



581 CLERK 2022



REASONING

LIVETEST



11:30 AM

BY SHIPRA MAHENDRAS



UPCOMING ONLINE BATCHES

May 2022

04 May 202<u>2</u> 05:30 PM to 07:30 PM **BANK ONLINE LIVE CLASS** 10:30 AM to 12:30 PM SSC ONLINE LIVE CLASS BILINGUAL

11 May 2022 10:30 AM to 12:30 PM **BANK ONLINE LIVE CLASS** 01:00 PM to 03:00 PM **SSC ONLINE LIVE CLASS BILINGUAL** 04:15 PM to 06:15 PM **BANK ONLINE LIVE CLASS**

ENGLISH & BENGALI

18 May 2022 07:30 PM to 09:30 PM **BANK ONLINE LIVE CLASS** 05:30 PM to 07:30 PM SSC ONLINE LIVE CLASS **BILINGUAL**

25 May 2022 03:00 PM to 05:00 PM **BANK ONLINE LIVE CLASS** 08:00 AM to 10:00 AM SSC ONLINE LIVE CLASS **BILINGUAL**



SBI CLERK 2022 / /



Nitika Gupta 1 day ago

Homework

(c) Either or

Downward

O red...

Read more

凸 切 REPLY

View reply from Mahendra



Nadeem 1 day ago

Homework

♦Puzzle**♦**

Shelves Box Colour

7 O Red..

Read more

占 尔 REPLY

▼ View reply from Mahendras : Online Videos For Govt. Exams



debasish chakraborty 1 day ago

Homework:

7 0 RED

6 S WHITE

5 R BLACK...

Read more

必 ♥ REPLY

View reply from Mahendras : Online Videos For Govt. Exams



Nabanita De 1 day ago

H.W-7.O-Red,6-S-White,5-R-Black,4-N-pink,3-Q-Brown,2-P-orange,1-M-Blue.



Rajnandini Pal 1 day ago (edited)

Homework Answer

7- 0- red

6- S- White

5 - R- Black..

Read more

凸 夘 REPLY

▼ View reply from Mahendras : Online Videos For Govt. Exams



Suman Paul 1 day ago

1) 7) O - Red

6) S - White

5) R - Black

4) N - Pink...

Read more

凸 夘 REPLY

View reply from Mahendras : Online Videos For Govt. Exams



shubhangi mishra 17 hours ago (edited)

H.w ans.

0-red

S - white

R - black..

Read more

凸 夘 REPLY

View reply from Mahendras : Online Videos For Govt. Exams



Rahul Bhakat 1 day ago

FLOOR BOX COLOUR

O RED

WHITE

SBI CLERK 2022

•Live at 11:30 AM

सात डिब्बे M, N, O, P, Q, R और S को सात अलग-अलग अलमारियों में एक के ऊपर एक इस तरह रखा गया है कि सबसे नीचे वाले शेल्फ को एक नंबर दिया गया है, एक के ऊपर वाले को 2 और इसी तरह सबसे ऊपर वाले शेल्फ को क्रमांकित किया गया है। 7. प्रत्येक बॉक्स अलग-अलग रंगों में है जैसे लाल, सफेट, भूरा, नारंगी, नीला, गुलाबी और काला। R, जो काले रंग में है, के ऊपर दो से अधिक डिब्बे नहीं रखे गए हैं। डिब्बा Q को तीसरे शेल्फ में रखा गया है। s और M के मध्य चार डिब्बे रखे गए हैं, जो नीले रंग में है। बॉक्स M को R के नीचे विषम संख्या वाले शेल्फ में रखा गया है। नारंगी रंग का बॉक्स नीले रंग के बॉक्स के ठीक ऊपर रखा गया है। बॉक्स 0 लाल रंग में है और बॉक्स s के ऊपर रखा गया है। सफेद रंग के बॉक्स के ऊपर रखे गए बॉक्स की संख्या भूरे रंग के बॉक्स के नीचे रखे गए बॉक्स की संख्या से एक कम है। डिब्बा N, डिब्बा P के ऊपर रखा गया है। भूरे रंग का डिब्बा, काले रंग के डिब्बे के ठीक ऊपर नहीं युवा प

Seven Boxes M, N, O, P, Q, R and S are placed. seven different shelves one above another such that the bottommost shelf is numbered one, the one above one is numbered 2 and so on till the top most shelf is numbered 7. Each box is in different in colours viz., Red, White, Brown, Orange, Blue, Pink and Black. Not more than two Boxes are placed above R, which is in Black colour. The Box Q is placed in 3rd shelf. Four Boxes are placed between S and M, which is in Blue colour. The box M is placed in odd numbered shelf below R. Orange coloured box is placed just above the Blue coloured box. The box O is in red colour and placed above the box S. Number of boxes placed above the White coloured box is one less than that of number of boxes placed below the Brown coloured colour box. The Box N is placed above the box P. The Brown coloured box does not placed immediately above the Black coloured box.



Seven Boxes M, N, O, P, Q, R and S are placed in seven different shelves one above another such that the bottommost shelf is numbered one, the one above one is numbered 2 and so on till the top most shelf is numbered 7. Each box is in different in colours viz., Red, White, Brown, Orange, Blue, Pink and Black. Not more than two Boxes are placed above R, which is in Black colour. The Box Q is placed in 3rd shelf. Four Boxes are placed between S and M, which is in Blue colour. The box M is placed in odd numbered shelf below R. Orange coloured box is placed just above the Blue coloured box. The box O is in red colour and placed above the box S. Number of boxes placed above the White coloured box is one less than that of number of boxes placed below the Brown coloured colour box. The Box N is placed above the box P. The Brown coloured box does not placed immediately above the Black coloured box.





73) Which of the following boxes is placed in 7th shelf and what is the colour of that box? निम्नलिखित में से कौन सा बॉक्स सातवें शेल्फ में रखा गया है और उस बॉक्स का रंग क्या है?

- a) M, Black
- b)S, Pink
- c)O, Red
- d)R, Brown
- e)None of these

Shelves	Boxes	Colour
7	0	Red
6	S	White
5	R	Black
4	N	Pink
3	Q	Brown
2	Р	Orange
1	M	Blue

71) Which of the fo	ollowing box is placed in shelf
number 2?	
	ौन सा बॉक्स शेल्फ नंबर 2 में रखा
गया है?	
a)M	
b)N	
c)O	

- 72) The color of Box N is डिब्बा N का रंग है ?
- a)Red

d)P

- b)Pink
- c)Black
- d)Brown
- e)None of these

e)None of these







Shelves	Boxes	Colour
7	0	Red
6	S	White
5	R	Black
4	N	Pink
3	Q	Brown
2	P	Orange
1	M	Blue

- 74) Which of the following statement(s) is/are true?
- I)The box N is in Pink colour
- II)The White coloured box is placed above the Red coloured box
- III)The box P is placed just below the box M
- a)Only I
- b)Only I and II
- c)Only II and III
- d)Only III
- e)None of the statement is correct

75) Four of the five among the following are similar in such a way to form a group. Which one of the following doesn't belongs to the group? निम्नलिखित पांच में से चार एक समूह बनाने के लिए समान हैं। निम्नलिखित में से कौन समूह से संबंधित नहीं है?

- a)O
- b)R
- c)S
- d)Q
- e)M



Point F is 8m to the east of point D and 12 m to the south of point G. Point G is 4m to the west of point K. Point O is 6m to the south of point K. Point O is 12m to the east of point R. point T is 10m to the north of point R. बिंदु F, बिंदु D के पूर्व में 8 मीटर और बिंदु G के दक्षिण में 12 मीटर है। बिंदु G, बिंदु के पश्चिम में 4 मीटर है K. बिंदु O, बिंदु K के 6मी दक्षिण में है। बिंदु O, बिंदु R के 12मी पूर्व में है। बिंदु T, बिंदु R के 10मी उत्तर में है।





78) Find the odd one out

a)CEG

b)FHJ

c)JLN

d)RSU

e)DFH



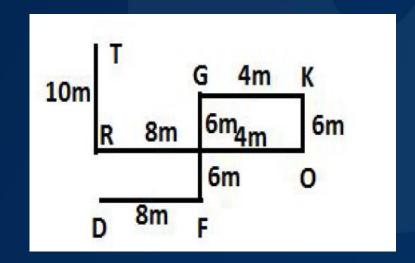
a) $4 \sqrt{10}$ m

b) $5\sqrt{6}$ m

c) $5\sqrt{10}$ m

d)160m

e)None of these



77) Point R is in which direction with respect to point K?

a)North west

b)South

c)South west

d)North east

e)None of these







41) Statements:

All A1 are A2 Some A3 are not A2 All A2 are A4

Conclusions:

I)All A4 being A2 is a possibility II)No A2 being A3 is a possibility







42) Statements:

Some NH1 is a NH2

Some NH2 are not NH3

All NH3 are NH4

Conclusions:

I)Some NH1 being NH3 is a possibility

II) All NH3 being NH4 is a possibility







43) Statements:

All one are two Some two are three No three is a four

Conclusions:

I)All one are three II)No two being four is a possibility







44) Statements:

All set are pair

Some pair are couple

Some couple are single

Conclusions:

I)All single are pair

II)Some single are not pair







45) Statements:

Some student are teacher

No teacher are principal

All principal are watchman

Conclusions:

I)Some student are principal

II)All teacher being watchman is a possibility.







आठ बॉक्स हैं- A1, B1, C1, D2, A2, B2, C3 और D4 एक दूसरे के ऊपर रखे गए हैं। प्रत्येक बॉक्स में अलग-अलग मोबाइल फोन होते हैं। HTC, Apple, Samsung, Microsoft, Lenovo, Sony, Vivo और Micromax लेकिन जरूरी नहीं इसी क्रम में हों।c3 के ऊपर वाले बक्सों की संख्या उसके नीचे वाले बक्सों की संख्या से एक कम है। लेनोवो और सोनी के बीच केवल दो बॉक्स रखे गए हैं। Lenovo वाला बॉक्स या तो C3 के ठीक ऊपर या ठीक नीचे रखा गया है। सैमसंग वाला बॉक्स लेनोवो के बॉक्स के ऊपर किसी एक स्थान पर रखा गया है। सैमसंग वाला बॉक्स सबसे ऊपरी स्थान पर नहीं रखा गया है। सैमसंग के साथ बॉक्स के ऊपर रखे गए बॉक्स की संख्या Microsoft के बॉक्स के नीचे रखे गए बॉक्स की संख्या के समान है। p2 और D4 के बीच तीन बॉक्स हैं; बॉक्स D2 में सैमसंग नहीं है और इसे सबसे ऊपरी स्थान पर नहीं रखा गया है। डिब्बा D2 को D4 के ऊपर रखा गया है। बॉक्स A1 में Apple है और इसे B2 के ठीक ऊपर रखा गया है। C1 बॉक्स में माइक्रोमैक्स है और इसे 🗚 बॉक्स के ऊपर किसी एक स्थान पर रखा गया है। वीवो वाले बॉक्स को या तो सबसे निचले या सबसे ऊपरी स्थान पर रखा गया है। बॉक्स A2 को बॉक्स C3 के ऊपर किसी एक स्थान पर रखा गया है। बॉक्स B1 में न तो लेनोवो है। और न ही सेमसंग।



There are eight boxes namely- A1, B1, C1, D2, A2, B2, C3 and D4 are placed one above another. Each box contains different mobile phones viz. HTC, Apple, Samsung, Microsoft, Lenovo, Sony, Vivo and Micromax but not necessarily in same order. The number of boxes above C3 is one less than the number of boxes below it. There are only two boxes placed between Lenovo and Sony. The box with Lenovo is placed either immediately above or immediately below C3. The box with Samsung is placed at one of the positions above the box with Lenovo. The box with Samsung is not placed at the topmost position. Number of boxes placed above the box with Samsung is as same the number of boxes placed below the box with Microsoft. There are three boxes between D2 and D4; the box D2 doesn't have Samsung and is not placed at the topmost position. The box D2 is placed above D4. The box A1 contains Apple and is placed immediately above B2. The C1 box contains Micromax and is placed at one of the positions above A1 box. The box with Vivo is placed at either lowermost or topmost position. The box A2 is placed at one of the positions above the box C3. The box B1 contains neither Lenovo nor Samsung.





There are eight boxes namely- A1, B1, C1, D2, A2, B2, C3 and D4 are placed one above another. Each box contains different mobile phones viz. HTC, Apple, Samsung, Microsoft, Lenovo, Sony, Vivo and Micromax but not necessarily in same order. The number of boxes above C3 is one less than the number of boxes below it. There are only two boxes placed between Lenovo and Sony. The box with Lenovo is placed either immediately above or immediately below C3. The box with Samsung is placed at one of the positions above the box with Lenovo. The box with Samsung is not placed at the topmost position. Number of boxes placed above the box with Samsung is as same the number of boxes placed below the box with Microsoft. There are three boxes between D2 and D4; the box D2 doesn't have Samsung and is not placed at the topmost position. The box D2 is placed above D4. The box A1 contains Apple and is placed immediately above B2. The C1 box contains Micromax and is placed at one of the positions above A1 box. The box with Vivo is placed at either lowermost or topmost position. The box A2 is placed at one of the positions above the box C3. The box B1 contains neither Lenovo nor Samsung.



48) Which of the following box is placed fourth from the bottom? निम्नलिखित में से कौन सा डिब्बा नीचे से चौथे स्थान पर रखा गया है?

a)Box D2

b)Box B2

c)The box with Apple mobiles

d)The box with Sony mobiles

e)None of these

Box	Mobiles
C1	Micromax
A2	Samsung
D2	Lenovo
C3	нтс
A1	Apple
B2	Sony
D4	Microsoft
B1	Vivo

46) Which of the following box has Vivo mobiles? निम्नलिखित में से किस बॉक्स में वीवो मोबाइल हैं?

a)Box C3

b)Box B1

c)Box B2

d)Box D4

e)Box A2

47) How many boxes are there between the boxes which has Microsoft and Micromax? बक्सों के बीच में कितने डिब्बे हैं जिसके पास माइक्रोसॉफ्ट और माइक्रोमैक्स है?

- a)One
- b)Two
- c)Three
- d)More than three
- e)None







Box	Mobiles
C1	Micromax
A2	Samsung
D2	Lenovo
C3	нтс
A1	Apple
B2	Sony
D4	Microsoft
B1	Vivo

- 49) What is the position of the box which has Sony mobiles? सोनी के मोबाइल वाले बॉक्स का स्थान क्या है?
- a)Second from the bottom
- b)Third from the top
- c)Fourth from the bottom
- d)Third from the bottom
- e)Immediate below C3
- 50) If the Box C1 is related to Lenovo; Box A1 is related to Microsoft in a certain way. Then which of the following mobile does C3 is related to? यदि बॉक्स C1 लेनोवो से संबंधित है; बॉक्स ए1 एक खास तरह से माइक्रोसॉफ्ट से संबंधित है। तो C3 निम्नलिखित में से किस मोबाइल से संबंधित है?
- a)Sony
- b)HTC
- c)Micromax
- d)Vivo
- e)Microsoft







51) Statements:

$$Q < D \le B \ge M = N; Y > J = V \ge H; C > Z \ge V > D$$

Conclusions:









52) Statements:

$$Y > T \ge R \ge E > Q$$
; W; $H < G \ge E = W < C < X \le Z$

Conclusions:

$$II.G = W$$





आठ व्यक्ति अर्थात् - P, L, M, O, K, N, I और् J एक वृत्ताकार मेज पर केंद्र की ओर मुख करके बैठे हैं। प्रत्येक को अलग-अलग फल पसंद हैं अर्थात। आम, अनानास, संतरा, केला, अंगूर, अमरूद, तरबूज और कीवी। सभी सूचनाओं का एक ही क्रम में होना आवश्यक नहीं है।

J और P के मध्य केवल एक व्यक्ति बैठा है। P, संतरा पसंद करने वाले के दायें से तीसरे स्थान पर बैठा है। वह व्यक्ति जिसे अमरूद पसंद है वह न तो P और न ही J का निकटतम पड़ोसी है। अमरूद पसंद करने वाले व्यक्ति और 1, जिसे अंगूर पसंद है, के मध्य केवल दो व्यक्ति बैठे हैं। L को कीवी पंसंद है और वह K के ठीक बायें बैठा है। к, N के ठीक बायें बैठा है, जिसे संतरा पसंद है। M को अनानास पसंद है और उसका मुख तरबूज पसंद करने वाले के विपरीत है। आम पसंद करने वाला व्यक्ति। के ठीक दायें बैठा है। वह व्यक्ति जिसे केला पसंद है वह अनानास पसंद करने वाले का निकटतम पड़ोसी नहीं

There are eight people namely – P, L, M, O, K, N, I and J sitting in a circular table facing towards the centre. Each likes different fruits viz. Mango, Pineapple, Orange, Banana, Grapes, Guava, Watermelon and Kiwi. All the information is not necessary to be in the same order. Only one person sits between J and P. P sits third to

the right of one who likes Orange. The person who likes Guava is an immediate neighbour of neither P nor J. Only two persons sit between the one who likes Guava and I, who likes Grapes. L likes Kiwi and sits to the immediate left of K. K sits to the immediate left of N, who likes Orange.M likes Pineapple and faces opposite to the one who likes Watermelon. The person who likes Mango sits to the immediate right of I. The person who likes Banana is not an immediate neighbour of the one who likes Pineapple.







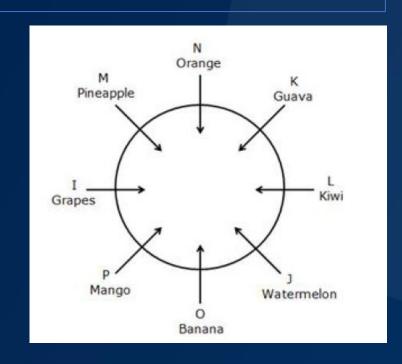
There are eight people namely – P, L, M, O, K, N, I and J sitting in a circular table facing towards the centre. Each likes different fruits viz. Mango, Pineapple, Orange, Banana, Grapes, Guava, Watermelon and Kiwi. All the information is not necessary to be in the same order. Only one person sits between J and P. P sits third to the right of one who likes Orange. The person who likes Guava is an immediate neighbour of neither P nor J. Only two persons sit between the one who likes Guava and I, who likes Grapes. L likes Kiwi and sits to the immediate left of K. K sits to the immediate left of N, who likes Orange.M likes Pineapple and faces opposite to the one who likes Watermelon. The person who likes Mango sits to the immediate right of I. The person who likes Banana is not an immediate neighbour of the one who likes Pineapple.





58) Who among the following likes Guava? निम्नलिखित में से किसे अमरूद पसंद है?

- a)M
- b)J
- c)K
- d)P
- e)L



56) Who sits to the immediate right of P? P के ठीक दायें कौन बैठा है?

- a)The one who likes Watermelon
- b)O
- c)L
- d)The one who likes Mango
- e)None of these

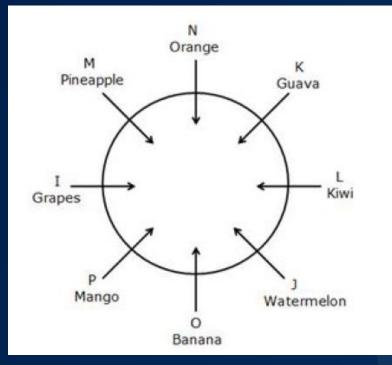
57) How many persons are sitting between M and L, when counted from L in anticlockwise direction? L से वामावर्त दिशा में गिनने पर M और L के मध्य कितने व्यक्ति बैठे हैं?

- a)One
- b)Three
- c)More than three
- d)Two
- e)None









- 59) Which of the following statement is true? निम्नलिखित में से कौन सा कथन सत्य है?
- a)N sits to the immediate left of K
- b)P and J face each other
- c)The one who likes Kiwi sits second to the right of P
- d)None is true
- e)All are true
- 60) Which of the following fruit does O like? निम्नलिखित में से कौन सा फल 🔾 को पसंद है?
- a)Kiwi
- b)Orange
- c)Banana
- d)Grapes
- e)Pineapple







Digits	4	5	2	9	3	1	8	6	0	7
Letter/Symbol	#	V		В	^	A	&	%	Н	*

- i)If the first digit is an even number and the last digit is an odd number, then their codes are to be interchanged.
- ii)If the first digit is an odd number and the last digit is an even number then codes of second and fourth digits are to be interchanged.
- iii)If both the first and the last digits are an even number, then both are to be coded as the code for the first digit.
- iv)If both the first and the last digits are an odd number, then both are to be coded as the last digit.
 - **61) What is the code for "17069"?**
 - a)A*H%B
 - **b**)**B*****H**%**A**
 - c)B*H%B
 - d)A%H*B
 - e)None of these







Digits	4	5	2	9	3	1	8	6	0	7
Letter/Symbol	#	V	1	В	^	А	&	%	н	*

- i)If the first digit is an even number and the last digit is an odd number, then their codes are to be interchanged.
- ii)If the first digit is an odd number and the last digit is an even number then codes of second and fourth digits are to be interchanged.
- iii)If both the first and the last digits are an even number, then both are to be coded as the code for the first digit.
- iv)If both the first and the last digits are an odd number, then both are to be coded as the last digit.
 - **62) What is the code for "14074"?**
 - a) %#^\$W
 - b)##H*A
 - c)A#H*#
 - d)A*H##
 - e)None of these









	14			90				1		
Digits	4	5	2	9	3	1	8	6	0	7
Letter/Symbol	#	V	1	В	^	A	&	%	н	*

- i)If the first digit is an even number and the last digit is an odd number, then their codes are to be interchanged.
- ii)If the first digit is an odd number and the last digit is an even number then codes of second and fourth digits are to be interchanged.
- iii)If both the first and the last digits are an even number, then both are to be coded as the code for the first digit.
- iv)If both the first and the last digits are an odd number, then both are to be coded as the last digit.
 - **63) What is the code for "20606"?**
 - a)%!HH%
 - b)!H%H%
 - c)!H%H!
 - d)!%H%H
 - e)None of these







Digits	4	5	2	9	3	1	8	6	0	7
Letter/Symbol	#	V	1	В	^	A	84	%	н	*

- i)If the first digit is an even number and the last digit is an odd number, then their codes are to be interchanged.
- ii)If the first digit is an odd number and the last digit is an even number then codes of second and fourth digits are to be interchanged.
- iii)If both the first and the last digits are an even
- number, then both are to be coded as the code for the first digit.
- iv)If both the first and the last digits are an odd number, then both are to be coded as the last digit.
 - **64) What is the code for "25681"?**
 - a)A&V%!
 - b)!V%&A
 - c)AV%&!
 - d)AV%&A
 - e)None of these





आठ् छात्र हैं अर्थात। A, S, D, Q, W, E, R और T एक सीधी रेखा में बैठे हैं। उनमें से कुछ का मुख उत्तर की ओर और शेष का मुख दक्षिण दिशा की ओर है। यें सभी अलग-अलग ग्रेड के छात्र थे कॉलेज के लिए स्कूली शिक्षा। वे इस प्रकार बैठे थे कि उनके ग्रेड सीधी रेखा के बाएँ से दाएँ छोर तक बढ़ते क्रम में थे। कोई भी दो छात्र एक ही कक्षा में नहीं पढते हैं।

नोट: उनके ग्रेड 1 से 9, बी.ई.एमई और पीएच.डी. जहां पीएच.डी उच्चतम ग्रेड है और 1 निम्नतम ग्रेड है।

पंक्ति के अंतिम छोर पर बैठे छात्रों का मुख उत्तर दिशा की ओर है। R और E निकटतम पडोसी हैं और दोनों का मुख विपरीत दिशाओं की ओर है. w 9वीं कक्षा से संबंधित है और A की समान दिशा की ओर उन्मुख है, जो चौथी कक्षा से संबंधित है। A और D के मध्य केवल तीन विद्यार्थी बैठे हैं; दोनों एक ही दिशा की ओर उन्मुख हैं। न तो A न ही D पंक्ति के अंतिम छोर पर बैठा है। S, 7वीं कक्षा से संबंधित है और w के दायें से दूसरे स्थान पर बैठा है। Q और T का मुख समान दिशा की ओर हैं। ई ने पीएचडी की है। एक B.E और M.E स्नातक हैं जो एक दूसरे के बगल में बैठे हैं। s के बायें बैठे छात्रों की संख्या Q के ग्रेड से एक वर्ष कम है।

There are eight students viz. A, S, D, Q, W, E, R and T are sitting in a straight line. Some of them were facing north and rest faces south direction. All of them were a student of different grades from schoolings to college. They were sitting in such a way that their grades were in increasing order from left to right end of the straight line. No two student studies in the same grades.Note: Their Grades were ranging from 1 to 9, B.E,M.E and Ph.D. Where Ph. D is the highest grade and 1 is the lowest grade.

The students sitting at the extreme ends of the line face North direction. R and E are immediate neighbours and both faces opposite directions. W belongs to 9th grade and faces the same direction of A, who belongs to 4th grade. Only three student sits between A and D; both faces same direction. Neither A nor D sits at the extreme ends of the line. S belongs to 7th grade and sits second to the right of W. Q and T faces same direction. E has done PhD. There is a B.E and M.E graduates who sits next to each other. Number of students sitting to the left of S is one year less than the grade of Q.





There are eight students viz. A, S, D, Q, W, E, R and T are sitting in a straight line. Some of them were facing north and rest faces south direction. All of them were a student of different grades from schoolings to college. They were sitting in such a way that their grades were in increasing order from left to right end of the straight line. No two student studies in the same grades.

Note: Their Grades were ranging from 1 to 9, B.E. M.E and Ph.D. Where Ph. D is the highest grade and 1 is the lowest grade.

The students sitting at the extreme ends of the line face North direction. R and E are immediate neighbours and both faces opposite directions. W belongs to 9th grade and faces the same direction of A, who belongs to 4th grade. Only three student sits between A and D; both faces same direction. Neither A nor D sits at the extreme ends of the line. S belongs to 7th grade and sits second to the right of W. Q and T faces same direction. E has done PhD. There is a B.E and M.E graduates who sits next to each other. Number of students sitting to the left of S is one year less than the grade of Q.







