## DIRECTION SENSE CONCEPTS

## AT A GLANCE

Direction is a measurement of position of one thing with respected to another thing.
Displacement is the measurement of distance between initial and the final point.
Here the candidate's ability to trace and follow the logical path correctly and sense of direction correctly as well. Direction and distance test mainly deals with two types of direction i.e.. main direction and cardinal direction

## MAIN DIRECTION

There are four type of directions, viz. East West North and South. Sun rises in the East. Just opposite of East is West and South is in the opposite to North.


Abbreviations for these directions are E (East), W (West), N (North) and S (South).

## CARDINAL DIRECTIONS

A direction between two main directions is called cardinal direction. Clearly, there are four cardinal directions.

They are

- N-E (North-East)
- N-W (North-West)
- S-E (South-East) and
- S-W (South-West)

We should use the diagram as given in question for the purpose of sensing directions. ote:- Angle formed between two main directions is $90^{\circ}$ and angle formed between a cardinal direction and main direction is $45^{\circ}$


## ROTATION OF ANGLES

To solve angle movement questions. It is necessary to know about the rotations of angles which are given below

1. i) For right direction movement (Clockwise)

ii) For left direction movement (Anti-clockwise)


Left turn Anti-clockwise direction
Right turn Clockwise direction

## THE CHANGE IN DIRECTION WHEN A PERSON OR VEHICLE TAKES A RIGHT OR A LEFT TURN

| Direction <br> before <br> taking <br> the turn | Direction in which the person or vehicle will be moving after taking the turn |  |
| :--- | :--- | :--- |
| North | East | Left |
| South | West | East |
| East | South | North |
| West | North | South |

The distance from a point is ' $P$ ' in horizontal direction and a distance of ' $Q$ ' in vertical direction is equal to.

## hythogoras Throrem

1. $Q R^{2}=Q P^{2}+P R^{2}$ or $Q R=$
2. $Q P^{2}=Q R^{2}-P R^{2}$ or $Q P=$
III. $P R^{2}=Q R^{2}-Q P^{2}$ or $P R=$

## In morning/ Sunrise time

1. a) If a person facing towards Sun, the shadow will be towards his back or in west.
2. b) If a person facing towards South, the shadow will be towards his right.
3. c) If a person facing towards West, the shadow will be towards his front.
4. d) If a person facing towards North, the shadow will be towards his left.

In evening/ Sunset time

1. a) If a person facing towards Sun, the shadow will be towards his back or in East.
2. b) If a person facing towards North, the shadow will be towards his right.
3. c) If a person facing towards East, the shadow will be towards his front.
4. d) If a person facing towards South, the shadow will be towards his left.
