

# Logical Reasoning

## Syllogism:

two statements are used to prove that a third statement is true, for example -

All human are mortal; I am human.

⇒ Therefore I am mortal.

## Rules:

All + All = All

All + No = No

All + Some = No conclusion

Some + All = Some

Some + No = Some Not

Some + Some = No conclusion

No + All = Some Not (Reversed)

No + Some = Some Not (Reversed)

No + No = No conclusion

Some Not / Some Not Reversed + Anything = No conclusion

## Conclusion to possibility:

if All A are B - Then Some B are Not A is a possibility

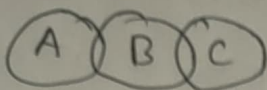
if Some B are Not A - Then All A<sup>are B</sup> is a possibility

if Some A are B - Then All A are B is a possibility  
All B are A is a possibility

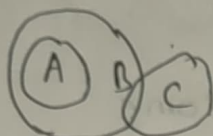
~~Question~~

More tricks:

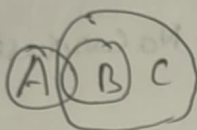
① Some A are B, some B are C



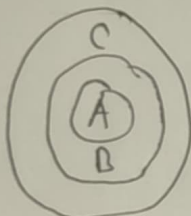
② All A are B, some B are C



③ Some A are B, all B are C



④ All A are B, all B are C



Some  $\rightarrow$  All = Connected

All  $\rightarrow$  All = Connected

All  $\rightarrow$  Some = Not connected

Some  $\rightarrow$  Some = Not connected

Example:

Some trees are jungles

All jungles are stones

All stones are buildings.

Conclusion:

I. Some buildings are trees

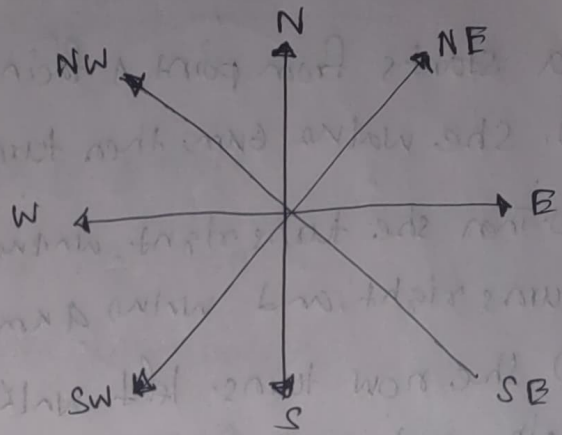
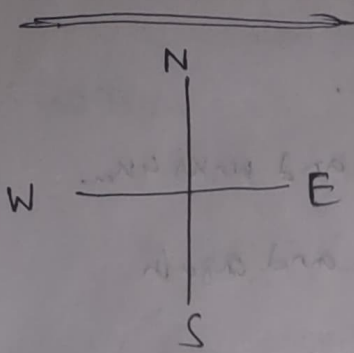
II. Some stones are trees

$\Rightarrow$  (I) & (II) both follow.

Some  $\nrightarrow$  All  $\Rightarrow$  Connect

All  $\nrightarrow$  All  $\Rightarrow$  Connect

## Direction Test!



## Left & Right TURN RULES

Current Facing

Left Turn (ACW)

Right Turn (CW)

N

W

E

S

E

W

E

N

S

W

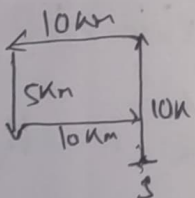
S

N

## Examp!'

① P 10km went to North, then he turned west and walked 10 km, Then he turned south and walked 5 km, Finally he turned east and walked 10 km. In which direction from his starting point.

⇒



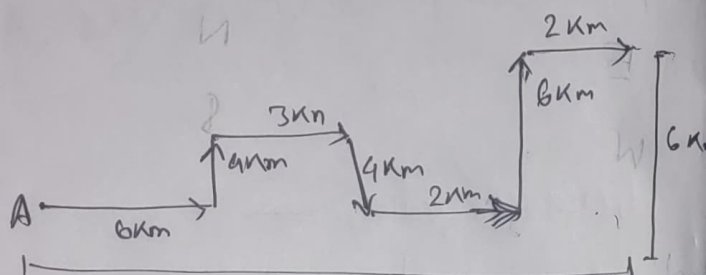
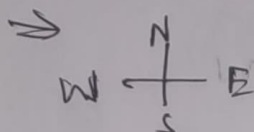
→ N

Q1)

Sita starts from point A facing East.

- ①. She walks 6km, then turns left and walks 4km.
- ②. Then she turns right, walks 3km, and again turns right and walks 4km.
- ③. She now turns left walks 2 km, turns left again, and walks 6km.
- ④. Finally, she turns right and walks 2km.

- Q (i) What direction is sita facing Now?
- (ii) How far is she from her starting point (A)?



So Now

① Sita is facing East direction

(2) The distance is -

$$\begin{aligned}
 &= \sqrt{(6+3+2+2)^2 + (6)^2} = \sqrt{(13)^2 + (6)^2} \\
 &= \sqrt{205} \\
 &\approx 14.32 \text{ Km}
 \end{aligned}$$



# SEATING ARRANGEMENT

□ Type →

- Row (linear arrangement)
- Circle (circular arrangement)
- rectangle/square (box-based)
- double row

△

Facing center

LEFT

Anti-clockwise

RIGHT

Clockwise

□ Facing Outward

LEFT

Clockwise

RIGHT

Anti Clockwise

● Q. Eight people - A, B, C, D, E, F, G, H - are sitting around a circular table, all facing center.

• A is second to the left of P  
C is immediate neighbor of A

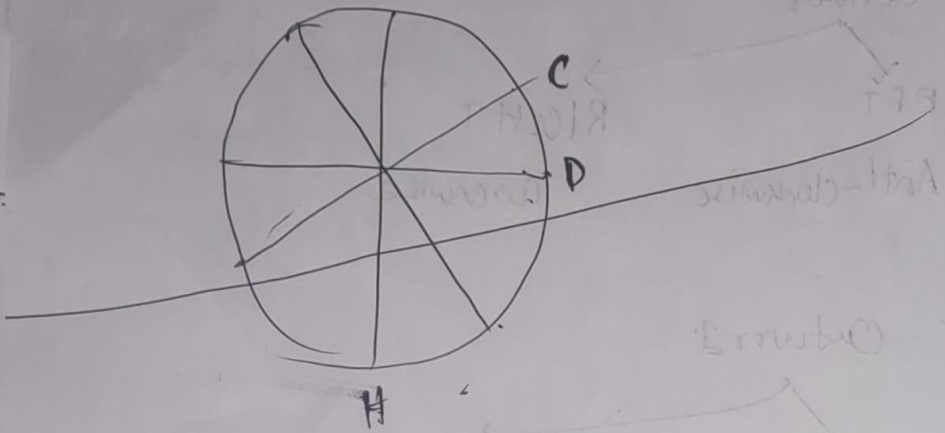
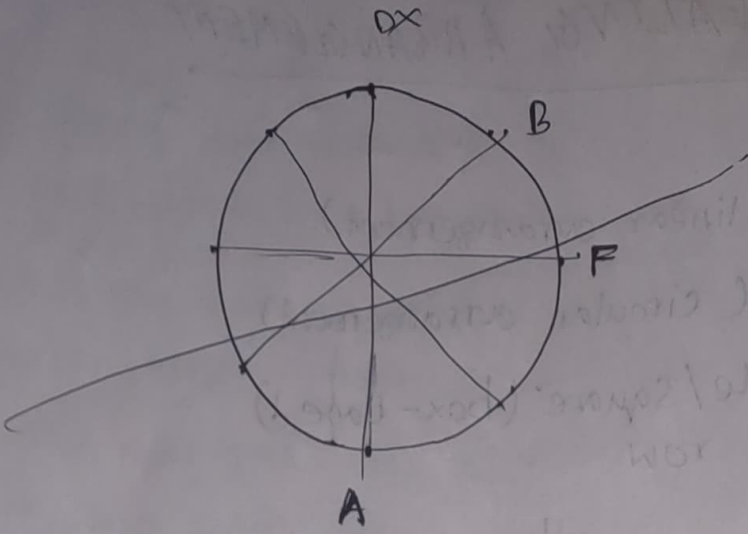
• B is third to the right of A

• H is second to the ~~left~~ <sup>right</sup> of D.

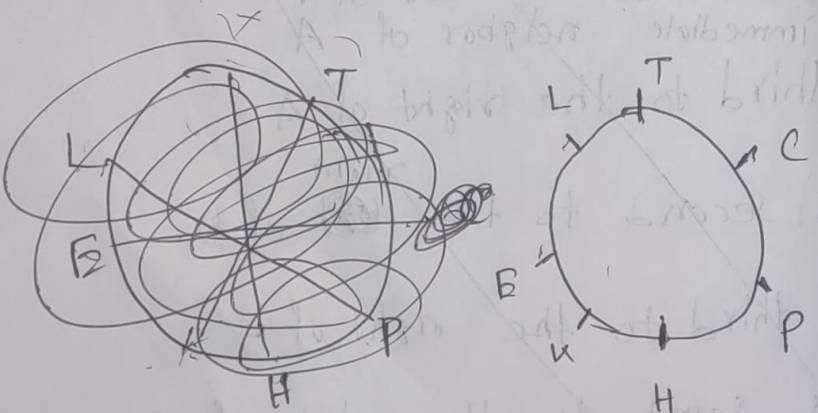
• C is third to the right of H

• G is second to the right of E

• D is not an immediate neighbor of B



(Q) R, L, C, E, H, T and P are sitting around a circular table facing the centre but not necessarily in the same order. T is third to the right of A, L is fourth to the left of P. P is to the immediate right of A. C is fourth to the right of B. B is not an immediate neighbor of T.



# Paper Cutting and Polishing ~~Topic~~ Topics

## ④ option elimination

Image Test:

check option

## ☑ Statement & Assumption

Point to Remember

- ① Always Remember that Assumption is always indefinite and positive.
- ② Any assumption that is conveying the message of advertisement, notice and appeal, that assumption will always be implicit (True).
- ③ Any assumption that is talking about social welfare (Positive), gov. policies that assumption will always be implicit (True).
- ④ If any assumption is talking about Past and Future that assumption will always be explicit (False).
- ⑤ If any Assumption showing the word like suggestion, order, request that will always be implicit (True).
- ⑥ Remember that Restatement is never implicit.
- ⑦ Comparison is always wrong.