

RRB Clerk Pre 2022 (13th August) Shift-Wise Previous Year Papers Mock 07

Directions (1-5): Study the following information carefully and answer the questions given below.

Eight persons are living in eight floors of a building. Ground floor is numbered as 1 and topmost floor is numbered as 8.

V lives on an even numbered floor above 4th floor. Three persons live between V and U. Two persons live between R and Q who lives below the R's floor. Q does not live on ground floor. Three persons live between P and T who lives above U's floor. The number of persons live below P is same as the number of persons live above T.

Q1. Who lives on the 8th floor?

- (a) P
- (b) W
- (c) S
- (d) T
- (e) None of these

Q2. Who lives on the 4th floor?

- (a) W
- (b) V
- (c) S
- (d) T
- (e) None of these

Q3. How many persons are living between the floors in which W and P live?

- (a) More than three
- (b) Two
- (c) One
- (d) Three
- (e) No one

Q4. The number of persons live between R and W is same as the number of persons live between ____ and ____.

- (a) S, T
- (b) V, U
- (c) P, V
- (d) Q, R
- (e) None of these

Q5. Which of the following statement is true about W?

- (a) W lives immediately below T
- (b) W lives on an even numbered floor
- (c) Only two persons live between W and R
- (d) W lives immediately above P
- (e) None is true

Directions (6-8): In each of the questions below are given some statements followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions

Q6. Statement:

Only a few Apples are Oranges.

Only a Few Oranges are Apples.

No Orange is an Apple.

Conclusion:

I. Some Apples are Oranges.

II. Some oranges are Apples.

(a) If only conclusion I follows

(b) If only conclusion II follows

(c) If either conclusion I or II follows

(d) If neither conclusion I nor II follows

(e) If both conclusions I and II follow

Q7. Statement:

Only a few Wrong are Correct.

All True is False.

Some False is True.

Conclusion:

I. All Wrong are Correct.

II. Some Correct are True.

(a) If only conclusion I follows

(b) If only conclusion II follows

(c) If either conclusion I or II follows

(d) If neither conclusion I nor II follows

(e) If both conclusions I and II follow

Q8. Statements:

Only Chair is Table.

Some Chair are Office.

All Office is Town

Conclusion:

I. Some Town are Table

II. Some Office are Table

(a) If only conclusion I follows

(b) If only conclusion II follows

(c) If either conclusion I or II follows

(d) If neither conclusion I nor II follows

(e) If both conclusions I and II follow

Directions (9-13): In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusions. Give answer accordingly.

Q9.

Statements:

$N \geq J = M = O > R < B < S$

Conclusions:

I. $N = M$

II. $N > M$

(a) If only conclusion I follows

(b) If only conclusion II follows

(c) If either conclusion I or II follows

(d) If neither conclusion I nor II follows

(e) If both conclusions I and II follow

Q10.

Statements:

$W \leq Y > Z = X > P > J$

Conclusions:

I. $Y > P$

II. $Z < W$

(a) If only conclusion I is true

(b) If only conclusion II is true

(c) If either conclusion I or II is true

(d) If neither conclusion I nor II is true

(e) If both conclusions I and II are true

Q11.

Statements:

$A < B < C \leq D = E$

Conclusions:

I. $B \leq E$

II. $B < E$

(a) If only conclusion I is true

(b) If only conclusion II is true

(c) If either conclusion I or II is true

(d) If neither conclusion I nor II is true

(e) If both conclusions I and II are true

Q12.

Statements:

$$A \geq B \leq C < D > F$$

Conclusions:

I. $F > B$

II. $A > D$

- (a) If only conclusion I is true
- (b) If only conclusion II is true
- (c) If either conclusion I or II is true
- (d) If neither conclusion I nor II is true
- (e) If both conclusions I and II are true

Q13.

Statements:

$$P > X > Y = Q \geq Z$$

Conclusions:

I. $Z < P$

II. $P > Q$

- (a) If only conclusion I is true
- (b) If only conclusion II is true
- (c) If either conclusion I or II is true
- (d) If neither conclusion I nor II is true
- (e) If both conclusions I and II are true

Directions
below.

There are some persons who are sitting in a row. A is sitting towards the north direction and is fifth to the right of K. O is the person who sits between B and K. G sits fourth to the left of H. H sits third to the right of G. A is the immediate neighbor of B. There are more than 16 persons sitting in the row. D sits fifth from the right of H.

Q14. If 'O' sits

- (a) 10
 - (b) 12
 - (c) 7
 - (d) 8
 - (e) None of these
- Q15. How many persons sit between A and G?**
- (a) Four
 - (b) Six
 - (c) Seven
 - (d) Eight
 - (e) Five

Q16. If 'P' sits between K and A then what is the position of 'P' with respect to G?

- (a) Fifth to the left
- (b) Sixth to the right
- (c) Fourth to the right
- (d) Fifth to the right
- (e) None of these

Directions (17-21): Study the following information carefully and answer the questions given below.

Eight boxes are placed one above the other. There are three boxes placed between D and B. Two boxes are placed between A and E. Two boxes are placed between C and F. Box F does not place immediately above or below box A.

Q17. How many boxes are placed between A and E?

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

Q18. Which box is placed immediately above box A?

- (a) Box D
- (b) Box E
- (c) Box G
- (d) Box H
- (e) None of these

Q19. The number of boxes placed between box A and box E is

- (a) A, C
- (b) F, E
- (c) B, D
- (d) C, E
- (e) None of these

Q20. Which of the box is placed on the top?

- (a) Box F
- (b) Box D
- (c) Box A
- (d) Box G
- (e) None of these



Q21. Which of the following statement is true about box G?

- (a) Box H is placed immediate below box G
- (b) Position of box G is fourth from the top
- (c) Two boxes are placed between box G and E
- (d) Not more than three boxes placed below box G
- (e) None of these

Directions (22-24): Study the following information carefully and answer the questions given below.

Suresh leaves his house and walks for 5m and then he walks for 9m, 14m and

Q22. How far

- (a) 5m
- (b) 9m
- (c) 4m
- (d) 14m
- (e) None of these

Q23. In which direction is he facing with respect to the start

- (a) West
- (b) South-East
- (c) South
- (d) North-West
- (e) None of these

Q24. If Suresh is facing North-East, what is his final position with respect to his starting point?

- (a) West
- (b) South-East
- (c) South
- (d) North-West
- (e) None of these

Directions (25-29): Study the following alphanumeric symbol series carefully and answer the questions given below.

S 3 2 G \$ 8 6 4 F 1 @ R Y D 9 & U V # M ∞ H E © B * 7 % W A 5

Q25. How many such alphabets are there which is immediately preceded and followed by a symbol?

- (a) Three
- (b) Two
- (c) One
- (d) Four
- (e) None

Q26. How many such symbols are there which is preceded by numbers and followed by vowels?

- (a) Two
- (b) None
- (c) One
- (d) Four
- (e) Three

Q27. How many such symbols are there which is immediately preceded by a vowel and followed by a consonant?

- (a) One
- (b) Two
- (c) Three
- (d) Four
- (e) None

Q28. If all the symbols are removed from the given arrangement, then which element is 14th from right end?

- (a) D
- (b) U
- (c) &
- (d) #
- (e) None of these

Q29. Which of the following is not a part of the given series?

- (a) M
- (b) H
- (c) 1
- (d) 2
- (e) None of these

Q30. If it is possible to make only one meaningful word with the 1st, 2nd, 4th and 8th letters of the word 'RATIONAL' which would be the second letter of the word from the right? If more than one such word can be formed give 'Y' as the answer. If no such word can be formed, give 'Z' as your answer.

- (a) Y
- (b) R
- (c) L
- (d) Z
- (e) I

Directions (31-35): Study the following information carefully and answer the questions given below.

Eight persons i.e., P, Q, R, S, T, U, V and W are sitting around a square table. Four persons are sitting around the corner of table and are facing towards the centre of the table while four persons are sitting around the middle side of the table and are facing away from the centre of table.

Q sits second to the right of P. R and W. P sits to the immediate left of S. S does not face away from the centre of the table.

Q31. Who is sitting opposite to P?

- (a) T
- (b) U
- (c) P
- (d) Q
- (e) None of these

Q32. Who is sitting to the immediate left of S?

- (a) Q
- (b) U
- (c) R
- (d) W
- (e) None of these

Q33. The number of persons sitting around the corner of the table is same as the number of persons sitting around the middle side of the table.

- (a) Q
- (b) U
- (c) S
- (d) P
- (e) None of these

Q34. Who among the following person faces away from the centre of the table?

- (a) W
- (b) U
- (c) T
- (d) Q
- (e) None of these



Q35. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?

- (a) P
- (b) V
- (c) Q
- (d) R
- (e) T

Directions (36-39): Study the following information carefully and answer the questions given below.

AME ORK

Q36. If the given words are arranged in the order as they appear from right to left, which of the following will be the third word from the right end?

- (a) AME
- (b) ORK
- (c) UNE
- (d) ONG
- (e) OMB

Q37. If the given words are arranged in the order as they appear from left to right, which of the following will be the third word from the left end?

- (a) AME
- (b) ORK
- (c) ILM
- (d) ONG
- (e) OMB

Q38. How many words are there in between the first letter of the first word from left end and the third letter of the second word from right end and

- (a) Two
- (b) One
- (c) Ten
- (d) Three
- (e) More than ten

Q39. How many vowels are there in between the first letter of the first word from left end and the first letter of the second word from left end, as in the English alphabet?

- (a) Two
- (b) One
- (c) Three
- (d) Five
- (e) Four



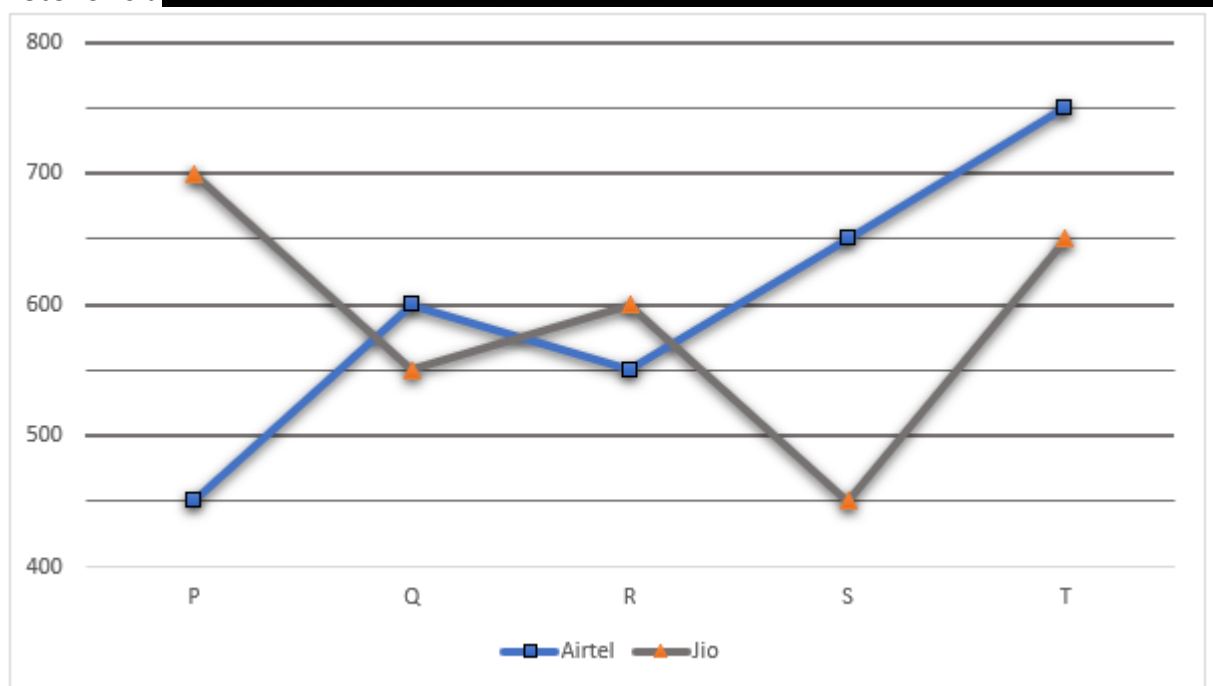
Q40. How many pairs of letters are there in the word 'INNOVATIVE', each of which have as many letters between them (both forward and backward direction) in the word as they have between them according to English alphabetical order?

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

Directions (41-45): Read the given data carefully and answer the following questions.

The line graph given below shows the user of Airtel and Jio network in five different villages.

Note: One u



Q41. The total number of users of Airtel in P and Q is what percentage of the total number of users of Jio in all the five villages?

- (a) 60%
- (b) 30%
- (c) 45%
- (d) 33.33%
- (e) 50%

Q42. The average number of users of Airtel in Q, S and R is how much more or less than average number of users of Jio in all the five villages.

- (a) 10
- (b) 0
- (c) 5
- (d) 15
- (e) 20

Q43. Find the ratio of Airtel users in village R and T together to Jio users in village P and S together.

- (a) 17: 14
- (b) 19: 15
- (c) 21: 24
- (d) 17: 13
- (e) 26: 23

Q44. The number of users of Jio in village Q is what percentage more or less than the number of users of Airtel in same village.

- (a) 7.5%
- (b) 25%
- (c) 12.5%
- (d) $8\frac{1}{3}\%$
- (e) $5\frac{1}{3}\%$

Q45. In village P, the number of users of Airtel is 100 less than the number of users of Jio. If the number of users of Airtel is 400, then find the number of users of Jio in village P.

- (a) 400
- (b) 500
- (c) 600
- (d) 450
- (e) 550

Q46. Shopkeeper bought a table for Rs. 320, then find the profit percentage if he sells it at Rs. 450. If cost price is Rs. 320, then find the profit percentage if he sells it at Rs. 450.

- (a) 92.5%
- (b) None of these
- (c) 74.5%
- (d) 87.5%
- (e) 83.5%

Q47. Sum of two digits of a two-digit number is 11. When digits of the number are reversed then number formed is 45 more than the original number. Find the original number?

- (a) 65
- (b) 56
- (c) 83
- (d) None of these
- (e) 38

Q48. Pipe A alone fill a tank for 6 hours and then it replaces with pipe B, which alone fill the remaining tank in 12 hours. If ratio of time taken by pipe A alone to B alone to fill the tank completely is 3 : 2, then find time taken by pipe B alone to fill the tank?

-
- (a) 12 hours
 - (b) 16 hours
 - (c) 24 hours
 - (d) 14 hours
 - (e) 18 hours

Q49. Sum of present age of P and R is 58 years and R is eight years younger than Q. If the ratio of present age of P to that of Q is 6:5, then the age of Q six years hence will be?

- (a) 32 years
- (b) 34 years
- (c) 30 years
- (d) 36 years
- (e) 28 years

Q50. A boat can cover a distance of 16 km upstream in 4 hours and 12 km downstream in 3 hours. Find the speed of boat in still water.

- (a) 4 km/hr
- (b) 2 km/hr
- (c) 3 km/hr
- (d) 5 km/hr
- (e) 6 km/hr

Q51. In what time will a sum of Rs. 10000 produce the same interest as Rs. 5000 produces in 4 years at 10% per annum compound interest?

- (a) 5 years
- (b) 6 years
- (c) 3 years
- (d) 4 years
- (e) 7 years

Q52. A and B invest in a business in the ratio 3:2 respectively. After 6 months, B withdraws his share. The profit of Rs. 15000 is divided between them in the ratio

6150. Find the profit share of B (in Rs.)?

- (a) 2767.5
- (b) 2735.5
- (c) 2727.5
- (d) 2797.5
- (e) None of these

Q53. Two trains A and B cross the same platform in 18 and 24 seconds respectively. The respective length of train A and B is 240 meters and 210 meters and the ratio of their speeds is 3:2. Find the length of platform (in meters)?

- (a) 25
(b) 20
(c) 30
(d) 35
(e) 40

Q54. A vessel contains 42 liters pure milk. Seven liters of milk is taken out and replaced with water and again 7 liter of mixture is taken out and replaced with water. Find the quantity of milk in final mixture (in liters)?

- (a) $28\frac{1}{6}$
(b) $29\frac{1}{6}$
(c) $23\frac{1}{6}$
(d) $30\frac{1}{6}$
(e) $31\frac{1}{6}$

Q55. The circumference of a circle is 132 cm and 132 cm. The area of the circle is (in cm^2)

- (a) 1052
(b) 1128
(c) 1258
(d) 770
(e) 1528

Directions: Read the given data carefully and answer the following questions.
The data given below shows the no. of watches (Analog and Digital) sold by five shopkeepers.

Shopkeeper	Total watches sold	Ratio of Analog watches to digital watches sold
A	1200	9 : 7
B	1440	5 : 7
C	1650	6 : 5
D	1540	3 : 4
E	1360	7 : 13

Q56. Total digital watches sold by shopkeeper A are what percentage of total analog watches sold by shopkeeper B?

- (a) 87.5%
(b) 62.5%
(c) 54%
(d) 82.5%
(e) 75%

Q57. Which shopkeeper sold maximum number of digital watches.

- (a) B
- (b) E
- (c) D
- (d) Both B and E
- (e) Both D and E

Q58. Total analog watches sold by shopkeeper D are what percentage more or less than total digital watches sold by shopkeeper C.

- (a) 15%
- (b) 12.5%
- (c) 20%
- (d) 25%
- (e) 12%

Q59. Find the ratio of the number of analog watches sold by all given shopkeepers.

- (a) 423
- (b) 729
- (c) 671
- (d) 588
- (e) 568

Q60. Find the ratio of the number of analog watches sold by shopkeeper B and shopkeeper A.

- (a) 7 : 10
- (b) 4 : 9
- (c) 4 : 7
- (d) 10 : 7
- (e) 7 : 9



Directions (61-65): What will come in place of question mark (?) in the following series questions.

Q61. 24 30 23 31 22 ?

- (a) 32
- (b) 33
- (c) 31
- (d) 34
- (e) 35

Q62. 6, 7, 16, 51, 208, ?

- (a) 970
- (b) 845
- (c) 1085
- (d) 985
- (e) 1045

Q63. 39600, 6600, ?, 330, 110, 55

- (a) 1320
- (b) 1650
- (c) 1100
- (d) 1160
- (e) 1280

Q64. 9, 1

- (a) 100
- (b) 144
- (c) 125
- (d) 162
- (e) 116

Q65. 999,

- (a) 888
- (b) 887
- (c) 877
- (d) 878
- (e) 886

Q66. Monthly expenditure of a family is Rs 45000 which is 75% of monthly income. What is the total monthly expenditure of the family?

- (a) Rs 56000
- (b) Rs 60000
- (c) Rs 45000
- (d) Rs 48000
- (e) Rs 40000

Q67. The ratio of present age of A and B is 3 : 2 and the ratio of A's age five years ago to B's age ten years hence is 1 : 2. Find sum of their present age?

- (a) 30 years
- (b) 25 years
- (c) 45 years
- (d) 35 years
- (e) 20 years

Directions (68-80): What will come in the place of question (?) mark in following questions.

Q68. $\frac{27}{40} \div \frac{1}{5} \times \frac{8}{9} \div \frac{3}{100} = ?$

- (a) 120
- (b) 90
- (c) 100
- (d) 75
- (e) 60

Q69. $51\% \text{ of } \frac{1200}{17} + 18^2 = ? \times 24$

- (a) 15
- (b) 10
- (c) 12
- (d) 18
- (e) 16

Q70. $102^2 \div 17 \text{ of } 25\% \text{ of } 4 \div 36 = ?$

- (a) 32
- (b) 16
- (c) 34
- (d) 21
- (e) 17

Q71. $35\% \text{ of } 30\% \text{ of } 50\% \text{ of } 6000 = ?$

- (a) 305
- (b) 315
- (c) 335
- (d) 295
- (e) 325

Q72. $5 \times 12 \div 8 \times 4 = ?$

- (a) 25
- (b) 28
- (c) 30
- (d) 35
- (e) 40

Q73. $\sqrt{144} + \sqrt[4]{256} + ? = \sqrt{324}$

- (a) 2
- (b) 12
- (c) 8
- (d) 26
- (e) 6

Q74. $17 + 24 \div 6 = ? + \sqrt{169}$

- (a) 5
- (b) 10
- (c) 12
- (d) 8
- (e) 15

Q75. $((16)^2 + (10)^2) \div \frac{2}{3} = ? \times 6$

- (a) 89
- (b) 93
- (c) 86
- (d) 96
- (e) 83

Q76. $119 + 41 + \sqrt{81} = ?^2$

- (a) 10
- (b) 13
- (c) 17
- (d) 8
- (e) 16

Q77. $1391 \div 26 \times 2 = ? - 16^2$

- (a) 324
- (b) 413
- (c) 400
- (d) 343
- (e) 363

Q78. $111 + 41 + (5)^2 + (2)^2 = ?$

- (a) 195
- (b) 162
- (c) 181
- (d) 170
- (e) 189

Q79. $109\sqrt{?} - \frac{61}{21} \times ? = 48\sqrt{?}$

- (a) 441
- (b) 169
- (c) 250
- (d) 121
- (e) 324

Q80. $150\% \text{ of } 20 + \frac{323}{17} + \sqrt{?} = (9)^2$

- (a) 984
- (b) 1024
- (c) 1360
- (d) 1225
- (e) 674

Solutions

S1. Ans.(c)

Sol. V lives on the 8th floor. Three persons live between V and R. Two persons live between R and Q. Q does not live on the 1st floor. There are four possibilities

Floors	Case-1 Persons	Case-2 Persons	Case-3 Persons	Case-4 Persons
8	V	R	V	
7				R
6	R	V		V
5		Q	R	
4	U		U	Q
3	Q			
2		U	Q	U
1				

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Three persons live between P and T who lives above U's floor. The number of persons live below P is same as the number of persons live above S. From these conditions case-1 and 2 will be eliminated. W does not live below P's floor. From this condition case-3 also eliminated. The final arrangement is-

Floor	Persons
8	S
7	R
6	V
5	T
4	Q
3	W
2	U
1	P

S2. Ans.(d)

Sol. V lives on an even numbered floor above 4th floor. Three persons live between V and U. Two persons live between R and Q who lives below the R's floor. Q does not live on ground floor. There are four possibilities-

Floors	Case-1	Case-2	Case-3	Case-4
	Persons	Persons	Persons	Persons
8	V	R	V	
7				R
6	R	V		V
5		Q	R	
4	U		U	Q
3	Q			
2		U	Q	U
1				

Three persons live between V and U. Two persons live between R and Q who lives below the R's floor. Q does not live on ground floor. There are four possibilities-

Floor	Persons
8	S
7	R
6	V
5	T
4	Q
3	W
2	U
1	P

S3. Ans.(a)

Sol. V lives on an even numbered floor above 4th floor. Three persons live between V and U. Two persons live between R and Q who lives below the R's floor. Q does not live on ground floor. There are four possibilities-

Floors	Case-1	Case-2	Case-3	Case-4
	Persons	Persons	Persons	Persons
8	V	R	V	
7				R
6	R	V		V
5		Q	R	
4	U		U	Q
3	Q			
2		U	Q	U
1				

Three persons live between P and T who lives above U's floor. The number of persons live below P is same as the number of persons live above S. From these conditions case-1 and 2 will be eliminated. W does not live below P's floor. From this condition case-3 also eliminated. The final arrangement is-

Floor	Persons
8	S
7	R
6	V
5	T
4	Q
3	W
2	U
1	P

S4. Ans.(b)

Sol. V lives on an even numbered floor above 4th floor. Three persons live between V and U. Two persons live between R and Q who lives below the R's floor. There are four possibilities-

Floors	Case-1	Case-2	Case-3	Case-4
	Persons	Persons	Persons	Persons
8	V	R	V	
7				R
6	R	V		V
5		Q	R	
4	U		U	Q
3	Q			
2		U	Q	U
1				

Three persons live between V and U. T lives on 5th floor. The number of persons below P is same as the number of persons live above S. From these conditions case-1 & 2 will be eliminated. W does not live on P's floor. From this condition case-3 will also be eliminated. The final arrangement is-

Floor	Persons
8	S
7	R
6	V
5	T
4	Q
3	W
2	U
1	P

S5. Ans.(e)

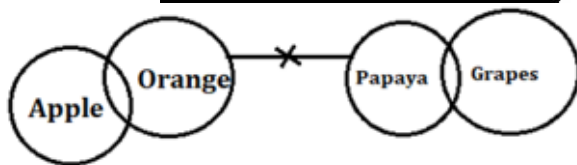
Sol. V lives on an even numbered floor above 4th floor. Three persons live between V and U. Two persons live between R and Q who lives below the R's floor. Q does not live on ground floor. There are four possibilities-

Floors	Case-1 Persons	Case-2 Persons	Case-3 Persons	Case-4 Persons
8	V	R	V	
7				R
6	R	V		V
5		Q	R	
4	U		U	Q
3	Q			
2		U	Q	U
1				

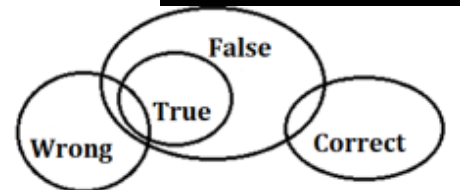
Three persons live between P and T who lives above U's floor. The number of persons live below P is same as the number of persons live above S. From these conditions case-1 and 2 will be eliminated. W does not live on floor 3. Hence the correct arrangement is-

Floor	Persons
8	S
7	R
6	V
5	T
4	Q
3	W
2	U
1	P

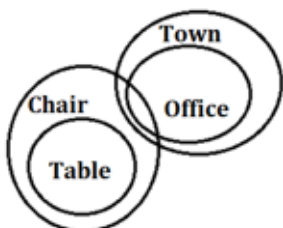
S6. Ans.(b)
Sol.



S7. Ans.(a)
Sol.



S8. Ans.(d)
Sol.



S9. Ans.(c)

Sol. I. $N = M$ (False) II. $N > M$ (False)

S10. Ans.(a)

Sol. I. $Y > P$ (True) II. $Z < W$ (False)

S11. Ans.(b)

Sol. I. $B \leq E$ (False) II. $B < E$ (True)

S12. Ans.(d)

Sol. I. $F > B$

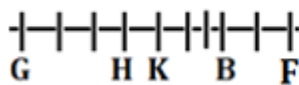
S13. Ans.(e)

Sol. I. $Z < P$

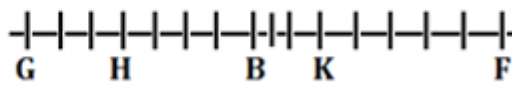
S14. Ans.(c)

Sol. From the given condition, F sits fifth to the right of K. Only two persons sit between B and K. There are two possibilities. G sits seventh to the left of B. H sits third to the right of G.

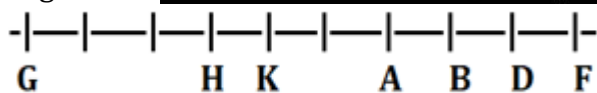
Case-1



Case-2



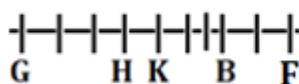
Less than 16 persons sit in the row. From this condition case-2 will be eliminated. A is the immediate neighbour of B. D sits fifth to the right of H. The final arrangement is-



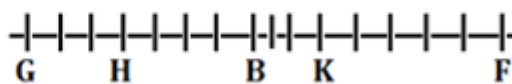
S15. Ans.(e)

Sol. From the given condition, F sits fifth to the right of K. Only two persons sit between B and K. There are two possibilities. G sits seventh to the left of B. H sits third to the right of G.

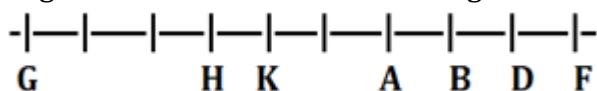
Case-1



Case-2

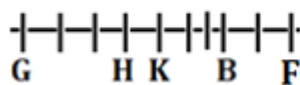
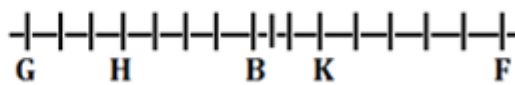


Less than 16 persons sit in the row. From this condition case-2 will be eliminated. A is the immediate neighbour of B. D sits fifth to the right of H. The final arrangement is-

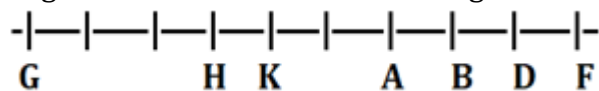


S16. Ans.(d)

Sol. From the given condition, F sits fifth to the right of K. Only two persons sit between B and K. There are two possibilities. G sits seventh to the left of B. H sits third to the right of G.

Case-1**Case-2**

Less than 16 persons sits in the row. From this condition case-2 will be eliminated. A is the immediate neighbour of B. D sits fifth to the right of H. The final arrangement is-

**S17. Ans.(c)**

Sol. From the given conditions, two boxes are placed between A and H. Box H kept just below box B. There are three boxes placed between D and B. There are two possibilities-

Case-1	Case-2
Boxes	Boxes
A	D
B	A
H	
	B
	H
D	

There are two possibilities for the arrangement of boxes. In the first possibility, box E is placed at the 1st position. In the second possibility, box E is placed at the 11th position. Box G is placed at the 12th position. Box H is placed at the 13th position. Box A is placed at the 14th position. Box B is placed at the 15th position. Box D is placed at the 16th position. The final arrangement is-

Boxes
F
D
E
A
G
B
H
C

S18. Ans.(b)

Sol. From the given conditions, two boxes are placed between A and H. Box H kept just below box B. There are three boxes placed between D and B. There are two possibilities-

Case-1	Case-2
Boxes	Boxes
A	D
B	A
H	
	B
	H
D	

There are two boxes between the box B and E. Two boxes are placed between the box C and box G. Box C placed at the bottom. Box F does not place immediately below the box A. case-1 will be ruled out. The final arrangement is-

Boxes
F
D
E
A
G
B
H
C

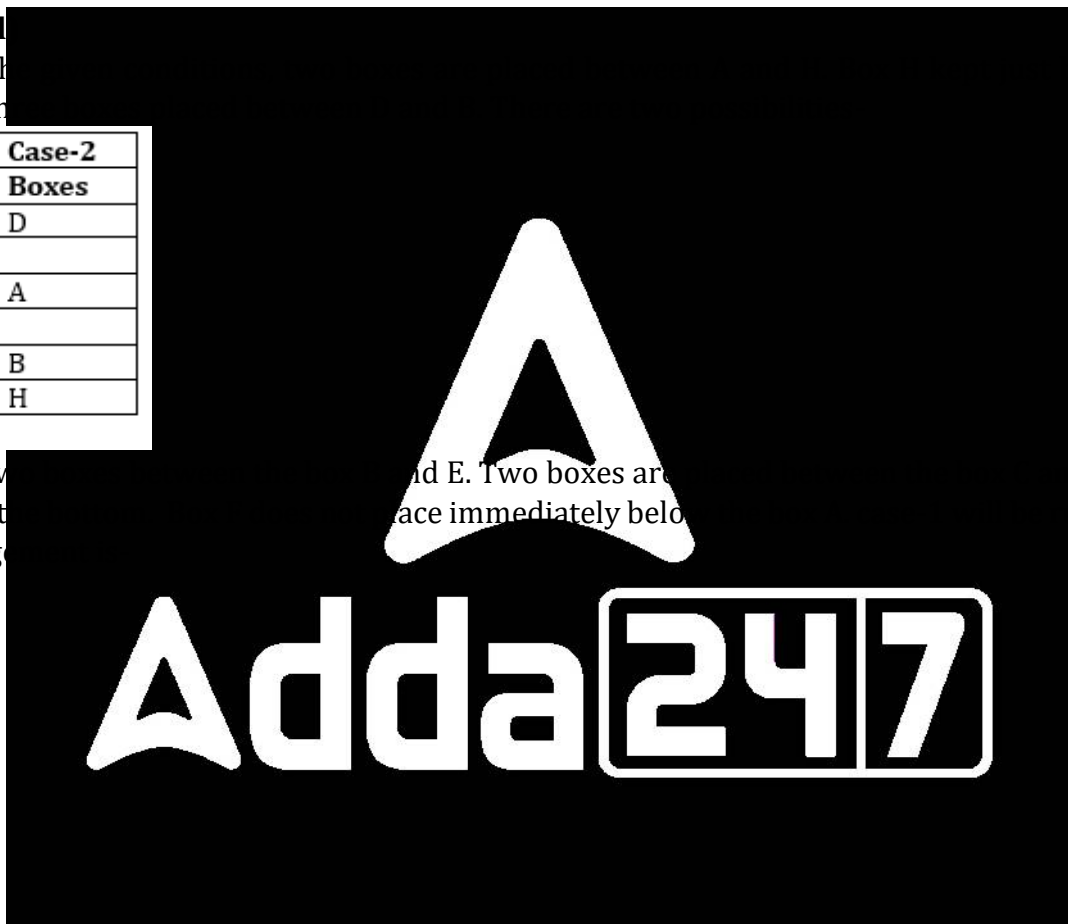
S19. Ans.(d)

Sol. From the given conditions, two boxes are placed between box A and box B. There are three boxes placed between box D and box B. Below box B.

Case-1	Case-2
Boxes	Boxes
A	D
B	A
H	
	B
	H
D	

There are two boxes between the box B and E. Two boxes are placed between the box C and box G. Box C placed at the bottom. Box F does not place immediately below the box A. case-1 will be ruled out. The final arrangement is-

Boxes
F
D
E
A
G
B
H
C



S20. Ans.(a)

Sol. From the given conditions, two boxes are placed between A and H. Box H kept just below box B. There are three boxes placed between D and B. There are two possibilities-

Case-1	Case-2
Boxes	Boxes
A	D
B	A
H	
	B
	H
D	

There are two boxes between the box B and E. Two boxes are placed between the box C and box G. Box C placed at the bottom. Box F does not place immediately below the box A. case-1 will be ruled out. The final arrangement is-

Boxes
F
D
E
A
G
B
H
C

S21. Ans.(d)

Sol. From the information given, we can see that box A is placed at the top. Below box A, there are two boxes. Below box B, there are three boxes.

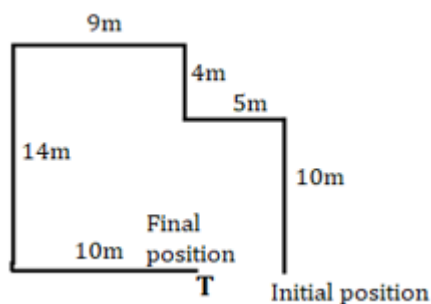
Case-1	Case-2
Boxes	Boxes
A	D
B	A
H	
	B
	H
D	

There are two boxes between the box B and E. Two boxes are placed between the box C and box G. Box C placed at the bottom. Box F does not place immediately below the box A. case-1 will be ruled out. The final arrangement is-

Boxes
F
D
E
A
G
B
H
C

S22. Ans.(c)

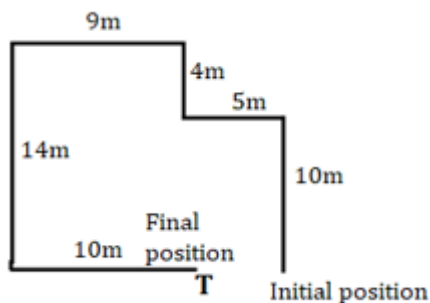
Sol.



$$((9+5) - 10) = 4m$$

S23. Ans.(a)

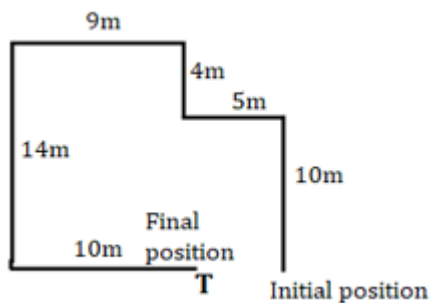
Sol.



The direction

S24. Ans.(e)

Sol.



If Suresh goes

then the direction of S

th-east with

S25. Ans.(b)

Sol. # M ∞ ,

S26. Ans.(c)

Sol. 9 & U

S27. Ans.(b)

Sol. F 1 @, D 9 &

S28. Ans.(c)

Sol. New series is-

S G \$ F @ R Y D & U V # M ∞ H E © B * % W A

S29. Ans.(a)

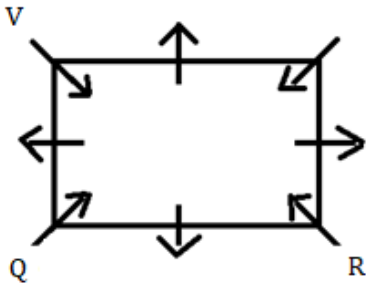
Sol. 5th to the right of 17th from the right end i.e. 12th from the right end = M

S30. Ans.(a)

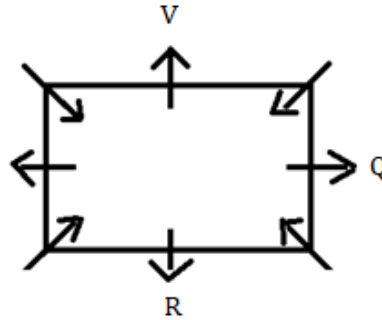
S31. Ans.(a)

Sol. From the given conditions, Q sits second to the right of V. One person sits between Q and R. here there are two cases possible i.e., case1 and case2.

Case 1



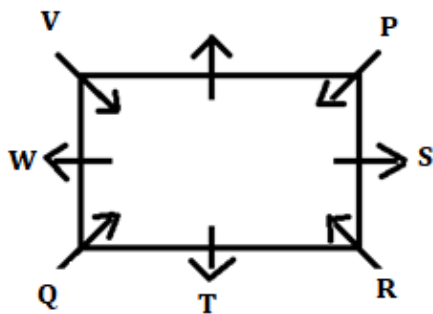
Case 2



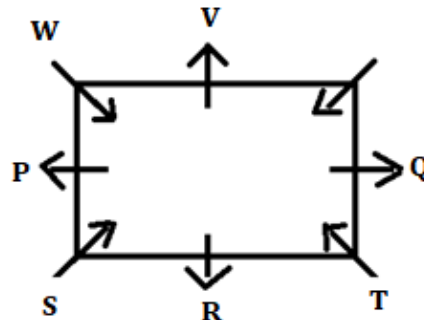
Two person
does not sit

en S and T. T

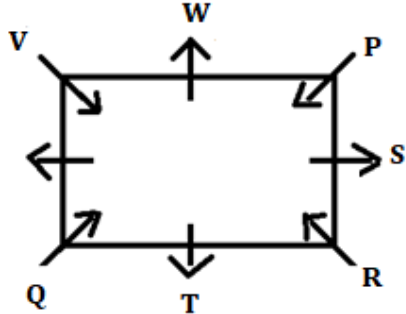
Case 1



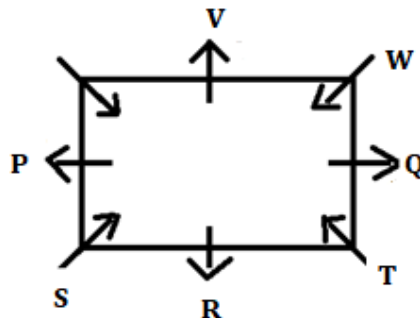
Case 2



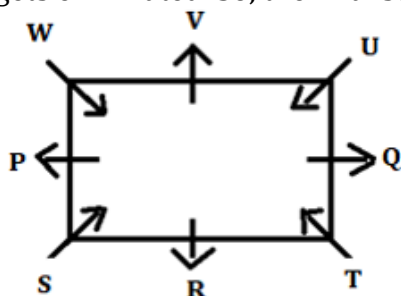
Case 1a



Case 2a



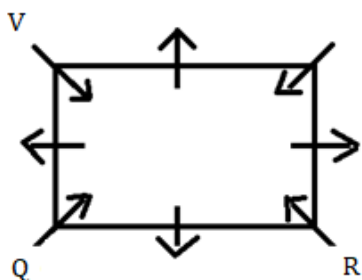
U does not face away from the centre of table and do not sits next to P. here case 1, Case 1a and case 2a gets eliminated. So, the final solution is-



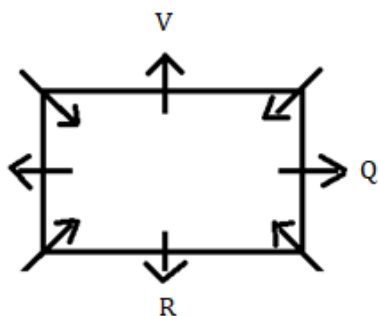
S32. Ans.(b)

Sol. From the given conditions, Q sits second to the right of V. One person sits between Q and R. here there are two cases possible i.e., case1 and case2.

Case 1



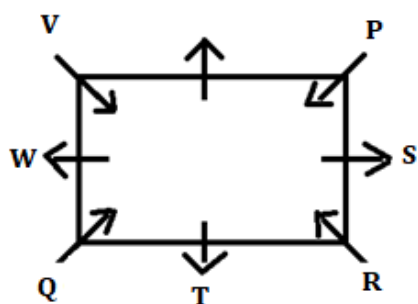
Case 2



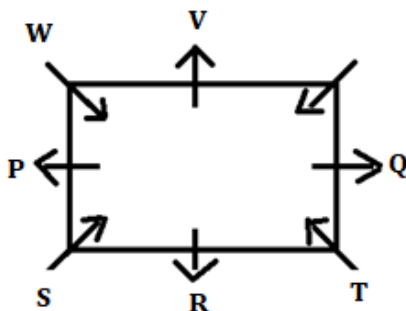
Two person
does not sit

en S and T. T

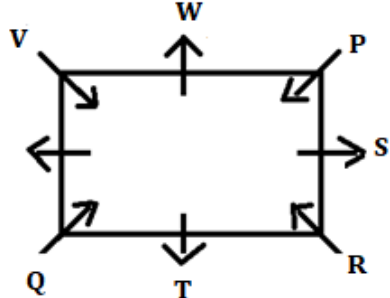
Case 1



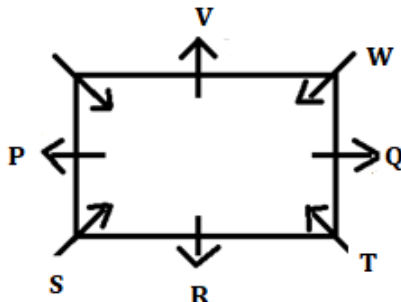
Case 2



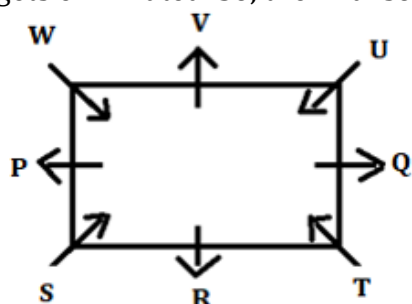
Case 1a



Case 2a



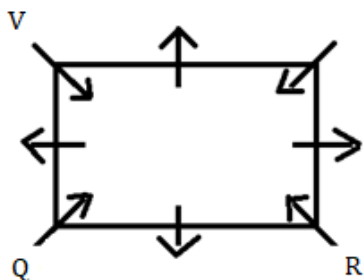
U does not face away from the centre of table and do not sits next to P. here case 1, Case 1a and case 2a gets eliminated. So, the final solution is-



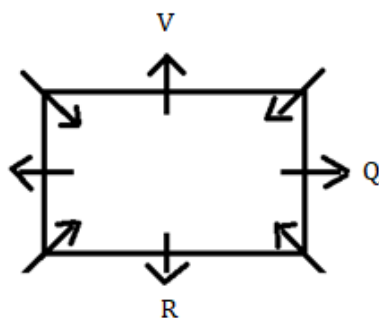
S33. Ans.(c)

Sol. From the given conditions, Q sits second to the right of V. One person sits between Q and R. here there are two cases possible i.e., case1 and case2.

Case 1



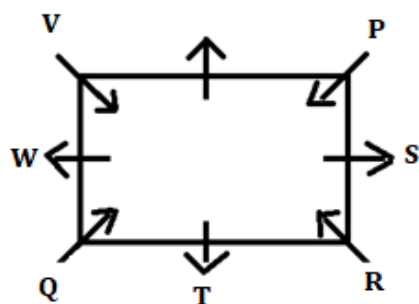
Case 2



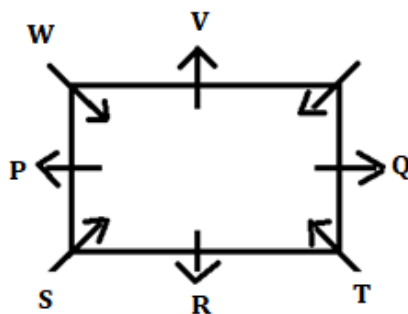
Two person
does not sit

en S and T. T

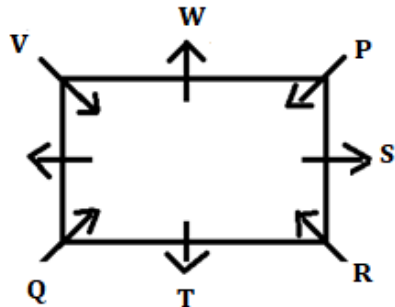
Case 1



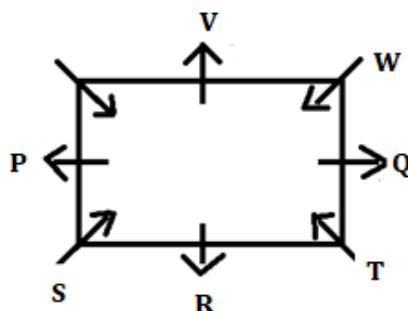
Case 2



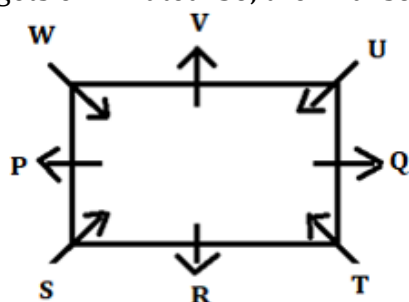
Case 1a



Case 2a



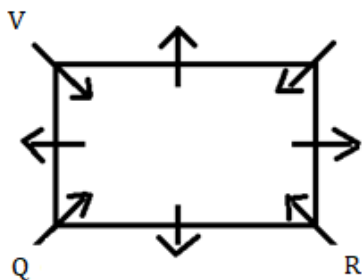
U does not face away from the centre of table and do not sits next to P. here case 1, Case 1a and case 2a gets eliminated. So, the final solution is-



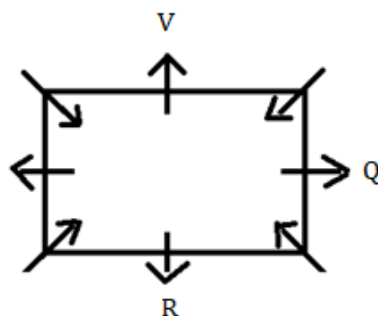
S34. Ans.(d)

Sol. From the given conditions, Q sits second to the right of V. One person sits between Q and R. here there are two cases possible i.e., case1 and case2.

Case 1



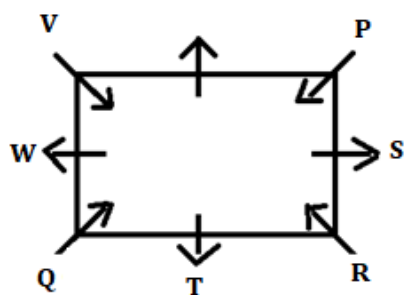
Case 2



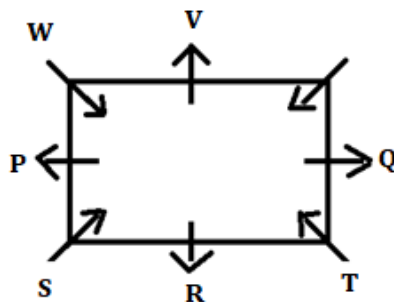
Two person
does not sit

en S and T. T

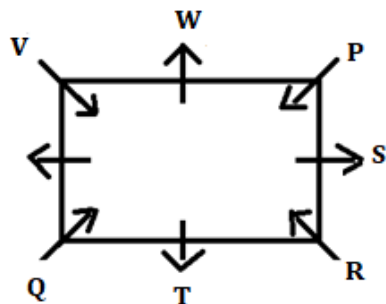
Case 1



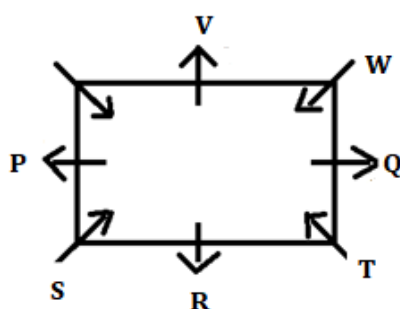
Case 2



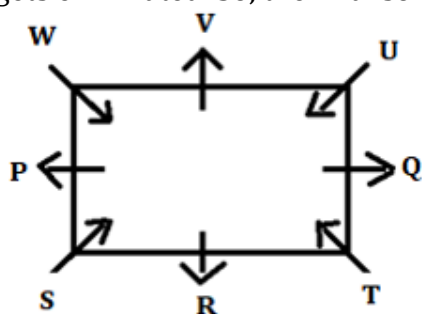
Case 1a



Case 2a



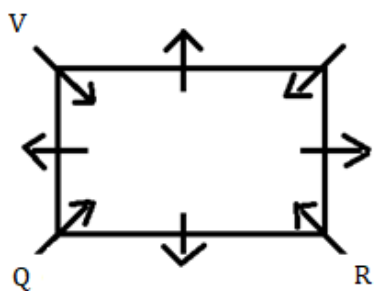
U does not face away from the centre of table and do not sits next to P. here case 1, Case 1a and case 2a gets eliminated. So, the final solution is-



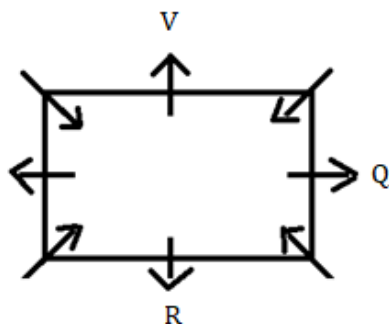
S35. Ans.(e)

Sol. From the given conditions, Q sits second to the right of V. One person sits between Q and R. here there are two cases possible i.e., case1 and case2.

Case 1

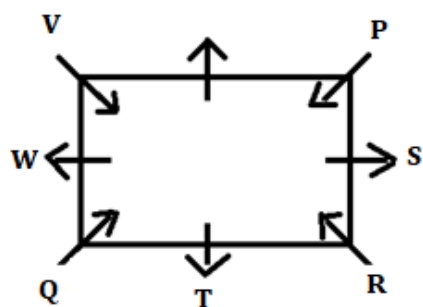


Case 2

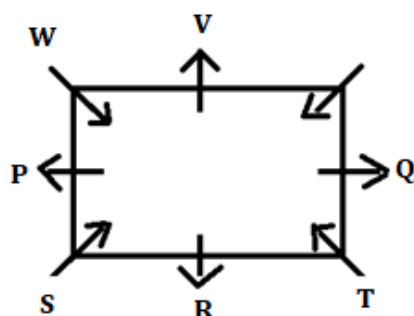


Two person does not sit between S and T. T

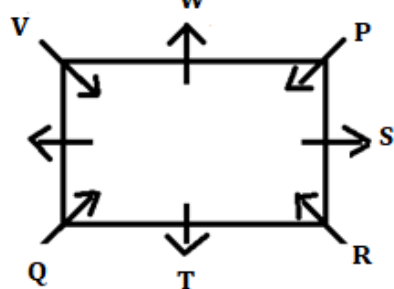
Case 1



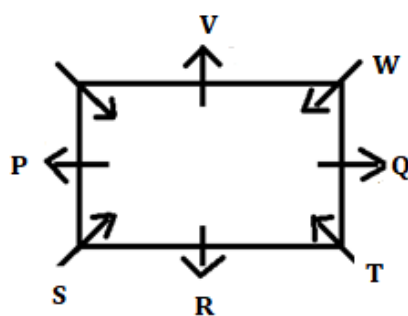
Case 2



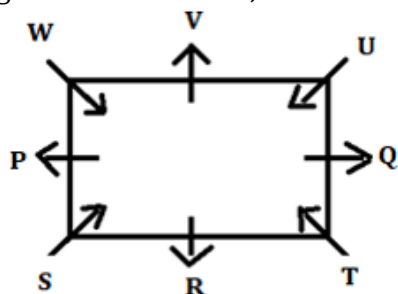
Case 1a



Case 2a



U does not face away from the centre of table and do not sits next to P. here case 1, Case 1a and case 2a gets eliminated. So, the final solution is-



S36. Ans.(e)

Sol. After Rearrangement: UNE ORK ONG **OMB** ILM AME

S37. Ans.(c)

Sol. After Rearrangement: AME **ILM** OMB ONG ORK UNE

S38. Ans.(b)

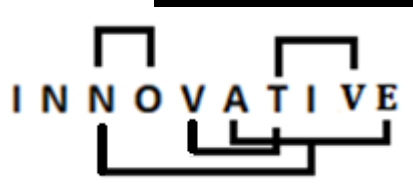
Sol. between K and I only one letter is there i.e., J.

S39. Ans.(a)

Sol. Only E a

S40. Ans.(d)

Sol.



S41. Ans.(c)

Sol.

$$\text{Required percentage} = \frac{450}{450+550} \times 100 = 45\%$$

S42. Ans.(a)

Sol.

$$\text{Average number of Airtel users in Q, S and R} = \frac{600+650+550}{3} = 600$$

$$\text{Average number of Jio users in all 5 villages} = \frac{700+550+600+450+650}{5} = 590$$

$$\text{So, required difference} = 600 - 590 = 10$$

S43. Ans.(e)

Sol.

$$\text{Required average} = \frac{550+750}{700+450} = \frac{1300}{1150} = 26:23$$

S44. Ans.(d)

Sol.

$$\text{Required percentage} = \frac{600-550}{600} \times 100 = 8\frac{1}{3}\%$$

S45. Ans.(c)

Sol.

Total users of Airtel and Jio in village T = $750 + 650 = 1400$

So, required number of Vodafone users = $\frac{1400}{70} \times 30 = 600$

S46. Ans.(d)

Sol.

Marked price of table = $\frac{450}{75} \times 100 = 600$ Rs.

Required percentage = $\frac{600-320}{320} \times 100 = 87.5\%$

S47. Ans.(e)

Sol.

Let the number be $10x+y$

ATQ,

$$10y + x - 10x - y = 45$$

$$y - x = 5 \dots\dots\dots(i)$$

$$x + y = 11 \dots\dots\dots(ii)$$

solving (i) and (ii), we get

$$x = 3 \text{ and } y = 8$$

Therefore number = 38

S48. Ans.(b)

Sol.

Let pipe A alone and pipe B alone fill the tank completely in $3x$ and $2x$ respectively

ATQ,

$$\frac{6}{3x} + \frac{12}{2x} = 1$$

$$x = 8$$

therefore, pipe B alone to fill the tank = $2 \times 8 = 16$ hours

S49. Ans.(d)

Sol.

Given, total age of P and R = 58 years

Let present age of P and Q be $6x$ and $5x$ years respectively

Therefore, present age of R = $5x-8$

ATQ,

$$5x-8 + 6x = 58$$

$$x = 6$$

the age of Q six years hence will be = $5 \times 6 + 6 = 36$ years

S50. Ans.(c)

Sol.

Let distance covered by boat in upstream = $4d$

So, distance covered by boat in downstream = $4d \times \frac{75}{100} = 3d$

And speed of stream be y km/hr

ATQ,

$$\frac{3d}{15+y} = 2$$

$$3d - 2y = 30 \dots\dots\dots(i)$$

$$\frac{4d}{15-y} = 4$$

$$4d + 4y = 60 \dots\dots\dots(ii)$$

Solving (i) and (ii), we get

$$d = 12, y = 3$$

Speed of stream = 3 km/hr

S51. Ans.(d)

Sol.

Let time = t years

According to the question,

$$\frac{10500 \times 3 \times t}{100} = 6000 \times \left[\left(1 + \frac{10}{100} \right)^t \right] - 6000$$

$$\frac{10500 \times 3 \times t}{100} = 7260 - 6000$$

$$\frac{10500 \times 3 \times t}{100} = 1260$$

$$315t = 1260$$

$$t = 4 \text{ years}$$

Hence required time = 4 years

S52. Ans.(a)

Sol.

Let investment of A and B be $7x$ and $9x$ respectively

$$(A's \text{ profit}) : (B's \text{ profit}) = 7x \times 11 : 9x \times 7$$

$$= 11 : 9$$

$$\therefore B's \text{ profit share} = \frac{9}{20} \times 6150 = \text{Rs. } 2767.5$$

S53. Ans.(c)

Sol.

Let length of platform = x meters

$$\therefore \frac{\frac{x+240}{18}}{\frac{x+210}{24}} = \frac{3}{2}$$

$$\Rightarrow \frac{x+240}{x+210} \times \frac{4}{3} = \frac{3}{2}$$

$$\Rightarrow 9x + 210 \times 9 = 8x + 240 \times 8$$

$$\Rightarrow x = 1920 - 1890 = 30 \text{ meters}$$

S54. Ans.(b)

Sol.

After replacing 7 liters of milk with water the ratio of milk to water in mixture become = $(42 - 7) : 7 = 5:1$

Quantity of milk left in final mixture = $35 - 7 \times \frac{5}{6} = 29\frac{1}{6} \text{ liters}$

S55. Ans.(d)

Sol.

Let radius of smaller & larger circles be r_1 & r_2 respectively.

$$2\pi r_1 = 88$$

$$r_1 = 14 \text{ m}$$

$$\text{Similarly, } 2\pi r_2 = 132$$

$$r_2 = 21 \text{ m.}$$

$\therefore$ Required difference

$$= \pi(r_2^2 - r_1^2)$$

$$= \frac{22}{7} \times 245$$

$$= 770 \text{ m}^2$$

S56. Ans.(a)

Sol.

From the table data

Shopkeeper	Total sold watches	Sold no. of Analog watches	Sold no. of Digital watches
A	1200	675	525
B	1440	600	840
C	1650	900	750
D	1540	660	880
E	1360	476	884
Total	7190	3311	3879

$$\text{Required percentage} = \frac{525}{600} \times 100 = 87.5\%$$

S57. Ans.(b)

Sol.

From the table data

Shopkeeper	Total sold watches	Sold no. of Analog watches	Sold no. of Digital watches
A	1200	675	525
B	1440	600	840
C	1650	900	750
D	1540	660	880
E	1360	476	884
Total	7190	3311	3879

From table,

S58. Ans.(e)

Sol.

From the table data

Shopkeeper	Total sold watches	Sold no. of Analog watches	Sold no. of Digital watches
A	1200	675	525
B	1440	600	840
C	1650	900	750
D	1540	660	880
E	1360	476	884
Total	7190	3311	3879

$$\text{Required percentage} = \frac{750-660}{750} \times 100 = 12\%$$

S59. Ans.(e)

Sol.

From the table data

Shopkeeper	Total sold watches	Sold no. of Analog watches	Sold no. of Digital watches
A	1200	675	525
B	1440	600	840
C	1650	900	750
D	1540	660	880
E	1360	476	884
Total	7190	3311	3879

$$\text{Required difference} = 3879 - 3311 = 568$$

S60. Ans.(d)

Sol.

From the table data

Shopkeeper	Total sold watches	Sold no. of Analog watches	Sold no. of Digital watches
A	1200	675	525
B	1440	600	840
C	1650	900	750
D	1540	660	880
E	1360	476	884
Total	7190	3311	3879

Average analog watches sold by shopkeeper B and C = $\frac{600+900}{2} = 750$

So, required ratio = $\frac{750}{525} = \frac{10}{7}$

S61. Ans.(a)

Sol.

Pattern of series -

$$24 + 6 = 30$$

$$30 - 7 = 23$$

$$23 + 8 = 31$$

$$31 - 9 = 22$$

$$\therefore 22 + 10 = 32$$

S62. Ans.(e)

Sol.

Pattern of series -

$$6 \times 1 + 1 = 7$$

$$7 \times 2 + 2 = 16$$

$$16 \times 3 + 3 = 51$$

$$51 \times 4 + 4 = 208$$

$$208 \times 5 + 5 = 1045$$

S63. Ans.(a)

Sol.

Pattern of series -

$$39600 \div 6 = 6600$$

$$6600 \div 5 = 1320$$

$$1320 \div 4 = 330$$

$$330 \div 3 = 110$$

$$110 \div 2 = 55$$

S64. Ans.(e)

Sol.

Pattern of series -

$$9 + 1^2 = 10$$

$$10 + 2^2 = 18$$

$$18 + 3^2 = 27$$

$$27 + 4^2 = 41$$

$$41 + 5^2 = 66$$

S65. Ans.(a)

Sol.

Pattern of series -

$$999 - 111 = 888$$

$$888 - 110 = 778$$

$$778 - 109 = 669$$

$$669 - 108 = 561$$

$$561 - 107 = 454$$

S66. Ans.(b)

Sol.

$$\text{Monthly income of Aman} = 28000 \times \frac{100}{100-40} \times \frac{900}{700} = \text{Rs } 60000$$

S67. Ans.(b)

Sol.

Let present age of A and B is '3x' and '2x' years.

ATQ,

$$\frac{3x - 5}{2x + 10} = \frac{1}{2}$$

$$6x - 10 = 2x + 10$$

$$4x = 20$$

$$x = 5$$

$$\text{Required age} = 3x + 2x$$

$$= 5x$$

$$= 25 \text{ years}$$

S68. Ans.(c)

Sol.

$$\frac{27}{40} \times 5 \times \frac{8}{9} \times \frac{100}{3} = ?$$

$$? = 100$$

S69. Ans.(a)

Sol.

$$\frac{51}{100} \times \frac{1200}{17} + 324 = ? \times 24$$
$$36 + 324 = ? \times 24$$
$$? = \frac{360}{24}$$
$$? = 15$$

S70. Ans.(e)

Sol.

$$10404 \div (17 \times \frac{25}{100} \times 4) \times \frac{1}{36} = ?$$
$$10404 \times \frac{1}{17} \times \frac{1}{36} = ?$$
$$? = 17$$

S71. Ans.(b)

Sol.

$$? = \frac{35}{100} \times \frac{30}{100} \times \frac{50}{100} \times 6000$$
$$? = 315$$

S72. Ans.(c)

Sol.

$$? = 5 \times \frac{12}{8} \times 4$$
$$? = 30$$

S73. Ans.(a)

Sol.

$$? = 18 - 12 - 4$$
$$? = 2$$

S74. Ans.(d)

Sol.

$$? = 17 + \frac{24}{6} - 13$$
$$? = 8$$

S75. Ans.(a)

Sol.

$$? = (256 + 100) \times \frac{3}{2} \times \frac{1}{6}$$
$$? = 89$$

S76. Ans.(b)

Sol.

$$119 + 41 + 9 = ?^2$$

$$? = 13$$

S77. Ans.(e)

Sol.

$$\frac{1391}{26} \times 2 + 256 = ?$$

$$? = 363$$

S78. Ans.(c)

Sol.

$$111 + 41 + 5^2 + 2^2 = ?$$

$$? = 152 + 25 + 4$$

$$? = 181$$

S79. Ans.(a)

Sol.

$$109\sqrt{?} - 48\sqrt{?} = \frac{61}{21} \times ?$$

$$61\sqrt{?} = \frac{61}{21} \times ?$$

$$? = 441$$

S80. Ans.(b)

Sol.

$$30 + 19 + \sqrt{?} = 81$$

$$? = 1024$$