PlacementSeason

Exclusive E-Book for Placements

Reasoning Book for placements

Table of Contents

Direction Sense 3
Coding & Decoding 6
Analogy 9
Odd one out 11
Element Series 11
Clocks 14
Calendar 15
Mirror & water image 17
Blood relations 18
M/c input output 21
Cubes 22
Mathematical inequality 23
Ranking and ordering 25
Syllogism 26
Seating arrangements 32
Arrangement puzzle 34
Data sufficiency 35
Data interpretation 37

Direction Sense

Four Main Directions

North(N) , East(E) , West(W) , South(S)

Angle between North and East is 90'(Clockwise)

Angel between North and Southeast is 45'(Clockwise)

Four Cardinal Directions

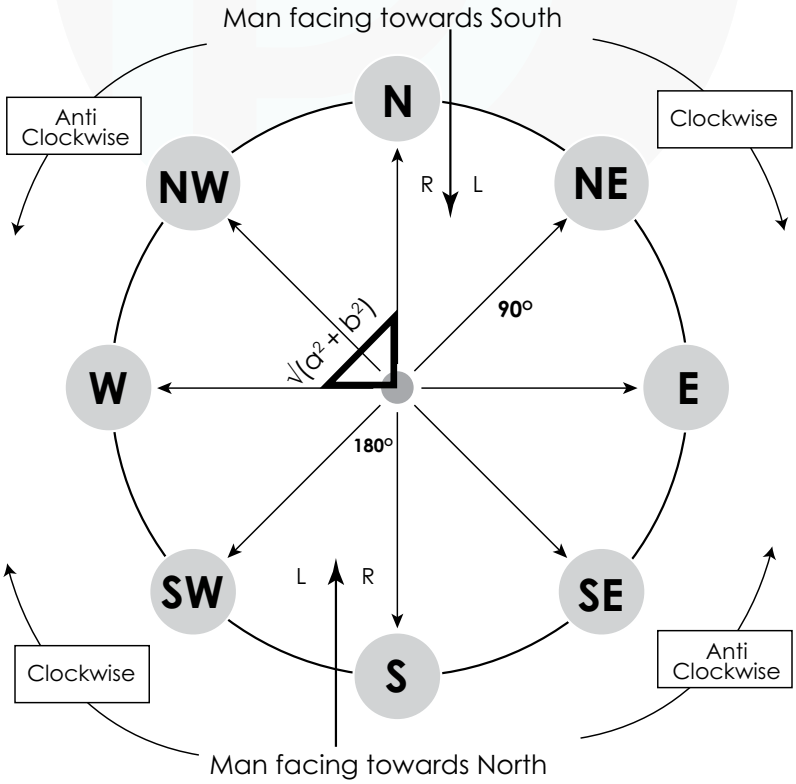
North-East (NE), North-West (NW), South-East (SE), South-West (SW)

Shadow's position

Morning (or) Sunrise (or) Dawn – WEST

Evening (or) Sunset (or) Dusk – EAST

Noon – No Shadow



Types of Problems

1. Facing Directions
2. Distance Travelled
3. Shadow Based Problems

1. A man is facing North. He turns 155' in anti clock direction and then 200' in clock wise direction. Which direction is he facing now?

a) South East b) South c)North East d) North

Answer: c) North East

Explanation:

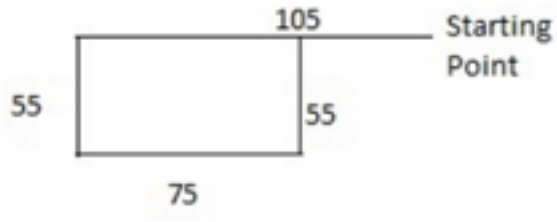
155' (anticlockwise) - 200' (clockwise) = 45' (clockwise). He turns 45' clockwise from North.

2. A man starts walking towards west. After walking 105 meter, he turns to the left and walks 55 meter straight . Again he turns to the left, walks a distance of 75 meters straight, again he turns to the left and walks a distance of 55 meters. How far is he from starting point?

a) 45 meter b)75 meter c) 30 meter d) 180 meter

Answer: c) 30 meter

Explanation:



105 – 75 = 30 meter from starting point

3. A man walks 1 km towards west and then he turn to south and walk 5 km.Again he turn

to west and walk 2 km,after this he turns to north and walk 9 km. How far is he from his starting point?

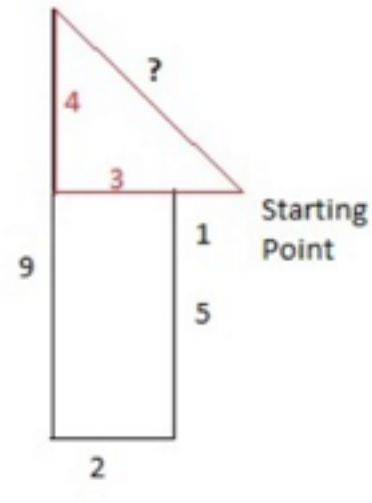
a) 17 km b)7 km c) 9 km d)5 km

Answer: d)5 km

Explanation:

Use Pythagoras theorem : Two sides (9-5=4) and (1+2=3)

$\sqrt{(42 +32)} = \sqrt{(16+9)} = 5$



4. One morning after sunrise Ram while going to school met Raj at road crossing. Raj's shadow was exactly to the right of Ram. If they were face to face, which direction was Ram facing?

a) South b) North c)East d) West

Answer: a) South

Explanation:

In morning the shadow falls towards the west. Raj's shadow falls to the right of the Ram. So Ram is facing South

AA

Coding & Decoding

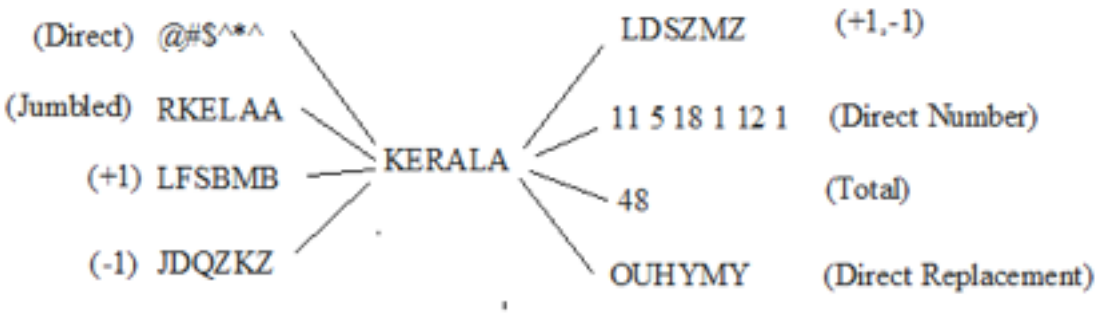
Alphabet Numbers

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

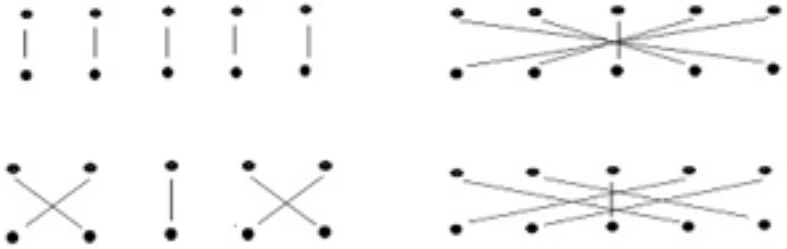
Opposite Letters

A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

Sample Coding



Sample Pattern



Examples

1. In certain language "BEAUTY" is coded as "DGCWVA", how is "UGLINESS" coded in that language?

a) WINKPGUU b) WINLQUVW c) UGNKPUGK d) UGKPUUGL

Answer: a) WINKPGUU

Explanation:

Add 2 letters(U+2 =W, G+2=I,L+2=N, I+2=K etc…)

2. If white is called blue, blue is called red, red is called yellow, yellow is called green, green is called black, black is called violet and violet is called orange, what would be the color of human blood?

a) Yellow b)Red c)Blue d)None of these

Answer : Yellow

Explanation:

Originally color of Human blood is Red. Here Red is code as Yellow.

3. If "tee see pee", means "drink fruit juice". "see kee lee", means "juice is sweet" and "lee ree mee" means "he is intelligent", which word in that language means "sweet"?

Answer : kee

Explanation : Juice –see, is – lee , sweet – kee

4. In a certain code language, 'tell them young' means 'ke la pa''wise young sharp tell' means 'na pa kup ke' 'bring clever young them' means 'se to pa la' 'clever sharp young tomorrow' means 'to kup pa jo'

1. What is the code for 'sharp'?
2. What does 'to' stand for?
3. What is the code for 'tell tomorrow'?
4. What is the code for 'clever young girl' ?

Answers :

1. kup
2. clever
3. ke jo
4. to pa xx

Explanation:

Compare the code and English word in each sentence. For question no four, "girl" is not given in the statement. So you have to choose a new code.

Analogy

TYPES OF ANALOGY

1) Complete the Analogous Pair

Numismatist : Coins

Philatelist : ?

Ans: Stamps

2) Simple or direct analogy

Defunct is related to Life in the same way Stagnant is related to ?

Ans: Motion

3) Select the Analogies Pair

Scene : Film

Sonnet : ?

Ans: Poem

4) Double Analogy I : Prune : : Hair : II

I. [A] Beard [B] Lawn [C] Wool [D] Shrub

II. [P] Shave [Q] Mow [R] Trim [S] Shear

Ans: DR

5) Selecting a similar word

Mumbai : Kolkata

Mangalore : ?

Ans: Cochin

6) Multiple – word Analogy

Music: Guitar: Performer then

a) Dance: Tune: Instrument

b) Food: Recipe: Cook

c) Patient: Medicine: Doctor

d) Trick: Rope: Acrobat.

Ans: d) Trick : Rope : Acrobat.

7) Analogy based on Numbers 9, 15, 21) then:

a) (10, 14, 21)

b) (7, 21, 28)

c) (5,10,25)

d) (4, 8, 12)

Ans: d) (4, 8, 12)

8) Analogy based on Alphabet

BEGK : ADFJ :: PSVY : ?

Ans: ORUX

Odd One Out

1. Odd One Out in Numbers 13, 23 ,33, 43, 53

Odd One : 33

2. Odd One Out in Alphabets DEBC, GFDE, JIKH, FJGH, WUVX

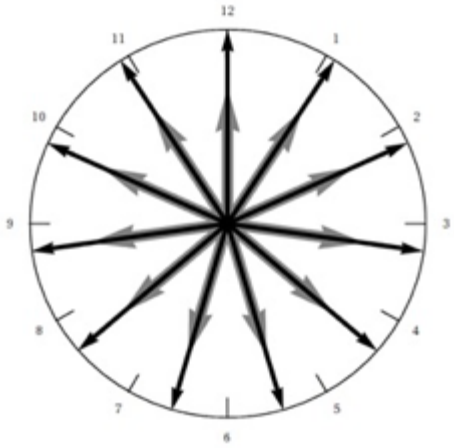
Odd One : FJGH

3. Odd One Out in Words Mars, Jupiter, Saturn, Sun, Neptune

Odd One : Sun

Clocks

1. A clock has two hands, the smaller one is called the hour hand and the larger one is called minute hand.
2. Angle traced by minute hand in 1 hr = 360°.
3. Angle traced by hour hand in 1hr = 30°
4. Speed of minute hand = 6° per min
5. Speed of hour hand = (½)° per min
6. The hour hand and minute hand coincides 22 times in a day. (Refer below picture)
7. The hour hand and minute hand will be in straight line and opposite (180°) 22 times in a day.
8. The hour hand and minute hand will be in right angle (90°) 44 times in a day.



FORMULA

To calculate angle between hour hand and minute hand

Angle= 11M/2 – 30H ,where M is minute and H is hour.

To calculate time during coincide, straight line and right angle.

A) Straight line (Coincide) : (5H+0) 12/11 (or) 60H/11

B) Right angle : (5H+15) 12/11 minutes past H

C) Straight line (Opposite) : a. (5H-30) 12/11 minutes past H, when H>6

b.(5H+30) 12/11 minutes past H, when H<6

TYPES OF PROBLEMS

1. Calculating the angle between Hour Hand and Minute Hand
2. Calculating the exact time during Straight line, Coincide & Right angle
3. Problems on incorrect clocks

1.What will be the angle between hour hand and minute hand at 7.50?

a) 45° b)56° c)65° d)75°

Answer: c) 65°

Solution : (11*50/2)- (30*7)

= 275-210 =65

2. At what time between 7 and 8'o clock will the hands of a clock in the same straight line but, not together?

a) 5 min. past 7 b)5 2/11 min. past 7 c)5 3/11min. past 7 d)5 5/11min. past 7

Answer : d)5 5/11min. past 7

Solution: (5*7 - 30) *(12/11) = 60/11 = 5 5/11

3. A watch gains 5 seconds in 3 minutes and was set right at 8 AM. What time will it show at 10 PM on the same day?

a) 10 : 20 : 20 PM b) 10 : 23 : 20 PM c) 10 : 20 : 23 PM d) 11 : 30 PM

Answer: b) 10 : 23 : 20 PM

Solution:

The watch gains 5 seconds in 3 minutes So 100 seconds in 1 hour. From 8 AM to 10 PM on the same day, time passed is 14 hours. In 14 hours, the watch would have gained 1400 seconds or 23 minutes 20 seconds.

So, when the correct time is 10 PM, the incorrect watch would show 10 : 23 : 20 PM

Element Series

Element series is a series which consists of different letters (A to Z and/or a to z) , numbers (0 to 9) and symbols such as @, #, $, % etc.

You should know the difference between "**Preceding**" ,"**Following**" ,"**preceded by**" and "**followed by**" to solve the problems in this category

Example:

Take two consecutive alphabets (eg: AB),

1. A is preceding by B
2. B is following A
3. B is preceded by A
4. A is followed by B

Take three consecutive alphabets (eg: ABC)

1. A is followed by B and C
2. A is immediately followed by B
3. C is preceded by A and B
4. C is immediately preceded by A

Calendar

Ordinary Year:

An ordinary year has 365 days. The year which is not a leap year is called an ordinary years.

Example: 1999, 2017

Leap Year:

A leap year has 366 days.

(i) Every year divisible by 4 is a leap year, if it is not a century.

(ii) Every 4th century is a leap year and no other century is a leap year.

Example : 1948, 2004, 1200, 1600, 2000 is a leap year.

1800, 2100 is a not a leap year.

Odd Day calculation:

Number of days more than the complete weeks are called odd days.

For Ordinary Year = 365 days = 52 weeks + 1 day (i.e 1 odd day)

For Leap Year = 366 days = 52 weeks + 2 days (i.e 2 odd days)

For 100 Years

100 Years = 76 ordinary Years + 24 Leap Years =(76 x 1)+ (24 x 2) = 124 odd days

= 17 weeks + 5 days = 5 odd days

For 200 Years = 5 x 2 = 10 = 3 odd days

For 300 Years = 5 x 3 = 15 = 1 odd days

For 400 Years = 5 x 4 +1=21 = 0 odd days

Year	No. of Odd Days
Ordinary	1
Leap Year	2
100 Years	5 (Friday)
200 Years	3 (Wednesday)
300 Years	1 (Monday)
400 years	0 (Sunday)
500 years	5 (Friday)
600 years	3 (Wednesday)
700 years	1 (Monday)
800 years	0 (Sunday)
900 years	5 (Friday)
1000 years	3 (Wednesday)

Key Points:

Last day of any century can't be Tuesday, Thursday and Saturday.

Last day of any century leap year is SUNDAY.

Mirror Image

In this topic the questions are given as a combination of alphabets and/or numbers and/or image followed by four alternatives. You have to choose the alternative which is closely resembles the mirror image of the given combination.

Water Image

In this topic the questions are given as a combination of alphabets and/or numbers and/or image followed by four alternatives. You have to choose the alternative which is closely resembles the water image of the given combination.

S. No.	Capital Letters of English Alphabet	The Position of Image	
		In Mirror	In Water
1.	A	A	∀
2.	B	ᗺ	B
3.	C	Ↄ	C
4.	D	ᗡ	D
5.	E	Ǝ	E
6.	F	ꟻ	Ⅎ
7.	G	Ↄ	⅁
8.	H	H	H
9.	I	I	I
10.	J	ᒐ	ſ
11.	K	ꓘ	K
12.	L	⅃	Γ
13.	M	M	ꟽ
14.	N	И	И
15.	O	O	O
16.	P	ꟼ	Ь
17.	Q	Ꝺ	б
18.	R	Я	ʁ
19.	S	Ƨ	Ƨ
20.	T	T	⊥
21.	U	U	∩
22.	V	V	Λ
23.	W	W	ʍ
24.	X	X	X
25.	Y	Y	⅄
26.	Z	Ƹ	Ƹ

Shortcut Techniques

For Mirror Image – Write/Draw the given question in paper using dark pen and turn the paper. The image(i.e trace of image, which you draw) appears in the other side of paper. That trace is the mirror image of given question.

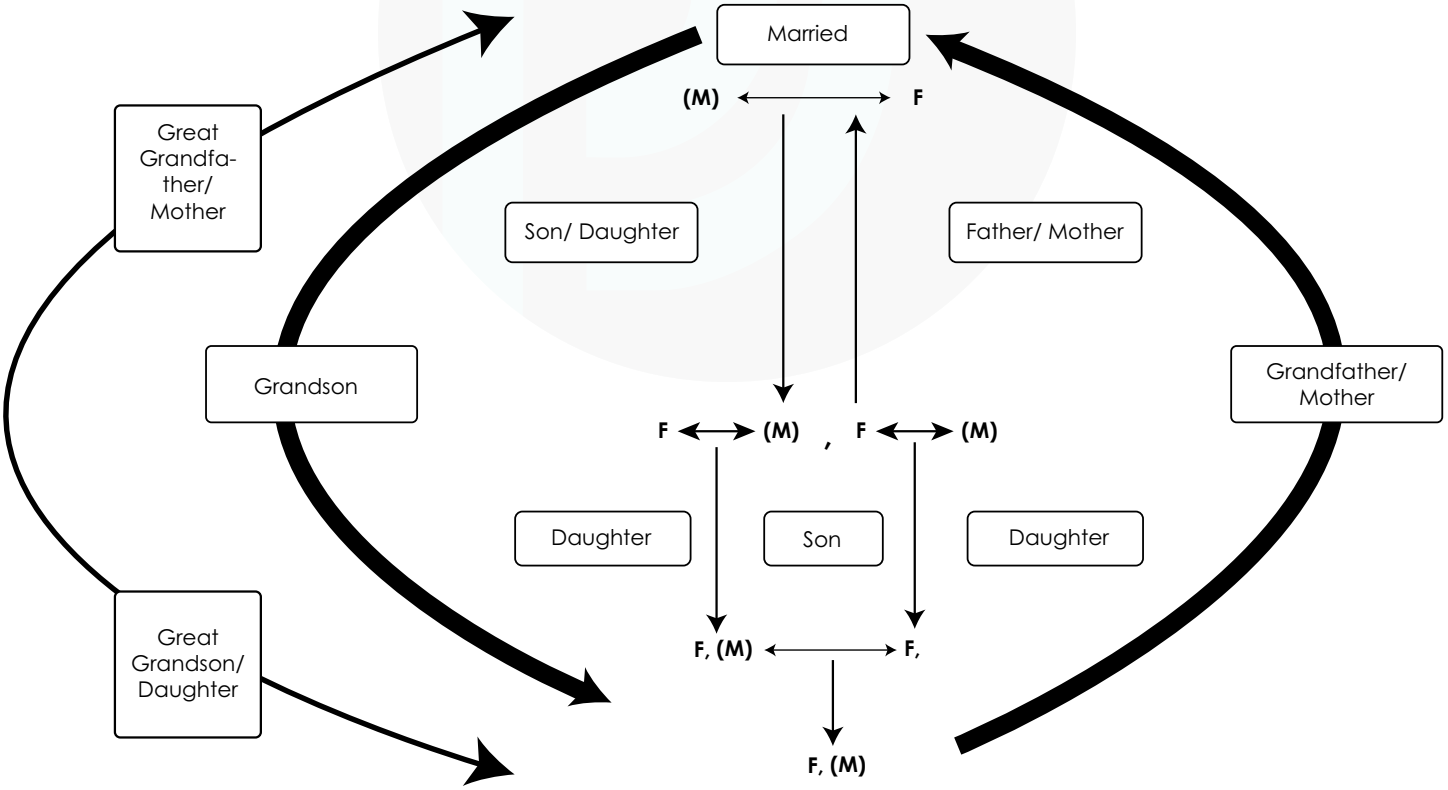
For Water Image – Write/Draw the given question in paper using dark pen and turn the paper. The image(i.e trace of image, which you draw) appears in other side of page. Rotate the paper 180'. The trace is the water image of given question.

Blood Relations

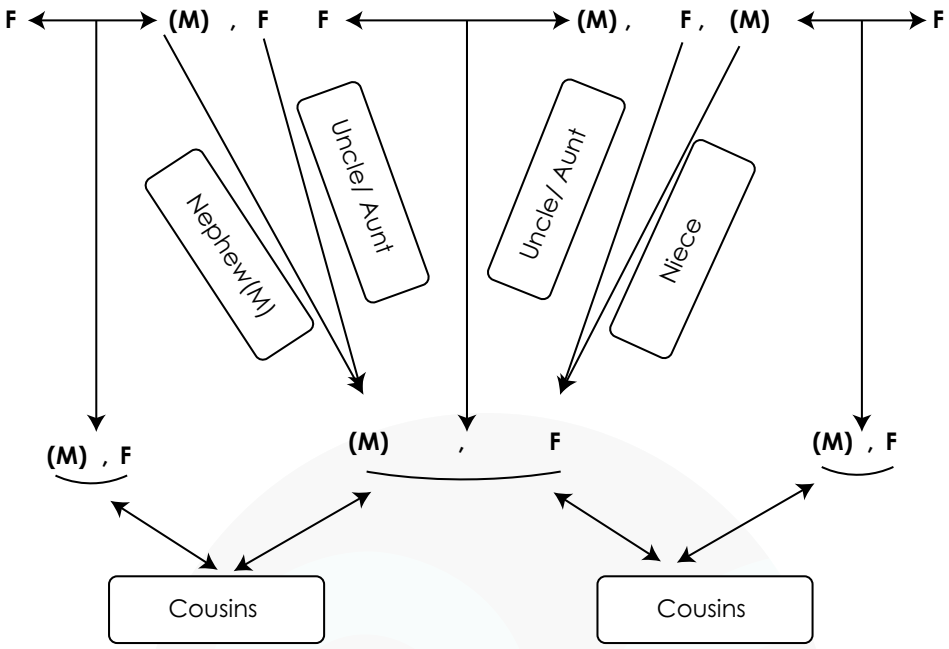
Mother's or Father's Father	Grand father
Mother's or Father's Mother	Grand mother
Mother's or Father's Son	Brother
Mother's or Father's Daughter	Sister
Mother's or Father's Brother	Uncle
Mother's or Father's Sister	Aunt
Husband or Wife's sister & Brother's wife	Sister in law
Husband or Wife's brother & Sister's husband	Brother in law

Son's Wife	Daughter in law
Daughter's Husband	Son in law
Brother's or Sister's Son	Nephew
Brother's or Sister's Daughter	Niece
Uncle or Aunt's Son/Daughter	Cousin
Grandson's or Granddaughter's Daughter/Son	Great Grand Daughter/Son

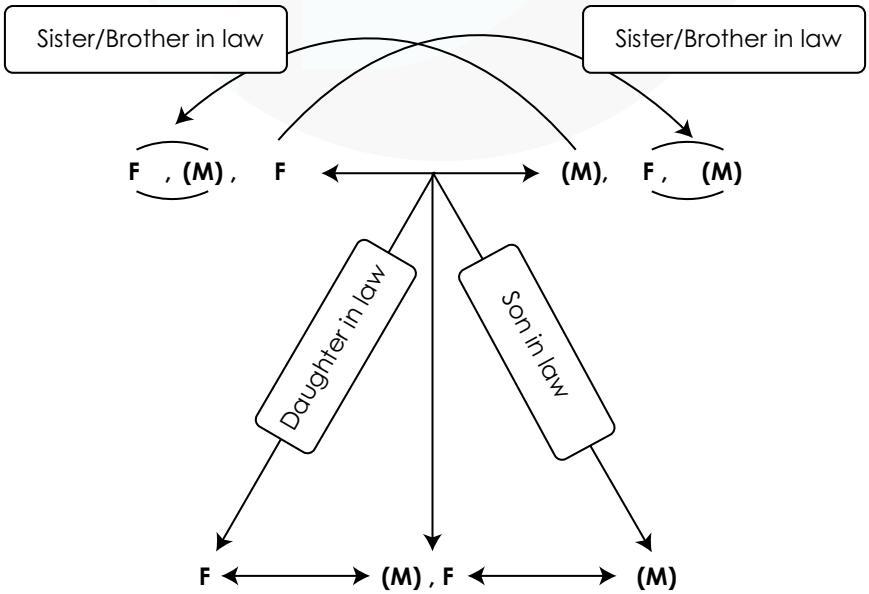
Type I



Type 2


F
(M) , F
F
(M) ,
F , (M)
F
Nephew(M)
Uncle/ Aunt
Uncle/ Aunt
Niece
(M) , F
(M) , F
(M) , F
Cousins
Cousins

Type 3


Sister/Brother in law
Sister/Brother in law
F , (M) ,
F
(M),
F , (M)
Daughter in law
Son in law
F
(M) , F
(M)

Conditions:

1. Dont judge the genders on the name basis.
2. Using the hints like "he","she", the gender must be considered.
3. Be aware of the word "Only".

Machine Input Output

In Machine Input Output, the general instruction is, when a word and number arrangement machine is given an input line words and number, it arranges them following a particular rule.

Example 1 :

Input: nice 32 18 in home 49 Kite 20

Step I:in nice 32 18 home 49 Kite 20

Step II:in 49 nice 32 18 home Kite 20

Step III:in 49 home nice 32 18 Kite 20

Step IV:in 49 home 32 nice 18 Kite 20

Step V: in 49 home 32 Kite nice 18 20

Step VI:in 49 home 32 Kite 20 nice 18

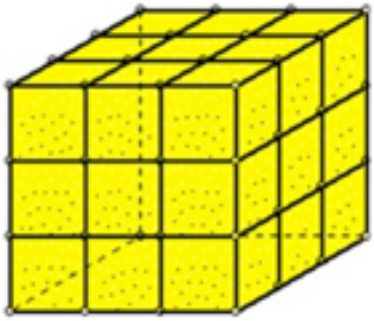
VIth step is the last step.

Tips to find the logic:

1. Compare quickly the Input and the final step and try to deduce the logic through which the machine has produced the output.
2. Find how many elements moves in each step (One /Two).

Cubes

In a cube there are six faces and its length, breadth and height are equal. Look at the below image to understand better.



Cube (n x n)	No of Cubes n^3	0 side painted $(n-2)^3$	1 side painted $6(n-2)^2$	2 sides painted 12 (n-2)	3 sides painted (8)
2x2	8	0	0	0	8
3x3	27	1	6	12	8
4x4	64	8	24	24	8
5x5	125	27	54	36	8
6x6	216	64	96	48	8
7x7	343	125	150	60	8
8x8	512	216	216	72	8
9x9	729	343	294	84	8
10x10	1000	512	384	96	8

Mathematical Inequality

Mathematical Inequality (Positive)

Symbol	Meaning	Example
>	Greater than	A > B -- A is greater than B
<	Less than	A < B -- A is less than B
≤	Less than or equal to	A ≤ B -- A is less than or equal to B
≥	Greater than or equal to	A ≥ B -- A is less than or equal to B
=	Equal to	A = B -- A is equal to B

Mathematical Inequality (Negative)

Symbol	Meaning	Example
≯	Not Greater than	≤
≮	Less than	≥
≰	Not less than or equal to	<
≱	Not greater than or equal to	>
≠	Not equal to	< or >

Tips to solve inequality

1. **A > B ≥ C --- A > C**
2. **A ≥ B > C --- A > C**
3. **A > B = C --- A > C**
4. **A = B > C --- A > C**
5. **A < B ≤ C = D --- A < D and B ≤ D**
6. **A < B ≤ C > D = E --- A < C and C > E**

In this case, the relations between AD, AE, BD and BE cannot be established.

For e.g. A < C and C > D so we get A < C > D. That means C is greater than both A and D. But we don't know which is greater – A or D; or if they are both equal. Thus the relation between A and D cannot be established.

7. **A > B ≤ C !≥ D ≤ E --- A > B ≤ C < D ≤ E --- B < E, C < E, B < D.**

But the relations between AC, AD, and AE cannot be established.

Ranking and Ordering

Type 1

a) Total number of persons = {(sum of positions of same person from both sides i.e. left and right side) – 1}

b) Position of a person from opposite side = {(Total no. of persons – Position of same person from given side) +1}

Type 2

a) Total no. of persons = No. of persons after or before the given person in a row + Position of same person from the other side

b) No. of persons after or before the given person in a row = Total no. of persons – Position of same person from other side

Syllogisms

Types of Statements

The four basic statements in syllogism are,

1. All As are B (Eg. All Cats are Dogs)
2. Some As are B (Eg. Some dogs are birds)
3. No A is B (Eg. No bird is a pig)
4. Some As are not B (Eg. Some pigs are not birds)

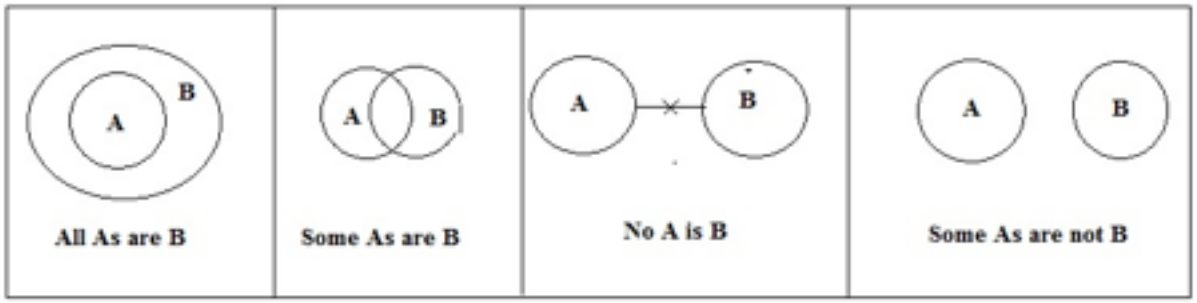
These statements can be classified into two categories as shown in below table.

	Universal	**Particular**
Positive	All cats are dogs	Some dogs are birds
Negative	No bird is a big	Some pigs are not birds

Alternate Words

All, every, any, none, not a single, only etc	Universal (Positive or Negative)
Some, many, a few, quite a few, not many, very little, most of, almost, generally, often, frequently, etc.	Particular (Positive or Negative)

Basic Diagrams



For (i) statement, i.e. All As are B, Circle A should be inside B or A and B can be equal. But circle A should not exceed B.

For (ii) statement, i.e. Some As are B, Circle A and B should be connected always. It should not separate.

For (iii) statement, i.e. No A is B, We should not connect circle A and circle B.

For (iv) statement, i.e. Some As are not B, We can connect circle A and circle B.

Complementary pair

In the Complementary pair, subject and predicate should be same in both the conclusions.If one conclusion is true,definitely the other conclusion will be false and vise versa. There are two complementary pairs in syllogism.

Pair I : All As are B & Some As are not B

If "All As are B" is true, definitely "Some As are not B" is false. If "Some As are not B" is true, definitely "All As are B" is false.

Pair II: No A is B & Some As are B

If "No A is B" is true, definitely "Some As are B" is false. If "Some As are B" is true, definitely "No A is B" is false.

Procedure

Step 1 : Draw the basic diagram for the given statements.

Step 2a : If all are positive conclusions,

Check those conclusion in basic diagram and decide which one is true or false.

Don't draw any other diagram if all are positive in conclusion.

Step 2b: If there is negative conclusion and it is true in basic diagram,

Try to make it false by drawing its complementary pair.

While drawing alternate diagram, it should not violate any other given statements.

If you are able to draw alternate diagram, without violating any statement. Then the negative statement is false.

Examples(Positive Conclusions)

Q.1.

Statements

1. All grapes are apples
2. All apples are mangoes

Conclusions:

1. All grapes are mangoes
2. All mangoes are grapes
3. Some grapes are mangoes

Answer : (1) and (3) are true

Q.2

Statements

1. Some doctors are lawyers
2. Some lawyers are circle

Conclusion

1. Some doctors are circle
2. All doctors are circle

Answer : Both (1) and (2) are false

Q.3.

Statements

1. Some mobiles are rows
2. No row is circular

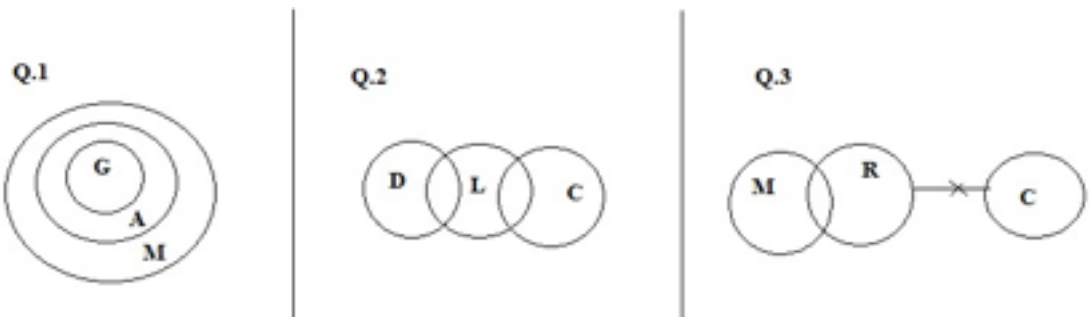
Conclusion

1. All circular are mobiles
2. Some circular are mobiles

Answer : Both (1) and (2) are false

Explanation :

Basic diagrams for above questions.Verify the conclusion only in below basic diagram.(Because all are positive conclusion)



Examples (Negative Conclusion)

Q.1.

Statements

1. All months are weeks
2. Some week are days

Conclusions:

1. No month is day
2. Some weeks are months

Answer : (2) is true

Q.2

Statements

1. All right are left
2. No left is top

Conclusion

1. Some tops are right
2. No top is right

Answer : Only (2) is true

Q.3.

Statements

1. All goats are good
2. Some good are watch

Conclusion

1. Some watch are goat

2. No watch is goat

Answer : Either (1) and (2) are true

Explanation

Q.1

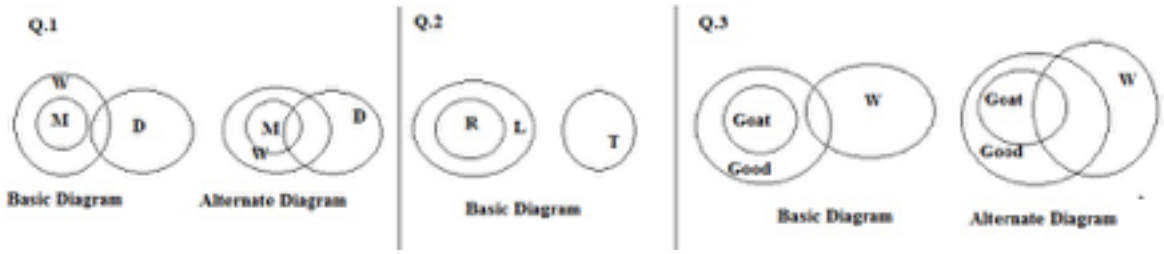
"No month is a day" is negative conclusion and it is true in basic diagram. So you have to make it false by drawing its complementary pair. Refer Alternate diagram. While drawing alternate diagram, it is not violating any statements. So the negative conclusion "No month is a day" is false in alternate diagram. Hence the conclusion is false.

Q.2

"No top is a right" is negative conclusion and it is true in basic diagram. So you have to make it false by drawing its complementary pair. While drawing alternate diagram, it is violating the given statements. So you can't draw alternate diagram. So the negative conclusion "No top is a right" will always true.

Q.3

"No watch is a goat" is negative conclusion and it is true in basic diagram. So you have to make it false by drawing its complementary pair. Refer Alternate diagram. While drawing alternate diagram, it is not violating any statements. So the negative conclusion "No month is a day" is false in alternate diagram and its complementary is true. So you have to mark either (1) or (2).



Seating Arrangements

General Guide Lines

1. Read the entire question quickly and understand the statements correctly

2. Determine the usefulness of each information and classify them accordingly into

a. Definite Information

b. Comparative information

c. Negative Information

3. Identify the statements that give definite information.

For instance let us take three statements and evaluate them

Statement (a): A is to the left of B.

The data in the statement is basic but not definite as the statement only says that A is to the left of B. but, it does not specify where A is located from B.

Statement (b): A is second to the left of B.

The data in the statement is definite as it clearly states that A is placed second to the left of B.

Statement (c):T is between Q who plays football and P in order of seating in a row.

It can be understood as 'T is between Q and P. So, they may be seated as QTP or PTQ (so, the data is not definite) and 'Q plays football'.

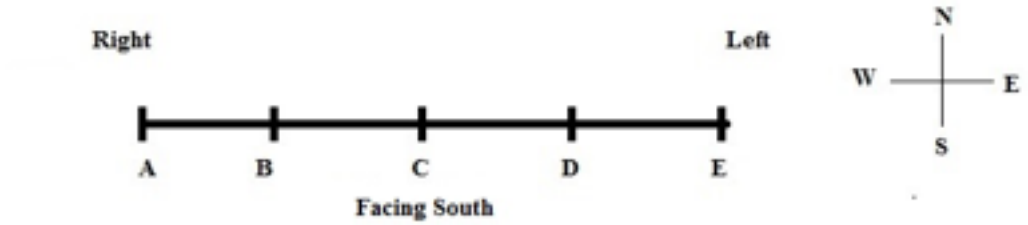
4. Search for the connecting information.

5. Figure out the seating arrangement by clearly identifying the directions

Linear Arrangements

If they are facing North,

1. B,C,D, E are right of A but only B is immediate right of A.
2. D,C,B,A are left of E but only D is the immediate left of E.
3. A is the immediate left of B while E is the immediate right of D.



If they are facing South,

1. B,C,D, E are left of A but only B is immediate left of A.
2. D,C,B,A are right of E but only D is the immediate right of E.
3. A is the immediate right of B while E is the immediate left of D.

Arrangement Puzzle

Shortcuts and tips to solve Arrangement Puzzle

Focus on Family-tree first: You can not successfully start placing people in the seating arrangement if you don't know the family tree. Usually people in the seating arrangement are referred to as: wife of A, son of B. So it is better if you know who is who and then start with the seating arrangement. To do this, read all conditions in the question carefully from the beginning and ignore all statement about who is sitting where.

Find starting points: Starting Points help in identifying the position of specific persons. Generally, the question begins with negative information which doesn't highlight the exact position. Remember, statements starting with "Neither/Nor" can only reveal relative positions and can never be a starting point. You must read all the statements carefully to be able to arrive at the starting point.

Find connecting dots: Connecting dots are small pieces of information which help in the further arrangement based on the position of people already seated.

Solve questions purely on blood relations first: If you are unable to solve the final seating arrangement but have already drawn the family tree, the answer the relevant questions. Don't leave the entire block just because you couldn't solve it completely.

ARRANGEMENTS

Seating arrangement is arranging people in their perspective position based on the data specified in the given question. Arrangements can be made in any form like row, circle, triangle,

square, rectangle etc. The position can be inferred by the direction. And that directions determine the types of seating arrangement

1. Linear Arrangement
2. Circular Arrangement
3. Rectangular / Square Arrangement
4. Hexagonal Arrangement

Data Sufficiency

Data Sufficiency problem consists of a question followed by two statements, labeled as Statement (1) and Statement (2), in which certain data are given. You have to decide whether the data given in the statements are sufficient for answering the question.

Using the data given in the statements upheld your knowledge of mathematics and everyday facts (such as the number of days in July or the meaning of counterclockwise), you must indicate from the following answer options that whether:

(A) Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient to answer

the question asked;

(B) Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient to answer

the question asked;

(C) Both statements (1) and (2) TOGETHER are sufficient to answer the question asked; but NEITHER statement ALONE is sufficient.

(D) EACH statement ALONE is sufficient to answer the question asked;

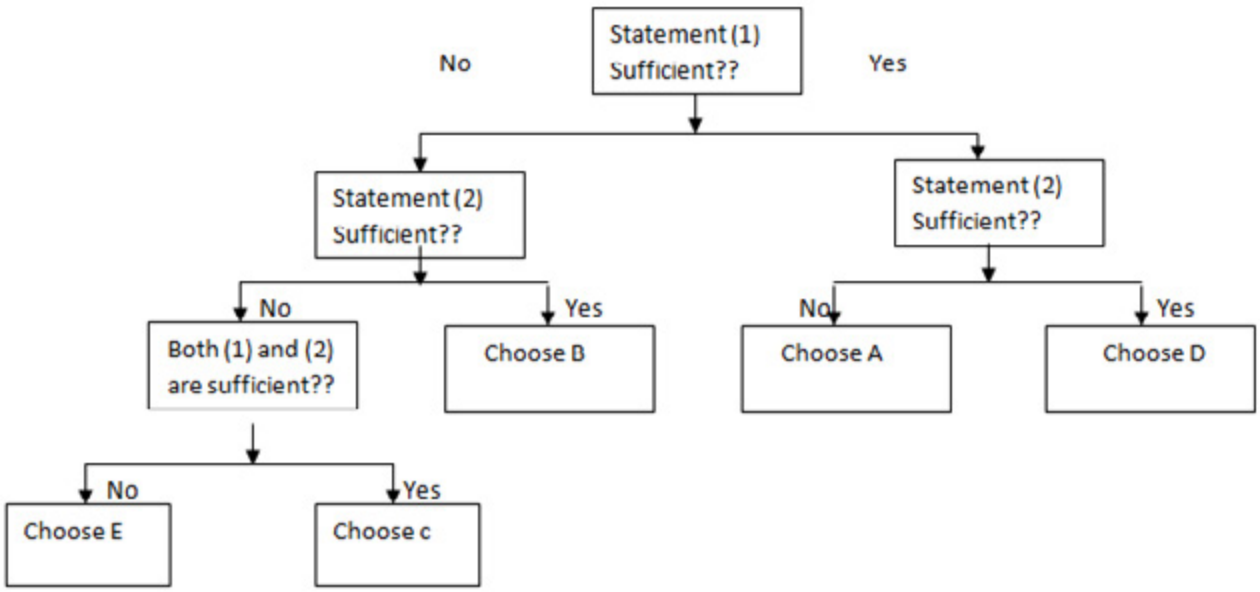
(E) Statements (1) and (2) TOGETHER are NOT sufficient to answer the question

asked,

and additional data specific to the problem are needed.

A statement is sufficient when it guarantees exactly one answer to that question.

DESICISION TREE:



TIPS TO SOLVE DATA SUFFICIENCY PROBLEMS:

• Never try to reach final answer as it is not asked. You need to find whether the information provided is enough to solve the given problem or not.

• Never make any assumption. Use only universal rules { eg. a + b = a + b - (a U b) }

• Try to solve questions by using above strategies

• Solve question step by step. First try to find answer using first statement then second and finally with both. Then mark the answer

• Even if you find answer with only one statement, then try to find answer with remaining statement as sometimes there is an option that answer can be find with both statements

separately.

• Move on quickly and mark answer can't be found in case you are unable to reach any conclusion with information provided.

Data Interpretation

TRICKS TO BE USED

• Percentage

• Ratios

• Time, speed and distances

• Average

The data interpretation may generally be given in the following format:

• Table charts

• Line charts

• Pie charts

• Bar charts

TABLE CHART

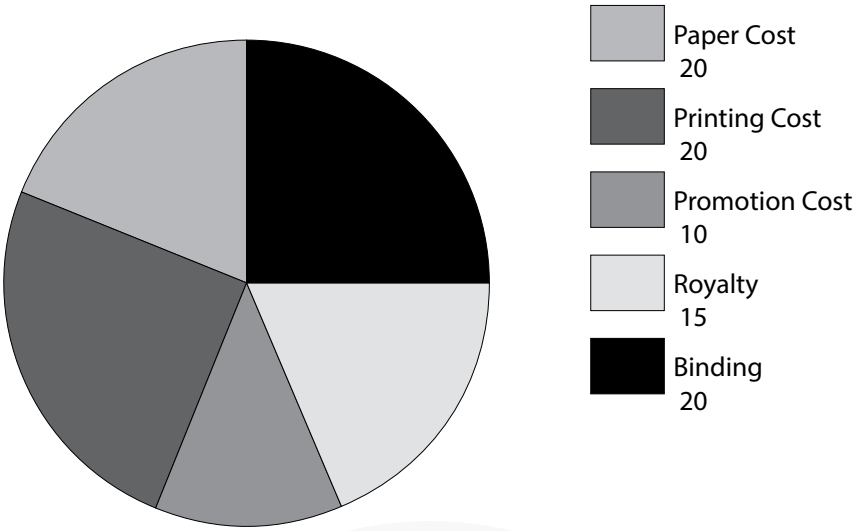
The data will be arranged in rows and columns in which the first row and the first column denote the titles.

Category of Assistance	Average number receiving per month		Total cost per help year (in crores of Rs.)		Cost paid by Centre for the year (in crores of Rs.)	
	1995	1996	1995	1996	1995	1996
A	36097	38263	38.4	34.8	18.4	17.4
B	6632	5972	5.0	3.2	2.6	1.6
C	32545	31804	76.4	59.4	13.0	10.0
D	13992	11782	26.4	42.6	6.6	10.6
E	21275	228795	216.6	242.8	55.0	62.6

PIE CHART

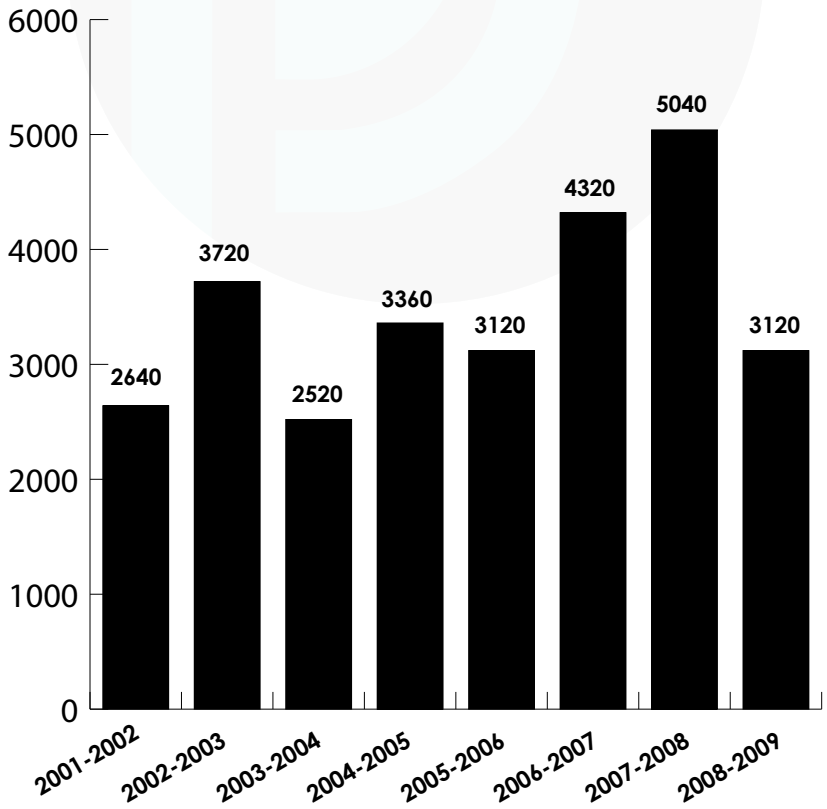
Pie charts are another type of data interpretation where the data is represented in the form of a circle. In a pie chart, a circle is divided into various sections or segments such that each sector or segment represents a certain proportion or percentage of the total.

In such a diagram, the total of all the given items is equated to 360 degrees and the degrees of angles, representing different items, are calculated proportionately. As we know a circle has 360°



BAR CHART

A bar chart or bar graph is a chart or graph that presents grouped data with rectangular bars with lengths proportional to the values that they represent. The bars can be plotted vertically or horizontally. A vertical bar chart is sometimes called a Line graph.



LINE CHARTS:

A line chart or line graph is a type of chart which displays information as a series of data points called 'markers' connected by straight line segments. It is a basic type of chart common in many fields. A line chart is often used to visualize a trend in data over intervals of time – a time series – thus the line is often drawn chronologically. In these cases they are known as run charts.