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SEATING ARRANGEMENT

Information of the arrangement of people in a row or around circular will be given. You need to arrange people in the row or circle or square according to the given conditions.

Points to Remember

When people face North then the left/ right direction is:	
When people face South then the left/ right direction is:	
Note: People are facing North in the following diagrams.	
When A is second to the left of B:	
When A is second to the right of B:	
When A is 2 places away from B:	
When A is two places to the right of B or B is two places to the left of A:	
When there are two people between A and B:	

Memory Tip

If A is three places away from B is given then $3 - 1 = 2$ people will sit between them.

Linear Arrangement

In this section, a student is required to arrange people in a row or multiple rows according to the given conditions.

Single Row Unidirectional

In this section, people will be arranged in a single row and everyone will face in the same direction.

Direction: Study the following information and answer the given questions.

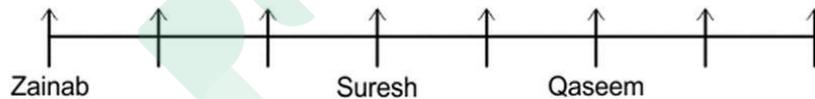
Pawan, Qaseem, Rajan, Suresh, Tariq, Uzma, Waseem, and Zainab are sitting in a line facing north. Zainab sits third to the left of Suresh. Zainab sits extreme end of the row. Only one people sit between Suresh and Qaseem. Only two people sit between Qaseem and Waseem, who is an immediate neighbor of Pawan. Uzma sits third to the left of Rajan.

Q. Who is an immediate neighbor of Tariq?

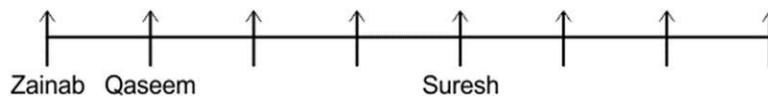
A. People: Pawan, Qaseem, Rajan, Suresh, Tariq, Uzma, Waseem, and Zainab.

- 1) Zainab sits third to the left of Suresh.
- 2) Zainab sits extreme end of the row.
- 3) Only one people sit between Suresh and Qaseem.

Case: 1

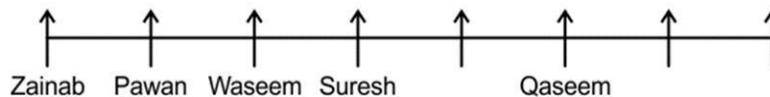


Case: 2

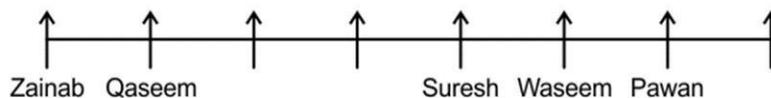


- 4) Only two people sit between Qaseem and Waseem, who is an immediate neighbor of Pawan.

Case: 1

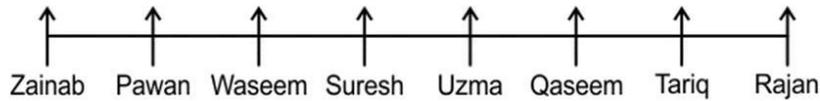


Case: 2



5) Uzma sits third to the left of Rajan.

Case: 1



Hence, Qaseem and Rajan is an immediate neighbor of Tariq.

Single Row Bidirectional

In this section, people will be arranged in a single row and they will face in two different directions.

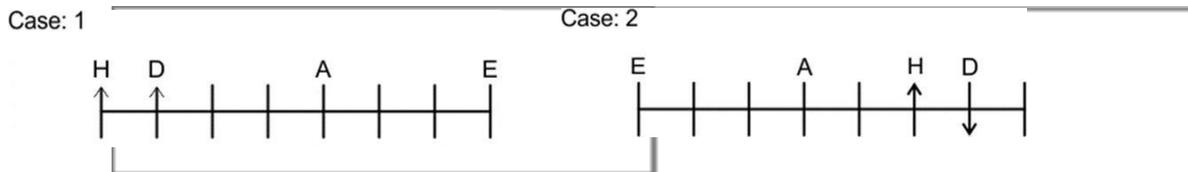
Directions: Eight persons A, B, C, D, E, F, G and H are sitting in a line and equal number of persons are facing north and south direction. Not more than two consecutive adjacent persons face in same direction. Persons at extreme end face in same direction.

A sits third to the right of D, who sits immediate right of H. H faces north direction. Two persons sit between A and E. D does not sit at extreme end. B sits immediate right of C and both face south direction. B and A are not adjacent to each other. G does not face south.

Q. Who is an immediate neighbor of Tariq?

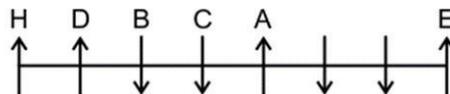
A. Eight persons: A, B, C, D, E, F, G and H.

- 1) A sits third to the right of D, who sits immediate right of H.
- 2) H faces north direction.
- 3) Two persons sit between A and E.
- 4) D does not sit at extreme end.



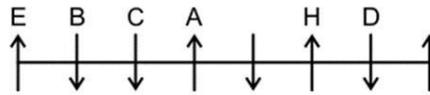
- 5) B sits immediate right of C and both face south direction.
- 6) B and A are not adjacent to each other.

Case: 1



7) G does not face south. So, case 1 is rejected.

Case: 2



One person sits between A and H.

Dual Row

In this section, people will be arranged in 2 different rows.

Direction: Study the following information carefully and answer the questions that follow:

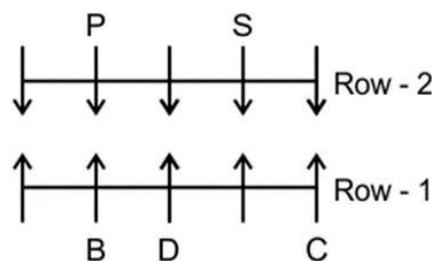
Ten people – A, B, C, D, E, P, Q, R, S, and T are sitting in two rows with five persons in each row namely row-1 and row-2. Each person in row-1 is facing north and each person in another row is facing south. Each person in row 1 faces a person of another row. A, B, C, D, and E are facing towards north while P, Q, R, S, and T are facing towards the south but not necessarily in the same order.

E is not an immediate neighbor of D. Neither P nor S sit at any of the extreme ends of the row. Q is an immediate neighbor of S and facing E. D is facing the person who is sitting 2nd to the right of the person who faces C. P is sitting 2nd to the right of S. T sits at one of the extreme ends but doesn't face C. B is sitting to the left of D. R sits second to the left of T.

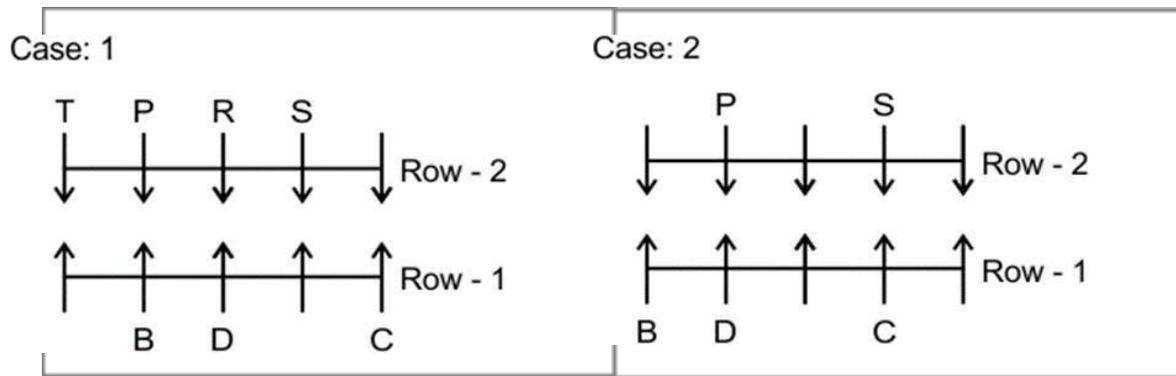
Q. If row-1 people sit in alphabetical order starting from left end then who will face S?

- A. 1) D is facing the person who is sitting 2nd to the right of the person who faces C.
2) B is sitting to the left of D.
3) P is sitting 2nd to the right of S.
4) Neither P nor S sit at any of the extreme ends of the row.

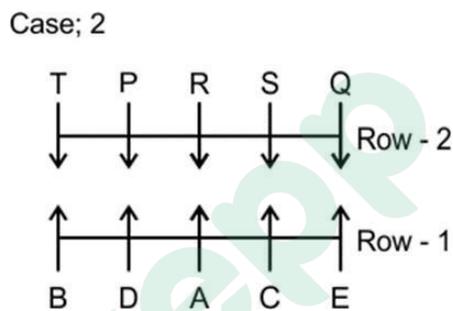
Case: 1



- 5) R sits second to the left of T.
6) T sits at one of the extreme ends but doesn't face C.



- 7) E is not an immediate neighbor of D.
Using statement 7, Case 1.B will be eliminated.
- 8) A sits to the left of E.



D will face S if persons of Row 1 are arranged according to alphabetical order. So, the correct answer is D.

Circular Arrangement

Circular arrangement is a type of seating arrangement where people are seated around a circular table.

Circular Unidirectional

In this section, a student is required to arrange people around a circular table, and everyone will face in the same direction i.e., either inside or outside.

Direction: Study the following information carefully and answer the questions based on it.

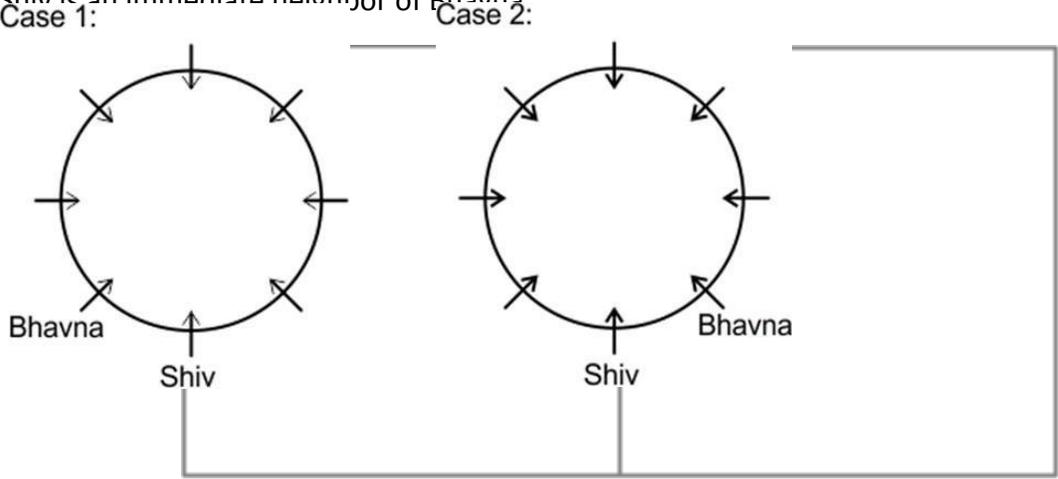
Eight friends Divya, Dev, Piyush, Shiv, Nisha, Geeta, Bhavna, Govinda are sitting around the circular table but not necessarily in the same order and are facing towards the center of the table.

Nisha is third to the Right of Bhavna. Dev and Piyush are neighbors. Divya is sitting opposite to Geeta. Shiv is an immediate neighbor of Bhavna. There are two persons sitting between Nisha and Geeta. Dev and Govinda are sitting opposite to each other.

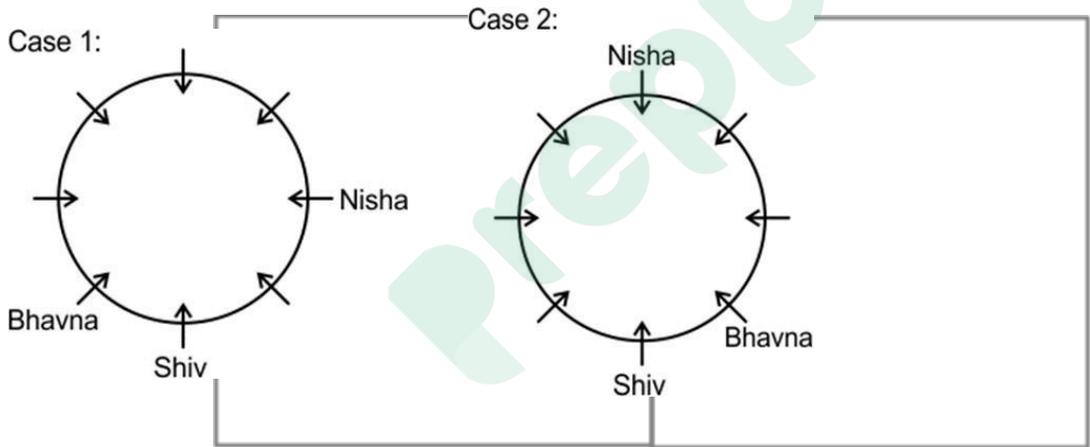
Q. Who is sitting immediate to the right of Nisha?

A. Persons: Divya, Dev, Piyush, Shiv, Nisha, Geeta, Bhavna, Govinda

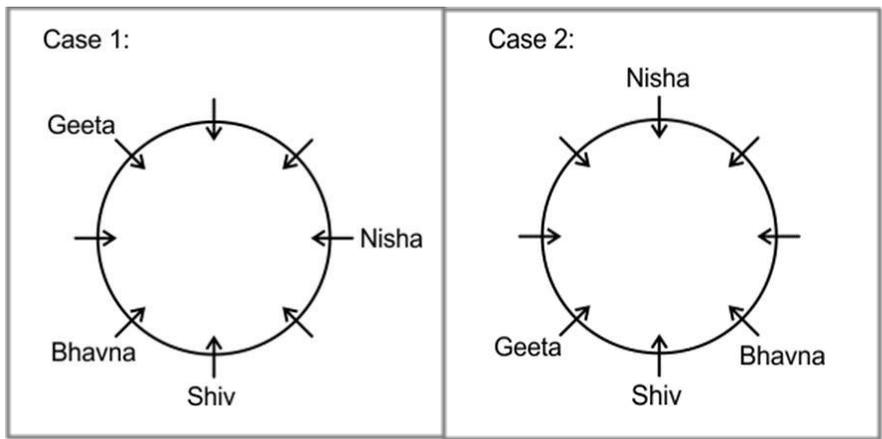
1) Shiv is an immediate neighbor of Bhavna.



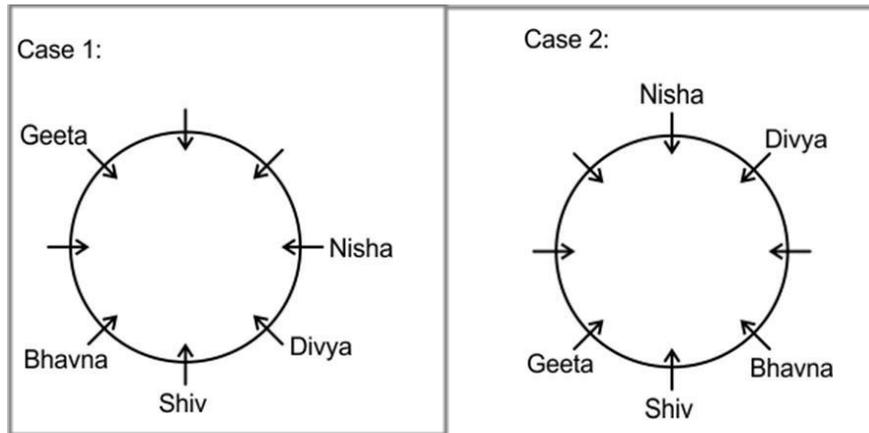
2) Nisha is third to the Right of Bhavna.



3) There are two persons sitting between Nisha and Geeta.



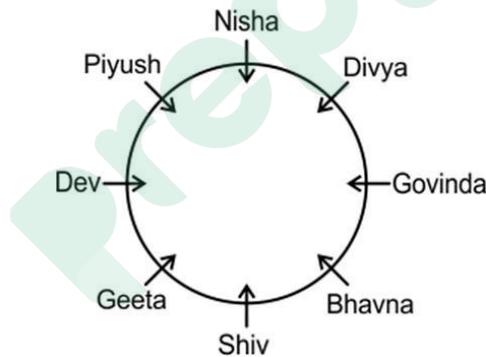
4) Divya is sitting opposite to Geeta.



5) Dev and Piyush are neighbors.

6) Dev and Govinda are sitting opposite to each other.

Case 1 cannot satisfy the above conditions. Hence, Case 1 gets eliminated. Hence, Piyush is the correct answer.



Circular Bidirectional

In this section, a student is required to arrange people around a circular table, and everyone will face in the same direction i.e., either inside or outside.

Directions: Study the following information and answer the given questions.

Eight persons Vignesh, Smriti, Raju, Navjot, Pulela, Kapil, Ravi and Chavi are sitting around a circular table at equal distance but not necessarily in the same order.

Four of them are facing center and others are facing away from the center and no two immediate

neighbors face same direction. These eight people are professional players of eight games viz. Cricket, Snooker, Tennis, Chess, Shooting, Badminton, Golf and Wrestling but not necessarily in the same order.

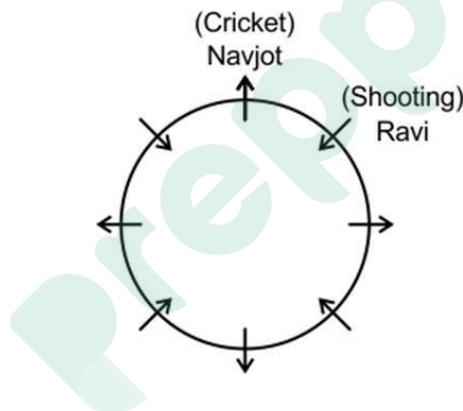
Chavi and Kapil are immediate neighbors of Raju who is a Chess player. Kapil who is a Golfer is sitting opposite Ravi. Navjot who plays Cricket is sitting to the immediate right of Ravi who is a Shooter. Wrestler is not an immediate neighbor of Badminton Player and Tennis player is not an immediate neighbor of Shooter. Chess player is sitting opposite Vignesh who is to the immediate left of Ravi. Navjot is facing away from center. Pulela who is a Badminton player does not sit opposite Navjot.

Q. How many persons are sitting between Smriti and Chavi when counted from right of Smriti?

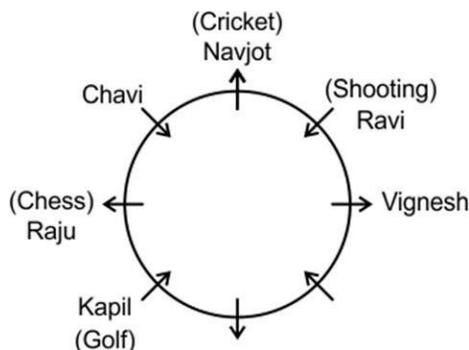
A. Persons: Vignesh, Smriti, Raju, Navjot, Pulela, Kapil, Ravi and Chavi.

Sports: Cricket, Snooker, Tennis, Chess, Shooting, Badminton, Golf and Wrestling.

- 1) Navjot who plays Cricket is sitting to the immediate right of Ravi who is a Shooter.
- 2) Navjot is facing away from center. (No two neighbors face same direction).



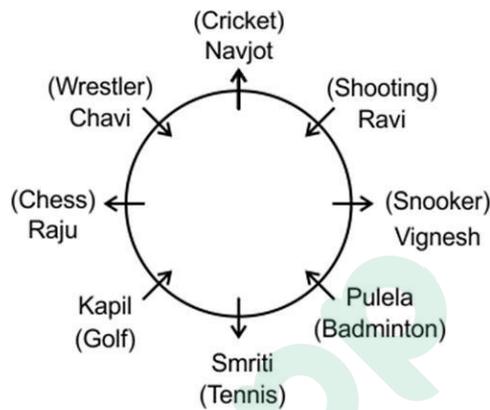
- 3) Kapil who is a Golfer is sitting opposite Ravi.
- 4) Chess player is sitting opposite Vignesh who is to the immediate left of Ravi.
- 5) Chavi and Kapil are immediate neighbors of Raju who is a Chess player.



- 6) Pulela who is a Badminton player does not sit opposite Navjot.
- 7) Wrestler is not an immediate neighbor of Badminton Player and Tennis player is not an immediate neighbor of Shooter.

Therefore, Chavi is a Wrestler and Smriti is sitting to the immediate left of Pulela.

Also, Smriti is a Tennis player and Vignesh plays Snooker.



Hence, two persons are sitting between Smriti and Chavi when counted from right of Smriti.

Polygonal Arrangement

In this type of arrangement, people will be seated around different shapes of table for eg. triangle, square, rectangle, pentagonal, hexagonal, octagonal etc.

Square Arrangement

In this section, a student is required to arrange people around a square table.

Direction: Study the following information carefully and answer the question given below.

Eight friends are sitting around a rectangular table either in the middle side or at the corner. Four of them like fruits Apple, Mango, Grapes and Banana and four of them like vegetables Tomato, Potato, Broccoli and Cucumber. The person who likes vegetables sits at the corner faces inside and the person who likes fruits sits in the middle faces outside.

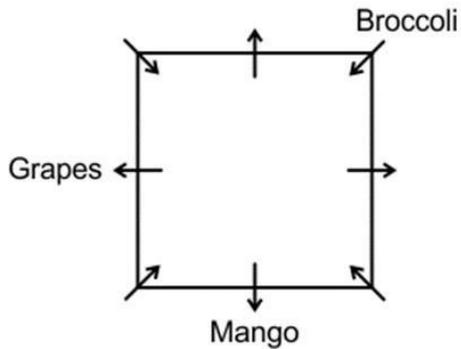
Only two friends sit between the one who likes Mango and the one who likes Broccoli. The one who likes Grapes sits second to the right of the one who likes Mango. Only one person sits between the one who likes Tomato and the one who likes Potato. The one who likes Apple is an immediate neighbor of the one who likes Potato. Friends who like Banana and Broccoli do not sit together.

Q. Who sits opposite to the one who likes Broccoli?

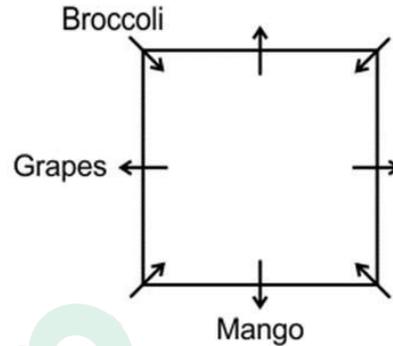
A. According to the question:

- 1) Only two friends sit between the one who likes Mango and the one who likes Broccoli.
- 2) The one who likes Grapes sits second to the right of the one who likes Mango.

Case 1:

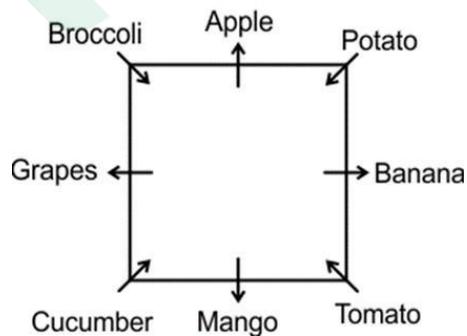


Case 2:



- 3) Friends who like Banana and Broccoli do not sit together. (This eliminates case 1)
- 4) The one who likes Apple is the immediate neighbor of the one who likes Potato.
- 5) Only one person sits between the one who likes Tomato and the one who likes Potato.

Case 2:



Hence, the one who likes Tomato sits opposite to the one who likes Broccoli.

Triangular Arrangement

In this section, a student is required to arrange people around a square table.

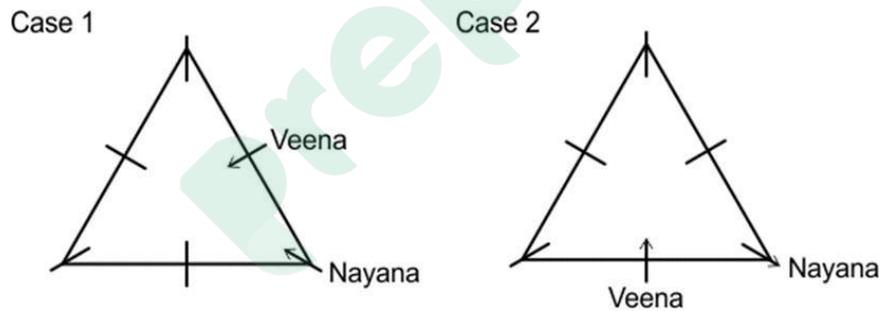
Directions: Read the information carefully and answer the following questions.

Six people Nayana, Arpita, Amulya, Deepa, Veena, Swara are sitting around a triangular shaped table such that four are facing inside the table and only two are facing outside the table but not necessarily in the same order. Three people are sitting at the corner and three people are sitting on edges of the table.

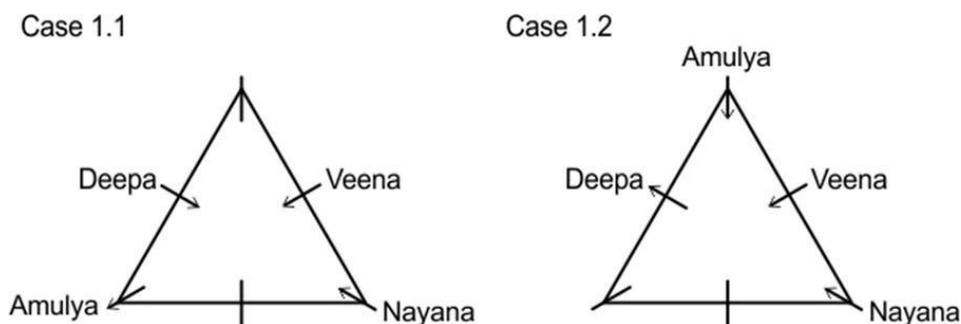
Deepa and Amulya are sitting to the right of each other. Nayana who is sitting at the corner is sitting second to the left of Amulya. Veena is facing inside the table and sitting to the immediate right of Nayana. Swara and Arpita are facing in the same direction but are not sitting together.

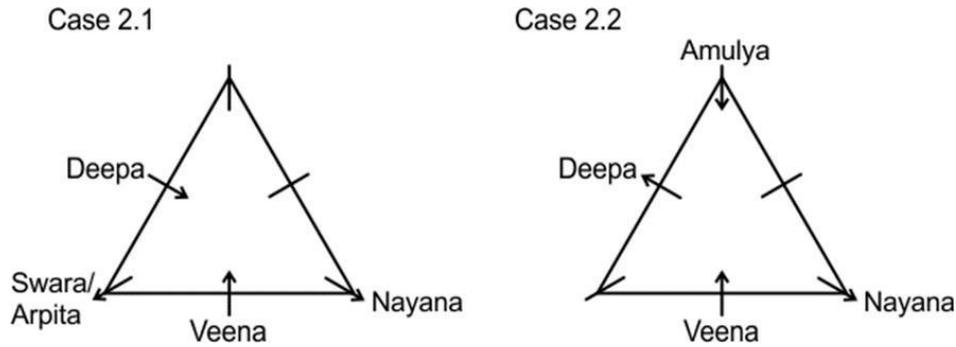
Q. How many persons are sitting between Deepa and Veena when counted clockwise from Deepa?

- A.** 1) Nayana who is sitting at the corner is sitting second to the left of Amulya.
2) Veena is facing inside the table and sitting to the immediate right of Nayana.

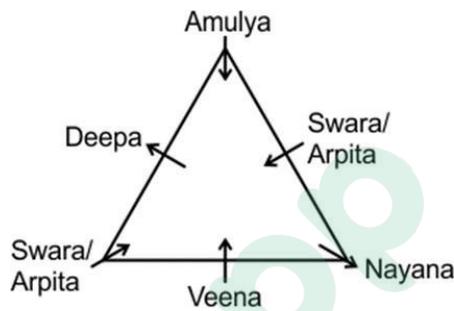


3) Deepa and Amulya are sitting to the right of each other.





4) Swara and Arpita are facing in the same direction but are not sitting together.



Only three persons are sitting between them.

Concentric Arrangement

In this section, 1 circular or polygonal shaped table will be placed inside the other circular or polygonal shaped people and a student need to arrange people around these tables according to the given information.

Direction: Study the following information carefully and answer the questions given below.

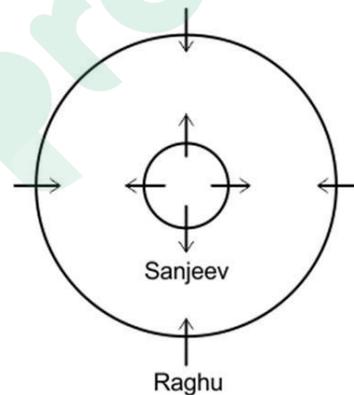
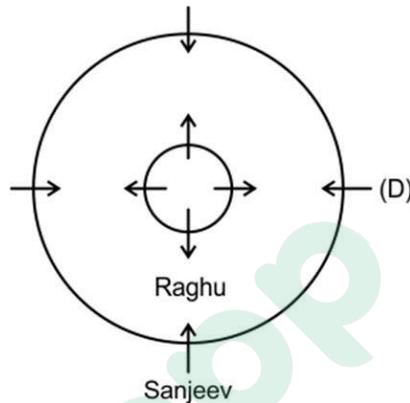
There are 8 people sitting in two concentric circles. Ranvijay, Dharmesh, Raghu, Rajeev, Sameer, Sanjeev, Sudheer, and Sukhdev are sitting in two concentric circular table. Four of them are sitting on outer circular table facing inside and rest of them are sitting on inner circular table facing outside but not necessarily in the same order. Each one has a deficiency of different vitamins viz. A, B1, C, D, E, B2, and B6 but not necessarily in the same order.

Rajeev is sitting to the immediate left of the one who has a deficiency of vitamin E. Ranvijay who has a deficiency of vitamin B1 is sitting to the immediate left of Dharmesh who has a deficiency of vitamin A. A Person with deficiency of B2 is sitting to the immediate left of the person with deficiency of K. Sanjeev has not a deficiency of vitamin E. Ranvijay is not facing to the one who has a deficiency of vitamin D. Sameer who has a deficiency of vitamin D is facing outside. Sukhdev is sitting second to the left of the one who has a deficiency of vitamin B1. Sameer and Ranvijay both are

sitting on different tables. None of the people who are sitting on outer circular table are facing each other. Sanjeev who is facing Raghu is sitting to the immediate of the person who has a deficiency of vitamin D. A person with a deficiency of vitamin C is not facing Raghu.

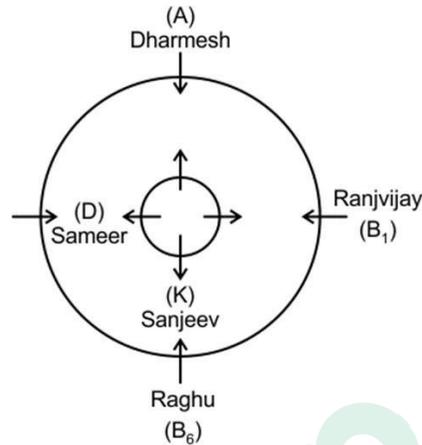
Q. Which of the following has a deficiency of vitamin B2?

- A.** 1) None of the people who are sitting on outer circular table are facing each other.
 2) Sanjeev who is facing Raghu is sitting to the immediate of the person who has a deficiency of vitamin D.
 3) Sameer who has a deficiency of vitamin D is facing outside.

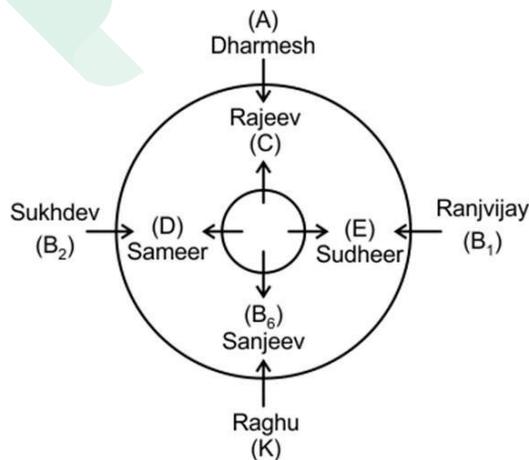


- 4) Sameer and Ranvijay both are sitting on different tables.
 5) Ranvijay who has a deficiency of vitamin B1 is sitting to the immediate left of Dharmesh who has a deficiency of vitamin A.
 6) Ranvijay is not facing to the one who has a deficiency of vitamin D.

Person	Vitamin
Sameer	D
Ranjvijay	B1
Dharmesh	A



- 7) Sukhdev is sitting second to the left of the one who has a deficiency of vitamin B1.
- 8) Rajeev is sitting to the immediate left of the one who has a deficiency of vitamin E.
- 9) Sanjeev has not a deficiency of vitamin E.
- 10) A person with deficiency of B2 is sitting to the immediate left of the person with deficiency of K.
- 11) A person with a deficiency of vitamin C is not facing Raghu.



Person	Vitamin
Dharmesh	A
Sukhdev	B2

Rajeev	C
Sameer	D
Sudheer	E
Raghu	K
Ranvijay	B1
Sanjeev	B6

Sukhdev has a deficiency of vitamin B2.

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