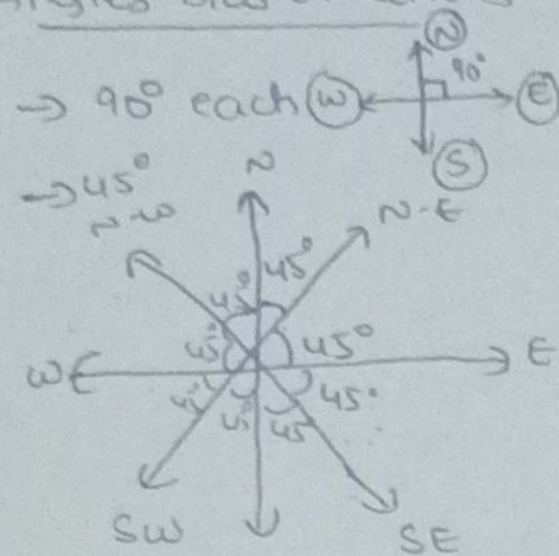
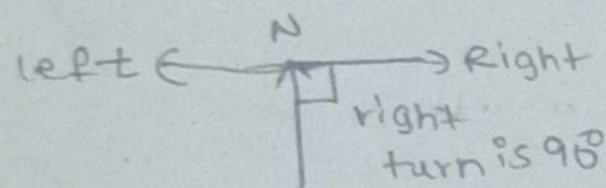


Angles b/w directions

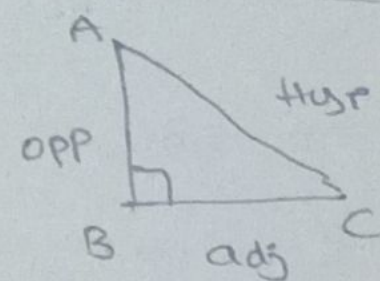
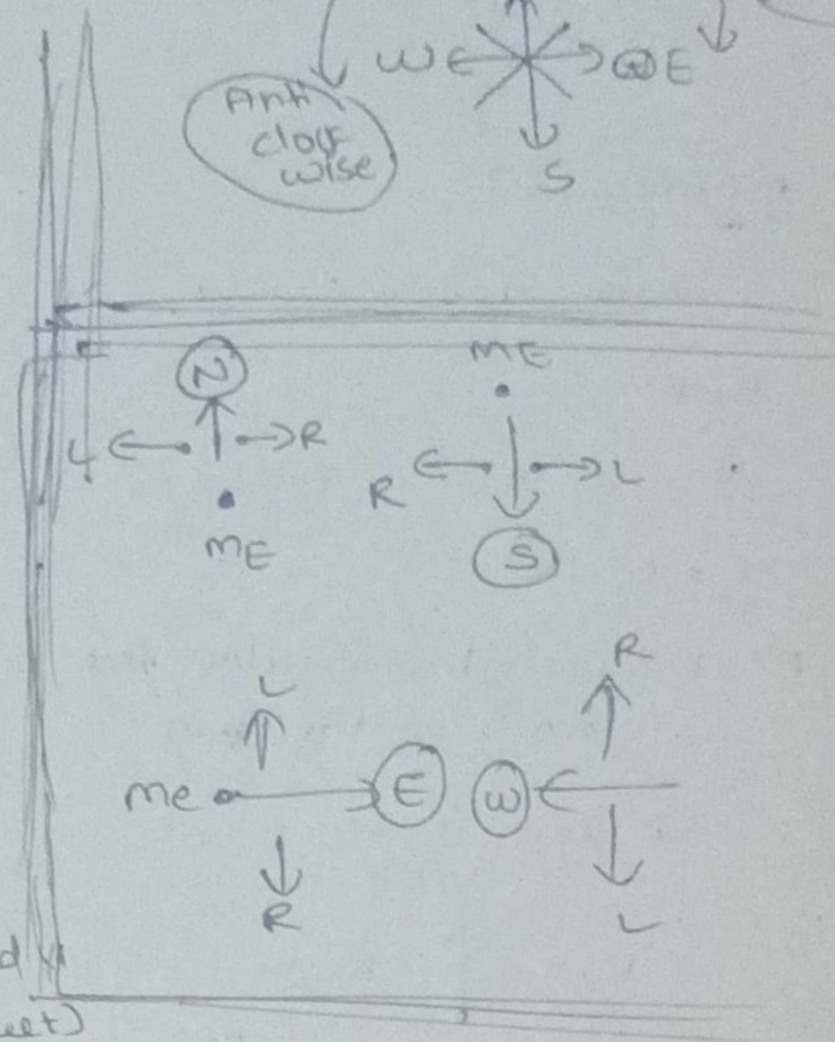
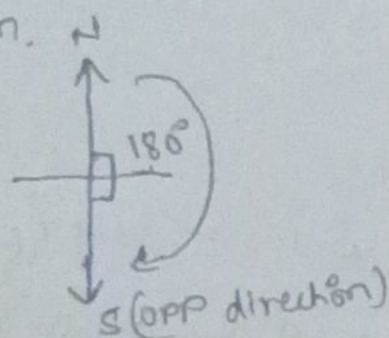


→ Total angle is 360°

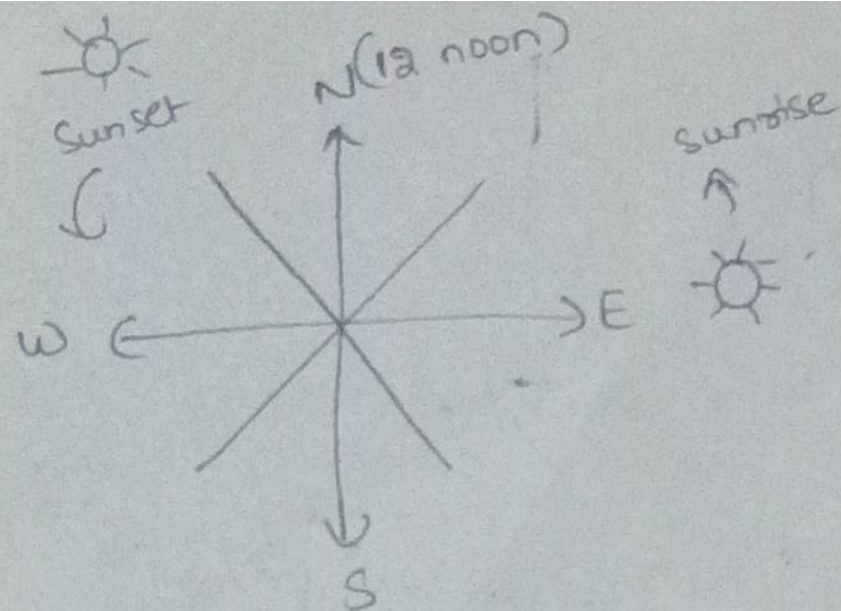
→ If no angle is mentioned then it is 90° (By default)



→ wherever the Person makes 180° turn the Person stands in opposite direction.



$$AC^2 = AB^2 + BC^2$$



Morning (E)

Sunrise - shadow - west

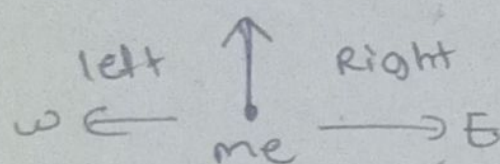
Evening (W)

Sunset - shadow - East

12 noon (N)

No shadow - shadow below feet
Sun is on top of us.

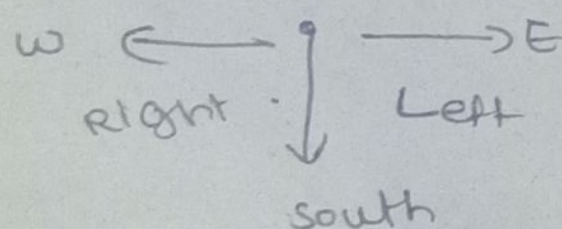
→ If I am facing north



During Sunrise - shadow will be left (W)

During Sunset - shadow will be right (E)

→ If I am facing south



During sunrise - shadow will be left (E)

During sunset - shadow will be right (W)

Blood Relations

1) Draw Diagram

2) Every generation should be in new row.
(new level)

3) use of symbols.

♀ female (—) married

♂ male (↔) siblings

4) No useless relations
like girlfriend, boyfriend, wives.

5) Maya - F/M

We can denote Gender directly based on names

6) you family tree

Important relations

Father of father (or) mother - Grandfather / Grandmother
Mother of father / mother - Grandmother / Grandfather
Wife of Grandfather - Grandmother
Husband of Grandmother - Grandfather
Father-in-law of father / mother - Grandfather / Grandmother
Mother-in-law of mother / father - Grandmother / Grandfather
Brother of father - Uncle (paternal)
Sister of father - Aunt (paternal)
Brother of mother - Maternal uncle / Maternal brother
Sister of mother - Maternal aunt / Maternal sister
Father of wife / husband - Father-in-law / Mother-in-law
Mother of wife / husband - Mother-in-law / Father-in-law
Father's / mother's only son / daughter
Son / daughter of uncle / Aunt
Brother / sister of husband / wife
Husband of sister / sister-in-law

Blood Relations

- 1) Draw Diagram
- 2) Every generation should be in new row.
(new level)
- 3) Use of Symbols.
 - ♀ Female (—) married
 - ♂ male (—) siblings
- 4) No useless relations
like girlfriend, boyfriend,
2 wives.
- 5) Maya - F/M
we can denote Gender
directly based on
names
- 6) you family tree.

Important relations

father of father (or) mother - Grandfather
mother of father/mother - Grandmother
wife of Grandfather - Grandmother
Husband of Grandmother - Grandfather
father-in-law of father/mother - Grandfather
mother-in-law of mother/father - Grandmother
Brother of father - Uncle (paternal)
sister of father - Aunt (paternal)
sister of mother - Maternal uncle/maternal aunt.
father of wife/husband - father-in-law
mother of wife/husband - mother-in-law.
father's/mother's only son/daughter - oneself.
son/daughter of uncle/aunt - cousin.
Brother/sister of husband or wife - Brother-in-law/sister-in-law
husband of sister/sister-in-law - Brother-in-law

Son of brother or sister - nephew
daughter of brother
or sister - niece.

Husband of Daughter - Son-in-law

wife of brother

Brother-in-law - Sister-in-law

wife of son, daughter-in-law

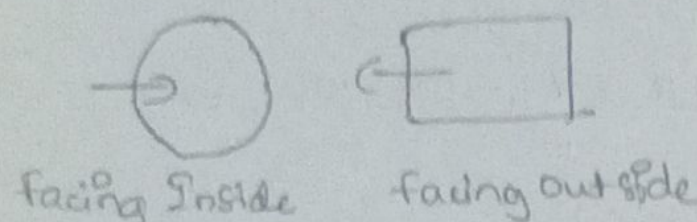
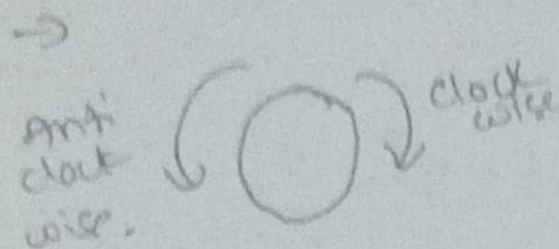
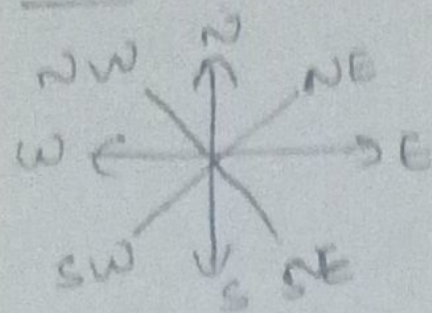
3 categories

(I) Backward tracking

(II) Symbols

(III) Family questions.

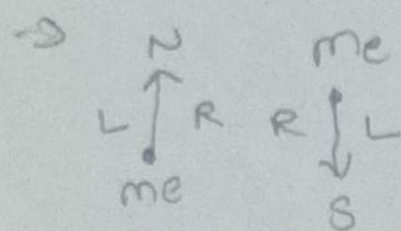
Seating Arrangement



→ Even if they sit

Inside (or) outside

clockwise (or) anticlockwise
will never change.



Types

Single Row

Parallel Row.

may be a square, circle, rectangle.

Steps

- 1) Count the no. of people
- 2) Draw a frame work.
- 3) Solve Sentence by sentence
& merge them.

Coding & Decoding

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

Reverse position =
27 - original position

Types

- Letters
- Numbers
- Symbols
- Group
- Miscellaneous

F = 6 J = 10

P = 16 T = 20

G = 7 K = 11

Q = 17 L = 12

M = 13

H = 8 W = 23

R = 18 C = 3

G/I = 9 N = 14

S = 19 N

O = 4

X = 24

AZ → (A) 1 (Z) 26

BY → (B) 2 (Y) 25

CX → (C) 3 (X) 24

DW → (D) 4 (W) 23

EV → (E) 5 (V) 22

FU → (F) 6 (U) 21

GT → (G) 7 (T) 20

HS → (H) 8 (S) 19

IR → (I) 9 (R) 18

JO → (J) 10 (O) 15

KP → (K) 11 (P) 16

LQ → (L) 12 (Q) 17

MR → (M) 13 (R) 18

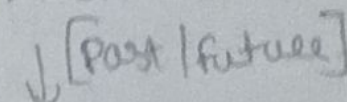
Statement & Assumptions

Implicit / Explicit



Has been
suggested
Indirectly

(True)



directly it is
explained

(False)

→ Every, each,
more, all, only,
etc

→ against statement

→ Assumption has to be
stick to statement

→ Generalised & specific
is explicit

Coding & Decoding

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

Reverse Position =
27 - original position

Types

- Letters
- Numbers
- Symbols
- Group
- Miscellaneous

F = 6	J = 10
P = 16	T = 20
G = 7	K = 11
Q = 17	L = 12
	M = 13
H = 8	W = 23
R = 18	C = 3
G/I = 9	N = 14
S = 19	D = 4

X = 24

AZ → (A) (Z)
 BY → (B) (Y)
 CX → (C) (X)
 DW → (D) (W)
 EV → (E) (V)
 FU → (F) (U)
 GT → (G) (T)
 HS → (H) (S)
 IR → (I) (R)
 JO → (J) (O)
 KP → (K) (P)
 LQ → (L) (Q)
 MN → (M) (N)

Statement & Assumptions

Simplicit / Explicit



Has been
suggested
Indirectly
(True)

↓ [Past / Future]

directly it is
explained

(False)

→ Every, each,
more, all, only,
etc.
→ against statement

→ Assumption has to be
stick to statement

→ Generalised & specific
is explicit

Data Interpretation

Table form

Bar graph

Pie chart

Graph form (or) Line form

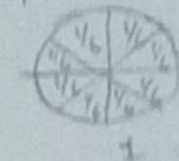
Pie chart

1) Fractions

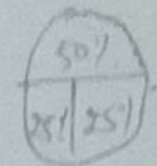
2) Percentages

3) Angles

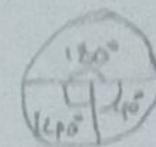
Pizza



Fraction



Percentage



→ 360°

Angle

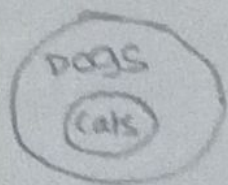
Statement &

Concluding

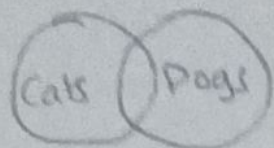
→ d/p will be
Result only
exclude then
if it true
→ do not pre
assume.

Syllogisms

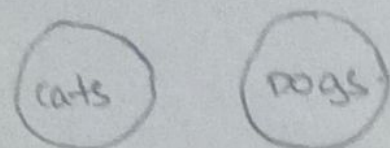
All cats are dogs



Some cats are dogs



No cats are dogs



series

1) Increasing cases:-

- Addition
- multiplication

2) Decreasing cases:-

- Subtraction
- Division

3) mixed cases

- Addition & subtraction
- Addition & multiplication
- multiplication & subtraction
- multiplication & division

4) Special cases

- Squares - 1, 4, 9, 16, 25, 36, 49, 64, 81, ...
- cubes - 1, 8, 27, 64, 125, 216, ...
- Even/Odd/Primes - 2, 3, 5, 7, 11, 13, 17, 19, 23, ...

A S
D M
C D
M D

Example

$$* 1, 2, 4, 7, 11, 16, 22 \rightarrow 2$$

$$\begin{array}{ccccccc} & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 2 & 3 & 4 & 5 & 6 \end{array}$$

$$* 1, 1, 2, 6, 24, 120, 720 \rightarrow 1$$

$$\begin{array}{ccccccc} 1 & 1 & 2 & 6 & 24 & 120 & 720 \\ \times 1 & \times 2 & \times 3 & \times 4 & \times 5 & \times 6 \end{array}$$

$$* 100, 98, 95, 90, 83, 72 \rightarrow 3$$

$$\begin{array}{ccccccc} 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ -2 & -3 & -5 & -7 & -11 \end{array}$$

$$* 1024, 512, 256, 128, 64, 32 \rightarrow 2$$

$$\begin{array}{ccccccc} 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ \div 2 & \div 2 & \div 2 & \div 2 & \div 2 & \div 2 \end{array}$$

$$* 25, 25, 21, 22, 30, 19, 34 \rightarrow 3$$

$$\begin{array}{ccccccc} 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ +2 & +2 & -3 & +3 & -3 & +3 & -3 \end{array}$$

$$* 9, 19, 37, 75, 149, 299 \rightarrow 2$$

$$\begin{array}{ccccccc} \times 2+1 & \times 2+1 & \times 2+1 & \times 2+1 & \times 2+1 \\ 9 & 19 & 37 & 75 & 149 & 299 \end{array}$$

Analogy { Number
Letter
Word

$$* 6:222 :: 7: \underline{350} ?$$

$$63+6 \quad 73+7$$

$$216+6 \quad 343+7$$

$$* 26:5 :: 65: \underline{8} ?$$

$$\begin{array}{cc} \sqrt{26-1} & \sqrt{65-1} \\ \sqrt{25} & \sqrt{64} \\ 5 & 8 \end{array}$$

Examples

* 1, 2, 4, 7, 11, 16, ? $\rightarrow 22$
 1 2 3 4 5 6
 +1 +2 +3 +4 +5 +6


* 1, 1, 2, 6, 24, 120, 720
 $\square \square \square \square \square \square \rightarrow 720$
 $\times 1 \times 2 \times 3 \times 4 \times 5 \times 6$

* 100, 98, 95, 90, 83, ?
 □ □ □ □ □ → 42
 -2 -3 -5 -7 -11

* 1024, 512, 256, 128, 64, ? $\rightarrow 32$

* $25, 25, 27, 22, 30, 19, 34, 16, ?$ $\rightarrow 39, 13$

* $\begin{matrix} x^2+1 & x^2-1 & x^2-1 & x^2+1 \\ \hline 9 & 19 & 37 & 75 & 149 & ? \end{matrix} \rightarrow 299$

Analogy 

* $6:222 :: 7: \underline{350}?$

$$6^3 + 6 \qquad 7^3 + 7$$

$$216 + 6 \qquad 343 + 7$$

$$* 2:8::3:\underline{27}$$

$2^3 \quad 3^3$

$$AZ: BY :: CY: \underline{DN}$$

* $26:5::65 \underline{8} \underline{?}$

$\sqrt{26-1}$	$\sqrt{65-1}$
$\sqrt{25}$	$\sqrt{64}$
5	8

33 D S
D B 3

* 14:9 :: 26: 15 ?

$$\frac{14}{8} + 2 = 7 + 2 = 9$$

$$\frac{13}{2} + 2 = 13 + 2 = 15$$

* 11d: Box :: cork: Bottle

* circle: circumference :: square: perimeter

* Shakespeare: Drama ::

Ghalib: Ghazels

* ace: bdf :: fhs: gik ?

* Binar: Patna :: Goa: Panaji

* Dentist: teeth ::

Cardiologist: Heart

* M x N: 13 x 14 :: F x R: 6 x 18

* Grass: Green :: Sky: Blue

* 625: 25 :: 225: 15 ?

$$\sqrt{625} \quad \sqrt{225}$$

* melt: liquid :: freeze: solid

* mullins: mosque :: gkhs: Gumda

* Teacher's day: Sep 5th :: women's day: 8th march

* 3: 27 :: 7: 343 ?

$$(3^3) \quad (7^3)$$

$$3 \times 3 \times 3 \quad 7 \times 7 \times 7$$

* 9: 80 :: 10: 99 ?

$$9^2 = 81 \quad 10^2 = 100$$

$$81 - 1 \quad 100 - 1$$

$$= 80 \quad = 99$$

* m o p n | m o P n |

m o p n | m o p n

* aa b | aaa b | aaaa b |
aaaa a b

* milk: curd :: water: Ice

* Desert: Sand :: Sea: water

* Book: Paper :: Gabel: wood

Ranking & ordering arrange

→ Total number of objects

Persons =

[Sum of positions of n
Same person/object
both sides]

→ Add to different objects

→ Add & Sub with
two different objects

→ Different objects can
unpredictable

Odd-man-out

Based on numbers

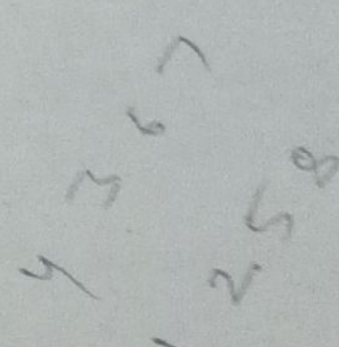
Based on Alphabets

Based on word

Based on figures

Based on numbers

A) 69 B) 67 C) 71 D)



x :: cook :: Bottle

Four :: Center :: Square :: Perimeter

please :: Drama ::

Ghalib :: Ghazals

Patna :: Goa :: Panaji

tooth :: teeth ::

Cardiologist :: Heart

grass :: Green :: Sky :: Blue

ice :: liquid :: freeze :: solid

mosque :: gift :: Humid

Sept 5th :: women's day :: 8th march

ob|bab|babb

pn|mopn|

Ranking & Ordering Arrangements

→ Total number of objects /

Persons =

[(Sum of positions of the
Same Person / object from
both sides) - 1]

→ Add to different objects

→ ~~add~~ Add & sub with total
two different objects

→ Different objects can be
unpredictable

Odd-man-out

Based on numbers

Based on Alphabets

Based on word

Based on figures

Based on numbers

A) 69 B) 67 C) 71 D) 39 E) 14

Prime numbers

2, 3, 5, 7, 11, 13, 17, 19, ...

Squares, cubes

L 1, 8, 27, 64, 125, 216
L 1, 4, 9, 16, 25, 36, 49, ...

Powers & factorials

L $2^2, 2^3, 2^4, 2^5$ L $5!, 6!, \dots$

Arithmetic operations on digits

L $326 = 3+2+6, 18 = 1+8, 27 = 2+7$

multiples of factors

L 6, 12, 18, 24, 30, ...

619

15