SYMBOLS&NOTATIONS

REASONING

VERBAL AND NON VERBAL

P * Q means P is neither greater than nor smaller than Q
P $ Q means P is neither greater than nor equal to Q
P @ Q means P is not smaller than Q
P © Q means P is not greater than Q
P # Q means P is neither smaller than nor equal to Q

1 Statements: W @ T, T © M, M $ D
Conclusions:
I W # D
II W @ M
III D # T

Answer
P * Q => P = Q OR * => =
P $ Q => P < Q OR $ => <
P @ Q => P ≥ Q OR @ => ≥
P © Q => P ≤ Q OR © => ≤
P # Q => P > Q OR # => >

W @ T © M $ D
W ≥ T ≤ M < D

I W # D
W > D (Not True)

II W @ M
W ≥ M (Not True)

III D # T
D > T (True)

2 F * R, R © M, M $ D
Conclusions
I D # R
II D # F
III M @ F

F * R © M $ D
F = R ≤ M < D

I D # R
D > R (True)

II D # F
D > F (True)

III M @ F
M ≥ F (True)

3 V © M, M * B, B $ F
Conclusions
I F # M
II B @ V
III F # V

V © M * B $ F
V ≤ M = B < F

I F # M
F > M (True)

II B @ V
B ≥ V (True)

III F # V
F > V (True)

4 D # N, N @ B, B * F
Conclusions
I F # D
II N # F
III N * F

D # N @ B * F
D > N ≥ B = F

I F # D
F > D (True)

II N # F
N > F
III N * F
N = F (Either II or III is True)

5 R $ T, T # K, K @ M
Conclusions
I R $ M
II T # M
III R $ K

R $ T # K @ M
R < T > K ≥ M

I R $ M
R < M (Not True)

II T # M
T > M (True)

III R $ K
R < K (Not True)

6 H # N, N $ T, T @ B
Conclusions
I B $ N
II H # T
III B $ H

H # N $ T @ B
H > N < T ≥ B

I B $ N
B < N (Not True)

II H # T
H > T (Not True)

III T @ B
T ≥ B (True)

P $ Q means P is neither equal to nor greater than Q
P © Q means P is neither equal to nor smaller than Q
P δ Q means P is neither greater than nor smaller than Q
P @ Q means P is not smaller than Q
P * Q means P is not greater than Q

7 B © N, N @R, F * R
Conclusions
I B © R
II F * N
III R $ B

$ => < © => > δ => = @ => ≥ * => ≤

B © N @ R, F* R
B > N ≥ R, F ≤ R
B > N ≥ R ≥ F

I B © R
B > R (True)

II F * N
F ≤ N (True)

III R $ B
R < B (True)

8 D $ M, M * B, B δ J
Conclusions
I J © D
II B @ D
III J @ M

D $ M * B δ J
D < M ≤ B = J

I J © D
J > D (True)

II B @ D
B ≥ D (Not True)

III J @ M
J ≥ M (True)

9 F * T, T $ N, N @ R
Conclusions
I R $ T
II N © F
III F $ R

F * T $ N @ R
F ≤ T < N ≥ R

I R $ T
R < T (Not True)

II N © F
N > F (True)

III F $ R
F < R (Not True)

10 W δ K, K © F, F $ M
Conclusions
I M © K
II W @ K
III F @ W

W δ K © F $ M
W = K > F < M

I M © K
M > K (Not True)

II W @ K
W ≥ K (Not True)

III F @ W
F ≥ W (Not True)

11 M @ D, D δ K, K © R
Conclusions'
I R $ M
II K δ M
III D @ R

M @ D δ K © R
M ≥ D = K > R

I R $ M
R < M (True)

II K δ M
K = M (Not True)

III D @ R
D ≥ R (Not True)

12 F @ T, T δ K, K * D
Conclusions
I D @F
II F @ K
III D @ T

F @ T δ K * D
F ≥ T = K ≤ D

I D @ F
D ≥ F (Not True)

II F @ K
F ≥ K (True)

III D @ T
D ≥ T (True)

P δ Q means P is not smaller than Q
P * Q means P is not greater than Q
P % Q means P is neither greater than nor equal to Q
P $ Q means P is neither smaller than nor equal to Q
P @ Q means P is neither greater than nor smaller than Q

13 B % N, N δ F, F * H
Conclusions
I H $ N
II F % B
III B % H

δ => ≥ * => ≤ % => < $ => > @ => =

B % N δ F * H
B < N ≥ F ≤ H

I H $ N
H > N (Not True)

II F % B
F < B (Not true)

III B % H
B < H (Not True)

14 W δ F, F % K, K $ M
Conclusions
I M % F
II M δ F
III W $ K

W δ F % K $ M
W ≥ F < K > M

I M % F
M < F (Not True)

II M δ F
M ≥ F (Not True)

III W $ K
W > K (Not True)

15 W $ B, B @ M, M * R
Conclusions
I R $ B
II R @ B
III M % W

W $ B @ M * R
W > B = M ≤ R

I R $ B
R > B
II R @ B
R = B (Either I or II is True)

III M % W
M < W (True)

16 M * D, D $ K, K @ T
Conclusions
I T % D
II K % M
III M % T

M * D $ K @ T
M ≤ D > K = T

I T % D
T < D (True)

II K % M
K < M (Not True)

III M % T
M < T (Not True)

17 K @ F, F $ M, M δ T
Conclusions
I T % F
II M %K
III K $ T

K @ F $ M δ T
K = F > M ≥ T

I T % F
T < F (True)

II M % K
M < K (Not True)

III K $ T
K > T (True)

18 N * A, A % B, B δ D
Conclusions
I D %A
II B $ N
III N % D

N * A % B δ D
N ≤ A < B ≥ D

I D % A
D < A (Not True)

II B $ N
B > N (True)

III N % D
N < D (Not True)

P @ Q means P is not greater than Q
P % Q means P is not smaller than Q
P * Q means P is neither greater than nor smaller than Q
P © Q means P is neither greater than nor equal to Q
P $ Q means P is neither smaller than nor equal to Q

19 R $ M, M © F, F % J
Conclusions
I R $ J II F © R

@ => ≤ % => ≥ * => = © => < $ => >

R $ M © F % J
R > M < F ≥ J

I R $ J II F © R
R > J (Not True) F < R (Not True)

20 M © D, D @ K, K * N
Conclusions
I N $ D II K $ M

M © D @ K * N
M < D ≤ K = N

I N $ D II K $ M
N > D (Not True) K > M (True)

21 B @ D, D $ M, M * N
Conclusions
I N @ D II D $ N

B @ D $ M * N
B ≤ D > M = N

I N @ D II D $ N
N ≤ D (Not True) D > N (True)

22 F $ W, W % J, J @ N
Conclusions
I J @ F II N % W

F $ W % J @ N
F > W ≥ J ≤ N

I J @ F
J ≤ F (Not True)

II N % W
N ≥ W (Not True)

23 F © T, T % R, R $ W
Conclusions
I W © T II R © T

F © T % R $ W
F < T ≥ R > W

I W © T
W < T (True)

II R © T
R < T (Not True)

P $ Q means P is not smaller than Q
P @ Q means P is not greater than Q
P © Q means P is neither greater than nor smaller than Q
P % Q means P is neither smaller than nor equal to Q
P * Q means P is neither greater than nor equal to Q

24 K @ B, B * J, J © T
Conclusions
I K * T II B @ T

$ => ≥ @ => ≤ © => = % => > * => <

K @ B * J © T
K ≤ B < J = T

I K * T
K < T (True)

II B @ T
B ≤ T (Not True)

25 F $ M, M @ L, L * W
Conclusions
I W $ M II F @ L

F $ M @ L * W
F ≥ M ≤ L < W

I W $ M
W ≥ M (Not True)

II F @ L
F ≤ L (Not True)

26 R * Q, Q @ F, F % A

Conclusions

I R $ A

II F @ A

R * Q @ F % A

R < Q ≤ F > A

I R $ A

R ≥ A (Not True)

II F @ A

F ≤ A (Not True)

27 V $ X, X © Y, Y % H

Conclusions

I Y @ V

II H * V

V $ X © Y % H

V ≥ X = Y > H

I Y @ V

Y ≤ V (True)

II H * V

H < V (True)

28 M @ B, B * A, A @ F

Conclusions

I M * A

II B * F

M @ B * A @ F

M ≤ B < A ≤ F

I M * A

M < A (True)

II B * F

B < F (True)

P @ Q means P is neither greater than nor equal to Q
P $ Q means P is not smaller than Q
P # Q means P is neither greater than nor smaller than Q
P © Q means P is not greater than Q
P % Q means P is neither smaller than nor equal to Q

29 J # R, R % K, K @ D
Conclusions
I K @ J II D @ J

@ => < $ => ≥ # => = © => ≤ % => >

J # R % K @ D
J = R > K < D

I K @ J
K < J (True)

II D @ J
D < J (Not True)

30 M © T, K % T, K @ N
Conclusions
I N % M II K % M

M © T, K % T, K @ N
M ≤ T, K > T, K < N
M ≤ T < K < N

I N % M
N > M (True)

II K % M
K > M (True)

31 V $ D, D © R, R % F

Conclusions

I R % V II V @ F

V $ D © R % F

V ≥ D ≤ R > F

I R % V II V @ F

R > V (Not True) V < F (Not True)

32 B @ E, E # S, S $ Z

Conclusions

I Z @ E II E # Z

B @ E # S $ Z

B < E = S ≥ Z

I Z @ E II E # Z

Z < E E = Z Either I or II True

33 H % M, N © M, N $ T

Conclusions

I H # T II H % T

H % M, N © M, N $ T

H > M, N ≤ M, N ≥ T

H > M ≥ N ≥ T

I H # T II H % T

H = T (Not True) H > T (True)

P © Q means P is either greater than or equal to Q

P % Q means P is either smaller than or equal to Q

P @ Q means P is neither greater than nor smaller than Q

P # Q means P is smaller than Q
P $ Q means P is greater than Q

34 M % T, T # R, R @ D
Conclusions
I D $ T II R $ T

© => ≥ % => ≤ @ => = # => < $ => >

M % T # R @ D
M ≤ T < R = D

I D $ T
D > T (True)

II R $ T
R > T (True)

35 J $ M, M © K, K # N
Conclusions
I J $ K II N $ M

J $ M © K # N
J > M ≥ K < N

I J $ K
J > K (True)

II N $ M
N > M (Not True)

36 F # T, T @ W, W $ H
I F # H II F © H

F # T @ W $ H
F < T = W > H

I F # H
F < H (Not True)

II F © H
F ≥ H (Not True)

37 K © R, R $ F, F # B
I B $ R

II F # K

K © R $ F # B
K ≥ R > F < B

I B $ R
B > R (Not True)

II F # K
F < K (True)

38 D $ N, N # F, F © T
I T # N

II D $ F

D $ N # F © T
D > N < F ≥ T

I T # N
T < N (Not True)

II D $ F
D > F (Not True)

SYLLOGISM

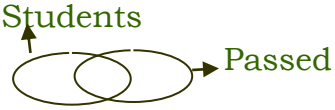
REASONING

VERBAL AND NON VERBAL

Is, are --→ Definite (must)
May, may not --→ Indefinite (might)

Indefinite

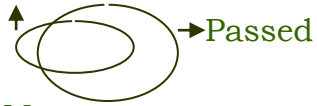
Students



Some

Some students are passed.

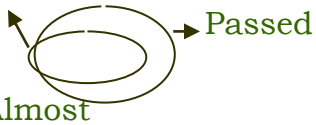
Students



Most

Most students are passed

Students

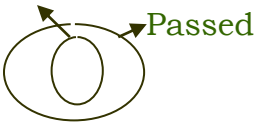


Almost

Almost students are passed

Definite

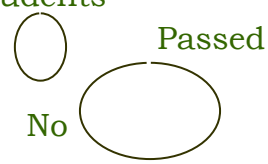
Students



All

All students are passed

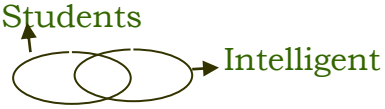
Students



No student is passed

Some

Students

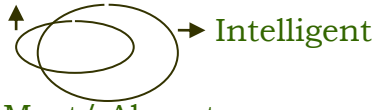


Some

Some students are intelligent ⟶
Some intelligent are students ⟵

Most/Almost

Students

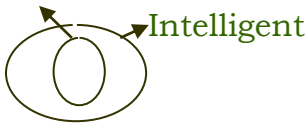


Most/ Almost

Most of the students are intelligent ⟶
Some intelligent are students ⟵

All

Students

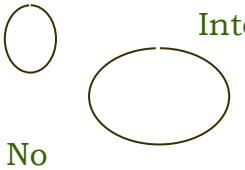


All

All students are intelligent ⟶
Some intelligent are students ⟵
(Some students are intelligent)

No

Students



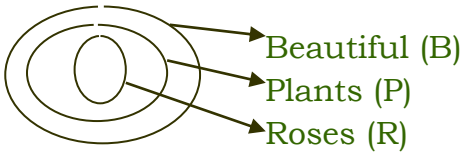
No

No student is intelligent →
No intelligent is a student ←
(Some students are not intelligent)

9 points

Point I

All roses are plants
All plants are beautiful



Conclusions

All roses are beautiful
Some beautiful are roses

Point II

All roses are plants
Some plants are beautiful

Conclusions

Some roses are beautiful --- 1
No rose is beautiful --- 2
(Answer is either 1 or 2)

Point III

All roses are plants
No plant is beautiful

Conclusions

No rose is beautiful

Point IV

Some roses are plants
All plant is beautiful

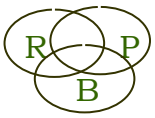
Conclusions

Some rose are beautiful
Some beautiful are roses

Point V

Some roses are plants
Some plants are beautiful

OR



Conclusions

Some roses are beautiful ---1
No rose is beautiful ---2 (answer is either 1 or 2)

Point VI

Some roses are plants
No plant is beautiful

Conclusions

Some roses are not beautiful (some roses which are plants are definitely not beautiful)

Point VII

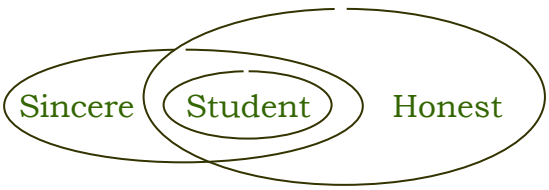
No rose is a plant
No plant is beautiful

Conclusions

No conclusion

Point VIII

All students are sincere
All students are honest

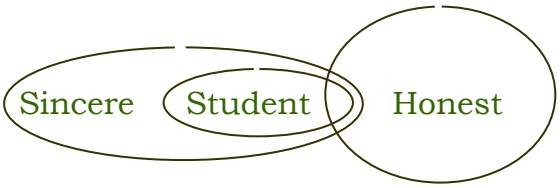


Conclusions

Some sincere are honest
Some honest are sincere

Point IX

All students are sincere
All students are honest



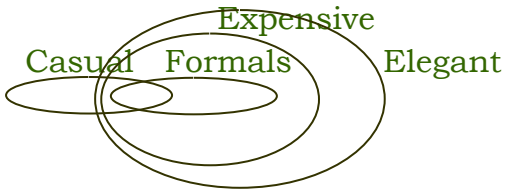
Conclusions

Some sincere are honest
Some honest are sincere

1 Statements:
Some casual are formal
All formal are expensive
All expensive are elegant

Conclusion:

I) all formal are elegant
II) Some casual are expensive

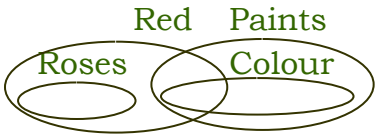


Answer is 'it follows conclusion I and II'

2 All roses are red
Some red are colour
All colour are paints

Conclusion

I) some red are paints
II) all red are roses

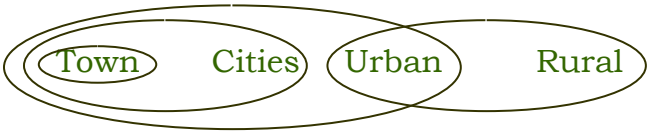


Answer is 'it follows only conclusion I'

3 All towns are cities
All cities are urban
Some urban are rural

Conclusion

Some towns are rural
All rural are towns

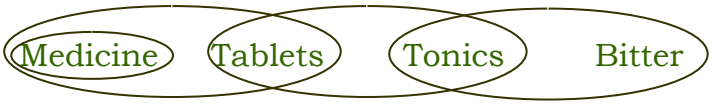


Answer is 'it does not follow conclusion I and II'

4 All medicines are tablets
Some tablets are tonics
Some tonics are bitter

Conclusion

I) some tablets are bitter
II) No medicine is a tonic

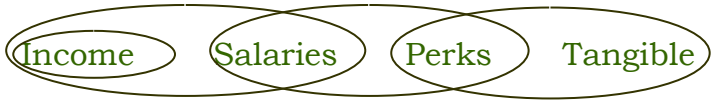


Answer is 'it does not follow conclusion I and II'

5 All incomes are salaries
Some salaries are perks
Some perks are tangible

Conclusion

Some incomes are tangible
At least some perks are salaries



Answer is 'it follow only conclusion II'

6 All petals are flowers
Some flowers are not petals
Some petals are colours

Conclusion

I) some flowers are colours
II) some flowers are not colours

Answer is 'it follow only conclusion I'

7 All desks are tables
Some tables are drawers
Some drawers are big

Conclusion

I) Some tables are big
II) No desk is a drawer

Answer is 'it does not follow conclusion I and II'

8 All colleges are buildings
All buildings are concrete
Some concrete are strong

Conclusion

I) some colleges are strong
II) at least some strong are concrete

Answer is 'it follows only conclusion II'

9 All books are interesting
All magazines are books
Some interesting that are not books are journals

Conclusions

I) all books are journals
II) all magazines are interesting

Answer is 'it follows only conclusion II'

10 Some trees are tall
All tall are healthy
All healthy are not tall

Conclusion

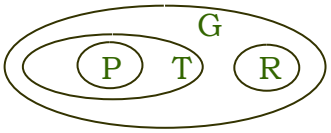
I) Some healthy are tall
II) Some trees are not tall

Answer is 'it follows only conclusion I'

11 All petals are trees
All trees are gardens
All roads are gardens

Conclusion

I) Some roads are trees
II) Some gardens are trees
III) Some gardens are petals



Answer is 'it follows conclusion II and III'

12 Some days are nights
Some nights are months
Some months are years

Conclusion

I) Some years are nights
II) Some months are days
III) No year is night

Answer is 'it follows only either conclusion I or III'

13 All cycles are tyres
Some tyres are wheels
All wheels are buses

Conclusions

I some buses are tyres
II some wheels are tyres
III some buses are cycles

Answer is 'it follows conclusion I and II'

14 Some dogs are cats
Some cats are horses
All horses are tigers

Conclusion

I some tigers are cats
II some horses are dogs
III some tigers are dogs

Answer is 'it follows only conclusion I'

15 All ropes are stick
Some sticks are hammers
Some hammers are lakes

Conclusion

I some lakes are ropes
II some hammers are ropes
III some lakes are sticks

Answer is 'it does not follow conclusion I, II and III'

16 All stars are suns
Some suns are planets
All planets are satellites

Conclusions

I Some satellites are stars
II No star is a satellite

Stars (S), Suns (S'), Satellites (S")

Answer is 'it follows either conclusion I or II'

17 All curtains are roads
Some rods are sheets
Some sheets are pillows

Conclusions

Some pillows are rods
Some rods are curtains

Answer is 'it follows only conclusion II'

18 All switches are plugs
Some plugs are bulbs
All bulbs are sockets

Conclusion

I Some sockets are plugs
II Some plugs are switches

Switches (S) and Sockets (S')

Answer is 'it does not follow conclusion I and II'

19 All fishes are birds
All birds are rates
All rats are cows

Conclusion

I all birds are windows
II all rats are fishes

Answer is 'it follows only conclusion I'

20 Some walls are windows
Some windows are doors
All doors are roofs

Conclusion

I some doors are wall
II No roof is a window

Walls (W), Windows (W')

Answer is 'it does not follow conclusion I and II'

21 Some bikes are cars
Some cars are trains
Some trains are buses

Conclusion

I some buses are cars
II some trains are bikes
III some buses are bikes

Answer is ‘it does not follow any conclusion’

22 All dogs are cats
Some cats are rats
All rats are mats

Conclusions

I some mats are cats
II some mats are dogs
III some rats are cats

Answer is ‘it follows conclusion I and III’

23 All cups are benches
Some benches are drums
All drums are kites

Conclusions

I some kites are cups
II some kites are benches
III some drums are cups

Answer is 'it follows only conclusion II'

24 All pens are sticks
All sticks are rings
All rings are roads

Conclusions

I some rings are pens
II some rods are sticks
III some rods are pens

R – Rings, R' – Roads

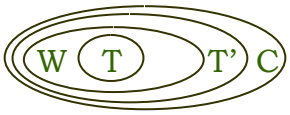
Answer is 'it follows only conclusion I'

25 All telephones are wires
All wires are tents
All tents are cans

Conclusions

I some cans are wires
II some tents are telephones
III some cans are telephones

T – Telephone, T' - Tents

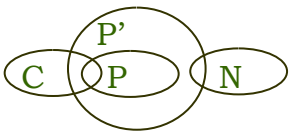


Answer is 'it follows conclusion I, II and III'

26 Some cards are pictures
All pictures are paints
Some paints are nails

Conclusions

I some paints are cards
II some nails are cards
III some nails are pictures



Answer is 'it follows only conclusion I'

27 All walls are glasses
No glass is table
Some tables are windows

Conclusions

I some windows are walls
II some tables walls
III some windows are glasses

Answer is 'it does not follow any conclusion'

28 All baskets are poles
Some poles are lamps
All lamps are roads

Conclusions

I some lamps are baskets
II some roads are poles
III some lamps are poles

Answer is 'it follows only conclusion II and III'

29 Some leaves are baskets
Some baskets are flowers
Some flowers are lakes

Conclusions

I some lakes are baskets
II some flowers are lakes
III no lake is basket

L – Leaves, L' - Lakes

Answer is 'it follows either conclusion I or III and conclusion II'

30 All pictures are bands
Some bands are chairs
Some chairs are tables

Conclusions

I some tables are bands
II some chairs are pictures
III some tables are pictures

Answer is 'it does not follow conclusion I, II and III'

31 Some toys are desks
Some desks are pens
All pens are rods

Conclusion

I some rods are toys
II some pens are toys

Answer is 'it does not follow conclusion I and II'

32 Some tables are huts
No hut is ring
All rings are bangles

Conclusion

I some bangles are tables
II no bangle is table

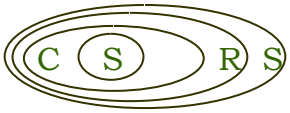
Answer is 'it follows either conclusion I or II'

33 All stars are clouds
All clouds are rains
All rains are stones

Conclusions

I all rains are stars
II all clouds are stones

S – Stars, S' - Stones



Answer is 'it follows only conclusion II'

34 All windows are doors
Some doors are buildings
All buildings are cages

Conclusions

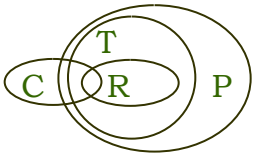
I some cages are doors
II some buildings are windows

Answer is 'it follows only conclusion I'

35 Some chairs are rooms
All rooms are trees
All trees are poles

Conclusion

I some poles are chairs
II some trees are chairs

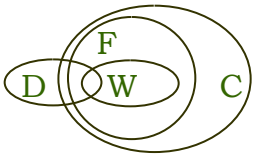


Answer is 'it follows conclusion I and II'

36 Some doors are windows
All windows are floors
All floors are ceilings

Conclusions

I some doors are floors
II all windows are ceilings

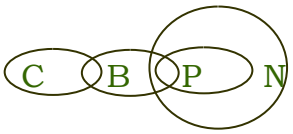


Answer is 'it follows conclusion I and II'

37 Some computers are books
Some books are pens
All pens are notebooks

Conclusion

I some books are notebooks
II some notebooks are computers



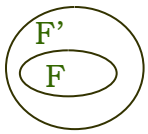
Answer is 'it follows only conclusion I'

38 All fruits are flowers
No flower is sweet
Some sweets are deserts

Conclusions

Some deserts are flowers
No desert is flower

F – Fruits, F' - Flowers



Answer is 'it follows either conclusion I or II'

39 All bottles are jars
Some jars are bowls
Some bowls are buckets

Conclusion

I some bottles are bowls
II some buckets are jars

B – Bottles, B' – Bowls, B" - Buckets

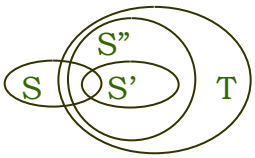
Answer is 'it does not follow conclusion I and II'

40 Some shoes are socks
All socks are sandals
All sandals are trousers

Conclusions

I all trousers are socks
II some sandals are shoes

S – Shoes, S' – Socks, S" - Sandals



Answer is 'it follows only conclusion II'

PLACING ARRANGEMENS

REASONING

VERBAL AND NON VERBAL

B, D, M, K, P, Q, W and H are sitting around a circle facing at the center. M is to the immediate right of B who is fourth to the right of K. P is second to the left of B and is fourth to the right of W. Q is second to the right of D who is second to the right of H.

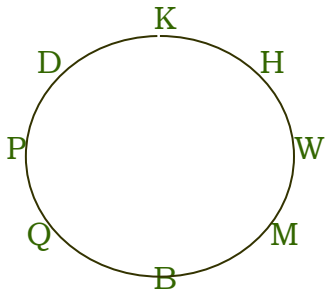
1 Who is third to the right of B?
a) W b) M c) K d) H e) None of these

2 Which of the following represents the immediate neighbor of D?
a) PQ b) KH c) PH d) KQ e) PK

3 Who is third to the right of W?
a) P b) D c) K d) R e) Data inadequate

4 Who is second to the left of P?
a) D b) H c) K d) Data inadequate e) None of these

5 Who is to the immediate left of B?
a) P b) Q c) W d) Data inadequate e) None of these



L, M, N, O, P, Q and R are sitting around a circle facing the centre. O is sitting between L and R. Q is second to the right of R and P is second to the right of Q. N is not an immediate neighbor of R.

6 Which of the following is not correct?

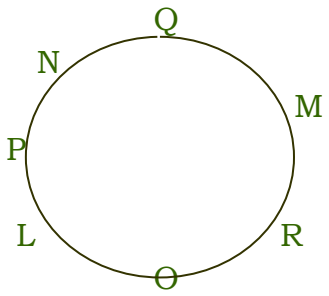
a) R is second to the right of L b) M is second to the left of N c) L sits exactly between O and P d) P and N are immediate neighbors e) P sits to the opposite of N

7 How many persons are seated between L and Q if we count anti-clockwise from L to Q?

a) One b) Two c) Three d) Four e) More than four

8 Who is to the immediate left of P?

a) L b) N c) M d) O e) None of these



A, M, P, D, Q, R, W and B are sitting around a circle facing at the centre. D is fourth to the left of A who is third to the right of M. P is third to the left of Q who is third to the left of M. R is third of the right of W who is second to the right of B.

9 Who is second to the left of D?
a) W b) B c) Q d) Data inadequate e) None of these

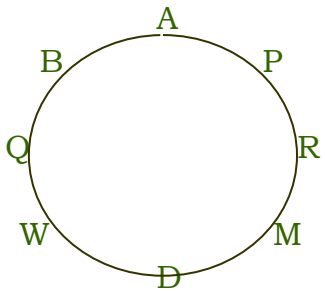
10 Who is the third to the left of P?
a) M b) D c) R d) Data inadequate e) None of these

11 Who is the immediate right of Q?
a) D b) W c) B d) Data inadequate e) None of these

12 Which of the following pairs represents the first and second respectively to the right of w?
a) QB b) DM c) MR d) Data inadequate e) None of these

13 In which of the following pairs is the second person sitting to the immediate right of the first person?
a) MD b) RM c) AB d) QB e) None of these

14 Who is the fourth to the right of R?
a) P b) A c) B d) Data inadequate e) None of these



P, A, D, Q, T, M, R and B are sitting around a circle facing at the centre. D is third to the left of T who is fifth to the right of P. A is third to the right of B who is second to the right of D. Q is the second to the left of M.

15 Who is second to the right of M

a) B b) R c) T d)Q e) None of these

16 Who is the immediate right of B?

a) M b) Q c) B d) Data inadequate e) None of these

17 Who is the third to the right of P?

a) D b) M c) R d) Data inadequate e) None of these

18 Who is the second to the left of D?

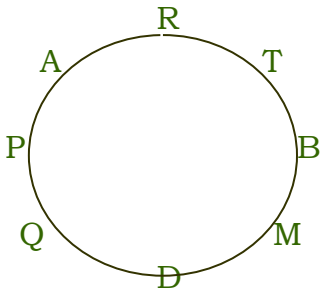
a) A b) Q c) B d) P e) Data inadequate

19 In which of the following pairs the first person is sitting to the immediate right of second person?

a) DM b) BT c) RA d) PQ e) PA

20 Which of the following pairs represents the immediate neighbours of A?

a) PT b) PB c) PQ d) PD e) None of these



M, P, D, Q, T, R, B and W are sitting around a circle facing at the centre. D is second to the left of M who is third to the right of P. W is third to the right of Q who is second to the left of B. R is third to the right of T.

21 Who is third to the left of M?
a) D b) W c) P d) Data inadequate e) None of these

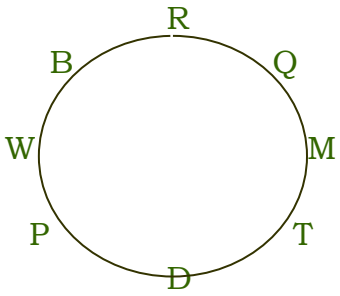
22 Which of the following pairs represents the immediate neighbours of R?
a) BM b) QW c) WM d) BT e) None of these

23 Who is fourth to the right of W?
a) T b) M c) Q d) D e) Data inadequate

24 Who is second to the right of M?
a) B b) W c) P d) R e) Data inadequate

25 Who is the second to the right of P?
a) B b) T c) W e) Data inadequate e) None of these

26 In which of the following pairs is the first person sitting to the immediate right of the second person?
a) PD b) WP c) BW d) RQ e) MQ



A, B, C, D, E, F, G and H are sitting around a circle facing the centre. F is third to the right of B who is third to the right of H. A is third to the left of H. C is fourth to the left of A. E is third to the right of D who is not a neighbour of A.

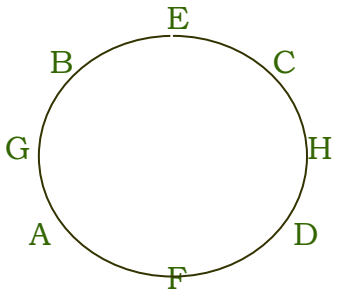
27 In which of the following pairs the second person is to the immediate right of the first person?
a) BE b) HC c) GB d) FA e) None of these

28 Who is second to the right of D?
a) F b) G c) A d) Data inadequate e) None of these

29 Who is third to the left of G?
a) H b) D c) C d) F e) None of these

30 Who is fourth to left of C?
a) F b) A c) E d) Data inadequate e) None of these

31 What is B's position with respect to D?
a) Fourth to the right b) Fourth to the left c) A & B d) Fifth to the left e) Fifth to the right



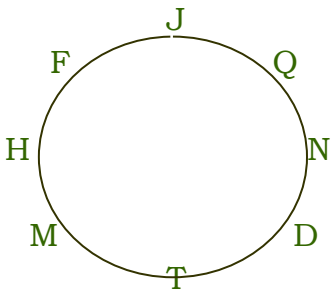
M, D, J, Q, T, F, H and N are sitting around a circle facing at the centre. T is third to the right of F who is second to the left of M. Q is not a neighbour of T or F and is third to the left of H. J is second to the right of N.

32 Who is second to the left of H?
a) T b) F c) Q d) Data inadequate e) None of these

33 Who is to the immediate left of M?
a) T b) H c) Q d) J e) None of these

34 In which of the following pairs the second person is to be immediate left of the first person?
a) MT b) NQ c) HF d) DN e) None of these

35 What is Q's position with respect of M?
a) Fourth to the right b) Fourth to the left c) Fifth to the left
d) Fifth to the right e) a & b



A, B, C, D, E, F, G and H are sitting around a circle facing at the centre. D is second to the left of F and third to the right of H. A is second to the right of F and an immediate neighbour of H. C is second to the right of B and F is third to the right of B. G is not an immediate neighbour of F.

36 Who is to the immediate left of A?

a) H b) E c) G d) Data inadequate e) None of these

37 Who is fourth to the right of B?

a) C b) E c) A d) Data inadequate e) None of these

38 What is E's position with respect to G?

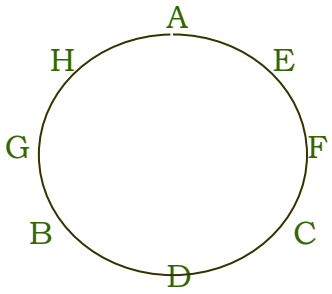
a) Second to the right b) Third to the left c) Third to the right d) Second to the left e) None of these

39 How many of them are there between H and C?

a) Two b) Three c) Two or three d) Data inadequate e) None of these

40 In which of the following pairs is the first person sitting to the immediate left of the second person?

a) CD b) BG c) HA d) FC e) None of these



P, Q, R, S, T, U and V are sitting along a circle and are facing the centre. P is between T and S. U is between Q and V. Q is second to the right of T.

41 Which of the following is the wrong statement?

a) S is immediate neighbour of V b) R is immediate neighbour of T c) Q is immediate neighbour of R d) T is immediate neighbour of S e) All are correct statements

42 Which of the following pairs has its first member sitting second to the right of the second member?

a) US b) TS c) RU d) PR e) None of these

43 Which of the following pairs has its second member sitting to the immediate left of the first member?

a) PT b) RQ c) UV d) SP e) None of these

44 What is the position of R?

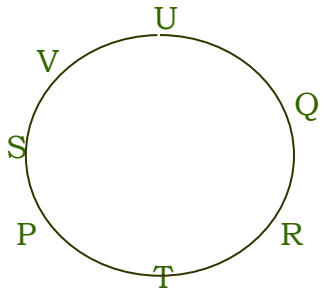
a) Can't be determined b) Between Q and T c) To the immediate left of T d) Second to the right of Q e) None of these

45 V is ----

a) Between P and U b) Second to the left of P c) To the immediate left of U d) forth to the left of T e) None of these

46 Which of the following is the correct statement?

a) S is between R and P b) Q is between T and R c) P is third to the left of Q d) S is to the immediate left of V e) None of these



A, B, C, D, E, F, G and H are sitting around a circle facing at the centre. F is third to the right of B who is third to the right of H. A is third to the left of H. C is fourth to the left of A. E is third to the right of D who is not a neighbour of A.

47 In which of the following pairs the second person is to the immediate right of the first person?

a) BE b) HC c) GB d) FA e) None of these

48 Who is second to the right of D?

a) F b) G c) A d) Data inadequate e) None of these

49 Who is third to the left of G?

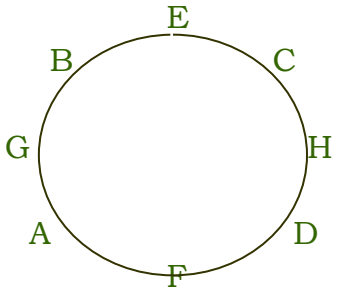
a) H b) D c) C d) F e) None of these

50 Who is fourth to left of C?

a) F b) A c) E d) Data inadequate e) None of these

51 What is B's position with respect to D?

a) Fourth to the right b) Fourth to the left c) a & b d) Fifth to the left e) Fifth to the right



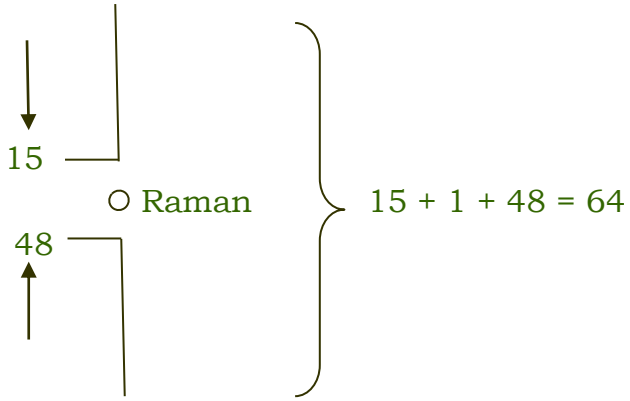
RANKING TEST

REASONING

VERBAL AND NON VERBAL

1) Raman ranks sixteenth from the top and forty ninth form the bottom in a class. How many students are there in the class?

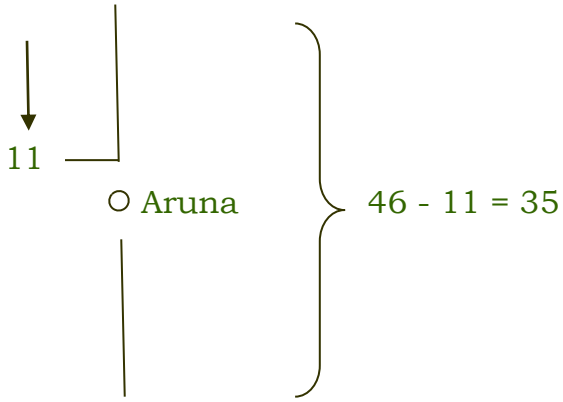
a) 66 b) 65 c) 64 d) None of these



15 + 1 + 48
64

2) Aruna ranks twelfth in a class of forty-six. What will be her rank from the last?

a) 37 b) 33 c) 35 d) None of these

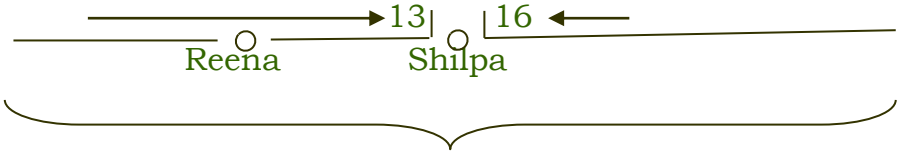


46 – 11
35

3) In a row of girls, Shilpa is eighth from the left and Reena is seventeenth from the right. If they interchange their positions. Shilpa becomes fourteenth from the left. How many girls are there in the row?

a) 25 b) 27 c) 32 d) None of these

Interchange their positions



13 + 1 + 16

30

4) In a row of boys, Deepak is seventh from the left and Madhu is twelfth from the right. If they interchange their positions, Deepak becomes twenty-second from the left. How many boys are there in the row?

a) 19 b) 33 c) 31 d) None of these

Interchange their positions

21 + 1 + 11

33

MATHEMATICAL OPERATIONS

REASONING

VERBAL AND NON VERBAL

1) If - means x, x means +, + means ÷ and ÷ means -, then 40x12+3-6÷60=?

a) 8 b) 16 c) 64 d) None of these

- = x
x = +
+ = ÷
÷ = -

40 + 12 ÷ 3 x 6 – 60 = ?
40 + 4 x 6 – 60 = ?
40 + 24 – 60 = ?
64 -60 = ?
? = 4

2) If + means ÷, x means -, ÷ means x and – means + then 8+6x4÷3-4=?

a) 12 b) -12 c) -20/3 d) 20/3

+ = ÷
x = -
÷ = x
- = +

8 ÷ 6 – 4 x 3 + 4 = ?
4/3 – 12 + 4 = ?
(4 – 36 + 12)/3 = ?
-20/3 = ?

3) If x means +, ÷ means -, - means x and + means ÷ then 8x 7-8+40÷2=?

a) 1 b) 37/5 c) 44 d) None of these

x = +
÷ = -
- = x
+ = ÷

8 + 7 x 8 ÷ 40 - 2
8 + 7 x 1/5 - 2
8 + 7/5 -2
(40 + 7 – 10)/5
35/ 5 or 7 (2/5)

4) If + means -, - means x, x means ÷ and ÷ means +, then 15x3÷15+5-2=?

a) 0 b) 6 c) 10 d) None of these

+ = -
- = x
x = ÷
÷ = +

15 ÷ 3 + 15 – 5 x 2 = ?
5 + 15 -10 = ?
10 = ?

5) If x means -, + means ÷, - means x and ÷ means +, then 15-2÷900+90x100=?

a) 190 b) 180 c) 90 d) None of these

x = -
+ = ÷
- = x
÷ = +

15 x 2 + 900 ÷90 - 100 = ?
30 + 10 -100 = ?
-60 = ?

6) If a means plus, b means minus, c means multiplied by and d means divided by, then 18 c 14 a 6 b 16 d 4 = ?

a) 63 b) 254 c) 288 d) None of these

a = +
b = -
c = x
d = ÷

18 x 14 + 6 – 16 ÷ 4 = ?
252 + 6 – 4 = ?
254 = ?

7) If A means -, B means ÷, C means + and D means x, then 15 B 3 C 24 A 12 D 2 = ?

a) 34 b) 2 c) 5 d) None of these

A = -
B = ÷
C = +
D = x

15 ÷ 3 + 24 – 12 x 2 = ?
5 + 24 – 24 = ?
5

8) If + means divided by, - means multiplied by, x means minus, and ÷ means plus, which of the following will be the value of the expression 16÷8-4+2x4=?

a) 16 b) 28 c) 32 d) None of these

+ = ÷
- = x
x = -
÷ = +

16 + 8 x 4 ÷ 2 – 4 = ?
16 + 6 – 4 = ?
28 = ?

9) If A means plus, B means minus, C means divided by, and D means multiplied by then 18 A 12 C 6 D 2 B 5 =?

a) 15 b) 25 c) 27 d) None of these

A = +
B = -
C = ÷
D = x

18 + 12 ÷ 6 x 2 – 5 = ?
18 + 2 x 2 – 5 = ?
18 + 4 – 5 = ?
17 = ?

FAMILY BASED PROBLMES

REASONING

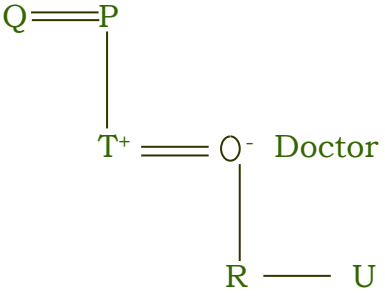
VERBAL AND NON VERBAL

P, Q, R, S, T and U are six members in a family in which there are two married couples. T a teacher is married to the doctor who is mother of R and U. Q, the lawyer is married to P. P has one son and one grandson. Of the two married ladies one is a housewife. There is also one student and one male engineer in the family.

1 How is P related to R?
   a) Grandfather b) Mother c) Sister d) Grandmother e) None of these
2 Who among the following is the housewife?
   a) Q b) P c) S d) T e) None of these
3 How is R related to U?
   a) Brother b) Sister c) Brother or Sister d) Data inadequate e) None of these
4 Which of the following represents the group of females in the family?
   a) PSR b) PSU c) QTR d) Data inadequate e) None of these
5 Which of the following is true about the grand daughter in the family?
   a) She is a lawyer b) She is student c) She is an engineer
   d) Data inadequate e) None of these

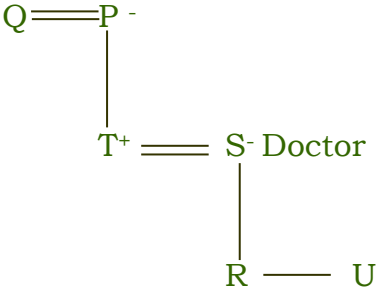
Name	+/-	Designation
P		
Q		Lawyer
R		
S		
T	+	Teacher
U		

Relation Tree



Name	+/-	Designation
P	-	Housewife
Q	+	Lawyer
R		Student / Engineer
S	-	Doctor
T	+	Teacher
U		Student / Engineer

Relation Tree



There is a family of six members A, B, C, D, E and F. There are two married couples in the family and family members represent three generations. Each member has a distinct choice of a colour amongst green, yellow, black, red, white and pink. No lady member likes either green or white. C, who likes black colour is the daughter –in-law of E. B is brother of F and son of D and likes pink. A is grandmother of F and F does not like red. The husband has a choice of green colour, his wife likes yellow.

6 Which of the following is the colour preference of A?
a) Red b) Yellow c) Either Red or Yellow d) Cannot be determined e) None of these

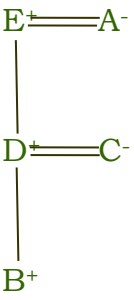
7 How many male members are there in the family?
a) Two b) Three c) Four d) Cannot be determined e) None of these

8 Which of the following is the colour combination of one of the couples?
a) Red – Yellow b) Yellow – Red c) Green – Black d) Yellow – Green e) None of these

Name	+/-	Colour
A	-	Yellow
B	+	Pink
C	-	Black
D	+	
E	+	Green
F		~~Red~~, Green, Yellow, White

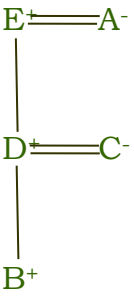
* Lady = ~~Green~~ or ~~White~~

Relation Tree



Name	+/-	Colour
A	-	Yellow
B	+	Pink
C	-	Black
D	+	Red
E	+	Green
F	+	~~Red~~, Green, Yellow, White

Relation Tree



9 Which of the following is true about F?

a) Sister of B b) Brother of B c) Dater of C d) Either sister of brother e) None of these

10 Which of the following is one of the married couples?

a) AC b) CD c) DA d) Cannot be determined e) None of these

P, Q, R, S T and U are six members of a group of which three are males and three are females. There are two engineers, two lawyers, one teacher and one doctor in the group. Q, T, P and P are two married couples and no person in this group has the same profession. T, a teacher with blue dress, married a male lawyer with brown dress. Colour of the dresses of both the husbands and that of both the wives is the same. Two persons have blue dress, two have brown and the remaining on each has black and green. P is a male engineer whose sister S is also an engineer. Q is a doctor.

11 Who is the wife of P?
a) R b) Q c) S d) T e) None of these

12 Which of the following is a group of female members?
a) QSR b) QST c) QSU d) QTU e) UST

13 Which of the following is a pair of married ladies?
a) PR b) TS c) QT d) Data inadequate e) None of these

14 What is the colour of U's dress?
a) Black b) Green c) Black or Green d) Data inadequate e) None of these

Name	+/-	Designation	Colour	Relation
P	+	Engineer		
Q		Doctor		P^{+}———— S^{-}
R				
S	-	Engineer		
T	-	Teacher	Blue	Lawyer ◯$^{+}$ ————T^{-}
U				Brown

* Q, T, P, R married couple and no one same profession. 3 are males and 3 are females. Both husband and that of both wives dress same colour.

Name	+/-	Designation	Colour	Relation
P	+	Engineer	Brown	
Q	-	Doctor	Blue	Q^{-}═══P^{+}———— S^{-}
R	+	Lawyer	Brown	
S	-	Engineer	Black or Green	
T	-	Teacher	Blue	Lawyer R^{+} ————T^{-}
U	+	Lawyer	Black Green	Brown

In a family of six persons, there are people from three generations. Each person has separate profession and also they like different colours. There are two couples in the family.
Rohan is a CA and his wife neither is a doctor and nor likes green colour.
Engineer likes red colour and his wife is a teacher. Mohini is mother in law of Sunita and she likes orange colour.
Vinod is grandfather of Tanmay and Tanmay, who is a principal, likes black colour.
Nanu is grand-daughter of Mohin and she likes blue colour. Nanu's mother likes white colour.

15 Who is an Engineer?
a) Nanu b) Mohini c) Sunita d) Cannot be determined e) None of these
16 What is the profession of Sunita?
a) Engineer b) Doctor c) Teacher d) Can't be determined e) None of these
17 Which of the following is the correct pair of two couples?
a) Rohan-Sunita and Tanmay-Nanu b) Vinod-Mohini and Rohan-Nanu c) Mohini-Vinod and Rohan-Sunita d) Cannot be determined e) None of these
18 How many ladies are there in the family?
a) Two b) Three c) Four d) Can't be determined e) None of these
19 Which colour is likes by CA?
a) White b) Green c) White or Green d) Can't be determined e) None

Name	+/-	Designation	Colour
Rohan	+	CA	Green
Sunita	-	~~Doctor~~	~~Green~~, White
Vinod	+	Engineer	Red
Mohini	-	Teacher	Orange
Tanmay	+	Principal	Black
Nanu	-	Doctor	Blue

Relation Tree

Vinod ═══ Mohini
|
Rohan ═══ Sunita
|
Tanmay ═══ Nanu

* Rohan wife ~~Doctor~~, ~~Green~~

* Engineer ◯ ⁺═══◯ ⁻ Teacher
Red

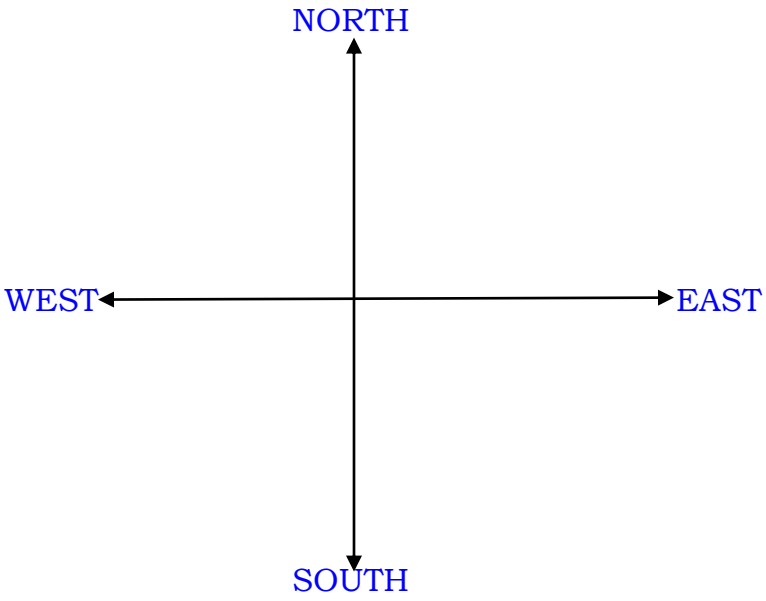
DIRECTION SENCE TEST

REASONING

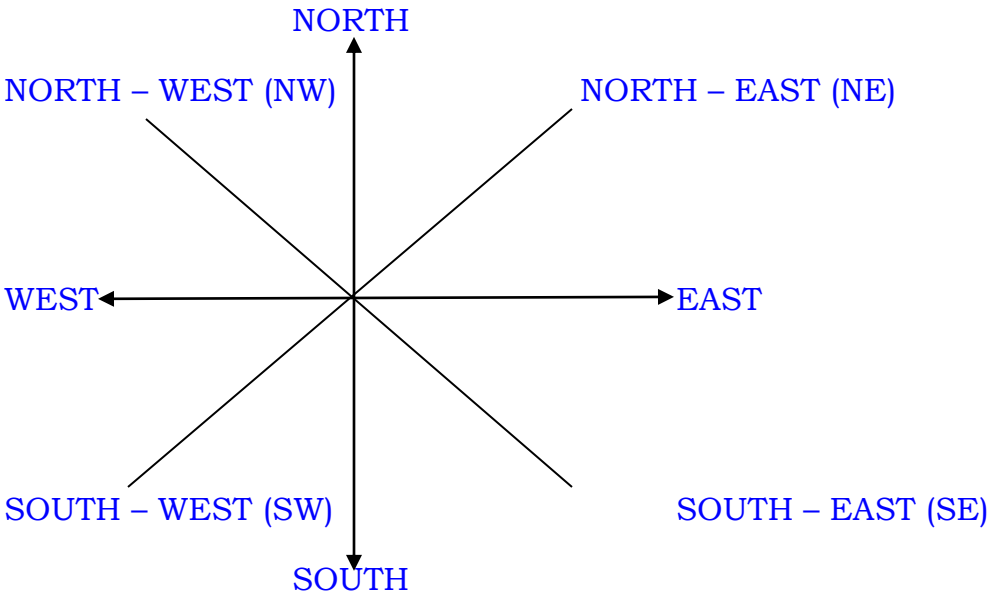
Main Directions: These are four. North, South, East, West.

Opposite Direction of North is South, as versa.

Opposite Direction of East is West, as versa.



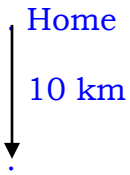
Sub Directions: These are corners of Main Directions



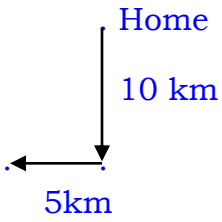
Note: I remember only one corner (NE) and South before exam

One day, Ravi left home and cycled 10 km southwards, turned right and cycled 5 km and turned right and cycled 10 km and turned left and cycled 10 km.

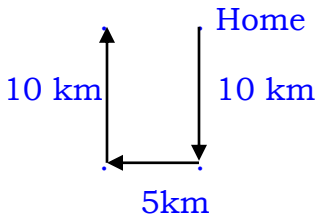
Step 1: 10 km southwards from home



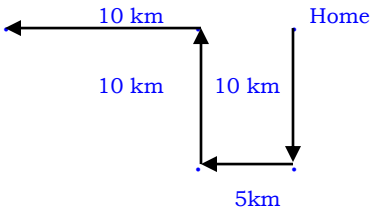
Step 2: 5 km right side



Step 3: 10 km right side

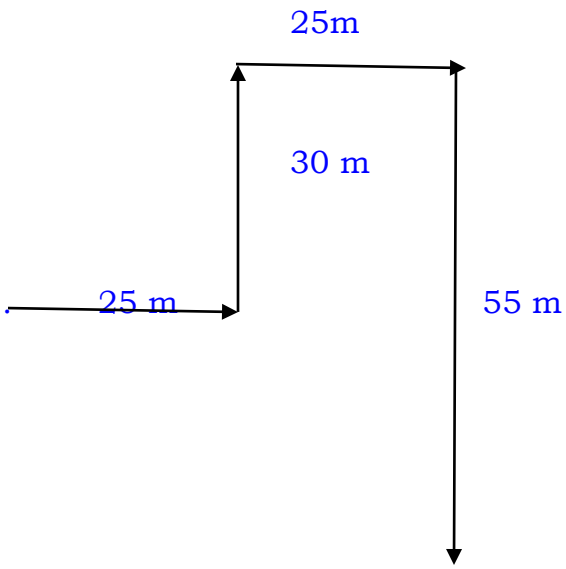


Step 4: 10 km left side

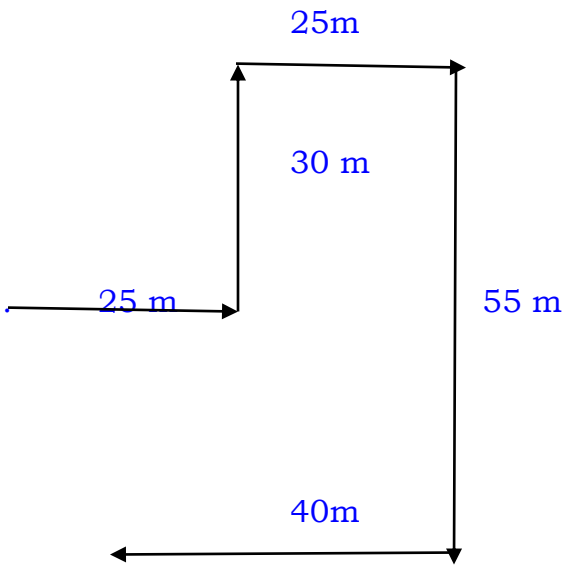


1 How is far from starting point?
5+10 = 15
2 Which direction is he facing?
West
3 From his position, which direction his home is?
East

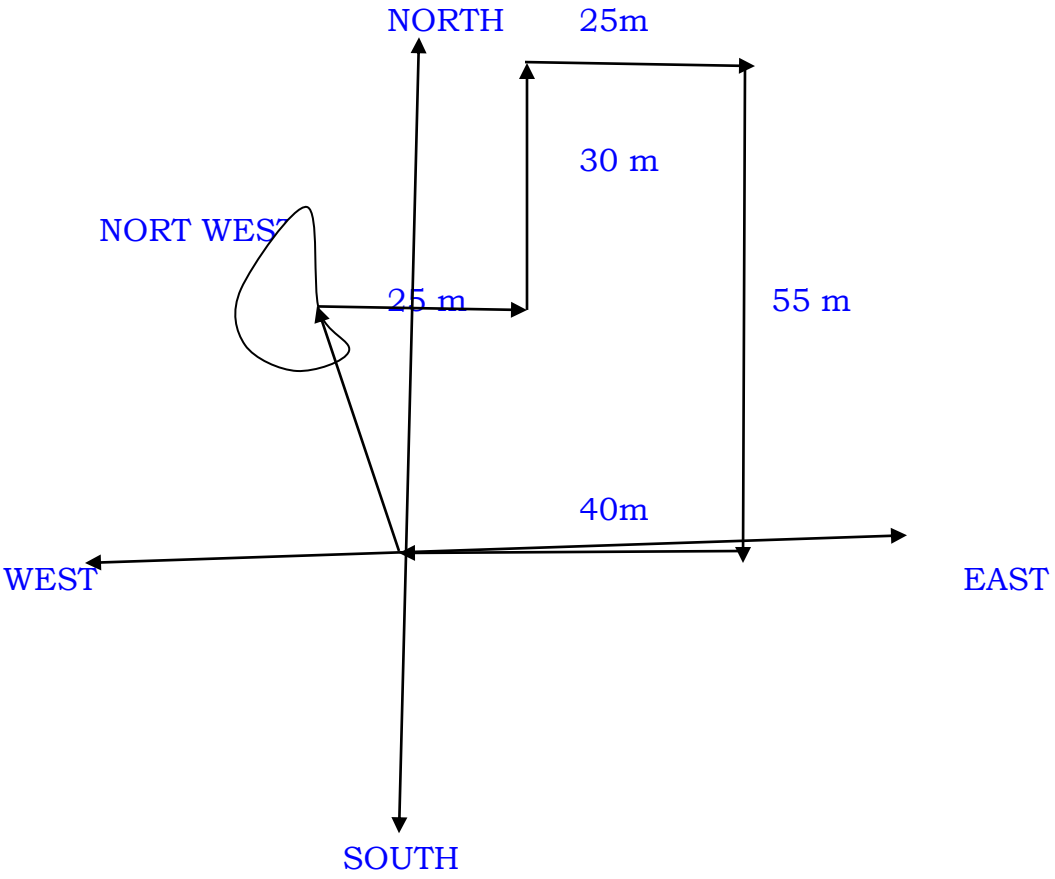
Step 6: Kailash walks 55 meters his right side



Step 7: Kailash walks 40 meters his right side



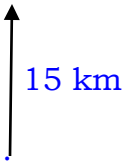
4 Which direction he is facing?
West
5 Which direction he is from starting point?
South East
6 Which direction his starting point



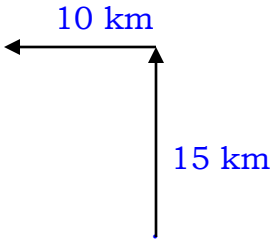
Answer: NORTH WEST

Johnson left for his office in his car he drove 15km toward north and then 10 km toward west. He then turned to south and covered 5 km. further, he turned to the east and moved 8 km. finally, he turned right and drove 10 km.

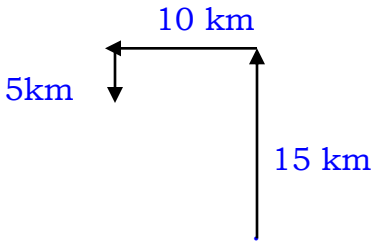
Step 1: Johnson moves 15 km north side



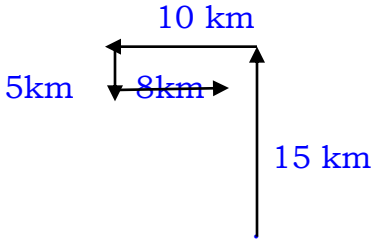
Step 2: Johnson moves 10 km west side



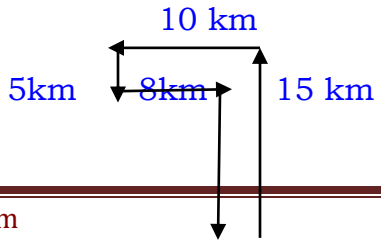
Step 3: Johnson moves 5 km south side



Step 4: Johnson moves 8 km east side

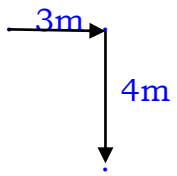


Step 5: Johnson moves 10 km right side



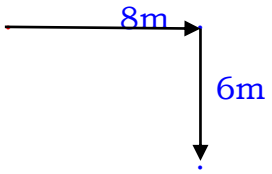
7 How is far from starting point?
2 km
8 Which direction he is facing
South
9 From starting point which direction he is?
West
10 Which direction his starting point?
East

Johnson left for his home he moves 3 m toward east, and then 4m toward south. How far he is from starting point?



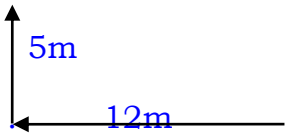
$\sqrt{[3^2+4^2]} = \sqrt{[9+16]} = \sqrt{[25]} = 5m$

Johnson left for his home he move 8 m his right, and then 6m toward south. How far he is from starting point?



$\sqrt{[8^2+6^2]} = \sqrt{[64+36]} = \sqrt{[100]} = 10m$

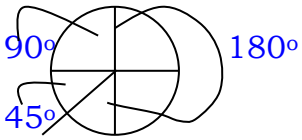
Johnson left for his home he move 12 m his left, and then 5 m move right. How far he is from starting point?



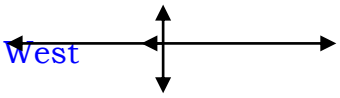
$\sqrt{[12^2+5^2]} = \sqrt{[144+25]} = \sqrt{[169]} = 13m$

A man is facing west. He turns 45° in the clockwise direction and then another 180° in the same direction and then 270° is the anti clockwise direction. Which direction is he facing now?

Circle has 360°



A man facing west

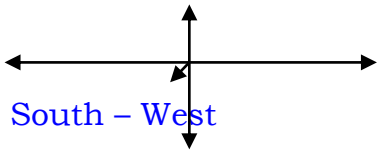


Clockwise Anti clockwise

45 + 180 =225 270 (135 - 270)

= - 45

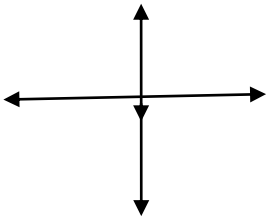
Now we turn 45° Anti clockwise direction



Answer is South West

A man is facing south. He turns 135° in the anti clockwise direction and then 180° in the clockwise direction. Which direction is he facing now?

A man facing south



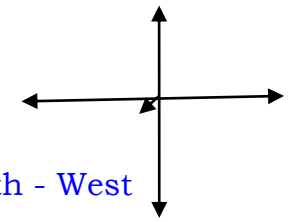
South

Clockwise Anti clockwise

180 135

= + 45

Now we turn 45° clockwise direction

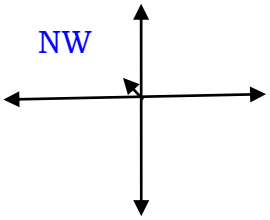


South - West

Answer is South West

A man is facing North West. He turns 90° in the clockwise direction and then 135° in the anti clockwise direction. Which direction is he facing now?

A man facing North West



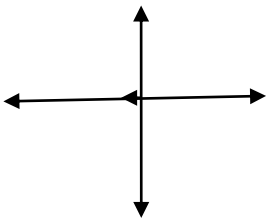
South

Clockwise Anti clockwise

90 135

= - 45

Now we turn 45° Anti clockwise direction



Answer is West

CODING & DECODING

REASONING

VERBAL AND NON VERBAL

Do you know everyone “A, B, C, D’s” up to “Z”

Pupils say, yes, I know them.

Yeah! Good!!

But I do not know how to write and in sequence them?

Can you tell me them?

Pupils says like this,

A B C D E F G H I J K L M

Z Y X W V U T S R Q P O N

Thanks!

Dear pupils watch it, clearly…

A => 1
B => 2
C => 3

X => 24
Y => 25
Z => 26

Dear my Pupils! Could you understand above what I wrote? No problem I can explain above them.

A is the first later in the alphabetical order, so I wrote here (A => 1)

B is the second later in the alphabetical order, so I wrote here (B => 2)

C is the third later in the alphabetical order, so I wrote here (C => 3)

X is the twenty fourth later in the alphabetical order, so I wrote here (X => 24)

Y is the twenty fifth later in the alphabetical order, so I wrote here (Y => 25)

Z is the twenty six later in the alphabetical order, so I wrote here (Z => 26)

Pupils! Everyone got it.
Pupils say yes, we are.
Ok! Good!!

A^{1} B^{2} C^{3} D^{4} E^{5} F^{6} G^{7} H^{8} I^{9} J^{10} K^{11} L^{12} M^{13}

Z^{26} Y^{25} X^{24} W^{23} V^{22} U^{21} T^{20} S^{19} R^{18} Q^{17} P^{16} O^{15} N^{14}

Pupils listen here! I want to say one thing each Pupil. Above alphabet and their alphabet numbers are. Pupils memorize all of them within three minutes. These are useful to us upcoming.

Pupils! Here, we discuss some words letter position (alphabet number).

TELANGANA

'TELANGANA' is word.

T's letter position is '20'
E's letter position is '5'
L's letter position is '12'
A's letter position is '1'
N's letter position is '14'
G's letter position is '7'
A's letter position is '1'
N's letter position is '14'
A's letter position is '1'

Dear my Pupils! Got it?
Yes, we do.

Can you say letter position of the word 'INDIA'?
Yes, we can.

What is the position of the 'I' in the alphabet order? (Pupils say 9)
What is the position of the 'N' in the alphabet order? (Pupils say 14)
What is the position of the 'D' in the alphabet order? (Pupils say 4)
What is the position of the 'I' in the alphabet order? (Pupils say 9)
What is the position of the 'A' in the alphabet order? (Pupils say 1)

'HYDERABAD'

H(=8) Y(=25) D(=4) E(=5) R(=18) A(=1) B(=2) A(=1) D(=4)

Pupils solve following?

Weeks (Sunday to Saturday)
Months (January to December)
States (29 states)
And take more as own and solve it.

Dear my Pupils! Will you know additions?
Yes, we know.
I give some problems on addition. Can you do it?
Yes, we can.

1 + 3 = ?

Dear my Pupils! What is the answer above problem?
Pupils say answer as '4'
Good going Pupils.

13 + 21 = ?

Dear my Pupils! What is the answer above problem?
Pupils say answer as '34'
Good going Pupils.

17 + 09 = ?

Dear my Pupils! What is the answer above problem?
Pupils say answer as '26'
Good going Pupils.

Pupils! Can you say the addition of position of the letter in alphabet of word?
Pupils say, yes, we can.

TELANGANA

What is the position of 'T' in the alphabet order? (Pupils say as '20')
What is the position of 'E' in the alphabet order? (Pupils say as '5')
What is the position of 'L' in the alphabet order? (Pupils say as '12')
What is the position of 'A' in the alphabet order? (Pupils say as '1')
What is the position of 'N' in the alphabet order? (Pupils say as '14')
What is the position of 'G' in the alphabet order? (Pupils say as '7')
What is the position of 'A' in the alphabet order? (Pupils say as '1')
What is the position of 'N' in the alphabet order? (Pupils say as '14')
What is the position of 'A' in the alphabet order? (Pupils say as '1')

Now we add them

T E L A N G A N A
20 5 12 1 14 7 1 14 1
20+5+12+1+14+1+14+1
68

Can you try 'INDIA'?

I N D I A
9 14 4 9 1
9+14+4+9+1
37

Try the following at home.

SUNDAY, MONDAY, ----- SATURDAY
JANUARY, FEBRUARY, ---- DECEMBER
And take more and try it.

Opposite Coding

Pupils! Watch the following carefully.

A^{1}	B^{2}	C^{3}	D^{4}	E^{5}	F^{6}	G^{7}	H^{8}	I^{9}	J^{10}	K^{11}	L^{12}	M^{13}
Z^{26}	Y^{25}	X^{24}	W^{23}	V^{22}	U^{21}	T^{20}	S^{19}	R^{18}	Q^{17}	P^{16}	O^{15}	N^{14}
27	**27**	**27**	**27**	**27**	**27**	**27**	**27**	**27**	**27**	**27**	**27**	**27**

Get it everyone. Do not worry, I can explain you. 'A' is the first latter of the English alphabet order and 'Z' is the twenty six later in the English alphabet order.

A + Z

1 + 26

27

B + Y (2+25=27), C + X (3+24=27), ----, M + N (13+14=27), ----, Z + A (26+1=27)

Now we discuss some exercises on Opposite Coding.

DELHI

'D' is the fourth letter in the English alphabet order.
Pupils! How much I have to add to get 27?
Pupils say answer is 23 (4 + ? = 27)
Pupils! What is the 23rd letter in the English alphabetical order?
Pupils say the answer is 'W'.
Yes! Good going!!
So, 'D"s opposite code is 'W'.

'E' is the fourth letter in the English alphabet order.
Pupils! How much I have to add to get 27?
Pupils say answer is 22 (5 + ? = 27)
Pupils! What is the 22nd letter in the English alphabetical order?
Pupils say the answer is 'V'.
So, 'E"s opposite code is 'V'.

'L' is the fourth letter in the English alphabet order.
Pupils! How much I have to add to get 27?
Pupils say answer is 15 (12 + ? = 27)
Pupils! What is the 15th letter in the English alphabetical order?
Pupils say the answer is 'O'.
So, 'L"s opposite code is 'O'.

'H' is the fourth letter in the English alphabet order.
Pupils! How much I have to add to get 27?
Pupils say answer is 19 (8 + ? = 27)
Pupils! What is the 19th letter in the English alphabetical order?
Pupils say the answer is 'S'.
So, 'H"s opposite code is 'S'.

'I' is the fourth letter in the English alphabet order.
Pupils! How much I have to add to get 27?
Pupils say answer is 18 (9 + ? = 27)
Pupils! What is the 18th letter in the English alphabetical order?
Pupils say the answer is 'R'.
So, 'I"s opposite code is 'R'.

D^4 E^5 L^{12} H^8 I^9
W^{23} V^{22} O^{15} S^{19} R^{18}

INDIA (Opposite Code)

'I' => 9 (9 + ? = 27)
18 => 'R' (9 + 18 = 27)

'N' => 14 (14 + ? = 27)
13 => 'M' (14 + 13 = 27)

'D' => 4 (4 + ? = 27)
23 => 'W' (9 + 23 = 27)

'I' => 9 (9 + ? = 27)
18 => 'R' (9 + 18 = 27)

'A' => 1 (1 + ? = 27)
26 => 'Z' (9 + 26 = 27)

I^9 N^{14} D^4 I^9 A^1
R^{18} M^{13} W^{23} R^{18} Z^{26}

NOTEBOOK (Opposite Code)

N^{14} O^{15} T^{20} E^5 B^2 O^{15} O^{15} K^{11}
M^{13} L^{12} G^7 V^{22} Y^{25} L^{12} L^{12} P^{16}

Pupils! Do the practice at home.

Vegetables (Ladyfinger, Tomato, etc)
Fruits (apple, Orange, Blackberry etc)
And take more and do it.

Corresponding Coding

Pupils! Watch the following carefully.

A^{1}	B^{2}	C^{3}	D^{4}	E^{5}	F^{6}	G^{7}	H^{8}	I^{9}	J^{10}	K^{11}	L^{12}	M^{13}
N^{14}	O^{15}	P^{16}	Q^{17}	R^{18}	S^{19}	T^{20}	U^{21}	V^{22}	W^{23}	X^{24}	Y^{25}	Z^{26}
27	27	27	27	27	27	27	27	27	27	27	27	27

Get it everyone. Do not worry, I can explain you. 'A' is the first latter of the English alphabetical order and 'N' is the fourteen later in the English alphabetical order.

A – N

$|1 - 14|$

13

B – O ($|2-15=13|$), C - P (3-16=13), ----, M - Z (13-26=13), ----, A - N (1-14=13)

Now we discuss some exercises on Corresponding Coding.

DELHI

'D' is the fourth letter in the English alphabet order.
Pupils! How much I have to subtract to get |-13| or 13?
Pupils say answer is |-17| or 17 (|4 - ?| = 13)
Pupils! What is the 17th letter in the English alphabetical order?
Pupils say the answer is 'Q'.
Yes! Good going!!
So, 'D"s Corresponding code is 'Q'.

'E' is the fifth letter in the English alphabet order.
Pupils! How much I have to subtract to get |-13| or 13?
Pupils say answer is |-18| or 18 (|5 - ?| = 13)
Pupils! What is the 18th letter in the English alphabetical order?
Pupils say the answer is 'R'.
So, 'E"s Corresponding code is 'R'.

'L' is the twelfth letter in the English alphabet order.
Pupils! How much I have to subtract to get |-13| or 13?
Pupils say answer is |-25| or 25 (|12 - ?| = 13)
Pupils! What is the 18th letter in the English alphabetical order?
Pupils say the answer is 'Y'.
So, 'L"s Corresponding code is 'Y'.

'H' is the eighth letter in the English alphabet order.
Pupils! How much I have to subtract to get |-13| or 13?
Pupils say answer is |-21| or 21 (|8 - ?| = 13)
Pupils! What is the 21st letter in the English alphabetical order?
Pupils say the answer is 'U'.
So, 'H"s Corresponding code is 'U'.

'I' is the ninth letter in the English alphabet order.
Pupils! How much I have to subtract to get |-13| or 13?
Pupils say answer is |-22| or 22 (|12 - ?| = 13)
Pupils! What is the 22nd letter in the English alphabetical order?
Pupils say the answer is 'V'.
So, 'I"s Corresponding code is 'V'.

D^{4} E^{5} L^{12} H^{8} I^{9}
Q^{17} R^{18} Y^{25} U^{21} V^{22}

INDIA (Corresponding Code)

'I' => 9 (|9 - ?| = 13)
22 => 'V' (|9 - 22| = 13)

'N' => 14 (|14 - ?| = 13)
1 => 'A' (|14 - 1| = 13)

'D' => 4 (|4 - ?| = 13)
17 => 'A' (|4 - 17| = 13)

'I' => 9 (|9 - ?| = 13)
22 => 'V' (|9 - 22| = 13)

'A' => 1 (|1 - ?| = 13)
14 => 'A' (|1 - 14| = 13)

NOTEBOOK (Corresponding Code)

N^{14} O^{15} T^{20} E^{5} B^{2} O^{15} O^{15} K^{11}
A^{1} B^{2} G^{7} R^{18} O^{15} B^{2} B^{2} X^{24}

CLASSIFICATION

REASONING

VERBAL AND NON VERBAL

In a school, there were five teachers. A and B were teaching Hindi and English. C and B were teaching English and Geography. D and A were teaching Mathematics and Hindi. E and B were teaching History and French.

1 Who among the teachers was teaching maximum number of subjects?
a) A b) B c) C d) D e) E

2 Which of the following pairs was teaching both Geography and Hindi?
a) A and B b) B and C c) C and A d) D and B e) None of these

3 More than two teachers were teaching which subject?
a) History b) Hindi c) French d) Geography e) Mathematics

4 D, B and A were teaching which of the following subjects?
a) English only b) Hindi and English c) Hindi only d) English and Geography e) Mathematics and Hindi

5 Who among the teachers was teaching less than two subjects?
a) A b) B c) D d) Data inadequate e) there is no such teacher

	Hindi	English	Geography	Mathematics	History	French
A	yes	yes	no	yes	no	no
B	yes	yes	yes	no	yes	yes
C	no	yes	yes	no	no	no
D	yes	no	no	yes	no	no
E	no	no	no	no	yes	yes

1) B teaches 5 subjects excepts Mathematics
2) Only B teaches Hindi and Geography
3) More than two teachers were teaching Hindi and English
4) D, B and A teaching Hindi
5) No one less than teach two subjects

Jayant, Kamal, Namita, Asha and Tanmay are five members of a family. They have their birth dates from January to May, each member in one of these months. Each one likes one particular item for his/her birthday out of Bengali Sweets, Chocolates, Pastries, Ice Cream and Dry Fruits. The one who likes Pastries is born in the month which is exactly middle in the months given. Asha does not like Ice cream but Chocolates for Jayant in February. Tanmay who is fond of Bengali sweets is born in the next month immediately after Namita. Namita does not like Dry fruits or Ice Cream.

6 What is the choice of Asha?
a) Pastries b) Dry fruits c) Bengali sweets d) Cannot be determine
e) None of these

7 Which combination of month and item is true for Jayant?
a) March – Pastries b) February – Pastries c) February – Ice cream
d) Cannot be determine e) None of these

8 What is the choice of Kamal?
a) Bengali sweets b) Ice cream c) Dry fruits d) Cannot be determine
e) None of these

9 In which month was Kamal born?
a) January b) may c) January or May d) Data inadequate e) None

Bengali Sweets (B), Chocolates (C), Pastries (P), Ice Cream (I), Dry Fruits (D) and January (J), February (F), March (M), April (A), May (M')

Name	Month	Likes
Jayant	F	C
Kamal		
Namita		~~D~~, ~~I~~, B, C, P
Asha		~~I~~, B, C, P, D
Tanmay		B

* J F M A M'
P

* Namita's birth next month Tanmay birth month

From above table, Namita likes Pastries, so Namita birth month is March and Tanmay birth is April

Name	Month	Likes
Jayant	F	C
Kamal	J & M'	I
Namita	M	~~D~~, ~~I~~, B, C, P
Asha	J & M'	~~I~~, B, C, P, D
Tanmay	A	B

6) Asha likes Dry fruits
7) Jayant birth month is February and likes Chocolates
8) Kamal likes Ice cream
9) Kamal was born on January or May

P, Q, R, S, T and U are six students procuring their Master's degree in six different subjects – English, History, Philosophy, Physics, Statistics and Mathematics. Two of them stay in hostel, two stay as paying guest and the remaining two stay at their home. R does not stay as paying guest and studies Philosophy. The students studying Statistics and History do not stay as paying guest. T studies Mathematics and S studies Physics. U and S stay in hostel. T stays as paying guest and Q stays at home.

10 Who studies English?
a) R b) S c) T d) U e) None of these

11 Which of the following combinations of subject and place of stay is not correct?
a) Physics – Hostel b) Mathematics – Paying guest
c) Philosophy – Home d) English– Hostel e) None of these

12 Which of the following pairs of students stay one each at hostel and at home?
a) QR b) SR c) US d) Data inadequate e) None of these

13 Which subject does Q study?
a) History b) Statistics c) History or Statistics d) Data inadequate e) None of these

14 Which of the following pairs of students stay at home?
a) PQ b) QR c) RS d) ST e) None of these

Name	Subject	Place of Stay
P		
Q		Home
R	Philosophy	~~Paying guest~~, Hostel, Home
S	Physics	Hostel
T	Mathematics	Paying guest
U		Hostel

* Statistics and History – ~~Paying guest~~,

From above table,

Name	Subject	Place of Stay
P	English	Paying guest
Q	Statistics and History	Home
R	Philosophy	~~Paying guest~~, Hostel, Home
S	Physics	Hostel
T	Mathematics	Paying guest
U	Statistics and History	Hostel

10) P studies English
11) Paying guest (English & Mathematics)
12) Home (Q & R), Hostel (S & U)
13) Q studies Statistics and History
14) Q and R stay at home

There are six friends A, B, C, D, E and F. Each one is proficient in one of the games, namely Badminton, Volleyball, Cricket, Hockey, Tennis and Polo. Each owns a different coloured car, namely yellow, green, black, white, blue and red. D plays Polo and owns a yellow coloured car. C does not play either Tennis or Hockey and owns neither blue nor yellow coloured car. E owns a white car and plays Badminton. B does not play Tennis, he owns a red coloured car. A plays Cricket and owns a black car.

15 Who plays Volleyball?

a) B b) C c) F d) Data inadequate e) None of these

16 Which coloured car F owns?

a) Green b) Blue c) Either Green or Blue d) Data inadequate e) None of these

17 Which of the following combinations of colour of car and game played is not correct?

a) Yellow – Polo b) Green – Tennis c) Black – Cricket d) Red – Hockey e) None of these

Badminton (B), Volleyball (V), Cricket (C), Hockey (H), Tennis (T), Polo (P)
Yellow (Y), Green (G), Black (B), White (W), Blue (B') and Red (R)

Name	Game	Colour of Car
A	C	B
B	~~T~~, V, C, H	R
C	~~T~~, ~~H~~, B, V, C	~~B'~~, ~~Y~~, G, B, W, R
D	P	Y
E	B	W
F		

From the above table,

Name	Game	Colour of Car
A	C	B
B	~~T~~, V, C, H	R
C	~~T~~, ~~H~~, B, V, C	B', Y, G, B, W, R
D	P	Y
E	B	W
F	T	B'

Five friends P, Q. R, S and T travelled to five different cities of Chennai, Calcutta, Delhi, Bangalore, and Hyderabad by five different modes of transport of Bus, Train, Aero plane, Car, and Boat from Mumbai. The person who travelled to Delhi did not travel by boat. R went to Bangalore by Car and Q went to Calcutta by Aero plane. S travelled by boat where as T travelled by Train. Mumbai is not connected by bus to Delhi and Chennai.

18 Which of the following combinations of person and mode is not correct?
a) P – Bus b) Q – Aero plane c) R – Car d) S – Boat e) T - Aero plane

19 Which of the following combinations is true for S?
a) Delhi – Bus b) Chennai – Bus c) Chennai - Boat d) Data inadequate e) None of these

20 Which of the following combinations of place and mode is not correct?
a) Calcutta – Aero plane b) Delhi – Bus c) Bangalore – Car d) Chennai – Boat e) Hyderabad - Bus

21 The person travelling to Delhi went by which of the following modes?
a) Bus b) Train c) Aero plane d) Car e) Boat

22 Who among the following travelled to Delhi?
a) R b) S c) T d) Data inadequate e) None of these

Name	Place	Mode
P	~~Delhi~~, ~~Chennai~~, Hyd	Bus
Q	Calcutta	Aero plane
R	Bangalore	Car
S		Boat
T		Train

* Delhi - ~~Boat~~

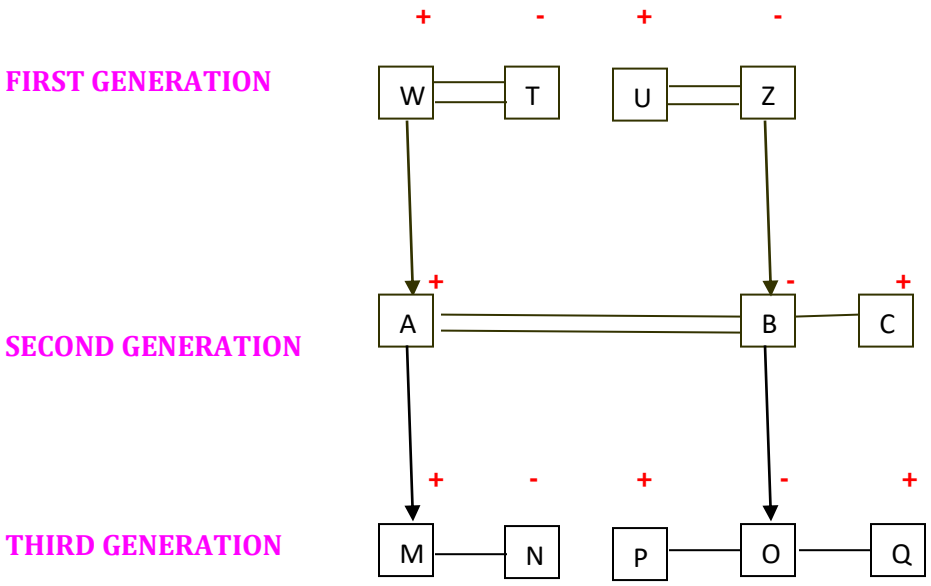
From the above table

Name	Place	Mode
P	~~Delhi~~, ~~Chennai~~, Hyd	Bus
Q	Calcutta	Aero plane
R	Bangalore	Car
S	Chennai	Boat
T	Delhi	Train

BLOOD RELATION

REASONING

BLOOD RELATION CHART



\+ Symbol: Male

\- Symbol: Female

↓ It change generations (father to son / mother to son / father to daughter / mother to daughter)

——— It indicates brother or sister

═══ It indicates wife and husband relation

What are the relation between A and B?

Here A is the husband of B or B is the wife of A or A and B are wife and husband.

What are the relation between A and W?

Here A is the son of W or W is the father of A or A and W are son and father.

What are the relation between A and T?

Here A is the son of T or T is the mother of A or A and T are son and mother.

What are the relation between A and M?

Here A is the father of M or M is the son of A or A and M are father and son.

What are the relation between A and N?

Here A is the father of N or N is the daughter of A or A and N are father and daughter.

What are the relation between M and N?

Here M is the brother of N or N is the sister of M or M and N are brother and sister.

What are the relation between B and C?

Here B is the sister of C or C is the brother of B or B and C are sister and brother.

What are the relation between P and Q?

Here P is the brother of Q or Q is the brother of P.

What are the relation between P and C?

Here P is the nephew of C or C is the uncle (maternal uncle) of P.

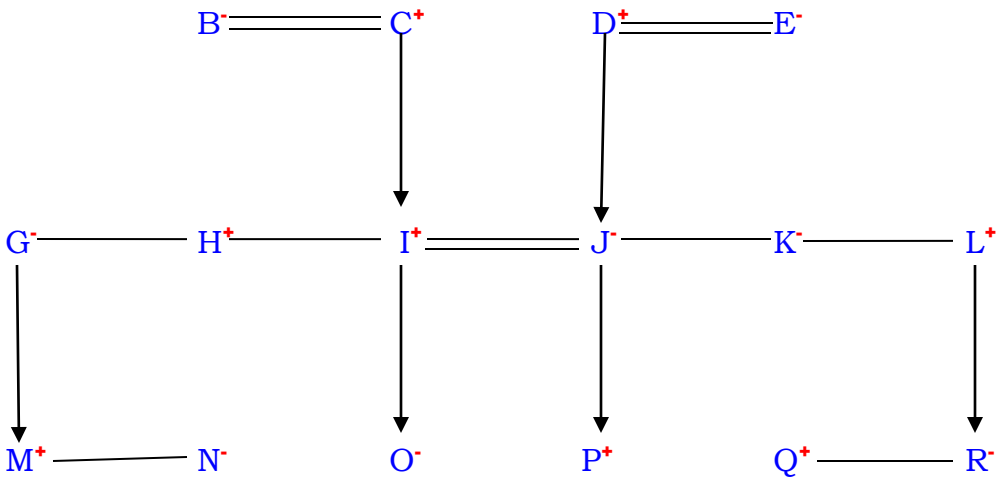
What are the relation between O and C?

Here O is the niece of C or C is the uncle (maternal uncle) of O.

What are the relation between Q and U?

Here Q is the grandson of U or U is the grandfather (maternal) of Q.

BLOOD RELATION CHART 2



Paternal: All relations from father side

Maternal: All relations from mother side

Spouse: we can't find out who is husband or who is wife

A = B

Here exist couple (wife and husband), in those who female, who male

Ex: Father and Mother / Grand Mother and Grand Father

Sibling: Brother or Sister

No Step Mother/Step Father (in blood relation topic)

C and B relation: C is husband of B / B is wife of C

C and I relation: C is father of I / I is son of C

B and I relation: B is mother of I / I is son of B

D and E relation: D is husband of E / E is wife of D

D and J relation: D is father of J / J is daughter of D

I and H relation: I is brother of H / H is brother of I

G and H relation: G is Sister of H / H is brother of G

G and I relation: G is Sister of I / I is brother of G

J and K relation: J is Sister of K / K is sister of J

J and L relation: J is Sister of L / L is brother of J

K and L relation: K is Sister of L / L is brother of K

C and O relation: C is grandfather (paternal) of O / O is granddaughter of C

B and O relation: B is grandmother (paternal) of O / O is granddaughter of B

C and P relation: C is grandfather (paternal) of P / P is grandson of C

B and P relation: B is grandmother (paternal) of P / P is grandson of B

D and O relation: D is grandfather (maternal) of O / O is granddaughter of D

E and O relation: E is grandmother (maternal) of O / O is granddaughter of E

D and P relation: D is grandfather (maternal) of P / P is grandson of P

E and P relation: E is grandmother (maternal) of P / P is grandson of E

I and O relation: I is father of O / O is daughter of E

J and O relation: J is mother of O / O is daughter of J

I and P relation: I is father of P / P is son of I

J and P relation: J is mother of P / P is son of J

K and O relation: K is aunt (maternal) of O / O is niece of K

K and P relation: K is aunt (maternal) of P / P is nephew of K

L and O relation: L is uncle (maternal) of O / O is niece of L

L and P relation: L is uncle (maternal) of P / P is nephew of L

H and O relation: H is uncle (paternal) of O / O is niece of H

H and P relation: H is uncle (paternal) of P / P is nephew of H

G and O relation: G is aunt (paternal) of O / O is niece of G

G and P relation: G is aunt (paternal) of P / P is nephew of G

O and P relation: O is sister of P / P is brother of O

Use cousin. We don't use sister in law / brother in law

O and M relation: cousin

O and N relation: cousin

P and M relation: cousin

P and N relation: cousin

O and Q relation: cousin

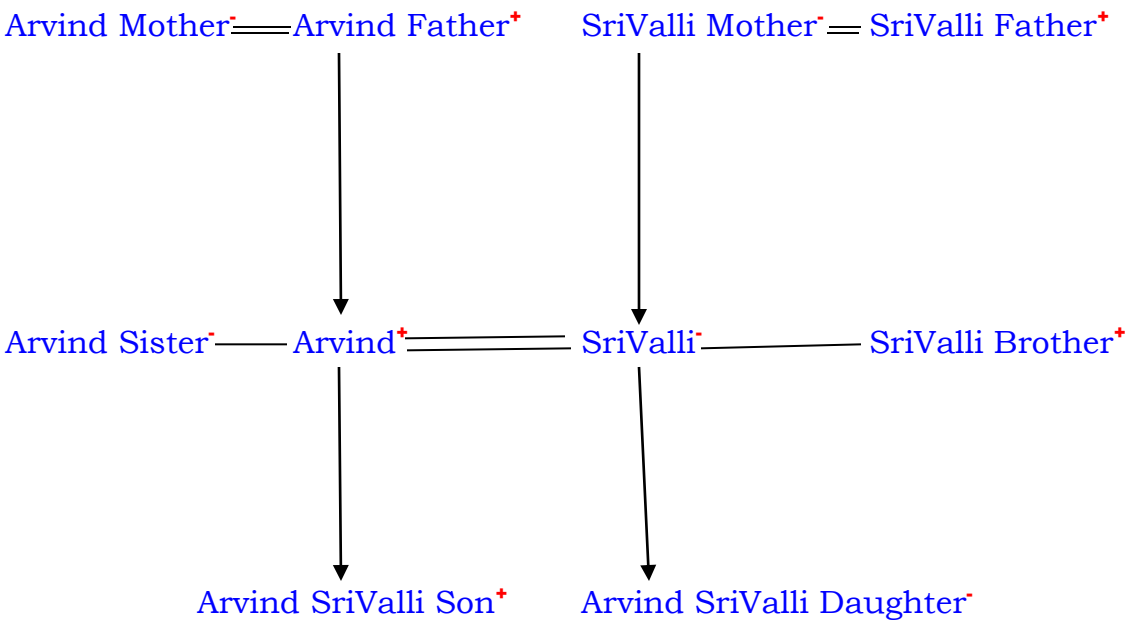
O and R relation: cousin

P and Q relation: cousin

P and R relation: cousin

RELATION THROUGH LAW

Arvind belong Hyderabad and SriValli belong to Vijayawada. Their parents arranged their marriage. Before marriage they do not know each other. After marriage the register their marriage in register office, this happens according to law.



What are the relation between Arvind and SriValli Mother?

Arvind is Son in law of SriValli Mother / SriValli Mother is Mother in law of Arvind.

What are the relation between Arvind and SriValli Father?

Arvind is Son in law of SriValli Father/ SriValli father is father in law of Arvind.

What are the relation between Arvind Father and SriValli?

SriValli is Daughter in law of Arvind Father/ Arvind father is father in law of SriValli.

What are the relation between Arvind Mother and SriValli?

SriValli is Daughter in law of Arvind Mother/ Arvind Mother is Mother in law of SriValli.

What are the relation between Arvind and SriValli Brother?

Arvind is Brother in law of SriValli Brother / SriValli Brother is Brother in law of Arvind.

What are the relation between Arvind Sister and SriValli?

SriValli is Sister in law of Arvind Sister/ Arvind Sister is Sister in law of SriValli.

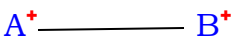
If you have interest, try some problems from blood relation chart 2

QUESTIONS

TYPE 1

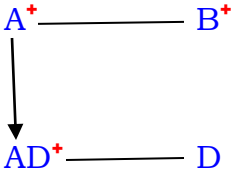
1. A and B are brothers, C and D are sisters, A's son is D's brother. How is B related to C?

Step 1
A and B are brothers

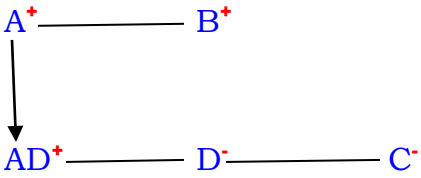


Step 2
C and D are sisters
After step 3

Step 3
A's son is and D's brother
Here A's son is AD and D's brother is AD



From step 2

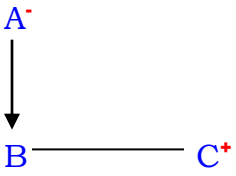


B is uncle of C

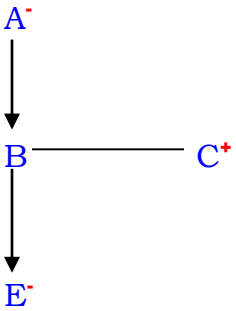
2. Given that
   A is the mother of B
   C is son of A
   D is brother of E
   E is daughter of B
   The grandmother of D is?

   Step 1
   A is mother of B

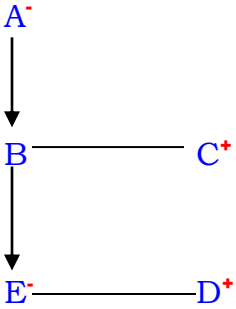
   Step 2
   C is son of A, mean C is brother of B



   Step 3
   D is brother of E, after step 4
   Step 4
   E is daughter of B



   From step 3

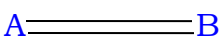


   A is grandmother of D

3. A and B are married couple. X and Y are brothers. X is the brother of A. how is Y related to B?

Step 1

A and B are married couple mean they are wife and husband

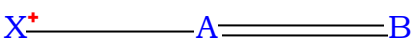


Step 2

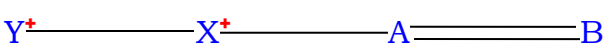
X and Y are brothers, after step 3

Step 3

X is the brother of A.



From step 2

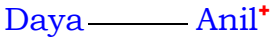


Y is brother in Law of B

4. Daya has a brother Anil, Daya is the son of Chandra. Bimal is Chandra's father. In terms of relationship, what is Anil of Bimal?

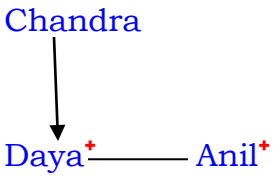
Step 1

Daya has a brother Anil.



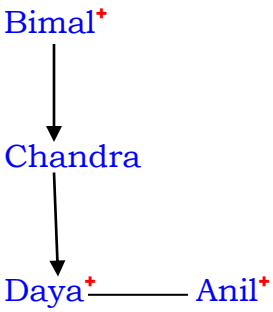
Step 2

Daya is son of Chandra.



Step 3

Bimal is Chandra's father.

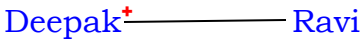


Anil is grandson of Bimal

5. Deepak is brother of Ravi. Rekha is sister of Atul. Ravi is son of Rekha. How is Deepak related to Rekha?

Step 1

Deepak is brother of Ravi

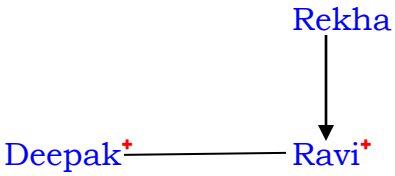


Step 2

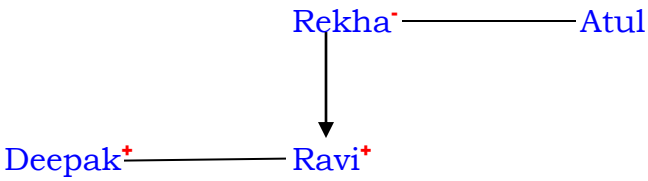
Rekha is sister of Atul. After step 3

Step 2

Ravi is son of Rekha



From step 2



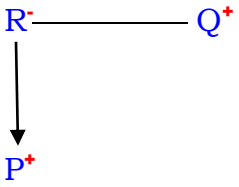
Deepak is son of Rekha

TYPE 2

A + B means A is the son of B;
A - B means A is the wife of B;
A ÷ B means A is the mother of B;
A × B means A is the brother of B;
A = B means A is the sister of B;

6. P + R – Q

+ = son
- = wife

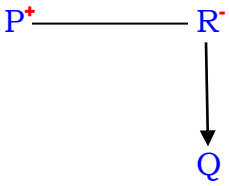


Relation P to Q: P is son of Q

Relation Q to P: Q is father of P

7. P × R ÷ Q

× = brother
÷ = mother

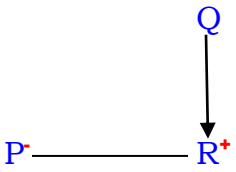


Relation P to Q: P is father of Q

Relation Q to P: we can't determine because we don't know Q is male or female.

8. P = R + Q

= = sister
+ = son



Relation P to Q: P is daughter of Q

Relation Q to P: we can't determine because we don't know Q is male or female.