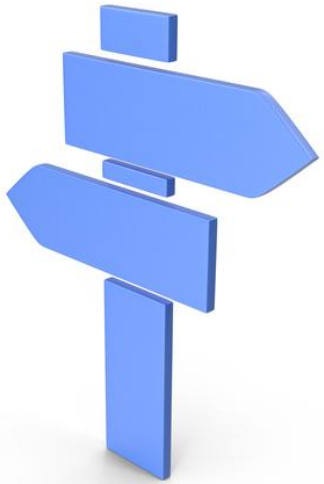
WELCOME

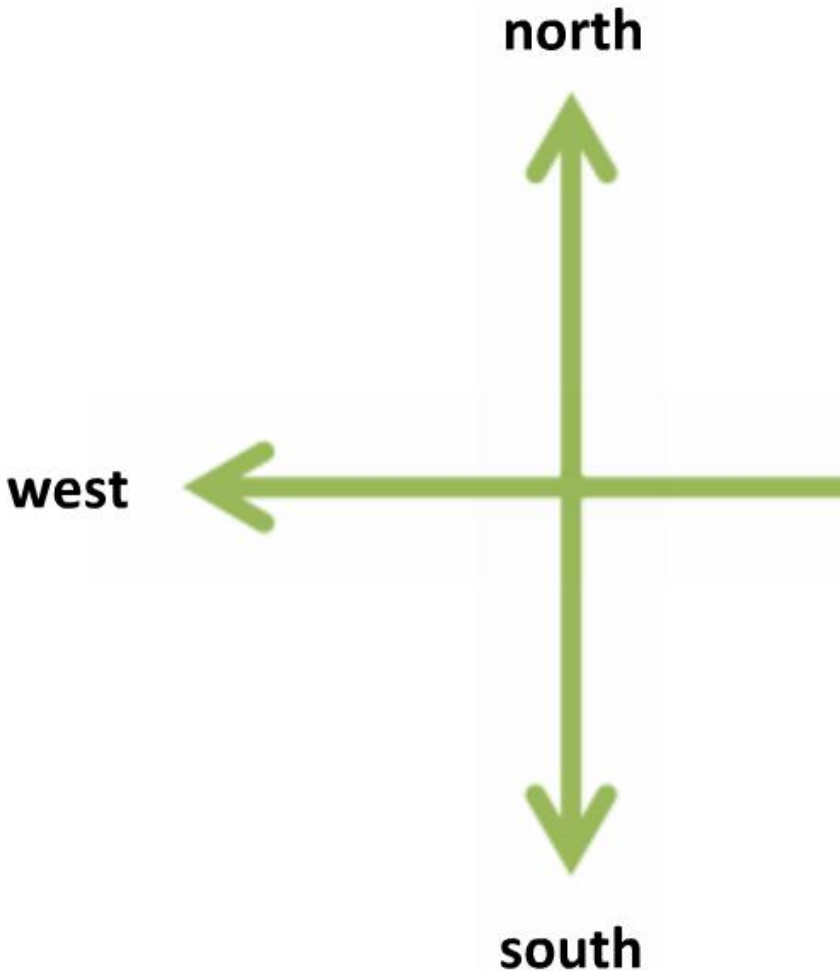
Reasoning

Direction Sense



Reasoning

Directions



Left Right Left Right.....

Right Right / Left Left - - - - - Opposite Direction

Right Right Right Right
or
Left Left Left Left

} Same Direction / No change

Right Left

Right Left Right Left

} Same Direction / No change

Right Left Right Left Right Left

Left Left Right Right Left Right

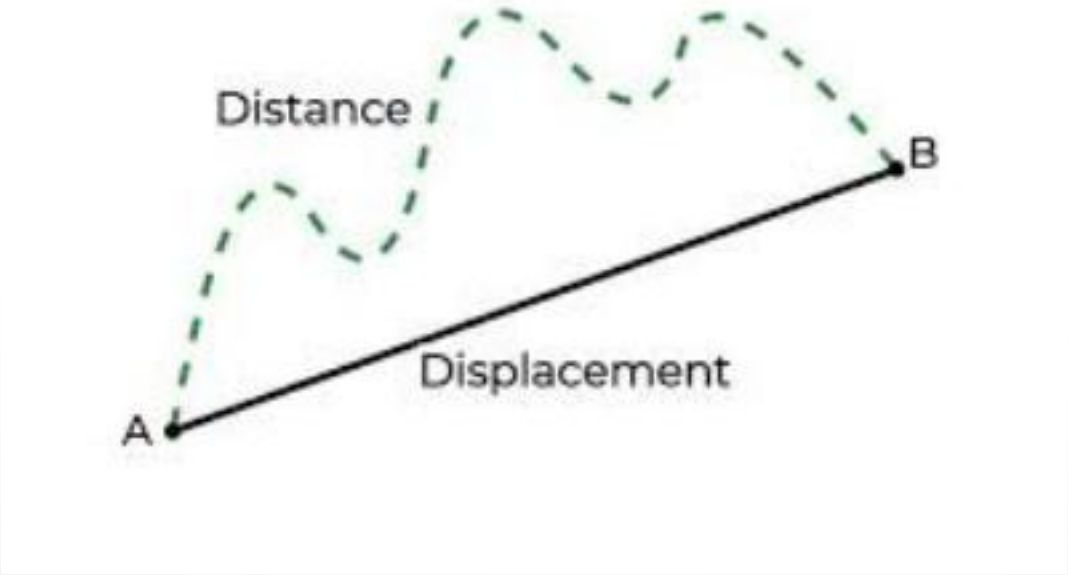
DISTANCE

>>> Length of the path taken by an object to reach from one point to another

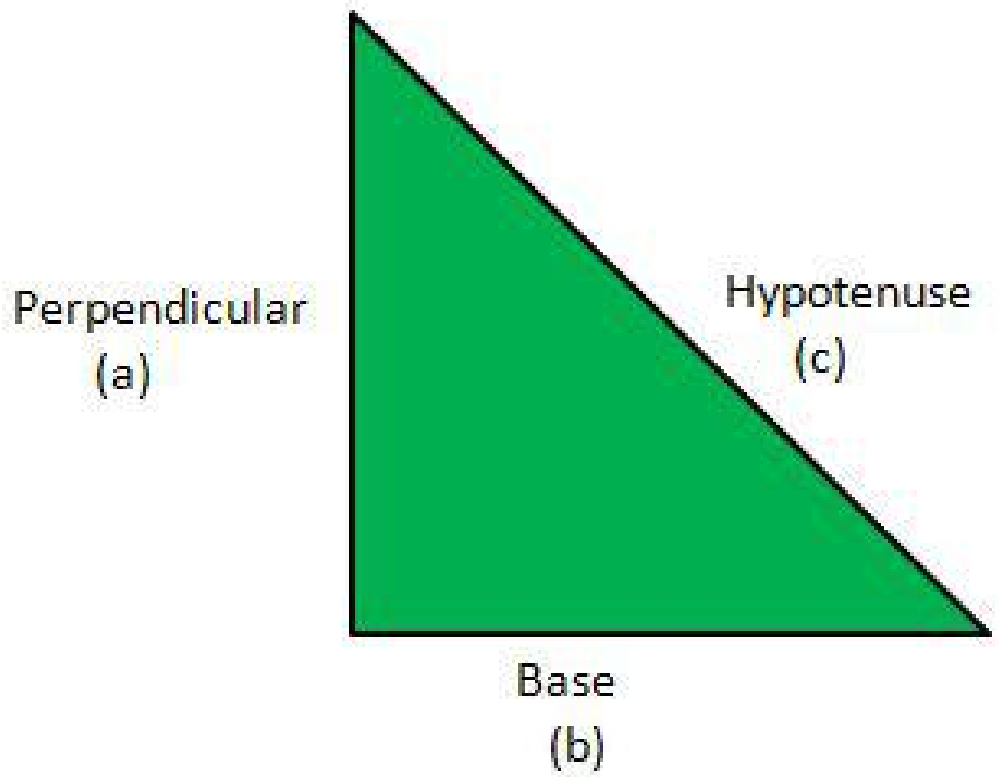
DISPLACEMENT

>>> Distance between initial point and final point

>>> Shortest distance between to point



PYTHAGORAS THEOREM



$$c^2 = a^2 + b^2$$

1. A man walking in NORTH directions turns, 12 times to his right, then 13 times to his left, again 11 times to his right and finally 9 times to his left, then in which direction he is going now?

a) East

b) West

c) South

d) North - East

Reasoning

2. A person is going towards North. After waliking 100m, he turns to his right and walks 50m. Again, he turns to his right & walks100 m. Finally, he turns to his left & walks 20m, Now in which direction is he moving or facing?

a) East

b) West

c) South

d) North

3. A man starts from a point and moves 3 km north, then turns to west and goes 2 km. He turns north and walks 1 km and then moves 5 km towards east. How far is he from the starting point?

(a) 11 km

(b) 5 km

(c) 10 km

(d) 8 km

4. Rohan is facing west and turns 45° clockwise, again 180° clockwise and then turns 225° anticlockwise. In which direction is he facing now?

(a) West

(b) East

(c) South

(d) North

5. Amritha walks 10km towards the South. Turning to the left, she walks 20km and then. moves to her right. After moving a distance of 20km, she turns to the right and walks 20km. Finally, she turns to the right and moves a distance of 10km. How far and in which direction is she from the starting point?

(a) 10 km North

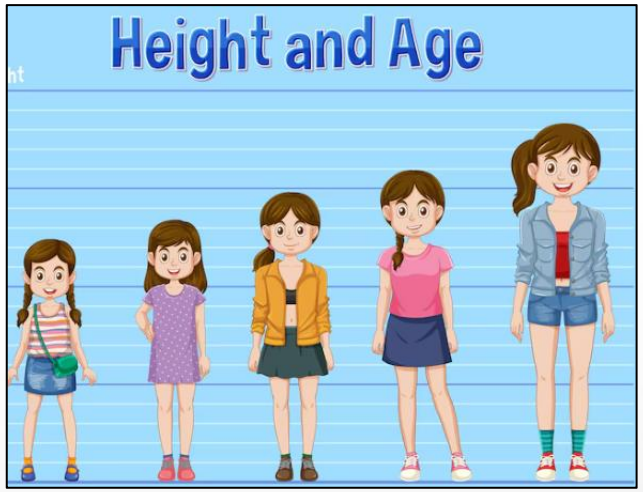
(c) 20 km North

(b) 20 km South

(d) 10 km South

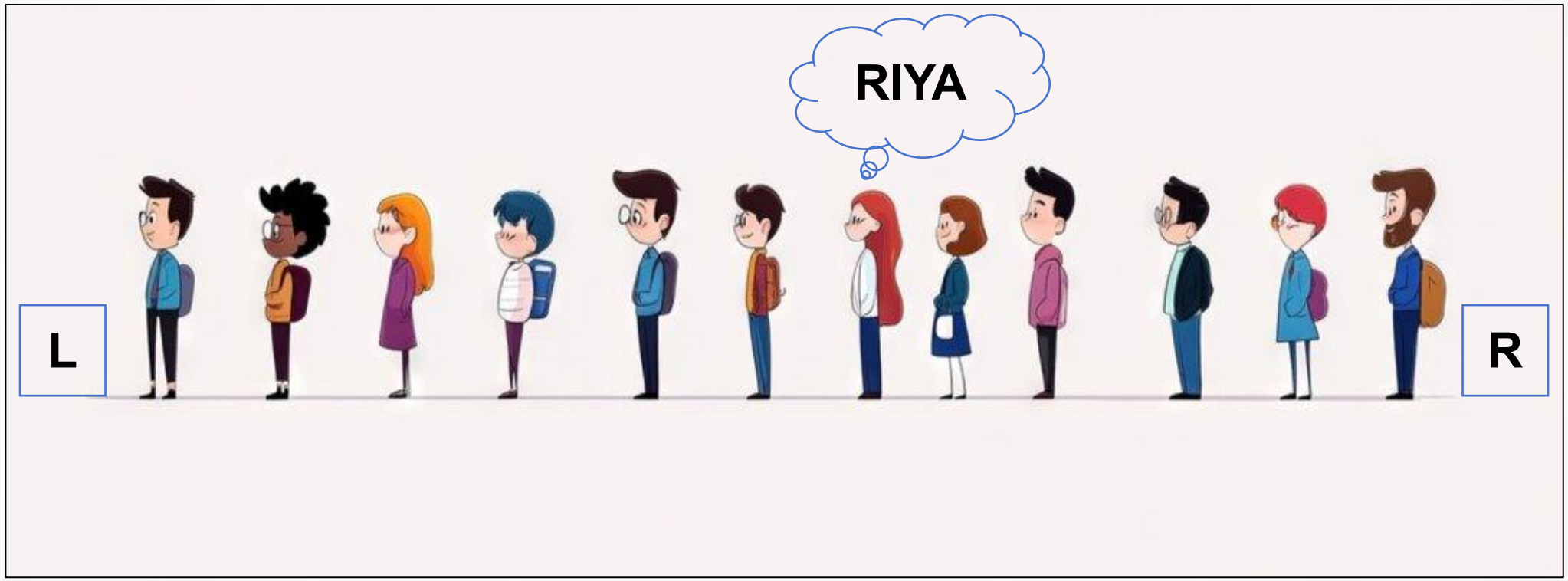
Reasoning

Ranking & Ordering



POSITION BASED

People in Queue



Riya's Position from left end = 7
Riya's Position from right end = 6
So Total Number of Persons in the Line = 7 + 6 - 1 = 12

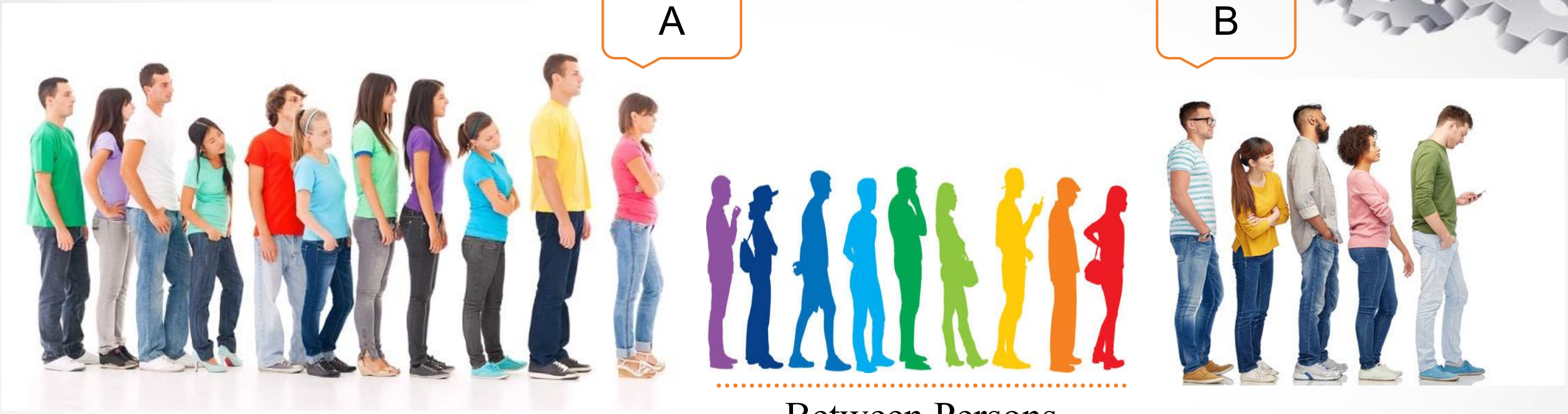
POSITION BASED

People in Queue

Blue’s Position from front end = 4
Blue’s Position from back end =14
So Total Number of Persons in the Line =4 + 14 - 1 = 17

POSITION BASED

People in Queue



A's Position from left / back end = 11
B' s Position from right / front end = 5
Number of Persons Between A and B = 9

Total Number of persons in the line = 11 + 5 + 9 = 25

POSITION BASED

People in Queue - Ineterchanging

1. Radhika has secured sixteenth rank from the top and thirteenth from the bottom in an examination. How many students are there in the class.

(a) 30

(b) 29

(c) 27

(d) 28

Reasoning

2. Ram is 18 th from left and 23rd from right in a line of people. How many people are there in the line?

(a) 40

(b) 42

(c) 41

(d) 39

Reasoning

3. Raju is 6th from left end and Chutki is tenth from the right end in a row of children. If there are 8 children between Raju and Chutki, how many chidren are there in the row?

a) 26

b) 25

c) 24

d) 23

Reasoning

4. In a row Vikas is 15th from left end ans Sonu is 7th from left end. Then how many person are sitting between them?

a) 6

b) 8

c) 7

d) 9

Reasoning

5. In a row of students all facing north, Kajal is 12th from the left and Salman is 18th from the right. If their positions are swapped. Salman becomes 14th from right. What is the total number of stuudents in the row?

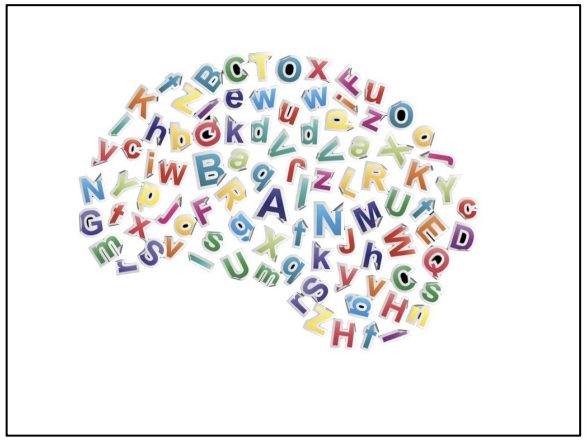
a) 31

b) 26

c) 25

d) 27

CODING & DECODING



1. In a certain code language, 'TRAIN' is written as 'WUDLQ' and 'ROAD' is written as 'URDG'. How will 'TAXI' be written in that language?

(a) WDAL

(b) WDBL

(c) WEAL

(d) WEAL

2. In certain code language, if DOUBLE is written as FRYGRL, then how will METHYL be written in the same code language?

(a) GRXFQJ

(b) GRXEOH

(c) OHXMES

(d) FQYFRK

3. If in a coding system, **SHELVES** is coded as **191951522219**, and **NOMINEE** is coded as **1412131814225**, then how will SEIZURE be coded in the same coding system?

(a) 8518266185

(b) 1922912195

(c) 19229262185

(d) 8221816922

4. In a code language, SAUCE is written as ASVEC. How will MEANT be written as in that language?

(a) EMANT

(b) EMBTN

(c) MEBTN

(d) EMCTN

5. In a certain code language, 'apple' is called 'pear', 'pear' is called 'orange', 'orange' is called 'guava' and 'guava' is called 'melon'. In this language, which one of the following will be a citrus fruit?

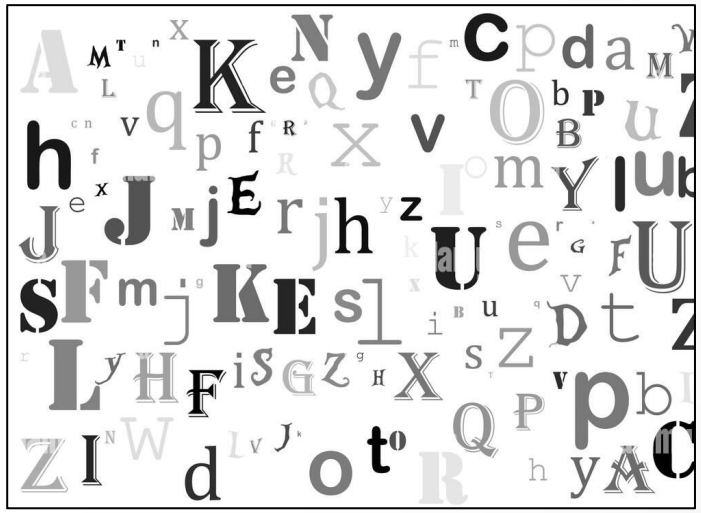
(a) Melon

(b) Guava

(c) Pear

(d) Orange

SERIES



1. In the following question, a number series is given with one term missing. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series

20, 19, 17, ___, 10, 5

a) 16

b) 18

c) 14

d) 24

7. In the following question, a number series is given with one term missing. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series

240, 120, ____, 180, 360, 900

a) 120

b) 148

c) 130

d) 150

3. In the following question, a number series is given with one term missing. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series

50, 86, ___, 127, 136, 140, 141

a) 123

b) 99

c) 111

d) 103

4. In the following question various terms of an alphabet series are given with one or more terms missing as shown by (___). Choose the missing term ouut of the given alternatives

SHG, RIF, QJE, PKD, _____

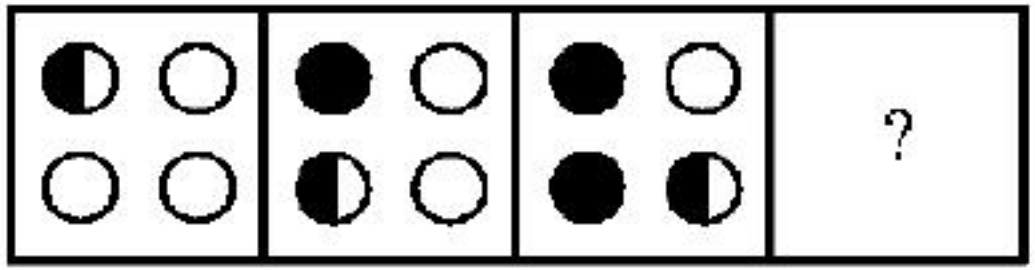
a) OLE

b) OLC

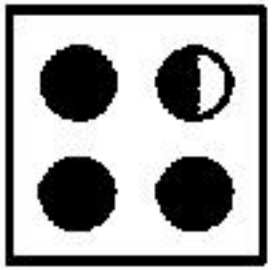
c) OME

d) OCW

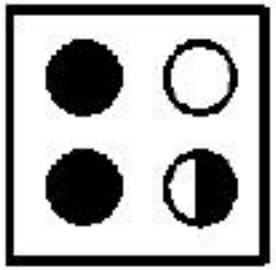
5. Select the figure that will come next in the following figure series



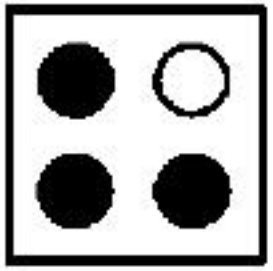
(a)



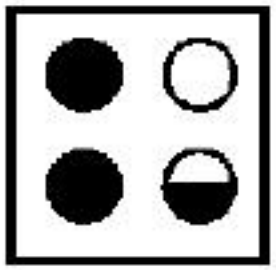
(b)



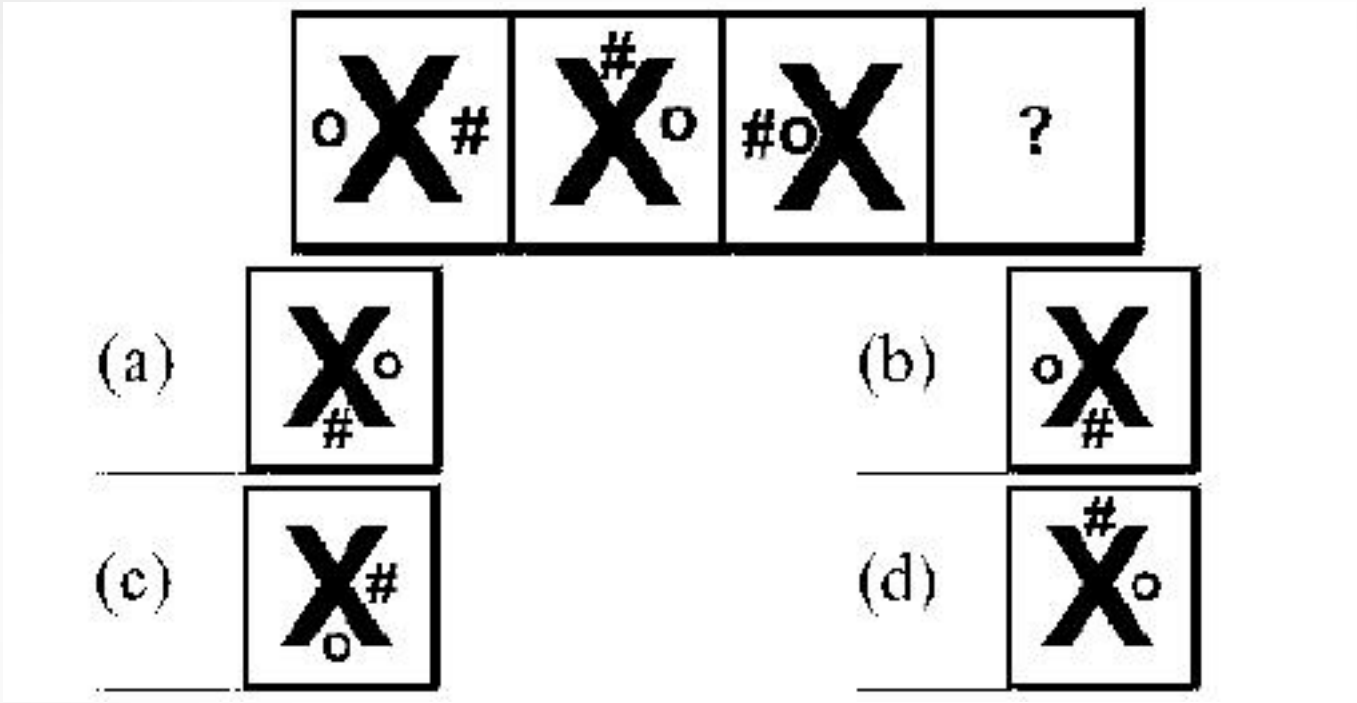
(c)



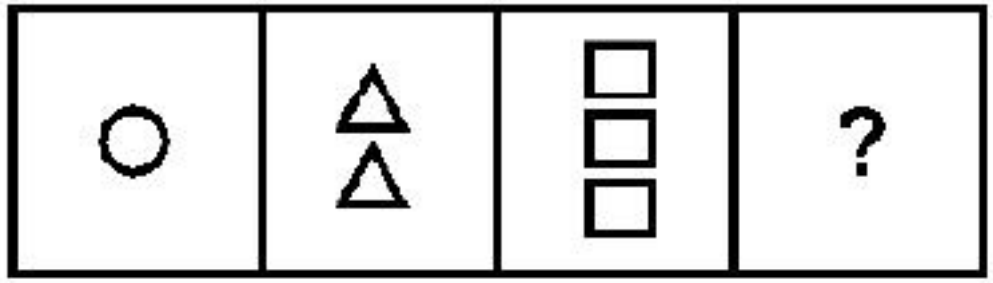
(d)

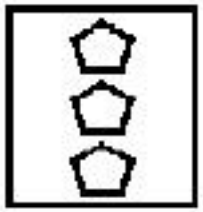


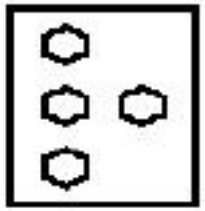
6. Select the figure that will come next in the following figure series



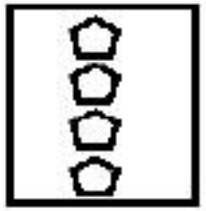
7. Select the figure that will come next in the following figure series



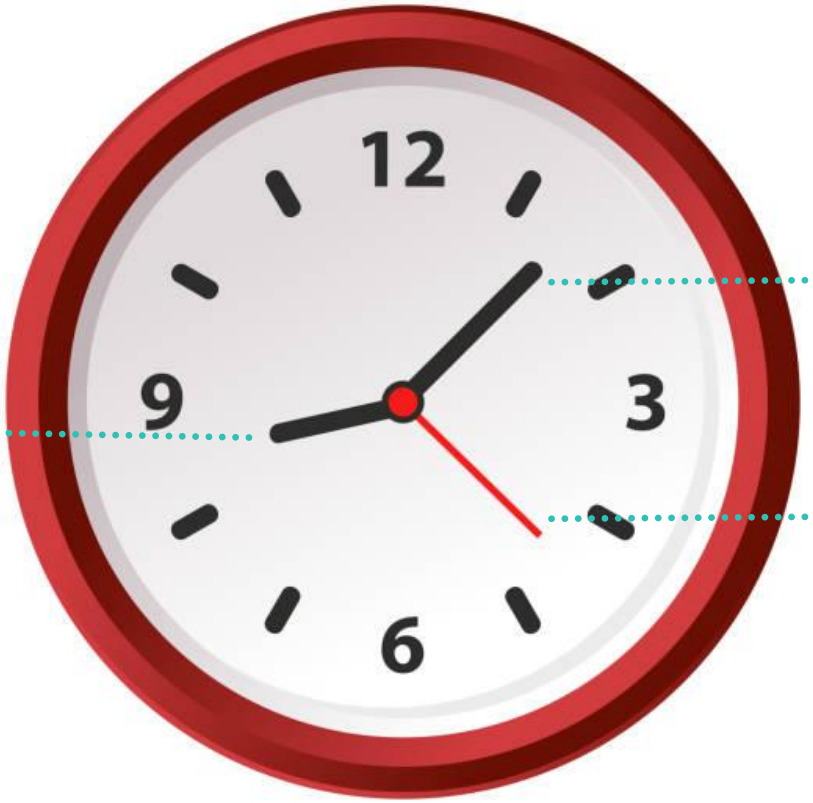
a) 

b) 

c) 

d) 

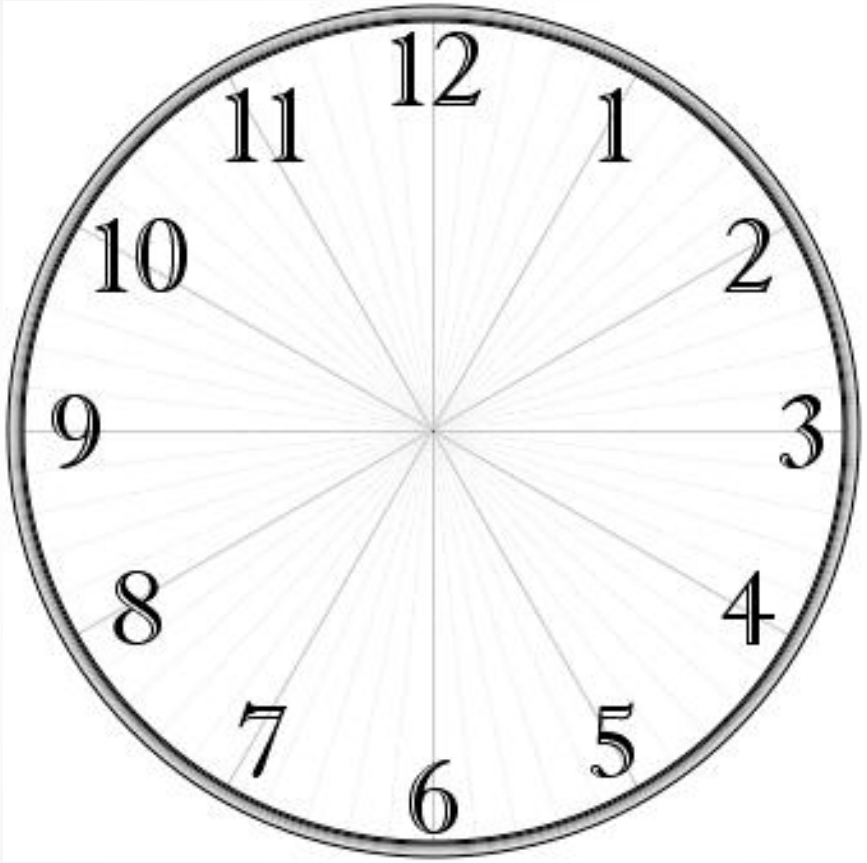
Clock



Hour Hand

Minute Hand

Second Hand


12
1
2
3
4
5
6
7
8
9
10
11


12
1
2
3
4
5
6
7
8
9
10
11

Mirror Image

Substract the given time from **11:60 or 23:60**

Water Image

a) Minute is Less than or Equal to 30

Substract the given time from **18:30**

b) Minute is more than 30

Substract the given time from **17:90**

Find The Mirror Image

TIME	MIRROR IMAGE	TIME	MIRROR IMAGE
03:00		08:45	
03:15		04:15	
12:00		05:36	
09:00		04:32	

Find The Water Image

TIME	WATER IMAGE	TIME	WATER IMAGE
03:00		08:45	
03:15		04:15	
12:00		05:36	
09:00		04:32	

Angle Between Hands

$$\theta = \left| 30H - \frac{11}{2} M \right|$$

Where H = Hour
M = Minute

Example: If time is given that 10:42; then H = 10 & M = 42

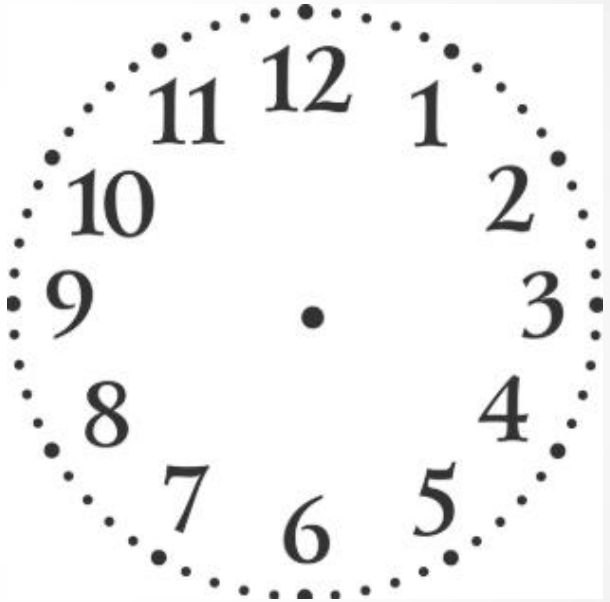
1. Find the angle between the hands of the clock when time is 7.45 am?

a) 37.5°

b) 45°

b) 33°

d) 49.25°



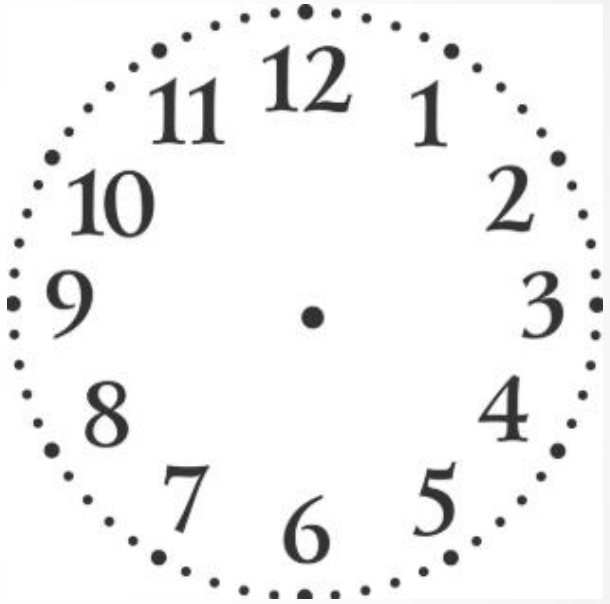
2. What is the measure of the smaller of the two angles formed between the hour hand and the minute hand of a clock when it is 6:44 p.m.?

a) 62°

b) 62.5°

c) 83.5°

d) 84°



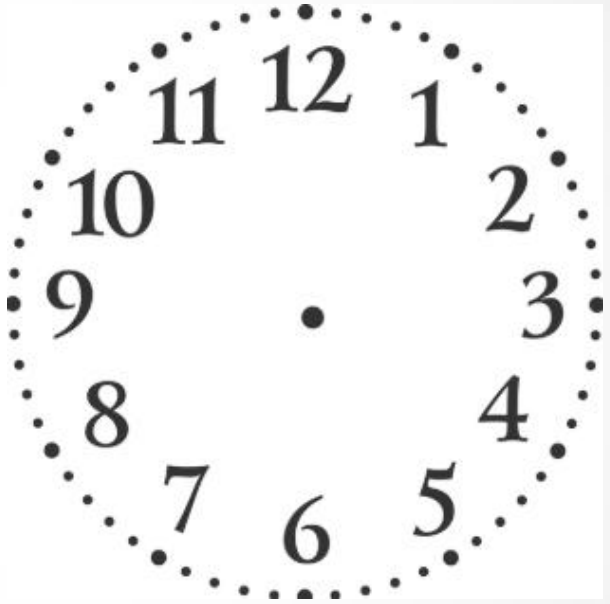
3. What will be the measure of the acute angle formed between the hour hand and the minute hand at 6:43 a.m.?

a) 56°

b) 56.5°

c) 78°

d) 21.5°



Inequalities

1. **Statement** : $A < L < T \leq R \leq H > K$

Conclusions :

I) $H > L$

II) $K > T$

(a)Only Conclusion I follows

(b)Only Conclusion II follows

(c)Either Conclusion I or II follows

(d)Neither Conclusion I or II follows

(e)Both Conclusion I and II follows

2. **Statement** : $P = N > D \geq G < B = J$

Conclusions :

I) $G < P$

II) $G < J$

(a)Only Conclusion I follows

(b)Only Conclusion II follows

(c)Either Conclusion I or II follows

(d)Neither Conclusion I or II follows

(e)Both Conclusion I and II follows

3. **Statement** : $F \leq C \geq V = Z > X = U$

Conclusions :

I) $V < U$

II) $Z < F$

(a)Only Conclusion I follows

(b)Only Conclusion II follows

(c)Either Conclusion I or II follows

(d)Neither Conclusion I or II follows

(e)Both Conclusion I and II follows

4. **Statement** : $Q \leq E = I > N \geq R \geq S$

Conclusions :

I) $E = S$

II) $S \leq N$

(a)Only Conclusion I follows

(b)Only Conclusion II follows

(c)Either Conclusion I or II follows

(d)Neither Conclusion I or II follows

(e)Both Conclusion I and II follows

5. **Statement** : $H \geq I = J > K \leq L$

Conclusions :

I) $K < H$

II) $L \geq I$

(a)Only Conclusion I follows

(b)Only Conclusion II follows

(c)Either Conclusion I or II follows

(d)Neither Conclusion I or II follows

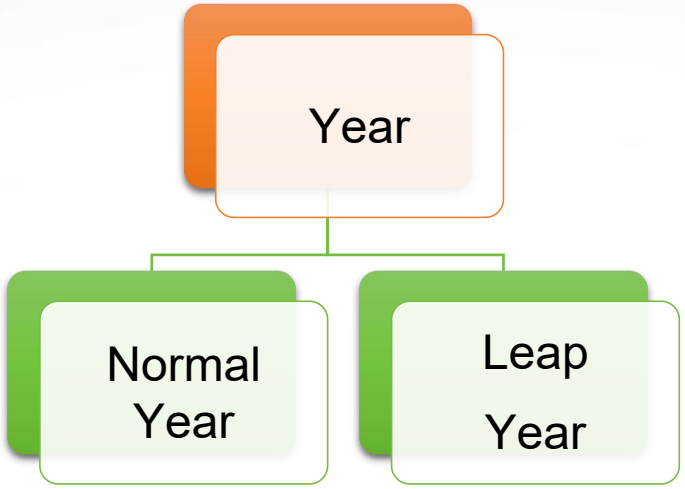
(e)Both Conclusion I and II follows

Calendar


SUN MON TUE WED THU FRI SAT
30 1 2 3 4 5 6
7 8 9 10 11 12 13
14 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29 30 31 1 2 3


JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER

Types of Years



A year that contains 365 days divided into 12 months, and only 28 days in February

A year that contains an extra day, February 29th, making it have 366 days instead of the usual 365

2010		1997		1988	
2020		1600		1994	
2000		1544		2006	
1800		1678		2100	
1888		2040		1990	
1996		2200		1992	

- **For a normal year starting day and ending day will be same**

  ie, if 1st January is Monday, then 31st December also Monday

- **In case of leap year ending day will be next day of the starting day**

  ie, if 1st January is Monday, then 31st December will be Tuesday

1. Today is Monday. After 61 days, it will be:

a)Tuesday

b) Monday

c) Sunday

d) Saturday

2. Today is Wednesday. What will be the day of the week after 75 days?

a) Friday

b) Wednesday

c) Tuesday

d) Monday

3. It was Sunday on Jan 1, 2006. What was the day of the week Jan 1, 2010?

a)Monday

b) Friday

c) Sunday

d) Saturday

4. If 6th March, 2005 is Monday, what was the day of the week on 6th March, 2004?

a) Sunday

b) Saturday

c) Tuesday

d) Wednesday

5. On 8th Dec, 2007 Saturday falls. What day of the week was it on 8th Dec, 2006?

a) Saturday

b) Friday

c) Monday

d) Tuesday

All the best,

Reasoning