

## Introduction

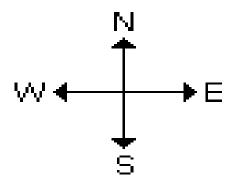
There are four main directions -

East,

West,

North,

South as shown below:



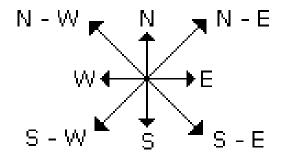
There are four cardinal directions -

*North-East (N-E)*,

North-West (N-W),

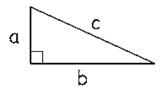
South-East (S-E),

South-West (S-W) as shown below:



## Remember!

Facing towards	On right	On left
North	East	West
South	West	East
East	South	North
West	North	South



$$\mathbf{a}^2 + \mathbf{b}^2 = \mathbf{c}^2$$

## **Problems based on Directions:**

1. After walking 6 km, I turned to the right and then walked 2 km. After then I turned to the left and walked 10 km. In the end, I was moving towards the North. From which direction did I start my journey?

A. North B. South C. East D. West

2. Ravi left home and cycled 10 km towards South, then turned right and cycled 5 km and then again turned right and cycled 10 km. After this he turned left and cycled 10 km. How many kilometers will he have to cycle to reach his home straight?

A.10 km B.15 km C.20 km D.25 km

3. Reena walked from A to B in the East 10 feet. Then she turned to the right and walked 3 feet. Again she turned to the right and walked 14 feet. How far is she from A?

A.4 feet B.5 feet C.24 feet D.27 feet

4. One morning after sunrise Nivedita and Niharika were talking to each other face to face at Dalphin crossing. If Niharika's shadow was exactly to the right of Nivedita, Which direction Niharika was facing?

A. North B. South

C. East D. Inadequate Data

5. If A x B means A is to the south of B; A + B means A is to the north of B; A % B means A is to the east of B; A - B means A is to the west of B; then in P % Q + R - S, S is in which direction with respect to Q?

A. South-West B. South-East C. North-East D. North-West

- Six flats on a floor in two rows facing North and South are allotted to P, Q, R, S, T and U.
- Q gets a North facing flat and is not next to S.
- S and U get diagonally opposite flats.
- R next to U, gets a south facing flat and T gets North facing flat.
  - **6.** If the flats of P and T are interchanged then whose flat will be next to that of U?

A. P

B. Q

C. R

D. T

7. Which of the following combination get south facing flats?

A.QTS

B. UPT

C. URP

D. Inadequate Data

**8.** The flats of which of the other pair than SU, is diagonally opposite to each other?

A. QP

B. QR

C. PT

D. TS

- **9.** Whose flat is between Q and S?

A. T

B. U

C. R

D. P

- **10.** Which of the following statements is definitely true?
- A. Papaya tree is just near to apple tree.
- B. Apple tree is just next to lemon tree.
- C. Raspberry tree is either left to Pomegranate or after.
- D. Pomegranate tree is diagonally opposite to banana tree.

- **11.** Which tree is just opposite to raspberry tree?
- A. Papaya
- B. Pomegranate
- C. Papaya or Pomegranate
- D. Data is inadequate

**12.** Which tree is just opposite to banana tree?

A Mango B. Pomegranate
C. Papaya D. Inadequate Data

13. Amit started walking positioning his back towards the sun. After some time, he turned left, then turned right and towards the left again. In which direction is he going now?

A. North or South

C. North or West

D. South or West

**14.** Rohit walked 25 m towards south. Then he turned to his left and walked 20 m. He then turned to his left and walked 25 m. He again turned to his right and walked 15 m. At what distance is he from the starting point and in which direction?

A. 35 m East B. 35 m North C. 30 m West D. 45 m East

**15.** Village Q is to the North of the village P. The village R is in the East of Village Q. The village S is to the left of the village P. In which direction is the village S with respect to village R?

A. West B. South-West C. South D. North-West

**16.** Radha moves towards South-East a distance of 7 km, then she moves towards West and travels a distance of 14 km. From here she moves towards North-West a

distance of 7 km and finally she moves a distance of 4 km towards east. How far is she now from the starting point?

A. 3 km B. 4 km C. 10 km D. 11 km

17. Sundar runs 20 m towards East and turns to right and runs 10 m. Then he turns to the right and runs 9 m. Again he turns to right and runs 5 m. After this he turns to left and runs 12 m and finally he turns to right and 6 m. Now to which direction is Sundar facing?

A. East B. West C. North D. South

18. A child went 90 m in the East to look for his father, then he turned right and went 20 m. After this he turned right and after going 30 m he reached to his uncle's house. His father was not there. From there he went 100 m to his north and met his father.

How far did he meet his father from the starting point?

A. 80 m B. 100 m C. 140 m D. 260 m

19. Four friends A, B, C and D live in a same locality. The house of B is in the east of A's house but in the north of C's house. The house of C is in the west of D's house. D's house is in which direction of A's house?

A. South-East B. North-East

C. East D. Inadequate Data

**20.** Umesh directly went from P, to Q which is 9 feet distant. Then he turns to the right and walked 4 feet. After this he turned to the right and walked a distance which is equal from P to Q. Finally he turned to the right and walked 3 feet. How far is he now from P?

A. 6 feet B. 5 feet C. 1 feet D. 0 feet