

Counting of Numbers (25)

1) How many triangles does the figure have?



- a) 6
- b) 2
- c) 5
- d) 7

Correct Choice: c Solution

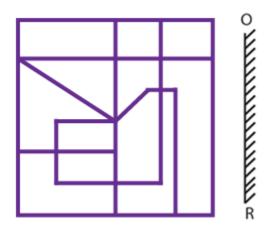
There are 5 triangles in the figure.

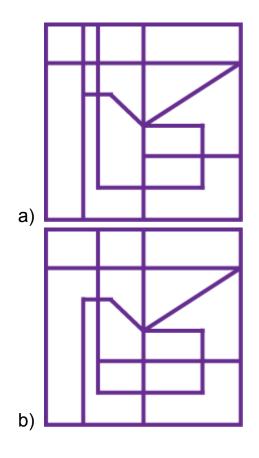
Hence, option c.

Mirror Image (26)

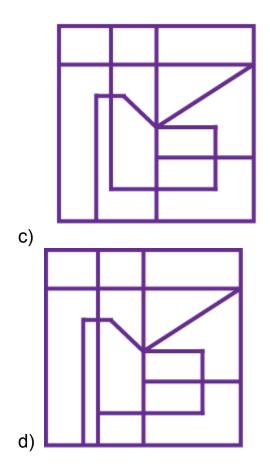


2) If a mirror is placed on the line OR, then which of the answer figures is the right image of the given figure?



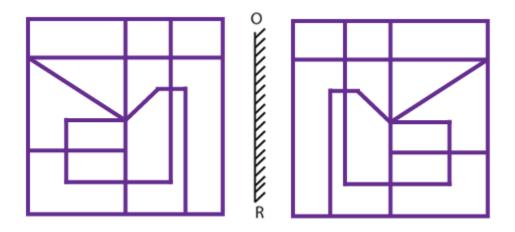






Correct Choice: c Solution





Hence, option c.

Coding – Decoding (Matrix coding)

3) In the question, a word is represented by only one set of number as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by 2 classes of alphabets as in two matrices given below. The columns and rows of matrix I are numbers from 0-4 and that of matrix II are numbers from 5-9. A letter from this matrix can be represented 1st by its row and next by its column. Ex- 'A' can be represented by 20, 79 etc. and 'B' can be represented by 11, 67, 96 etc. Similarly, you have to identify the set of word 'PREVENT'.

Matrix - I

	0	1	2	3	4
0	К	Н	Т	R	Е



1	Ρ	В	С	S	Т
2	A	L	Ν	G	D
3	Н	К	R	В	М
4	Р	Ν	F	E	S

Matrix - II

	5	6	7	8	9
5	J	R	G	D	W
6	К	Ν	В	G	Y
7	С	S	W	R	А
8	N	U	V	Ρ	Т
9	К	В	С	Х	D

a) 10, 32, 34, 78, 22, 66, 14
b) 40, 56, 43, 87, 04, 85, 14
c) 40, 56, 43, 87, 04, 58, 14
d) 40, 65, 43, 87, 04, 85, 14

Correct Choice : b

Solution

As the digits of the numbers represented by rows and columns respectively,



Р	R	E	V	E	N	Т
10, 40,	03, 32, 56,	04,	87	04,	22, 66, 85,	02,14,
88	78	43		43	41	89

Hence, option b.

Syllogisms (28)

4) Three statements are given followed by three conclusions numbered I, II, and III assuming the statements to be true, even if they seem to be at variance with commonly known facts. Decide which of conclusions logically follow(s) from the statement.

Statements:

Some apples are bananas.

No bananas are guavas.

Mostly guavas are grapes.

Conclusions:

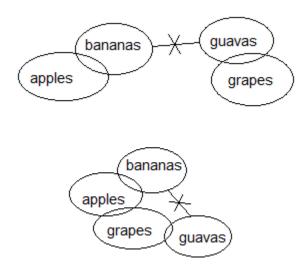
- I. Some grapes are bananas.
- II. Mostly guavas are apples.
- III. Some grapes are apples.



- a) None follows
- b) Only conclusion II follows
- c) Conclusion II and conclusion III follow
- d) Conclusion I and conclusion III follow

Correct Choice: a Solution

Following figure can be formed from the statements.



None follows.

Hence, option a.

Inserting the Missing number (29)

5) Select the digit which can replace the ? from the given four alternatives.

8	9	12
4	7	6



3	5	2
9	11	?

a) 14 b) 16 c) 17 d) 15 Correct Choice: b **Solution**

Given

8	9	12
4	7	6
3	5	2
9	11	?

The pattern is 8 + 4 - 3 = 9, 9 + 7 - 5 = 11, similarly, 12 + 6 - 2 = 16.

Hence, option b.

Alphabet Series (30)



6) A letter series is given below in which some letters are missing. Select the option that gives the letters that can fill these blanks in that order.

q_rs_uu_rrst_uq_rstuu

a) Rtqur
b) Qturq
c) Rsqur
d) Rtqru
Correct Choice: a

Solution
From option (a),

qrrstuu/qrrstuu/qrrstuu

Hence, option a.

North – South Sitting Row arrangement (31-35)

(7-9) Directions: Answer the questions based on the information given below.

Ten persons A, B, C, D, E, F, G, H, I and J are sitting in two parallel rows i.e. Row 1 and Row 2. The persons are sitting in row 1 face south and the persons sitting in row 2 face north. Each of them works in different companies viz. Infosys, Wipro, HP, HCL, TCS, Tata, IBM, Samsung, Nokia and LG but not in the same order. The persons sitting in row I are sitting exactly opposite to the persons sitting in row 2 and are facing each other.



F works in HP and sits at one of the extreme ends. F sits opposite to the one who sits second to the left of J. I does not work in Nokia. E sits opposite to the one who sits second to the right of the one who works in Tata. H works in HCL. E and J are immediate neighbors. J faces south. C sits to the immediate right of the one who works in IBM. I does not work in IBM. Only one person sits between the one who works in Tata and the one who works in HCL. B works in Wipro and sits third to the right of the one who works in LG sits opposite to G, who works in TCS. A sits opposite to F.

7) Who sits 2nd to the right of D?

- a) The one who works in HP
- b) The one who works in HCL
- c) The one who works in Nokia
- d) The one who works in TCS

Correct Choice: d

Solution

Starting Point: Start with placing F and J as, F sits opposite to the one who sits 2nd to the left of J which means both J and F are not sitting in the same row.

Clues: E and J are immediate neighbors. J faces south. F works in HP and sits at one of the extreme ends. A sits opposite to F.

Inference: So, E either sits to the right or left of J. So, we have 2 cases.

Case I: When E sits to the left of J in row 1:

Row - 1		J	E	A



|--|

Case II: When E sits to the right of J in row 1:

Row - 1	E	J		A	
------------	---	---	--	---	--

Row - 2			F(HP)
			, , ,

Clues: E sits opposite to the one who sits second to the right of the one who works in Tata. H works in HCL. Only one person sits between the one who works in Tata and the one who works in HCL. B works in Wipro and sits third to the right of the one who works in Infosys. B sits opposite to C. C sits to the immediate right of the one who works in IBM.

Inference: So, case II is rejected because E sits opposite to the one who sits 2nd to the right of the one works in Tata which is not possible in case II. Also, A must be working in Infosys so, that C sits immediate right of the one who works in IBM.

Row - 1	B(Wipro)	J	E	A(Infosys)
------------	----------	---	---	------------

Row - 2	(IBM)	C (Tata)		H(HCL)	F(HP)
------------	-------	----------	--	------------	-------

Clues: The one who works in LG sits opposite to G, who works in TCS. I does not work in Nokia. I does not work in IBM.

Inference: So, J must be working in LG so, that G sits opposite to the one who works in LG. Also, E works in Nokia and I works in Samsung.



The final arrangement is as follows:

Row - 1	I(Samsung)	B(Wipro)	J (LG)	E (Nokia)	A(Infosys)
------------	------------	----------	--------	-----------	------------

Row -D(IBMG(TCSH2)C (Tata)))	6 H(HCL) F(HP)
------------------------------	--------------------

The one who works in TCS sits 2nd to the right of D.

Hence, option d.

8) Who sits opposite to the one who works in Tata?

- a) I
- b) D
- c) B
- d) F

Correct Choice: c Solution

Starting Point: Start with placing F and J as, F sits opposite to the one who sits 2nd to the left of J which means both J and F are not sitting in the same row.

Clues: E and J are immediate neighbors. J faces south. F works in HP and sits at one of the extreme ends. A sits opposite to F.

Inference: So, E either sits to the right or left of J. So, we have 2 cases.

Case I: When E sits to the left of J in row 1:

Row - 1		J	E	A



|--|

Case II: When E sits to the right of J in row 1:

Row - 1	E	J		A	
------------	---	---	--	---	--

Row - 2			F(HP)
			, , ,

Clues: E sits opposite to the one who sits second to the right of the one who works in Tata. H works in HCL. Only one person sits between the one who works in Tata and the one who works in HCL. B works in Wipro and sits third to the right of the one who works in Infosys. B sits opposite to C. C sits to the immediate right of the one who works in IBM.

Inference: So, case II is rejected because E sits opposite to the one who sits 2nd to the right of the one works in Tata which is not possible in case II. Also, A must be working in Infosys so, that C sits immediate right of the one who works in IBM.

Row - 1	B(Wipro)	J	E	A(Infosys)
------------	----------	---	---	------------

Row - 2	(IBM)	C (Tata)		H(HCL)	F(HP)
------------	-------	----------	--	------------	-------

Clues: The one who works in LG sits opposite to G, who works in TCS. I does not work in Nokia. I does not work in IBM.

Inference: So, J must be working in LG so, that G sits opposite to the one who works in LG. Also, E works in Nokia and I works in Samsung.



The final arrangement is as follows:

Row - 1	I(Samsung)	B(Wipro)	J (LG)	E (Nokia)	A(Infosys)
------------	------------	----------	--------	-----------	------------

Row - D(IBM 2) C (Tata)	G(TCS)	H(HCL)	F(HP)	
-----------------------------	------------	------------	-------	--

B sits opposite to the one who works in Tata.

Hence, option c.

9) Who sits 3rd to the left of the one who works in Samsung?

- a) E
- b) J
- c) F
- d) D

Correct Choice: a

Solution

Starting Point: Start with placing F and J as, F sits opposite to the one who sits 2nd to the left of J which means both J and F are not sitting in the same row.

Clues: E and J are immediate neighbors. J faces south. F works in HP and sits at one of the extreme ends. A sits opposite to F.

Inference: So, E either sits to the right or left of J. So, we have 2 cases.

Case I: When E sits to the left of J in row 1:

	Row - 1			J	E	A
--	------------	--	--	---	---	---



|--|

Case II: When E sits to the right of J in row 1:

Row - 1	E	J		A	
------------	---	---	--	---	--

Row - 2			F(HP)
			, , ,

Clues: E sits opposite to the one who sits second to the right of the one who works in Tata. H works in HCL. Only one person sits between the one who works in Tata and the one who works in HCL. B works in Wipro and sits third to the right of the one who works in Infosys. B sits opposite to C. C sits to the immediate right of the one who works in IBM.

Inference: So, case II is rejected because E sits opposite to the one who sits 2nd to the right of the one works in Tata which is not possible in case II. Also, A must be working in Infosys so, that C sits immediate right of the one who works in IBM.

Row - 1	B(Wipro)	J	E	A(Infosys)
------------	----------	---	---	------------

Row - 2	(IBM)	C (Tata)		H(HCL)	F(HP)
------------	-------	----------	--	------------	-------

Clues: The one who works in LG sits opposite to G, who works in TCS. I does not work in Nokia. I does not work in IBM.

Inference: So, J must be working in LG so, that G sits opposite to the one who works in LG. Also, E works in Nokia and I works in Samsung.



The final arrangement is as follows:

Row - 1	l(Samsung)	B(Wipro)	J (LG)	E (Nokia)	A(Infosys)
------------	------------	----------	--------	-----------	------------

Row -D(IBM2)C (Tata)	G(TCS)	H(HCL)	F(HP)
----------------------	------------	------------	-------

E sits 3rd to the left of the one who works in Samsung.

Hence, option a.

10) Who works in IBM?

- a) The one who sits immediate right of A
- b) The one who sits 2nd to the right of B
- c) The one who sits immediate right of C
- d) The one who sits opposite to I

Correct Choice: d

Solution

Starting Point: Start with placing F and J as, F sits opposite to the one who sits 2^{nd} to the left of J which means both J and F are not sitting in the same row.

Clues: E and J are immediate neighbors. J faces south. F works in HP and sits at one of the extreme ends. A sits opposite to F.

Inference: So, E either sits to the right or left of J. So, we have 2 cases.

Case I: When E sits to the left of J in row 1:



Row - 1			J	E	A	
------------	--	--	---	---	---	--

Row - 2			F(HP)
			. ,

Case II: When E sits to the right of J in row 1:

Row - 1	E	J		А	
------------	---	---	--	---	--

Row - 2					F(HP)
------------	--	--	--	--	-------

Clues: E sits opposite to the one who sits second to the right of the one who works in Tata. H works in HCL. Only one person sits between the one who works in Tata and the one who works in HCL. B works in Wipro and sits third to the right of the one who works in Infosys. B sits opposite to C. C sits to the immediate right of the one who works in IBM.

Inference: So, case II is rejected because E sits opposite to the one who sits 2nd to the right of the one works in Tata which is not possible in case II. Also, A must be working in Infosys so, that C sits immediate right of the one who works in IBM.

Row - 1	B(Wipro)	J	E	A(Infosys)	
------------	----------	---	---	------------	--

Row - 2	(IBM)	C (Tata)		H(HCL)	F(HP)
------------	-------	----------	--	------------	-------



Clues: The one who works in LG sits opposite to G, who works in TCS. I does not work in Nokia. I does not work in IBM.

Inference: So, J must be working in LG so, that G sits opposite to the one who works in LG. Also, E works in Nokia and I works in Samsung.

The final arrangement is as follows:

Row - 1	l(Samsung)	B(Wipro)	J (LG)	E (Nokia)	A(Infosys)
------------	------------	----------	--------	-----------	------------

Row - D(IBM 2)	C (Tata)	G(TCS)	H(HCL)	F(HP)	
--------------------	----------	------------	------------	-------	--

The one who sits opposite to I i.e. D works in IBM.

Hence, option d.

35) Find the odd one out?

- a) A
- b) C
- c) D

d) I

Correct Choice: b

Solution

Starting Point: Start with placing F and J as, F sits opposite to the one who sits 2nd to the left of J which means both J and F are not sitting in the same row.

Clues: E and J are immediate neighbors. J faces south. F works in HP and sits at one of the extreme ends. A sits opposite to F.

Inference: So, E either sits to the right or left of J. So, we have 2 cases.

Case I: When E sits to the left of J in row 1:



Row - 1			J	E	A	
------------	--	--	---	---	---	--

Row - 2			F(HP)
			. ,

Case II: When E sits to the right of J in row 1:

Row - 1	E	J		А	
------------	---	---	--	---	--

Row - 2					F(HP)
------------	--	--	--	--	-------

Clues: E sits opposite to the one who sits second to the right of the one who works in Tata. H works in HCL. Only one person sits between the one who works in Tata and the one who works in HCL. B works in Wipro and sits third to the right of the one who works in Infosys. B sits opposite to C. C sits to the immediate right of the one who works in IBM.

Inference: So, case II is rejected because E sits opposite to the one who sits 2nd to the right of the one works in Tata which is not possible in case II. Also, A must be working in Infosys so, that C sits immediate right of the one who works in IBM.

Row - 1	B(Wipro)	J	E	A(Infosys)	
------------	----------	---	---	------------	--

Row - 2	(IBM)	C (Tata)		H(HCL)	F(HP)
------------	-------	----------	--	------------	-------



Clues: The one who works in LG sits opposite to G, who works in TCS. I does not work in Nokia. I does not work in IBM.

Inference: So, J must be working in LG so, that G sits opposite to the one who works in LG. Also, E works in Nokia and I works in Samsung.

The final arrangement is as follows:

Row - 1	l(Samsung)	B(Wipro)	J (LG)	E (Nokia)	A(Infosys)
------------	------------	----------	--------	-----------	------------

Row -D(IBM2)C (Tata)	G(TCS H(HCL))	F(HP)
----------------------	--------------------	-------

All are sitting at the extreme ends of the row except C.

Hence, option b.

Logical Inequalities

11) In the question, relationship between some elements is shown in the statements (s). These statements are followed by two conclusions. Read the statements and give answer.

Statements: $Q \le D \ge E > F$; $H = F > X \ge Y$

Conclusions:

I. D > Y

II. E> H

- a) Only conclusion I is true
- b) Only conclusion II is true
- c) Either conclusion I or II is true
- d) Both conclusions I and II are true



Correct Choice: d Solution
Given statement: $Q \le D \ge E > F$; $H = F > X \ge Y$
On combining statements, we get,
$D \ge E > F > X \ge Y$ and $D \ge E > F = H$
Conclusions:
I. D > Y: True (As, D \ge E > F > X \ge Y, so, D > Y)
II. E > H: True (As, E > F = H, so, E >H)
Hence, option d.

Syllogisms (12-13)

12) In the question below there are three statements followed by two conclusions I and II. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then



decide which of the given conclusions logically follows from the three statements disregarding commonly known facts.

Statements:

Only a few cotton is jean

All jean is shirt

All shirt is trouser

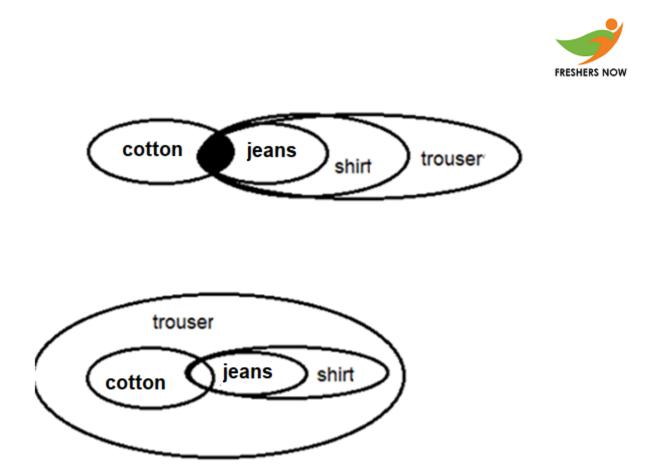
Conclusions

- I. Some shirt is not cotton
- II. Some cotton is not trouser
 - a) Only conclusion I follows
 - b) Both the conclusions I and II follow
 - c) Neither conclusion I nor II follows
 - d) Only conclusion II follows

Correct Choice : c

Solution

Following figures can be formed from the statements.



So, neither conclusion I nor II follows.

Hence, option c.

13) In the question below there are three statements followed by two conclusions I and II. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three statements disregarding commonly known facts.

Statements:

Only group is single

Some group is online

Some online is offline

Conclusions:

I. No single is online



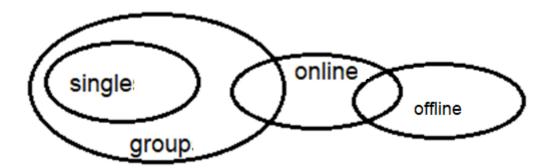
II. All single being offline is a possibility

- a) Only conclusion I follows
- b) Both the conclusions I and II follow
- c) Neither conclusion I nor II follow
- d) Only conclusion II follows

Correct Choice : a

Solution

Following figure can be formed from the statements.



Since, only group is single is given which means all single is only part of group so, conclusion I follows.

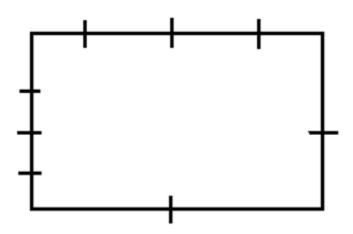
Hence, option a.

(39-40) Directions: Answer the questions based on the information given below.

Eight persons P, Q, R, S, T, U, V and W are sitting in eight seats around a rectangular table such that three persons are sitting on one of the longer side and three are sitting on one of the shorter side and one is sitting on other longer and one is sitting on other shorter side of the table. Also, one of the three who are sitting on longer side and the one who sits alone on



the shorter side are facing away from the table and rest all are facing towards the table.



P and T are not adjacent to each other. P sits on longer side and S sits third to the left of P, who does not sit in the middle of the longer side. Two persons sit between S and W. R and Q are not immediate neighbors of each other. T faces away from the centre and U sits 2nd to the left of T. Q sits second to the right of V.

Rectangular Sitting arrangement

14) Who sits immediate right of T?

```
a) V
b) Q
c) S
d) W
Correct Choice : b
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Solution



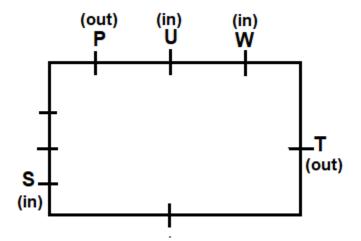
Starting Point: As, P sits in the longer side of table but does not sit in the middle of longer side so, start with placing P and S as S sits 3rd to the left of P so, P either face away or towards the table.

https://www.freshersnow.com/placement-papers-download/

Clues: Two persons sit between S and W. T faces away from the centre and U sits 2^{nd} to the left of T. P and T are not adjacent to each other.

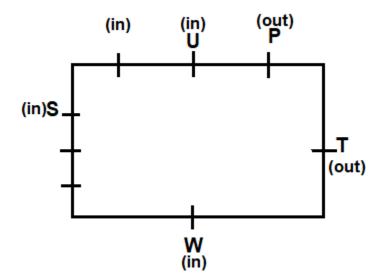
Inference: So, there are 4 possibilities of P i.e. either P faces away and sit either of the two seats of longer side or P faces towards and sits either of the two seats of longer sides. Now, T and P are not adjacent to each other and T faces outside which means T either sit alone in shorter side or sit in longer side so, two of the possibilities are rejected here. So, we have left with two possibilities of P faces away from the table.

Case I: When P sitting immediate right of U:



Case II: When P sits immediate left of U:

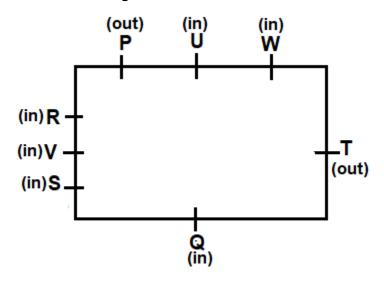




Clues: Q sits second to the right of V. R and Q are not immediate neighbors of each other.

Inference: So, in case II, V must be sitting adjacent to U and Q is sitting adjacent to S which means R must be sitting adjacent to Q so, case II is rejected.

The final arrangement is as follows:



Q sits immediate right of T. Hence, option b.