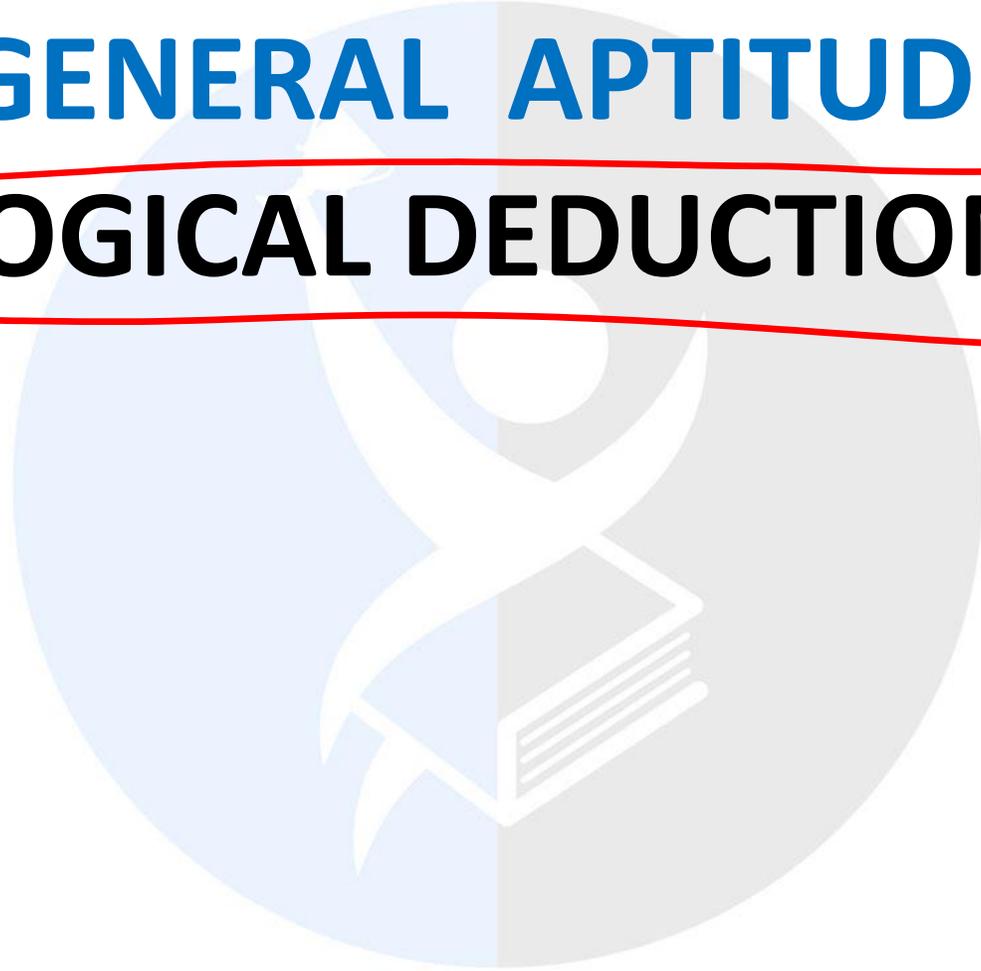


GENERAL APTITUDE

LOGICAL DEDUCTION

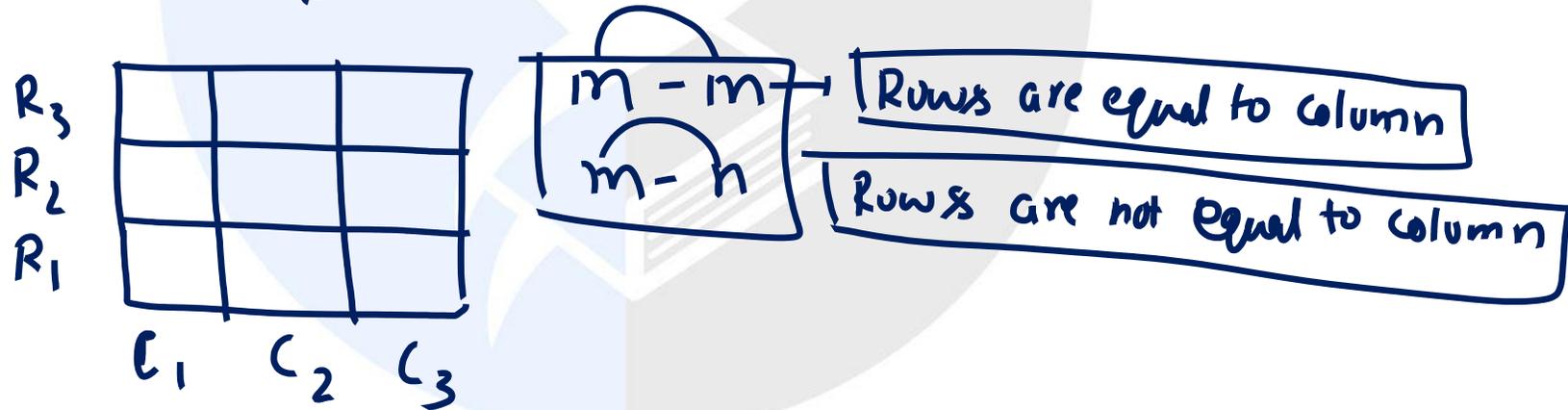




Imp

COUNTING THE FIGURES

Number of squares, rectangles and triangles



Number of squares (m - m)

Rows = Column

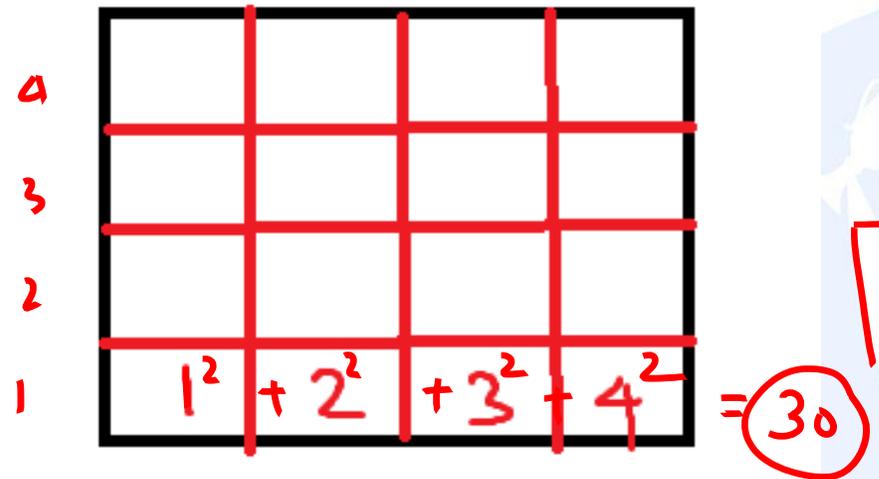
1	2	3

= 14

$$R = 3$$
$$C = 3$$

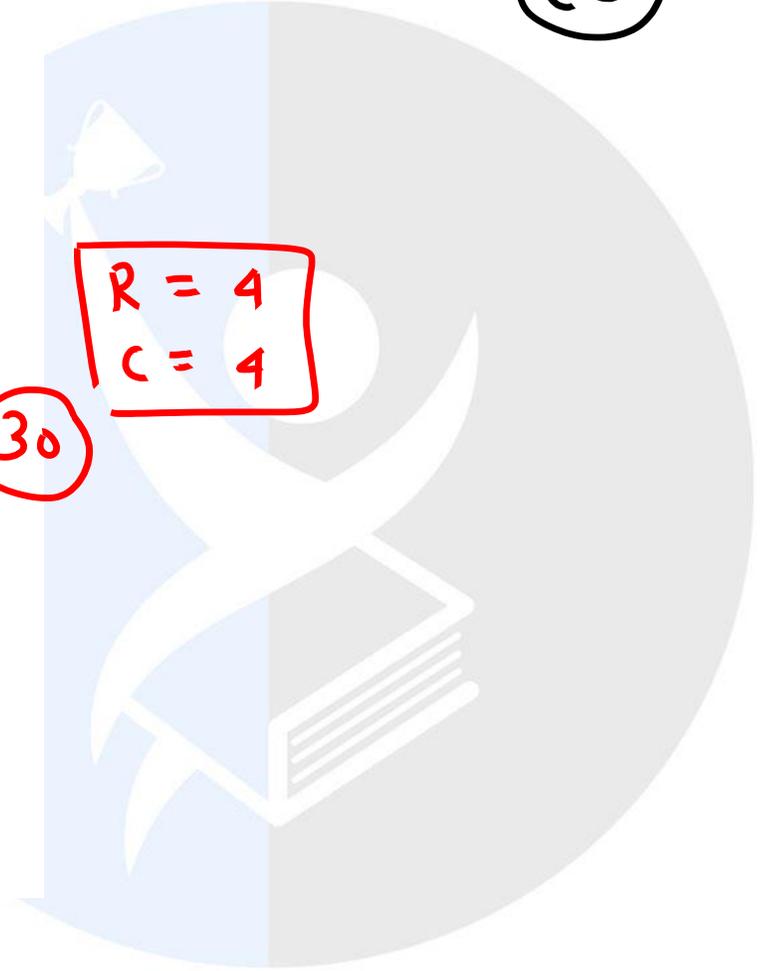
$$1^2 + 2^2 + 3^2$$
$$= 1 + 4 + 9$$
$$= 14$$

CC



R = 4
C = 4

$$1^2 + 2^2 + 3^2 + 4^2 = 30$$



Number of squares $(m - n)$

$$C = 4$$

$$R = 3$$

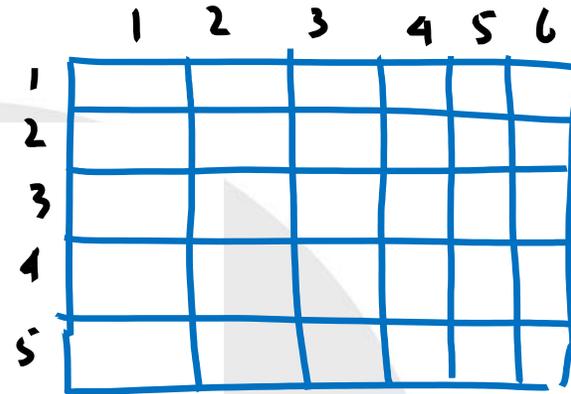
1	2	3	4
2			
3			

$$(C \times R) + (C \times R) + (C \times R) + (C \times R)$$

$$(4 \times 3) + (3 \times 2) + (2 \times 1) + (1 \times 0)$$

$$12 + 6 + 2$$

$$20$$



NU. of squares.

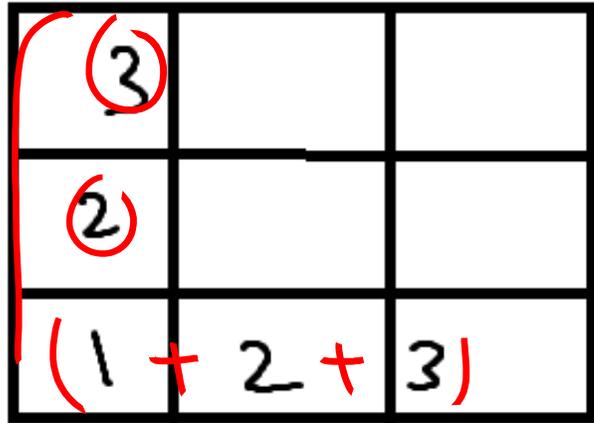
$$(6 \times 5) + (5 \times 4) + (4 \times 3) + (3 \times 2) + (2 \times 1)$$

$$30 + 20 + 12 + 6 + 2$$

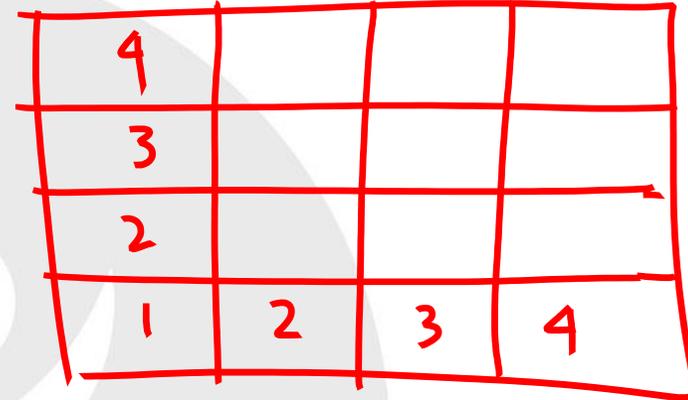
$$70$$



Number of rectangles (m - m / m-n)



$$\begin{aligned}
 & \overbrace{(1 + 2 + 3)}^C \times (1 + 2 + 3) \\
 & \quad \underline{6 \times 6} \\
 & \quad \boxed{36}
 \end{aligned}$$

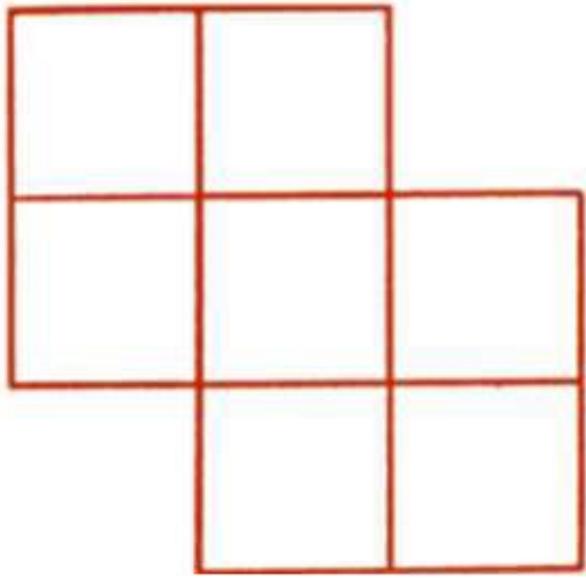


$$\begin{aligned}
 & (1 + 2 + 3 + 4) \times (1 + 2 + 3 + 4) \\
 & \quad 10 \times 10 \\
 & \quad = 100
 \end{aligned}$$

4					
3					
2					
1	2	3	4	5	6

$$(1+2+3+4+5+6) \times (1+2+3+4)$$
$$21 \times 10$$
$$= 210$$

How many quadrilaterals ^{Rectangle} does the following figure have?



- (1) 17 (2) 18 (3) 19 (4) 20

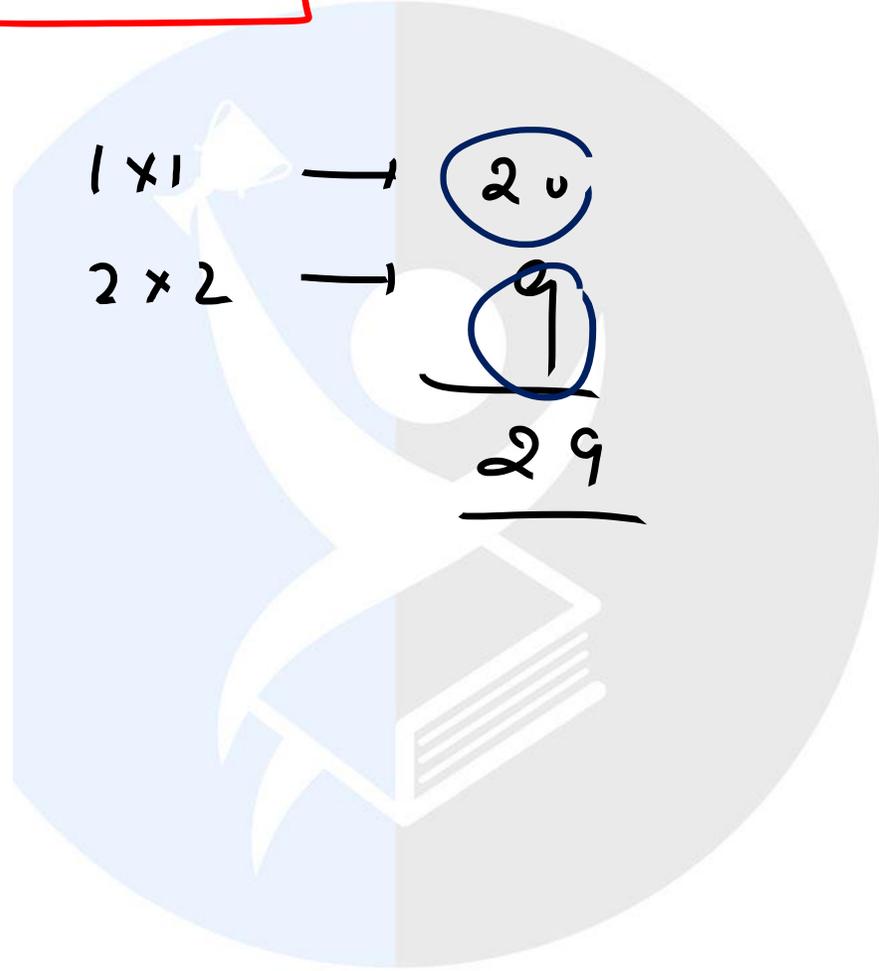
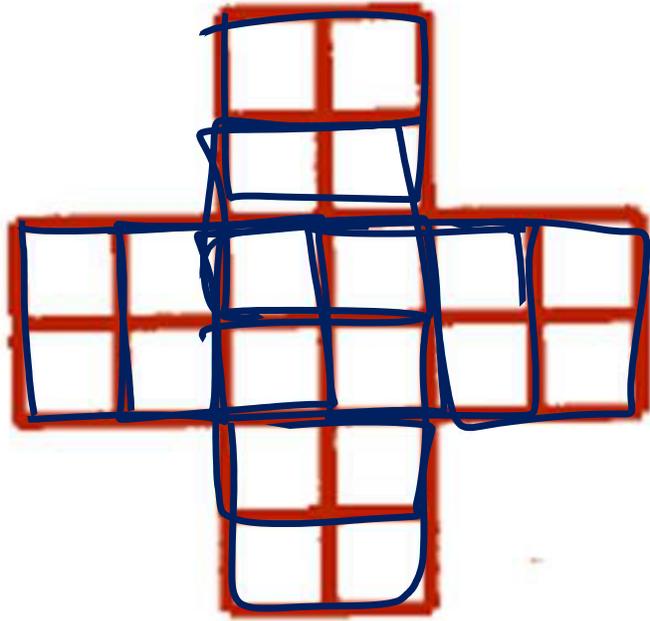
Handwritten calculation for counting quadrilaterals:

$1 \times 1 =$	7
$2 \times 1 =$	4
$1 \times 2 =$	4
$2 \times 2 =$	2
$1 \times 3 =$	1
$3 \times 1 =$	1
	<hr/>
	19
	<hr/>

Quadr

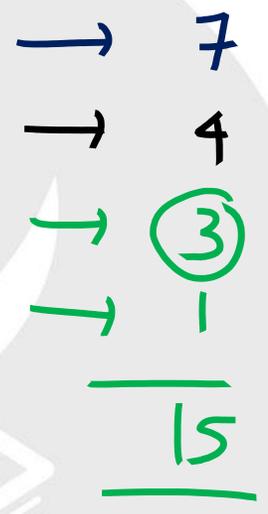
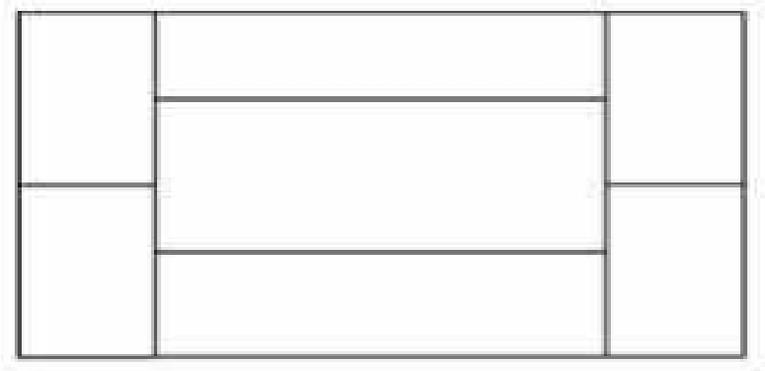


The number of squares in the figure is:



- (1) 30
 - (2) 29
 - (3) 25
 - (4) 20
- Ans //

2022 The number of rectangles in the given figure is

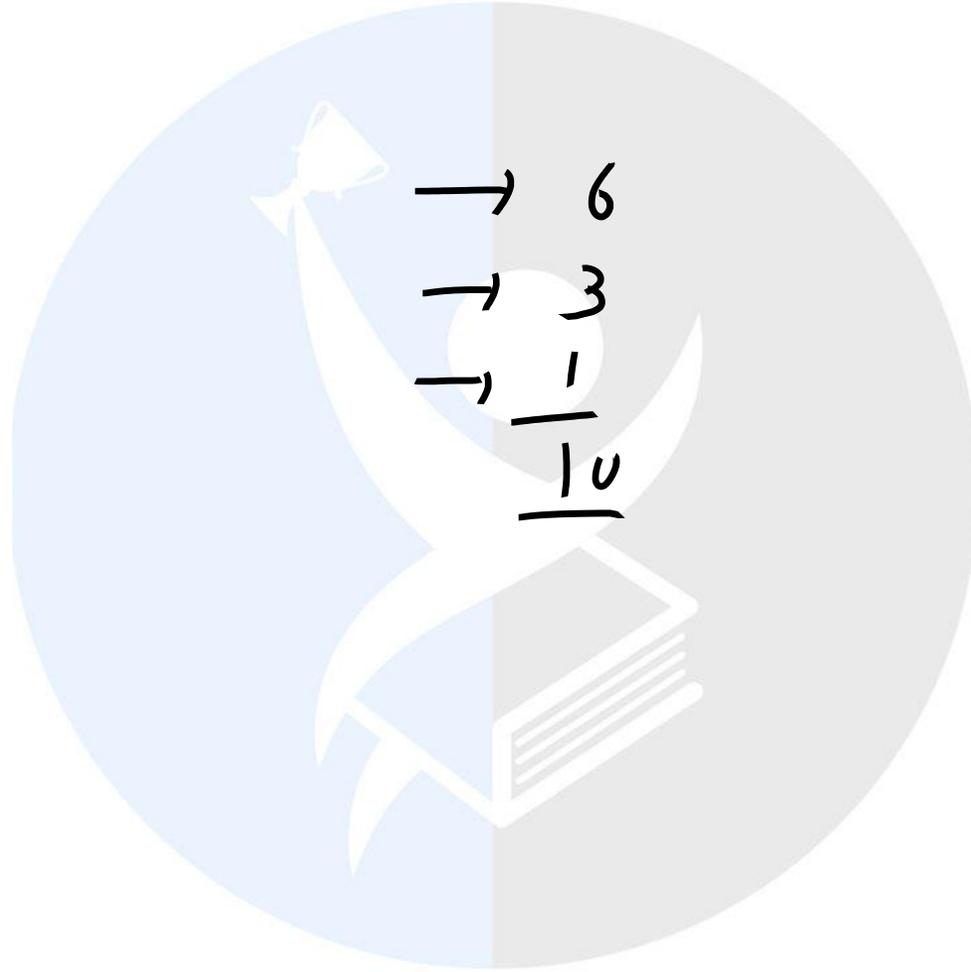
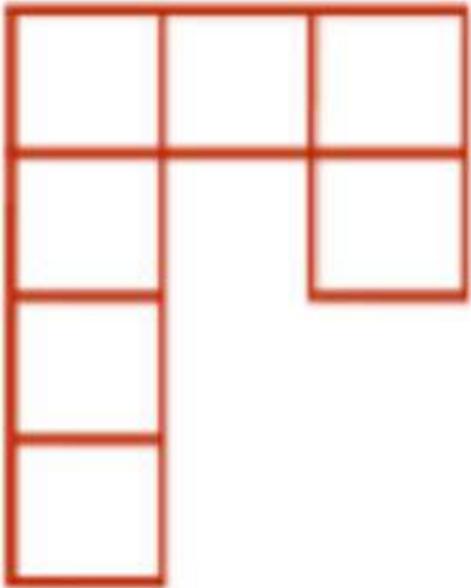


- 1. 12
- 2. 13
- ✓ 3. 15 *Ans*
- 4. 16

How many non-square rectangles are there in the following figure, consisting of 7 squares?

(1) 8 (2) 9

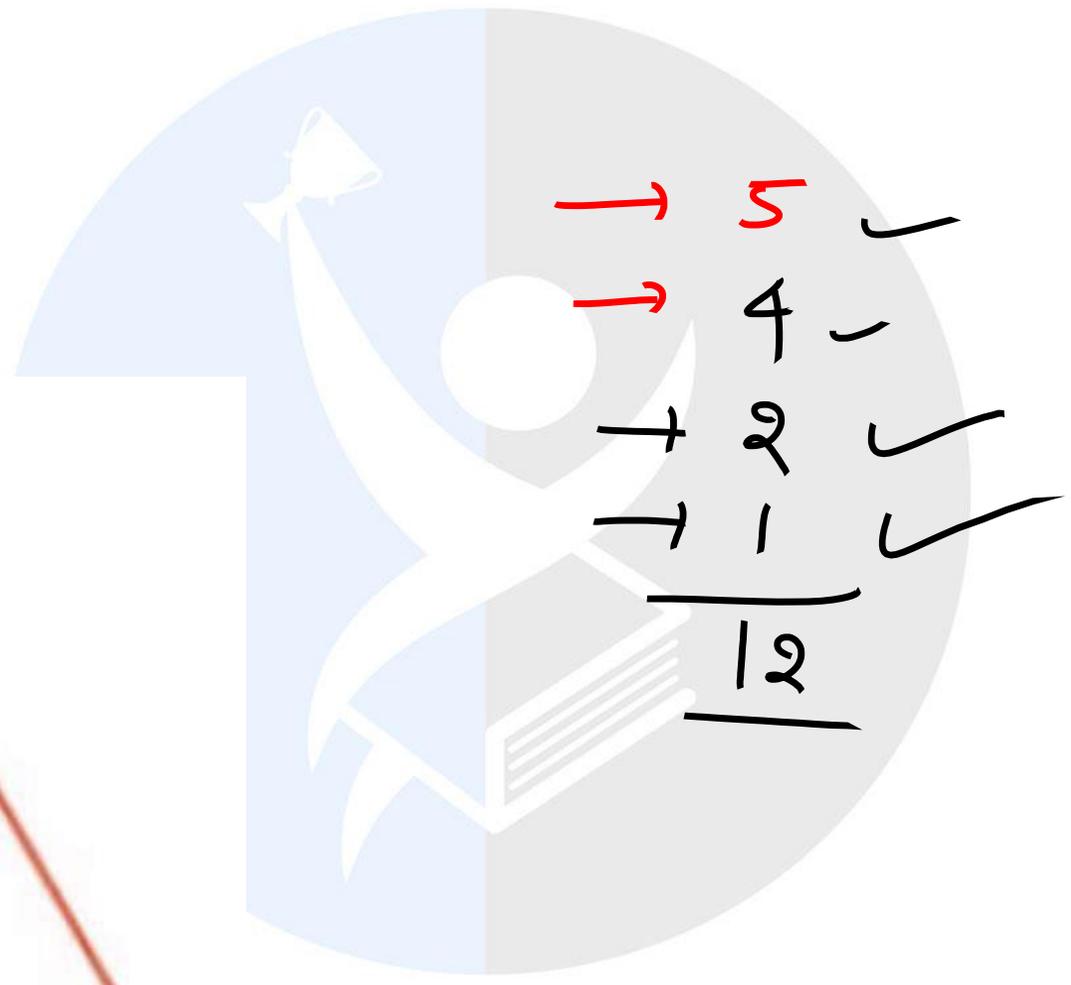
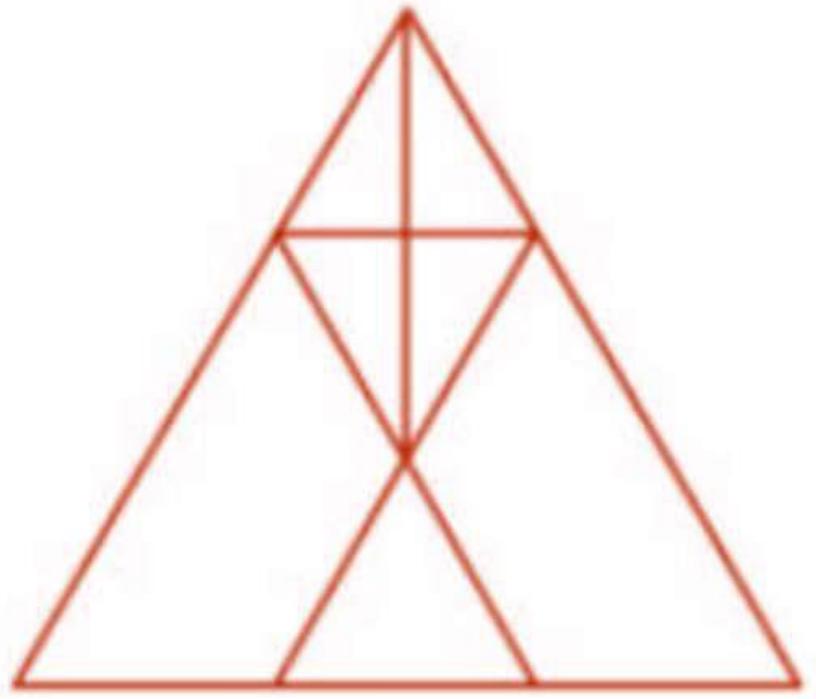
~~(3) 10~~ (4) 11





* The number of triangles in the figure is?

- (1) 9
- (2) 10
- (3) 11
- (4) 12



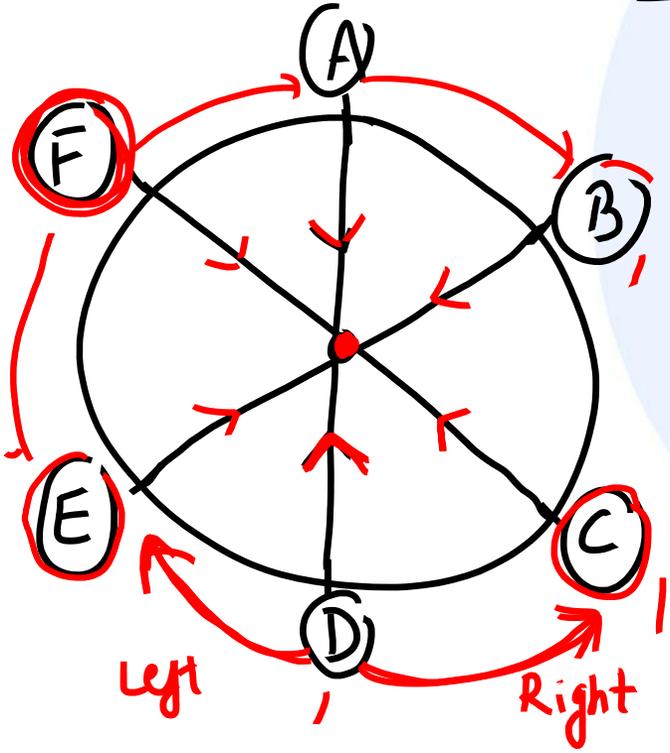
Logical Deduction

Puzzles

→ Circular Arrangements

→ Linear Arrangements

→ Parallel Row Arrangements

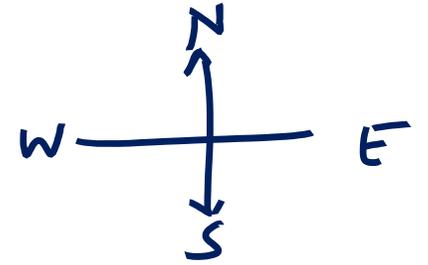
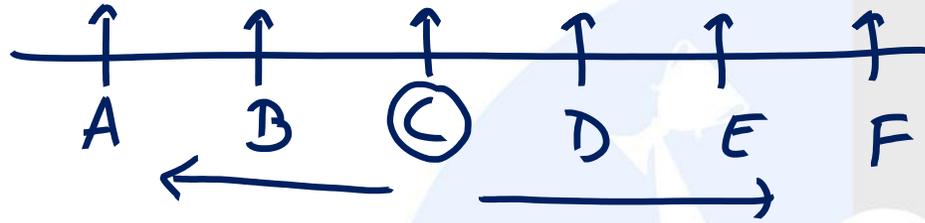


Immediate right of D → C
 Second to left of D → F

What is the position of B w.r.t F.
 B is second to the left of F.
 B " fourth to the right of F.

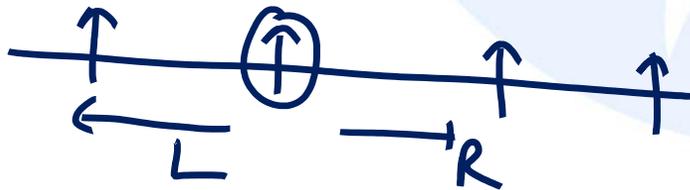
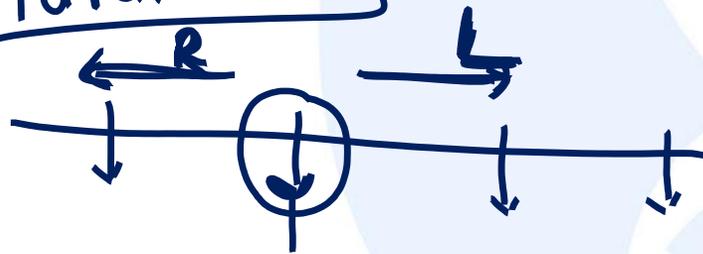
Linear Row

Facing North
 Facing South



Parallel Row

Facing South
 Facing North

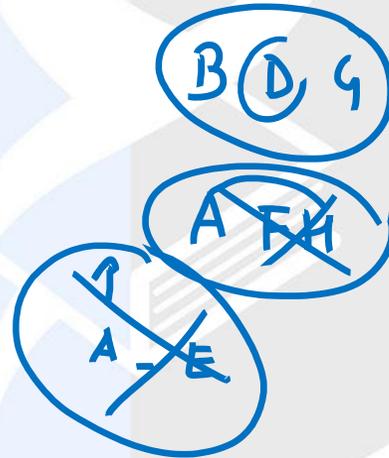
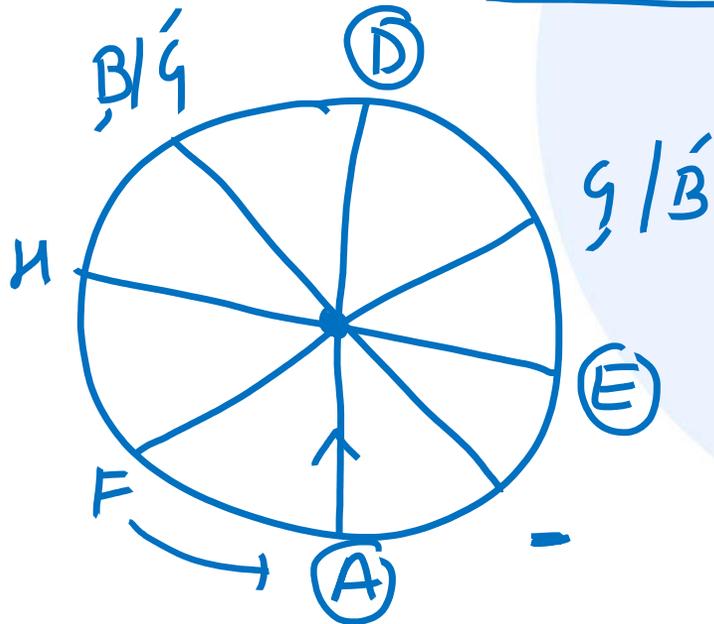


○ Study the following information to answer the given B question.

- (i) Eight friends A, B, C, D, E, F, G and H are seated in a circle facing centre.
- (ii) D is between B and G and F is between A and H.
- (iii) E is second to the right of A.

Which of the following is A's position?

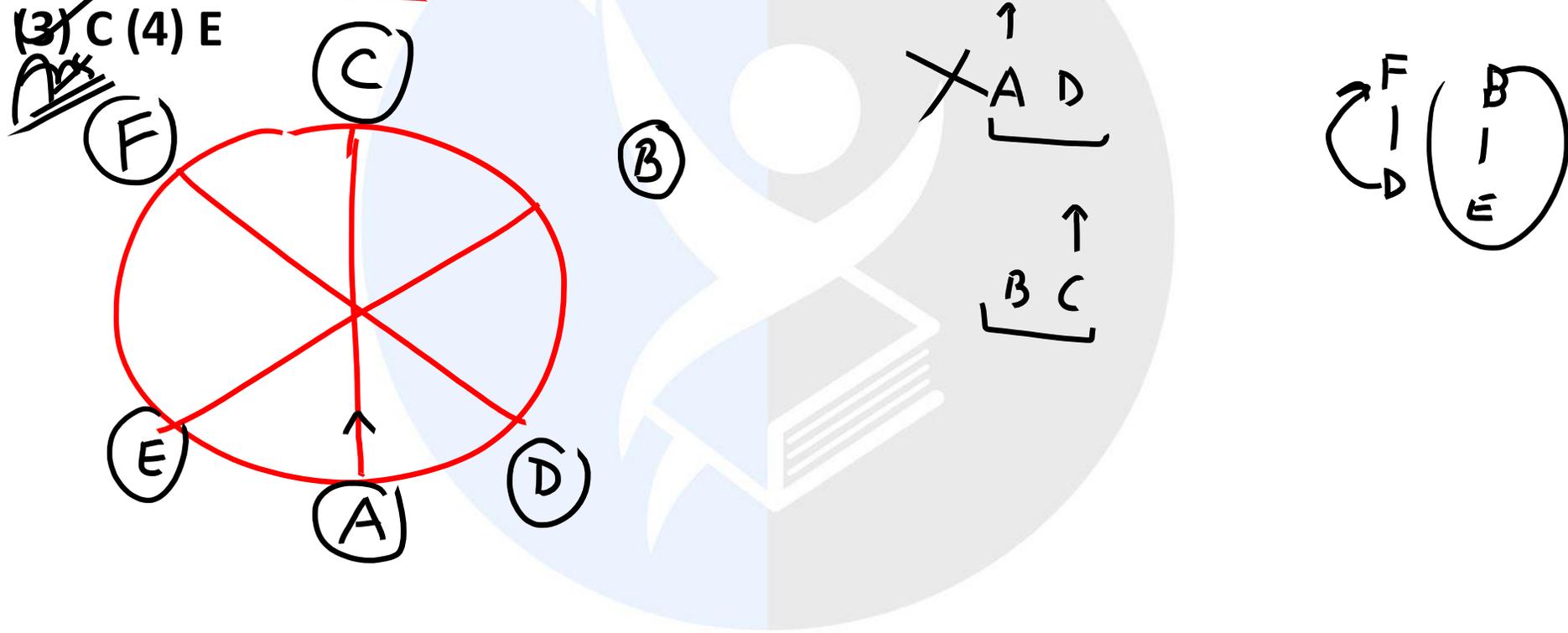
- (1) Left of F (2) Right of F (3) Between E and F (4) can't be determined



A, B, C, D, E and F are three couples sitting around a round table. D is to the right of A and B is to the left of C. F – D and B – E are two pairs of person sitting opposite each other.

Who is sitting to the left of F?

- (1) A (2) B (3) C (4) E



Five friends P, Q, R, S and T are standing in a row facing South but not in the order mentioned. Only Q is between P and T, R is immediate right to T, and S is immediate left to P. On the basis of the above statements answer the following:

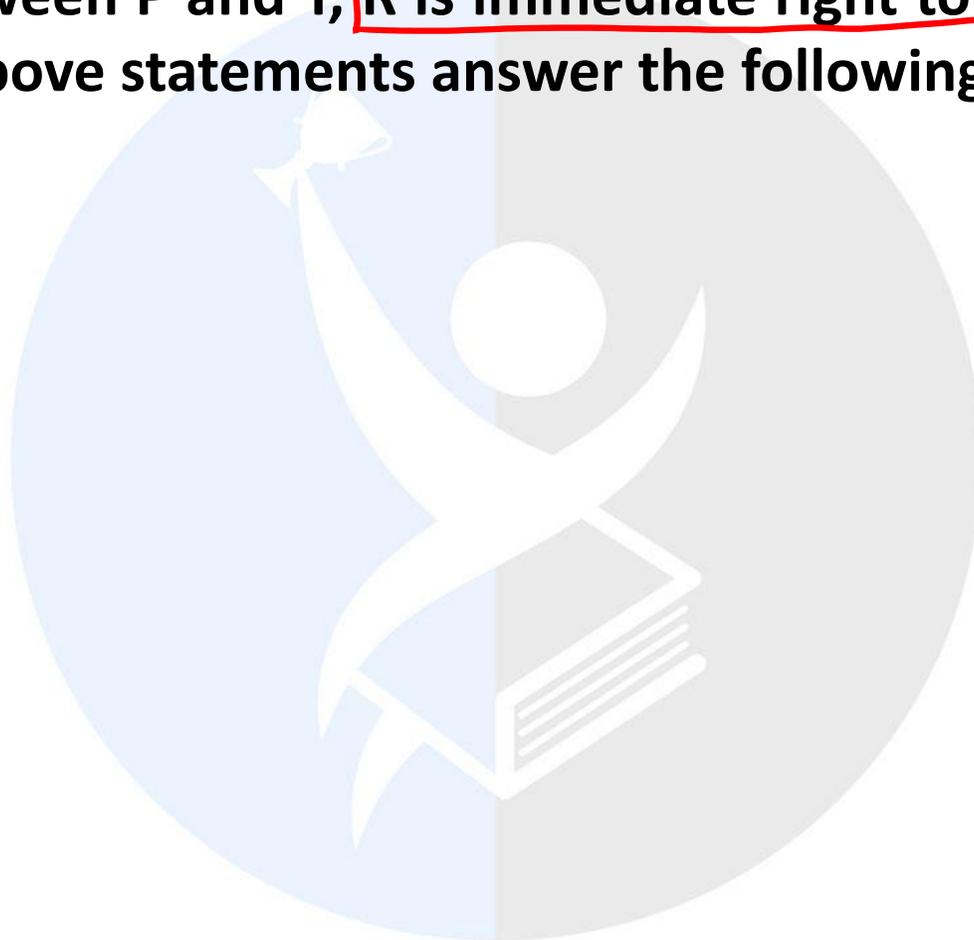
Who is to the right of T?

(1) P (2) Q (3) R (4) S

Ans

North ↑

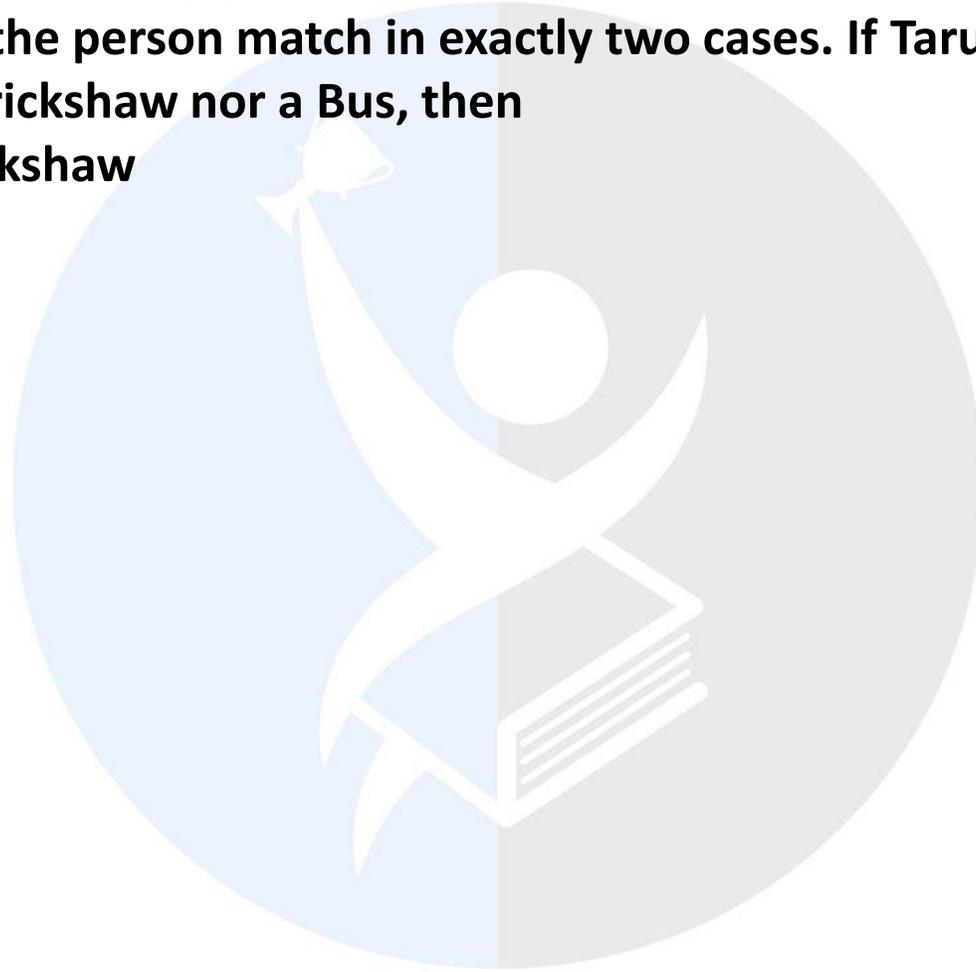
South ↓



Anwara, Bharati, Colin and Tarun commute by different modes of transport namely, Cycle (C), Autorickshaw (A), Bus (B) and Train (T). The initials of the mode of transport and the name of the person match in exactly two cases. If Tarun travels by Train, and Colin rides neither an Autorickshaw nor a Bus, then

- (1) Anwara rides an Autorickshaw
- (2) Anwara rides a Bus
- (3) Bharati rides a Bus
- (4) Bharati rides a Cycle

HW → (1)



* Seven persons (A), B, C, D, E, F, and G are sitting in a row. E and B are sitting adjacent to each other. F is sitting between D and G. If C is sitting four places left of F, who among the following cannot be sitting at the centre?

- (1) ~~G~~ (2) ~~B~~ (3) ~~D~~ (4) F

Ans D ✓

Case I

C E/B B/E D F G

↑

Case II

C E/B B/E G F D A

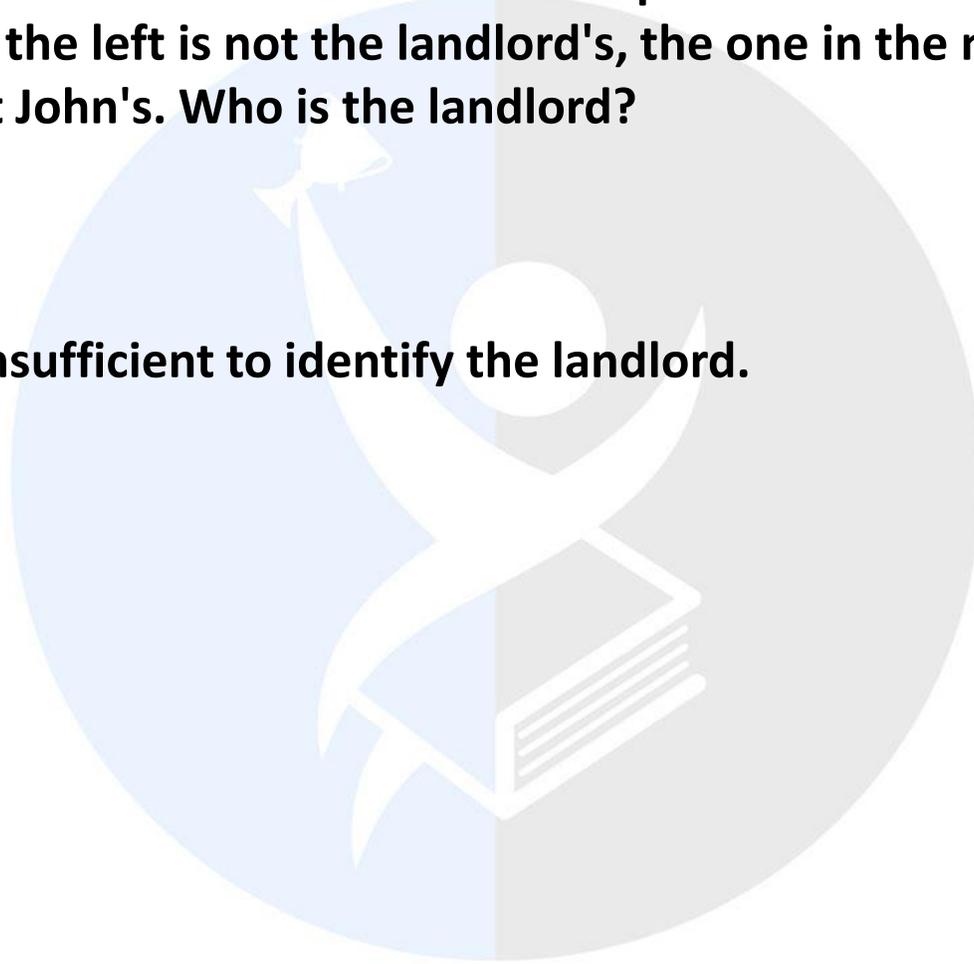
EB

DFG

Three apartments, which are in a row, are occupied by Umar, Ramesh and John. Only one of them is the landlord, whose apartment is at one end. Ramesh's apartment is not next to John's apartment. The apartment on the left is not the landlord's, the one in the middle is not Ramesh's and the one on the right is not John's. Who is the landlord?

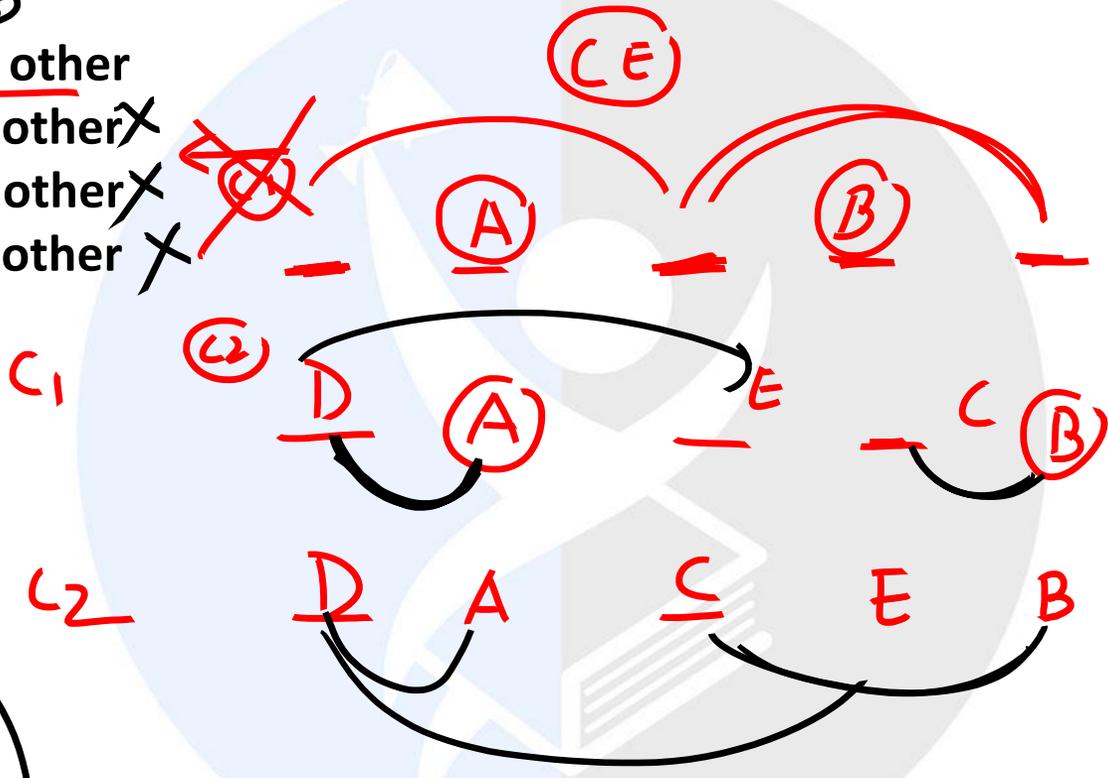
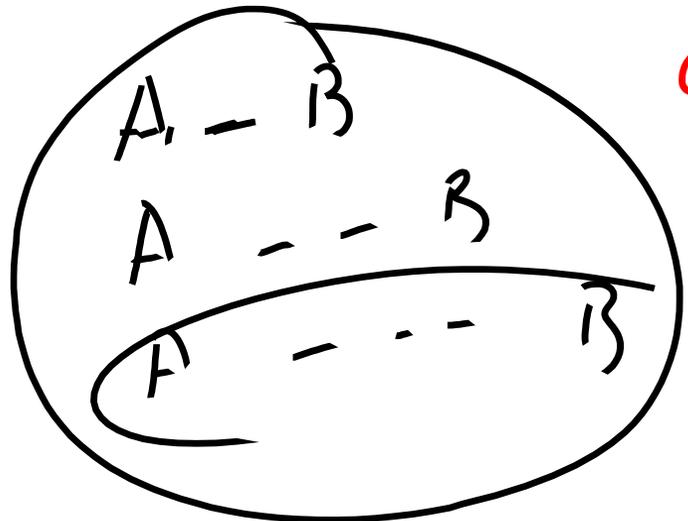
- (1) Umar
- (2) Ramesh
- (3) John
- (4) The above information is insufficient to identify the landlord.

THW-12



Q) Five persons A, B, C, D and E form a queue. C and E are next to each other. A has one person ahead of him and has at least one person separating him from B. Which of the following statements is certainly true?

- (1) A and D are next to each other
- (2) A and E are next to each other ~~X~~
- (3) D and E are next to each other ~~X~~
- (4) B and C are next to each other ~~X~~





THANK YOU
HAPPY LEARNING