

| | | | | | | | | |
|------------|------------|------------|-----|-----|-----|-----|---------|------------------|
| 1 → 1 | 1 → 1 | 13 | 17 | 19 | 23 | 29 | Triplet | 41 → 1681 |
| 2 → 4 | 2 → 8 | 26 | 34 | 38 | 46 | 58 | 345 | 42 → 1764 |
| 3 → 9 | 3 → 27 | 39 | 51 | 57 | 69 | 87 | 6810 | 43 → 1849 |
| 4 → 16 | 4 → 64 | 52 | 68 | 76 | 92 | 116 | 51213 | 44 → 1936 |
| 5 → 25 | 5 → 125 | 65 | 85 | 95 | 115 | 145 | 91215 | 46 → 20+6 2116 |
| 6 → 36 | 6 → 216 | 78 | 102 | 114 | 138 | 174 | 152025 | 47 → 2109 (2209) |
| 7 → 49 | 7 → 343 | 91 | 119 | 133 | 161 | 203 | 81517 | 48 → 2304 (2304) |
| 8 → 64 | 8 → 512 | 104 | 126 | 152 | 184 | 232 | | 49 → 2401 (2401) |
| 9 → 81 | 9 → 329 | 117 | 153 | 172 | 207 | 261 | | 50 → 25 2700 |
| 10 → 100 | 10 → 1000 | 130 | 170 | 190 | 230 | 290 | | |
| 11 → 121 | 11 → 1331 | | | | | | | |
| 12 → 144 | 12 → 1728 | | | | | | | |
| 13 → 169 | 13 → 2199 | | | | | | | |
| 14 → 196 | 14 → 2744 | | | | | | | |
| 15 → 225 | 15 → 3375 | | | | | | | |
| 16 → 256 | 16 → 4096 | | | | | | | |
| 17 → 2897 | 17 → 4913 | | | | | | | |
| 18 → 3248 | 18 → 5832 | | | | | | | |
| 19 → 3619 | 19 → 6859 | | | | | | | |
| 20 → 4000 | 20 → 8000 | | | | | | | |
| 21 → 441 | 21 → 12167 | | | | | | | |
| 22 → 484 | 22 → 24389 | | | | | | | |
| 23 → 529 | 23 → 29391 | | | | | | | |
| 24 → 576 | 24 → 35937 | | | | | | | |
| 25 → 625 | 25 → 59319 | | | | | | | |
| 26 → 676 | | | | | | | | |
| 27 → 729 | 12 × 6 | 21 → 9261 | | | | | | |
| 28 → 784 | 13 × 5 | 22 → 10648 | | | | | | |
| 29 → 841 | 14 × 6 | 23 → 12167 | | | | | | |
| 30 → 900 | | 24 → 13824 | | | | | | |
| 1 → 901 | | 25 → 15625 | | | | | | |
| 32 → 1024 | | 26 → 17576 | | | | | | |
| 33 → 1089 | | 27 → 19683 | | | | | | |
| 44 → 1156 | | 28 → 21952 | | | | | | |
| 55 → 1225 | | 29 → 24389 | | | | | | |
| 66 → 1296 | | 30 → 27000 | | | | | | |
| 77 → 1369 | 17 × 8 | 31 → 29391 | | | | | | |
| 88 = 1444 | 18 × 8 | 32 → 32768 | | | | | | |
| 99 = 1521 | 19 × 9 | 33 → 35937 | | | | | | |
| 100 → 1600 | | | | | | | | |

$$\frac{3 \times 4 - 11}{116} = 9 \times 2$$

51 → 2601

52 → 2704

53 → 2809

54 → 2916

55 → 3025

56 → 3136

57 → 3249

58 → 3364

59 → 3481

60 → 3600

61 → 3721

62 → 3844

63 → 3969

64 → 4096

65 = 42425

34 → 39, 304

35 → 42, 875

$$-9 = +1 \curvearrowright +1$$

$$-8 = -1 \curvearrowright +2$$

$$+9 = +1 \curvearrowright -1$$

$$+8 = +1 \curvearrowright -2$$

→

Q

$$\text{for two years } S_2 \text{ and } C_2 = \frac{C_F}{S_2} = \frac{200+r}{200}$$

$$\text{Sum of squares} = \left[\frac{n(n+1)(2n+1)}{6} \right]$$

→ Prime no from 1 to 100

$$2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47$$

$$53, 59, 61, 67, 71, 73, 79, 83, 89, 97$$

100

$$1, 3, 7, 9$$

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 24 | 25 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 |
| 36 | 39 | 42 | 45 | 48 | 51 | 54 | 57 | 60 | 63 | 66 | 69 | 72 | 75 | 78 | 81 | 84 | 87 | 90 | 93 |
| 48 | 52 | 56 | 60 | 64 | 68 | 72 | 76 | 80 | 84 | 88 | 92 | 96 | 100 | 104 | 108 | 112 | 116 | 120 | 124 |
| 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 | 105 | 110 | 115 | 120 | 125 | 130 | 135 | 140 | 145 | 150 | 155 |
| 72 | 78 | 84 | 90 | 96 | 102 | 108 | 114 | 120 | 126 | 132 | 138 | 144 | 150 | 156 | 162 | 168 | 174 | 180 | 186 |
| 84 | 91 | 98 | 105 | 112 | 119 | 126 | 133 | 140 | 147 | 154 | 161 | 168 | 175 | 182 | 189 | 196 | 203 | 210 | 217 |
| 96 | 104 | 112 | 120 | 128 | 136 | 144 | 152 | 160 | 168 | 176 | 184 | 192 | 200 | 208 | 216 | 224 | 232 | 240 | 248 |
| 108 | 117 | 126 | 135 | 144 | 153 | 162 | 171 | 180 | 189 | 198 | 207 | 216 | 225 | 234 | 243 | 252 | 261 | 270 | 279 |
| 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 | 210 | 220 | 230 | 240 | 250 | 260 | 270 | 280 | 290 | 300 | 310 |

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|
| 32 | 33 | 84 | 85 | 36 | 87 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 64 | 66 | 68 | 70 | 72 | 74 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 96 | 99 | 102 | 105 | 108 | 111 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 128 | 132 | 136 | 140 | 144 | 148 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 160 | 165 | 170 | 175 | 180 | 185 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 192 | 196 | 204 | 210 | 216 | 222 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 224 | 234 | 238 | 245 | 252 | 259 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 256 | 264 | 272 | 280 | 288 | 296 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 288 | 298 | 306 | 315 | 324 | 333 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 320 | 330 | 340 | 350 | 360 | 370 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |

$$(61)^2$$

$$\begin{array}{r} 36 \\ \hline 1 \\ 12 \\ \hline 2721 \end{array}$$

$$3601$$

$$12$$

$$3721$$

$$(a+b)^2$$

$$a^2 + b^2 + 2ab$$

$$3601$$

$$12$$

$$3721$$

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

| | | | | | |
|----|----|----|------|------|------|
| G7 | H8 | E5 | J-10 | O-15 | T-20 |
|----|----|----|------|------|------|

e j o t q
 5/10/15/20/2

Mera-13

R-18

W-23

L - twelve

XXX

X King II p

I-9-R

S - history

N - Fourteen

Fayyaz Khan

6-f U

21-F V

24-climax

Pk → D.O.I.G.

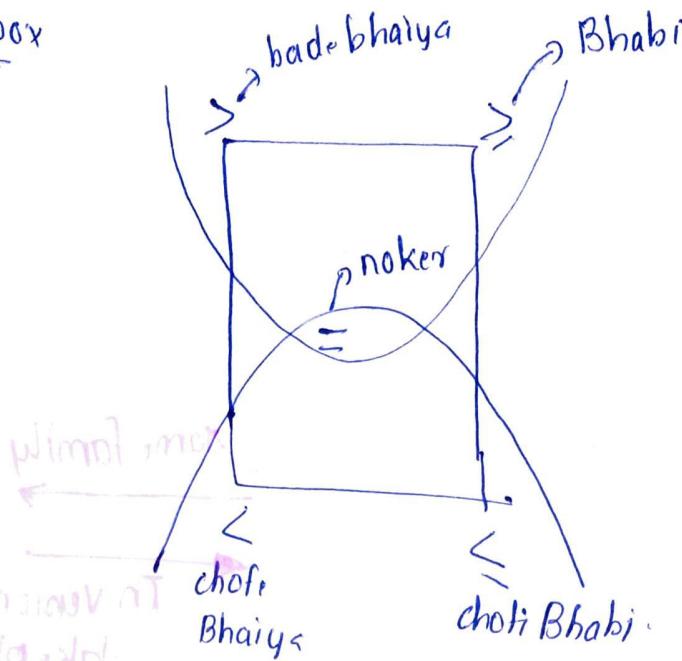
Quan → FF
Jokers

Sunnis

Uttar
= 22

Reasoning (35/35)

Magic box



Either or Rule

- ① $A > B \times$ ① Subject object same
 ② three signs.
- ② $A \leq B \times$ ~~either~~

When there is NO common

Q: ~~Given~~ $D > A, B > F, E > A > K, G > D$

C1: $E > G \times$

C2: $G > F$ (no direct linky \rightarrow just it is wrong always)

Coded inequality

not possible

Coded Inequality

P @ Q means P is not smaller than Q.

P & Q P neither greater nor equal to Q

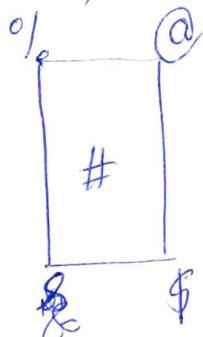
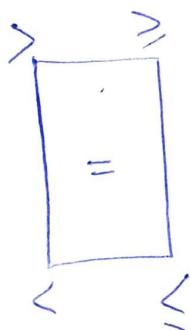
P # Q P neither greater than nor smaller than Q

P \$ Q P is not greater than Q

P % Q P is neither small nor equal to Q same family

S1:- A% B # C% D \$ E, G @ F% B

(i) G @ A (ii) A & G



% @ #
① ② ③

& \$ #
④ ⑤ ⑥

Inversion will
both wrong take place

as it is

Inversion

Q) R% T @ J% A \$ G # H ; I% T.

C1:- H # A

A \$ H

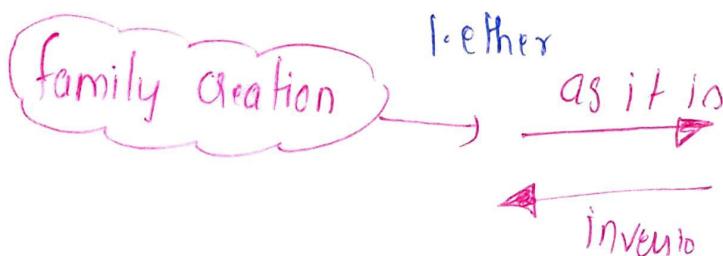
H % A

H = A

C2 H % A

H @ A

H > A



Blood Relation :-

puzzle type

② Indication type

(*) Coded type.

Concept

Male → | | +

femal → -○

Coupl. \rightarrow

- +

→ पती या पत्नी का शाई

गोपनीया दिव्य, बाला

Brother-in-law →

sister-in-law →

पती या पत्नी की बहन

માન્ય

नॅन्ट, सालो, लहीनी

Tree diagram

paternal unit

माना - नानी → ma
दादा - दादी → paternal

~~unit - GIGI → paternal~~

A simple line drawing of a house. It features a chimney on the left, a rectangular body with a square window in the center, and a circular door on the right.

A simple line drawing consisting of a square on the left connected by a horizontal line to a circle on the right.

Trick =)

email

sister in law

Q female friend of
~~an~~ daughter in law

Sibbling → 250

Cousin → पाचा के भेटे

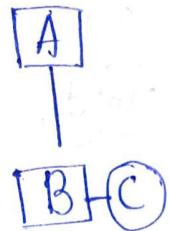
And/But → 1st person

who/whom → 2nd person

Nice → girl of brother

Nephew → boy of brother

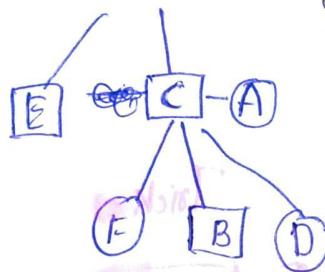
Q) A is father of 'B' and husband of C
 A is father of B who is " " C.



How is P related to R

R, P are direct siblings
 P & R are not.

Q) ABCDEF are family members, B is son of 'C' but 'C' is not mother of 'B'. A & C are married couple, E is brother of 'C', D is daughter of A, F is sister of B. What is relation b/w E and F



How is 'F' related to 'E'

F is Niece of E.

Coded Type

A-B A is brother of B

A-X-B A is father of B

A=B A is mother of B

A+B A is sister of B

A÷B A is husband of B.

R is nephew of S

R+
=

- Final
- (A) $R + P \times W = T + S$
- (B) $R + C - M \times J \div S$
- (C) $S + D + H = F = R + G$
- (D) $R = Y - L \div N = S$

e✓

Reasoning - Blood Relation Coded type

① $G = A - N + O = W$

① as gender of W is not clear.
W

② always take one and verify gender

③ $M+N$ M is sister of N

$M=N$ M is father of N

$M-N$ M is mother of N

$M \times N$ M is brother of N

$M \oplus N$ M is son of N

$M \diamond N$ M is daughter of N

$M @ N$ M is husband of N

$N \times G + P \div T \div R @ K$

how is G related to R

④ G P Grand father,

$A \# B$ A is father of B

$A & B$ B is daughter of A

$A \% B$ A is mother of B

$A @ B$ B is husband of A

$A * B$ A is son of B

If $N \# T \times R \times J @ P$ is true if

X is sister of P then how is X related to R .

⑤ $\square - P$ X R aunt
 \square R

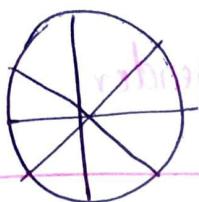
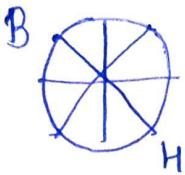
⑥ If relation b/w last letter is asked it may be CNN

⑦ directly jump to question

Puzzle

Circular puzzle

- ③ person sit b/w B and H ~~xx~~ → circ B & H will be opposite
 compulsory
 3 b/w total 8 → square B & H opposite compulsory



Weekly puzzle

work days Sun

Mon

Tue

Wed

Thurs

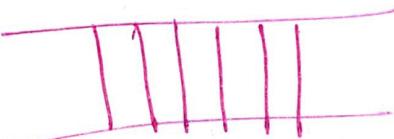
Friday

Sat

sitting in a line



facing each other (possibilities)



∴

(X)

Jan → 31

Feb → 28

March → 31

April → 30

May → 31

June → 30

July → 31

August → 31

Sept → 30

Oct → 31

Nov → 30

Dec → 31

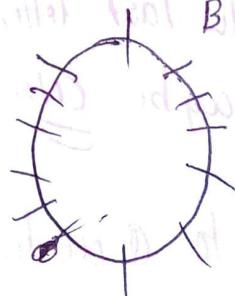
→ 10 people

6 b/w



⇒ 12 people

6 people b/w



Puzzle

52Q

Row
South

R T S R P Q L PQRST

North. L T D E B C D R ABCDE

→ Next, near, immediate, neighbour
adjacent beside near

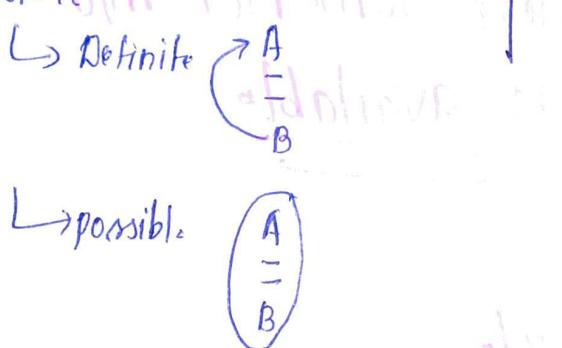
Approach to solve puzzles

① Definite conditions

→ always in two parts

② Possible

→ hints and possible.



① Part A → Reading → Part B → least possible place

→ Definite

→ Hint

2 or more

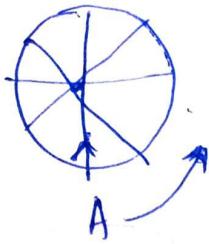
More information

* When becomes confirm

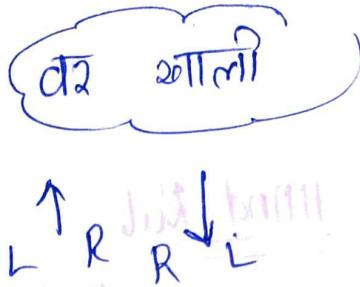
- ⊗ two days prior → 2 at 1st 9th 10th
- ⊗ only one adjacent → extreme top / bottom

Circular seating arrangement

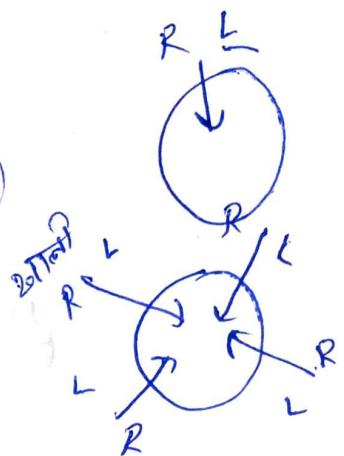
- ① all facing inside ② all facing outside ③ mix.



niche
d₂ 20πm
UPP 20πm
d₁ 20πm



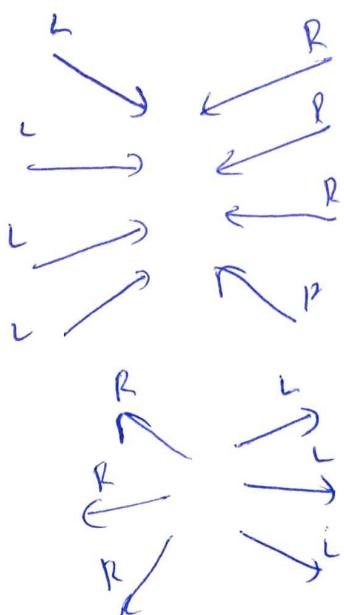
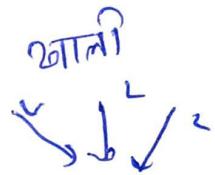
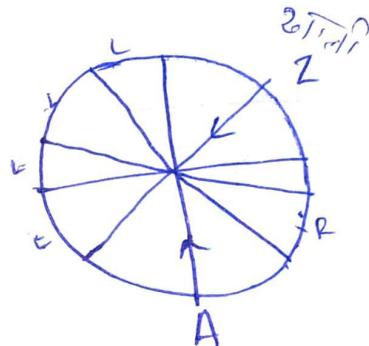
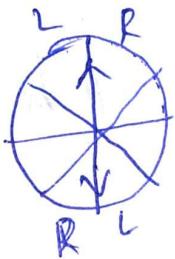
B sits second Right of A



C sits 2nd left of A

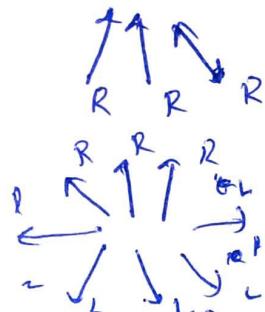
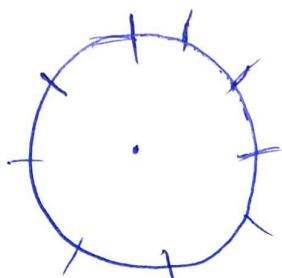
facing outside

10 people

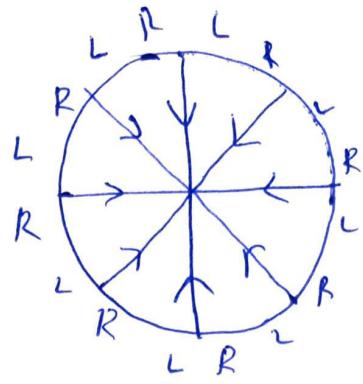
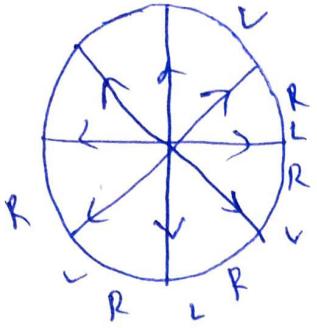


Z is forth right of

9 people



Opposite can not be determin.



E' Hand Rub

X X X X

Back side of hand represent L or R

people = 3 people in b/w

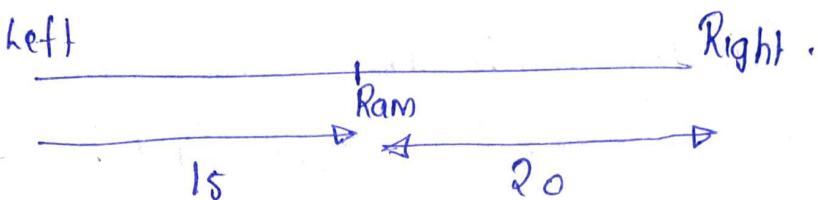
always they will be opposit

19/10/18

Order & Ranking



10



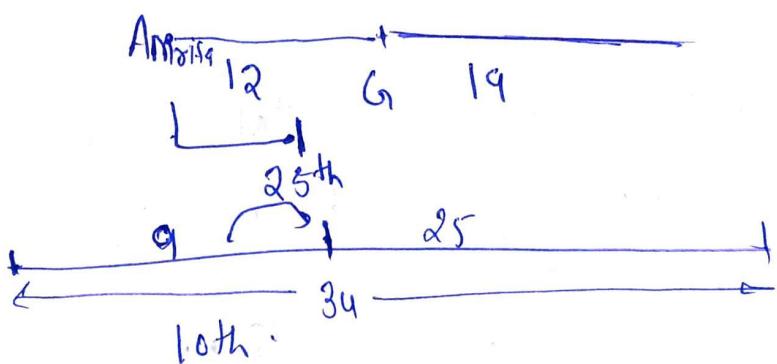
Total student = 34

Rank gaji \Rightarrow wo student bhi gaya

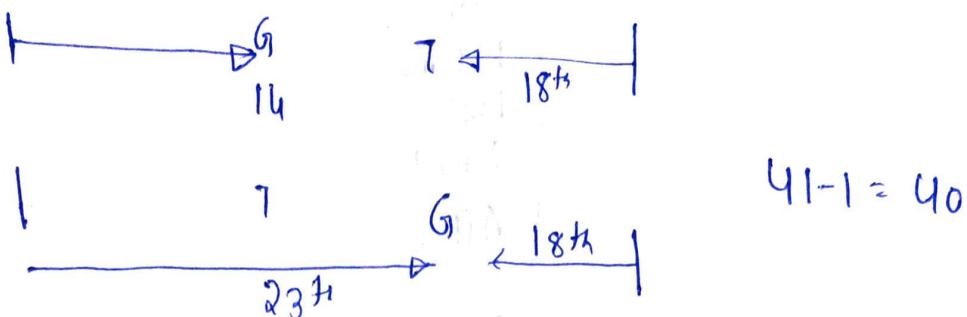
Overlapping Case

$$\text{Left} + \text{Right} - \text{Total} - 2$$

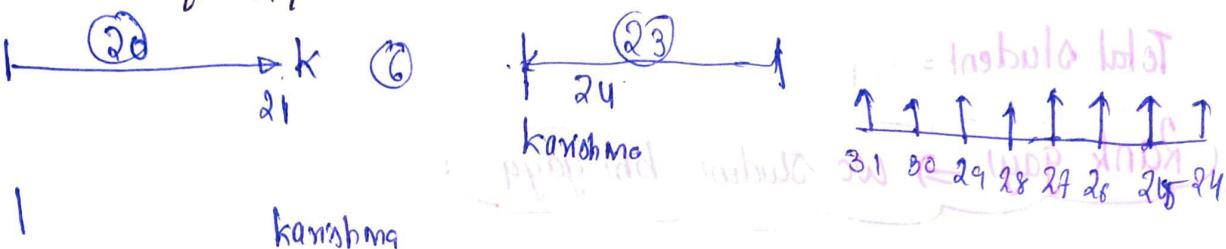
→ In a line Kapil is 6th to the right of Amrita who is 12th to the left of Gurupreet who is 19th from right. What is position of Kapil from left if total no of student 34



(Q) In a line Gargandeep is 14th from left and trisha is 18th from right after interchanging their position gagan deep becomes 28th from left find total student



In a line krishna is 21st from left and kanishma is 24th from right after interchanging kanishma becomes 31 from right find krishna position from left end



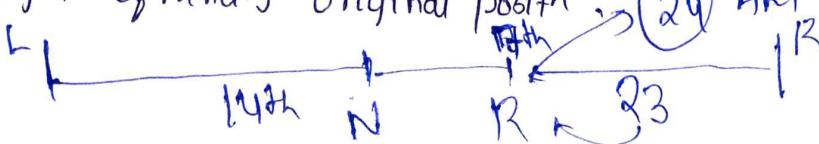
(Q) In a row position of Rashni from left 12 and position of Shahba from right is 26 if there are 5 person b/w R and S find minimum no of students.

$$38 - 2 - 5 = T$$

$$31 = T$$

$$R + L - T - 2 = \text{middle prob.}$$

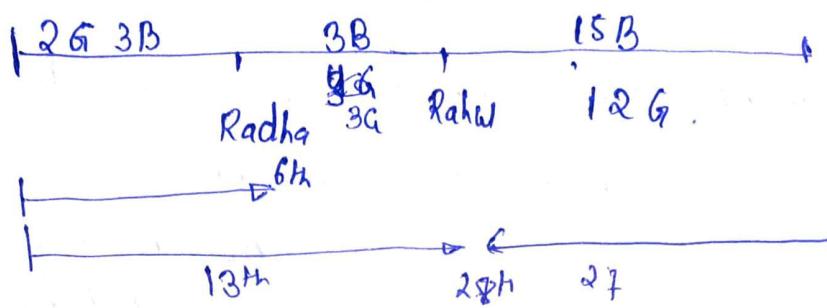
In a row of 40 girls when neha was shifted to her left by four places her number from left end became 10, what was position of Rani from right end of the row if the rani was three places to the right of Neha's original position



Reasoning

Left \rightarrow Top \rightarrow equivalent

In a class of students Rahul is 13th from top, and Radha is 6th from top. Radha is 3rd girl from top and Rahul is 7th boy from top and 16th boy from bottom. Rahul is 28th from bottom.



Max Students and minimum students

A is 6th from right end B is 7th from left end in a row \Rightarrow there are two persons b/w 'A' and 'B' find total students.

$$6 + 7 + 2 = 15 \rightarrow \text{non-overlapping}$$

$$6 + 7 - 2 - 2 = 9 \rightarrow \text{overlapping}$$

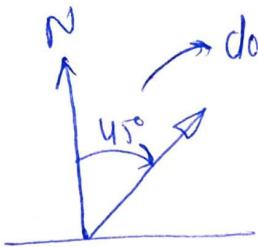
Some times check for minimum
if it is possible or not.

Direction & Distance

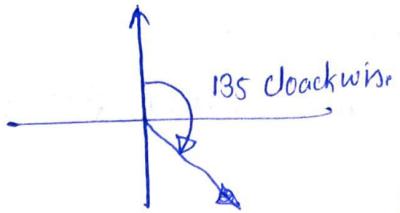
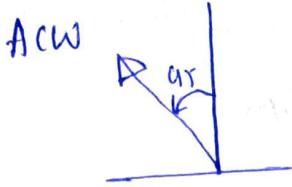
⊗ If angle not given always assume 90° .

Right \Rightarrow clockwise

Left \Rightarrow anticlockwise

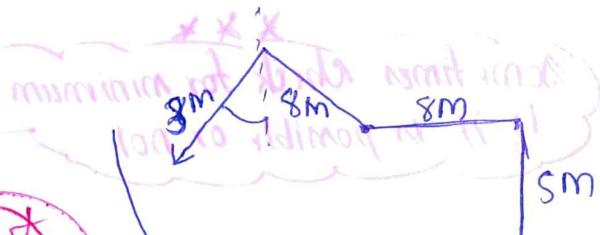
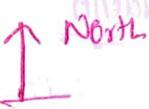


POINT 4
clockwise \approx Right



Q) A man walks 5m from his house then he takes a left turn and walks 8m. now he rotates for 45° in the clockwise and walks 8m. finally takes a left turn and walks for '3m' and now he realises that he was going towards south. In which direction did he started walking.

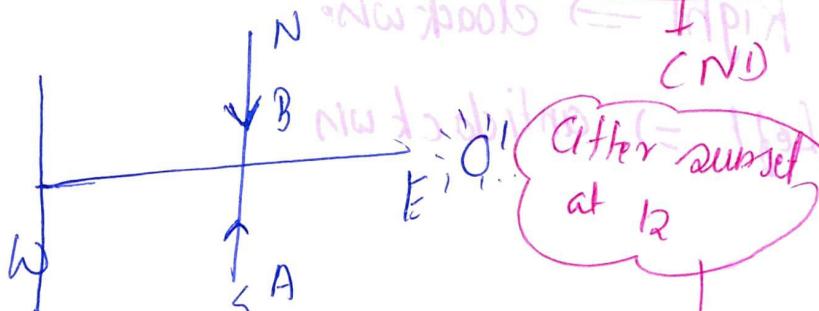
Always assume:



rotate to get original direction

Shadow

Before sunrise



3 4 5
6 8 10
5 12 13
9 12 15
8 15 17
15 20 25

One morning after sunrise A and B are talking to each other face to face if A's shadow is right of B direction A is facing (N)