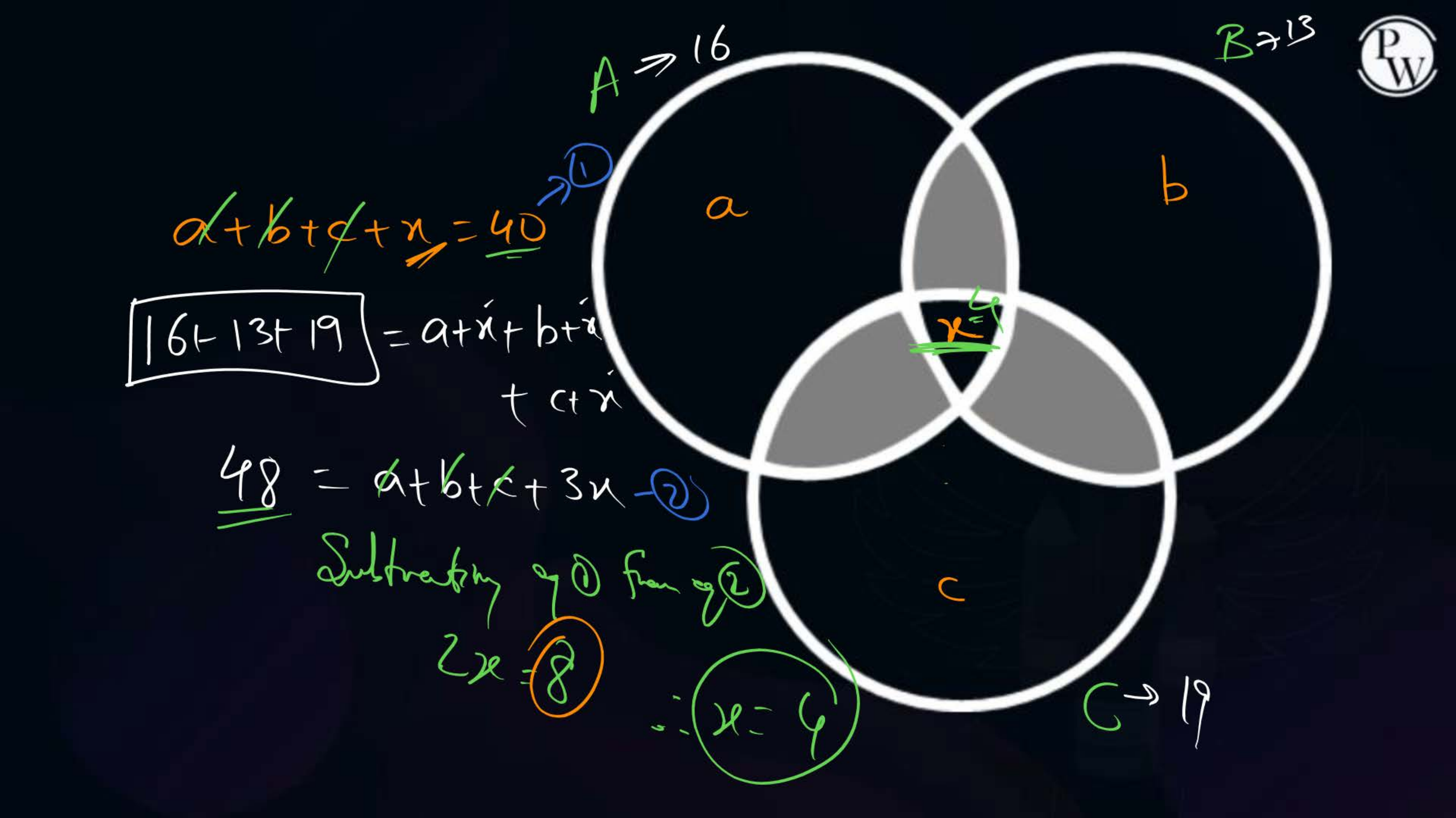
B ⇒ 13

C ⇒ 19

Assignment

16
+13
+19
48

8
2 = 4



$a + b + c + x = 40$ → (1)

$16 + 13 + 19 = a + x + b + x + c + x$

$48 = a + b + c + 3x$ → (2)

Subtracting eq (1) from eq (2)

$2x = 8$

$\therefore x = 4$

[MCQ]

$\frac{4}{10} \times 150 = 60$

$13\frac{1}{3}\% = \frac{40}{300} = \frac{2}{15}$

#Q. The following table gives the statistics of a class in which each student opted for Maths or Statistics or both. Unfortunately most of the figures have been erased but I remember some information as follows:

1. 13 1/3% of the students took both Math's and Statistics. $\frac{2}{15} \times 150 = 20$
2. 40% of the students were females. 60
3. None of the females took both Mathematics and Statistics.

	Maths	Statistics	Both	Total
Male	50	20	20	90
Female	10	50	0	60
Total	60	70	20	150

[MCQ]

#Q.

How many males took both Mathematics and Statistics?

a) 40 b) 10 c) 20 d) 60

How many students took only Mathematics?

a) 50 b) 80 c) 60 d) 10

[MCQ]

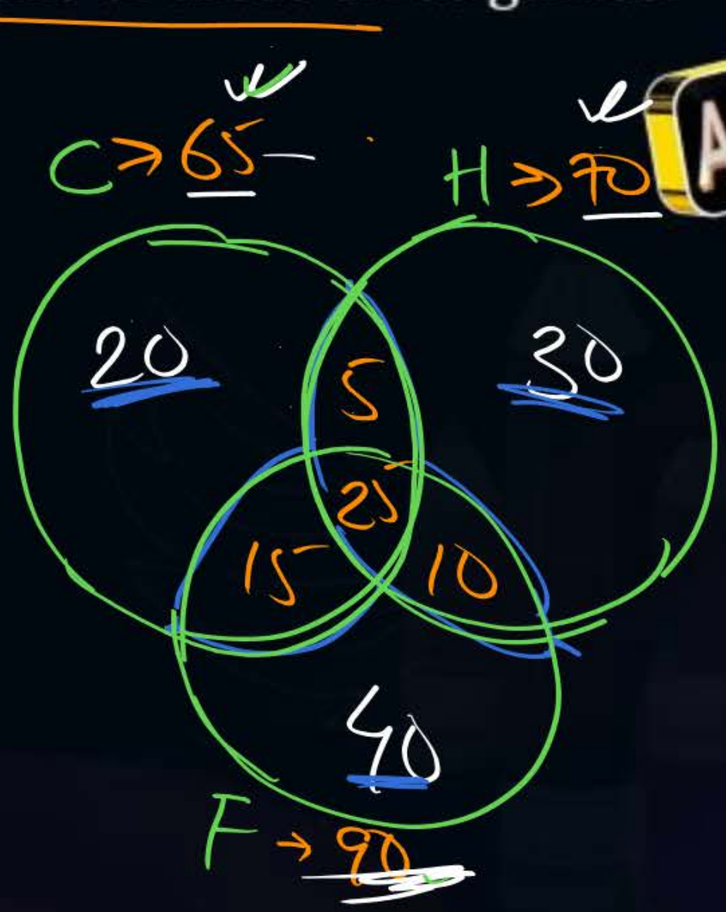
105

80

#Q. In a class of 160 students, it was found that 65 play Cricket 70 play Hockey and 90 play Football, 30 play Cricket and Hockey, 40 Cricket and Football, 35 play Hockey and Football and 15 play none of these three games.

1. How many play all three games? 25
2. How many students play exactly one game? 90

160 - 15 = 145

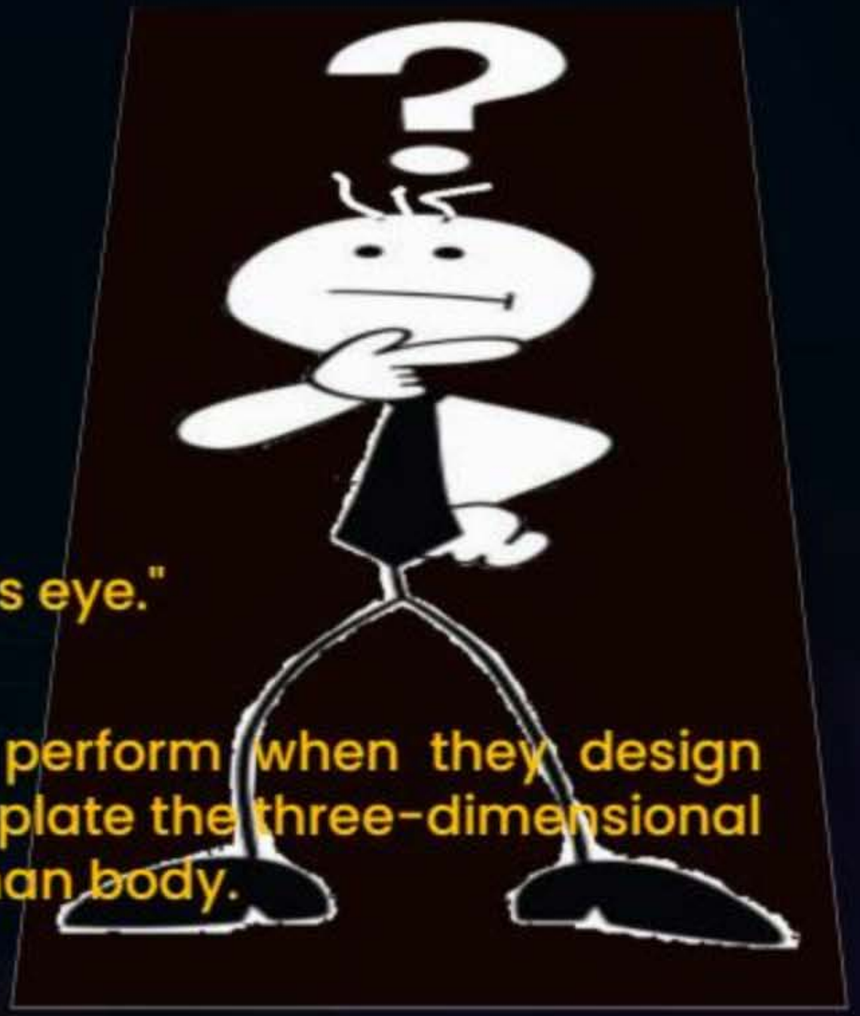


65
70
90
225

Assignment

SPATIAL APTITUDE

"the ability to generate, retain, retrieve, and transform well-structured visual images"



- It's what we do when we visualize shapes in our "mind's eye."

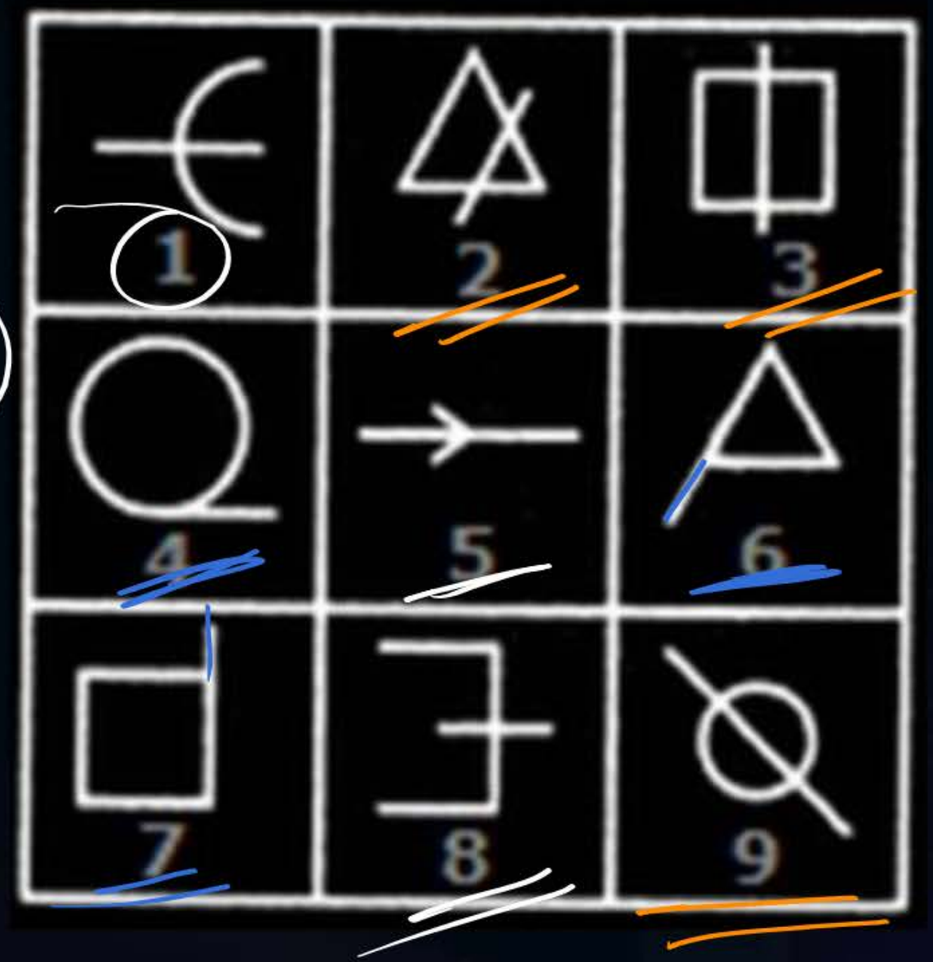
- It's the mental feat that architects and engineers perform when they design buildings. The capacity that permits a chemist to contemplate the three-dimensional structure of a molecule, or a surgeon to navigate the human body.

Formation of Images

- In each of the following questions, group the given figures into three classes using each figure only once.

[MCQ]

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



A. 1,3,9 / 2,5,8 / 4,6,7

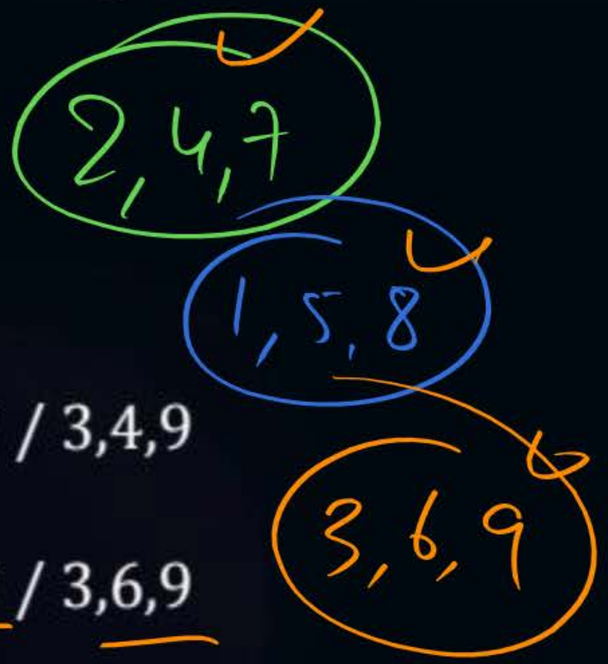
B. 1,5,8 / 4,6,7 / 2,3,9

C. 3,5,8 / 1,2,4 / 6,7,9

D. 2,5,9 / 1,3,8 / 4,6,7

[MCQ]

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



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

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

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

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

[MCQ]

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

(A) 1,4,8 / 2,7,9 / 3,5,6

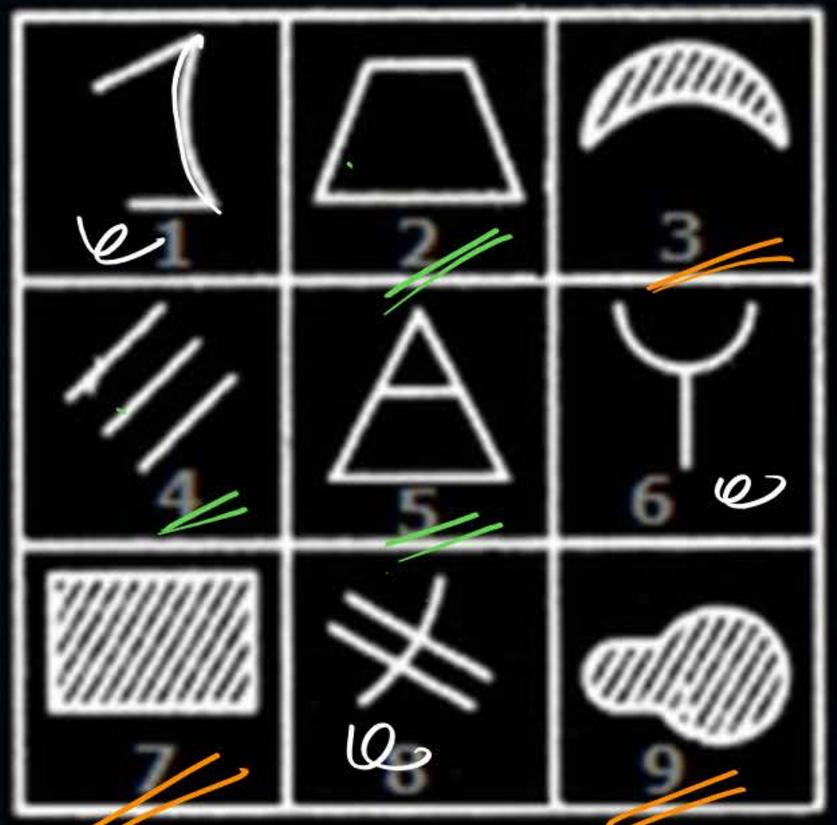
(B) 1,4,8 / 2,5,6 / 3,7,9

(C) 1,4,6 / 2,5,7 / 3,8,9

(D) 1,3,7 / 2,4,6 / 5,8,9

[MCQ]

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



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

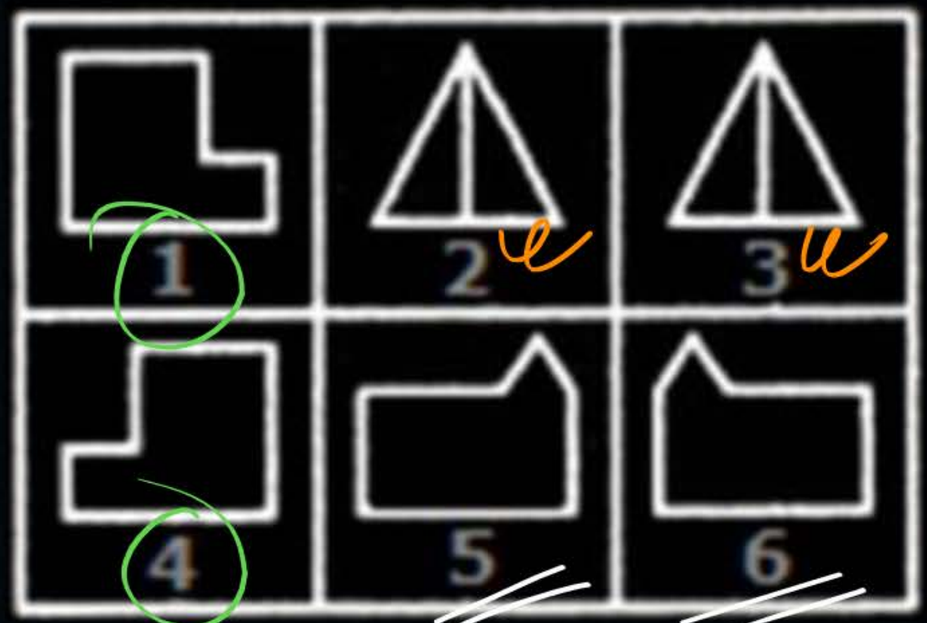
B 2,3,9 / 4,5,8 / 1,6,7

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

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

[MCQ]

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



A 1,4 / 2,3 / 5,6

B 1,5 / 2,6 / 4,3

C 1,6 / 2,3 / 4,5

D 1,2 / 3,6 / 4,5

[MCQ]

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

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

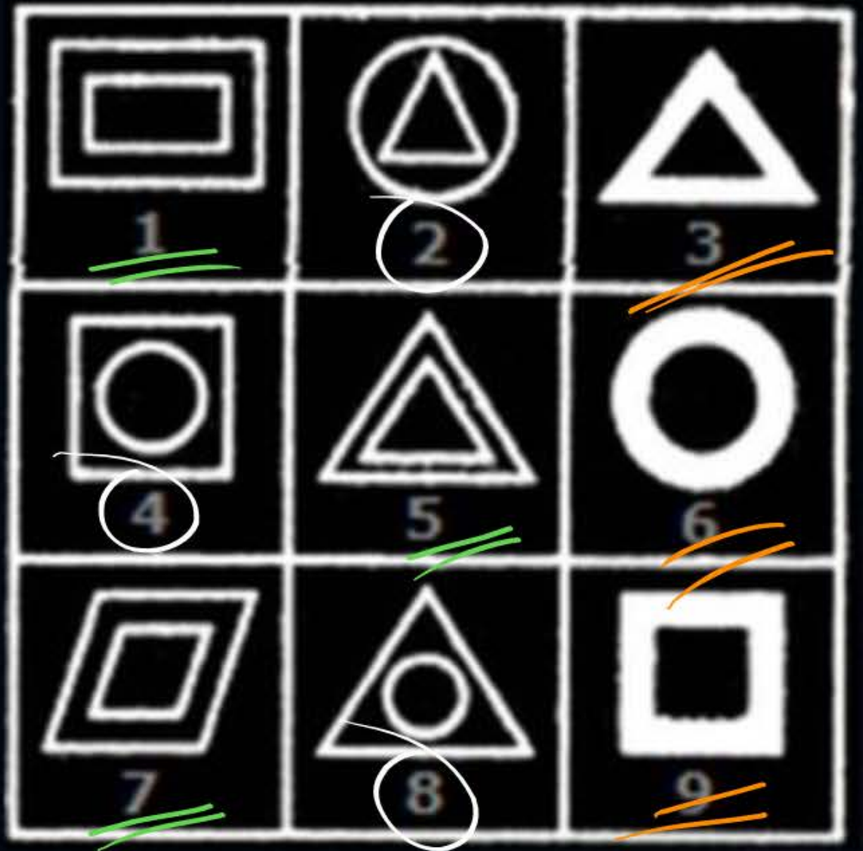
B 1,3,9 / 2,7,8 / 4,5,6

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

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

[MCQ]

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



3,6,9

1,5,7

2,4,8

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

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

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

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

[MCQ]

Assignment

#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

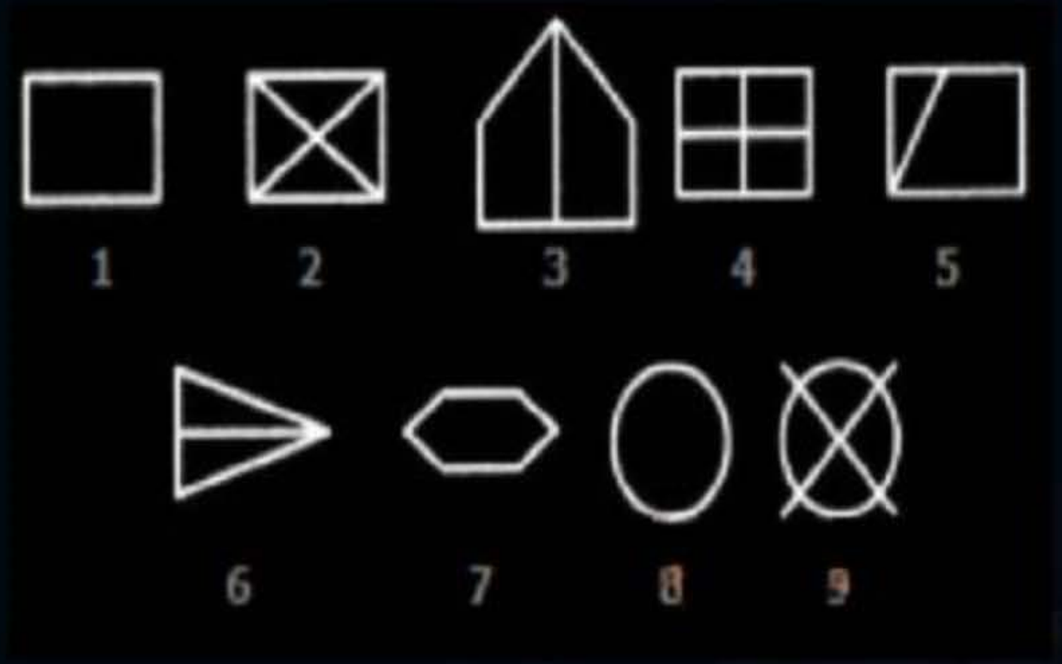
C 1, 6, 9 | 2, 4, 7 | 3, 5, 8

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

[MCQ]

Assignment

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



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

- In each problem, out of the five figures marked (1), (2), (3), (4) and (5), four are similar in a certain manner. However, one figure is not like the other four. Choose the figure which is different from the rest.

[MCQ]

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

A B C D E

[MCQ]

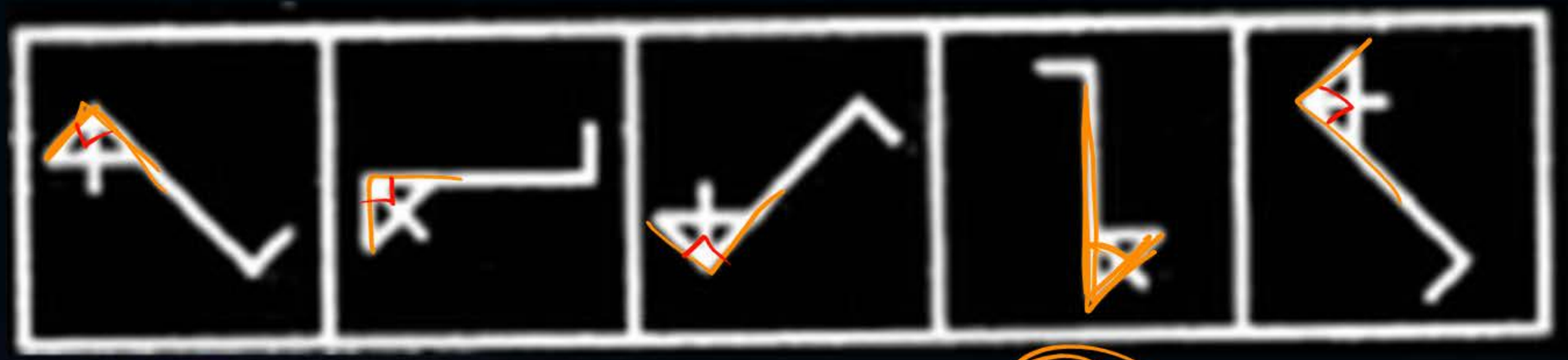
#Q. Choose the figure which is different from the rest.

A B C D E

Left Left Left Right

[MCQ]

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



A B C D E

[MCQ]

Assignment

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

A B C D E

[MCQ]

Assignment

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

A B C D E

[MCQ]

Assignment

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

A B C D E

[MCQ]

Assignment

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

A B C D E

[MCQ]

Assignment

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

A B C D E

[MCQ]

Assignment

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

A B C D E

[MCQ]

Assignment

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

A B C D E

[MCQ]

Assignment

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

A B C D E

[MCQ]

Assignment

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

A B C D E

[MCQ]

Assignment

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

A B C D E

[MCQ]

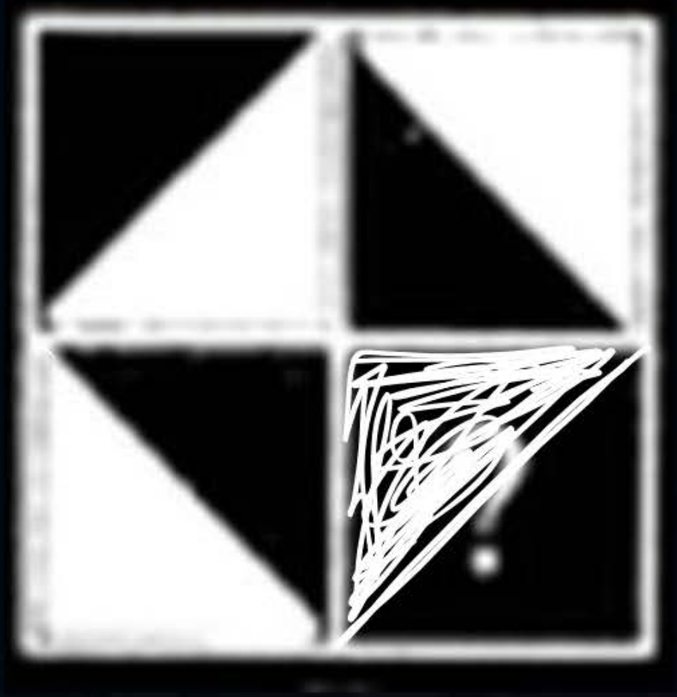
Assignment

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

A B C D E

[MCQ]

#Q. Identify the figure that completes the pattern.



A 

B 

C 

D 

[MCQ]

Assignment

#Q. Identify the figure that completes the pattern.

A 

B 

C 

D 

[MCQ]

Assignment

#Q. Identify the figure that completes the pattern.

A 

B 

C 

D 

[MCQ]

Assignment

#Q. Identify the figure that completes the pattern.

A 

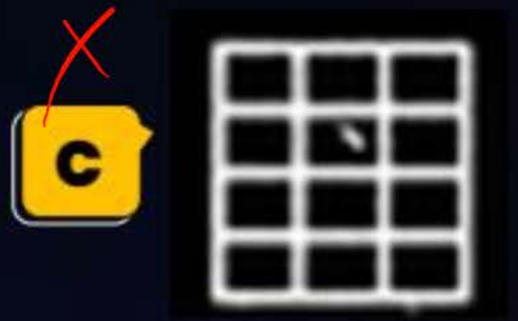
B 

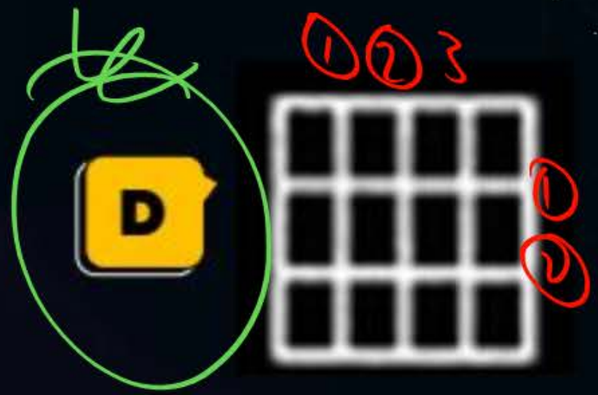
C 

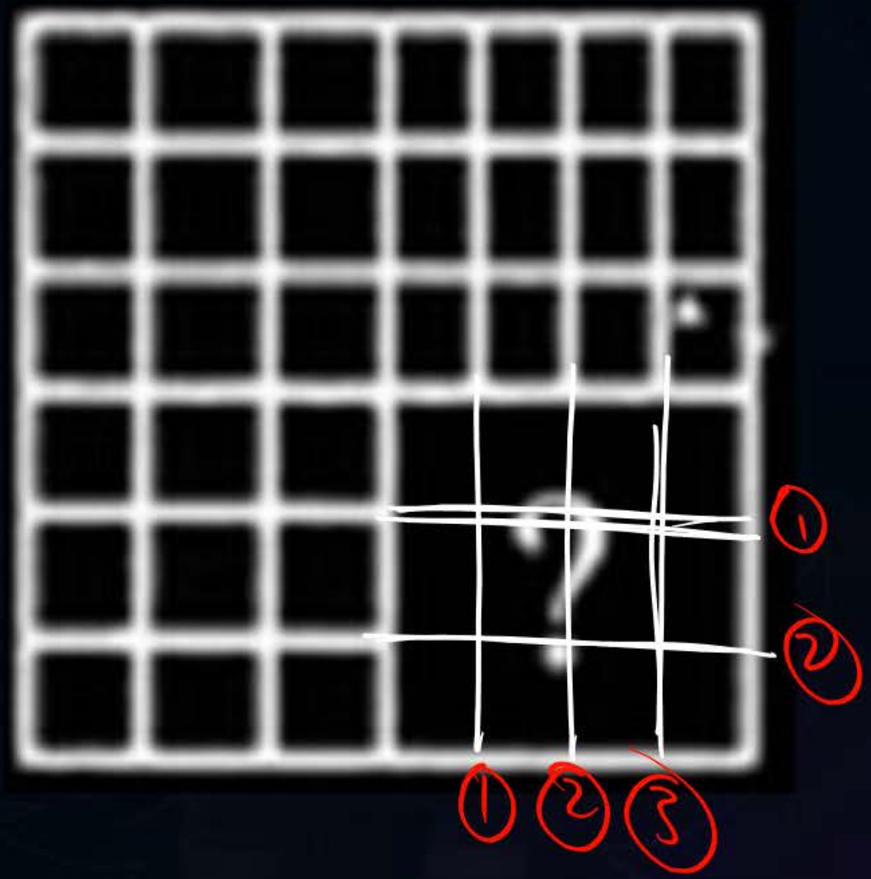
D 

[MCQ]

#Q. Identify the figure that completes the pattern.







[MCQ]

Assignment

#Q. Identify the figure that completes the pattern.

A B C D

[MCQ]

Assignment

#Q. Identify the figure that completes the pattern.

A B C D

2 mins Summary

Topic Formation of Images

THANK - YOU