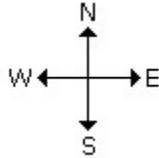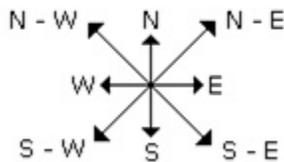# Directional Sense Test

There are four main directions - East, West, North and South as shown below:

There are four cardinal directions - North-East (N-E), North-West (N-W), South-East (S-E), and South-West (S-W) as shown below:
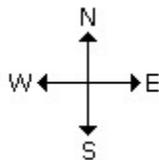

1. At the time of sunrise if a man stands facing the east, his shadow will be towards west.

2. At the time of sunset the shadow of an object is always in the east.

3. If a man stands facing the North, at the time of sunrise his shadow will be towards his left and at the time of sunset it will be towards his right.

4. At 12:00 noon, the rays of the sun are vertically downward hence there will be no shadow.

In these questions, we will see persons or things moving in E, W, N, S directions from an initial point. We have to plot the diagram for their movements and give the appropriate Solutions to the given questions.
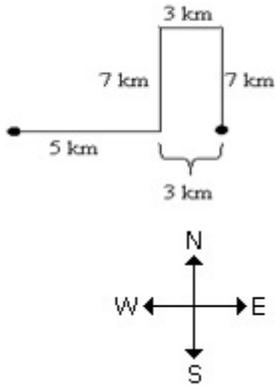
Tips 2 solve:

1) Plot the diagram of traverse path with respect to the 4 directions E, W, N and S in a diagrammatic presentation

2) Find the distance from one node to another place, if necessary.

3) Now solve the question by carefully observing the diagrammatic presentation.

Example: 1) A man walks 5 km east and turns left, then he walks 7 km and turns right and walks 3 km, then turns right and walks 7 km. Find the shortest distance he traveled and find the direction he is now from the starting point?

Solution: Diagrammatic representation of the given data:

The shortest distance, he is from the starting point = 5 km + 3 km = 8 km.

The direction he is from the starting point = East.

2) A car travels 2.5 km towards south, then turns left and travels 7.5 km and then turns left and travels 15 km and then turns left and travels 7.5 km. Then find the distance and direction of the with respect to the starting point?

Solution: Diagram: prob1

The final position of the car in north direction with respect to the starting point.

The distance from the starting point, from the diagram = 15 km - 2.5 km = 12.5 km