

Directions

Model 1: Tracing the Path



1. A vehicle starts from point P and runs 10 km towards North, It takes a right turn and runs 15 km. It now runs 6 km after taking a left turn. It finally takes a left turn, runs 15 km and stops at point Q?
 - i. How far is point Q with respect to point P?
1) 16 km 2) 25 km 3) 4 km 4) 20 km 5) None of these
 - ii. Towards which direction was the vehicle moving before it stopped at point Q?
1) North 2) East 3) South 4) West 5) North-West
 - iii. In which direction point Q with respect to P?
1) East 2) South 3) West 4) North-West 5) North
2. Vehicle started moving towards east. After moving a distance of 20 meters, it took a right turn, again after moving 10 meters, it took a left turn, and again after moving 10 meters, he took a left turn. Which direction is the vehicle moving now?
1) West 2) North-West 3) North 4) East 5) South
3. A car started from point P and moves towards South and stops at point Q. It now takes a right turn followed by a left turn and stops at point R. It finally takes a left turn and stops at point S. If it moves 5 km before taking each turn, towards which direction car has to move from S to reach point Q?
1) North 2) East 3) South 4) West 5) North-West

Model 2: Tracing the Path - Pythagoras Theorem



4. A person started moving towards west and stopped at point 'P' after covering 10 km. He then takes a right turn and stopped at point 'Q' after covering 12 km. Finally, he takes left turn, covers 6 km and stops at point R. What is the distance between the starting point and stopping point?
- 1) 20 km 2) 40 km 3) 60 km 4) 80 km 5) None of these
5. Gautam walked 35 meters towards south. Then he turned to his left and walked 40 meters. He then turned towards his left and walked 15 meters. He again turned to his right and walked 25 meters. At what approximate distance is he from the starting point and in which direction?
- 1) 60m NE 2) 35m SE 3) 67m East 4) 67m SE 5) None of these
6. A persons starts from his house and travels a distance of 10m southwards and then travels a distance of 12m rightwards, then travels distance of 10m rightwards and finally travels a distance of 10m in the eastern direction. At what horizontal distance is he from his house?
- 1) 2 m 2) 10 m 3) 12 m
- 4) Cannot be determined 5) None of these

Model 3: Direction before Stopping



7. Town D is to the west of town M. Town R is to the south of town D. Town K is the East of Town R. Town K is towards which direction of town D?
- 1) South 2) East 3) North-East
- 4) South-East 5) None of these

8. Suresh started walking straight facing east. After walking distance 20 meters, he took a right turn, again after walking 10 meters, he took a left turn, and again after walking 10 meters, he took a left turn. Which direction is he facing now?

1) East 2) West 3) North 4) North-West 5) None of these

9. Raman started from point P and walks towards south and stops at point Q. He now takes a right turn followed by a left turn and stops at point R. He finally takes a left turn and stops at point S. if he walks 5 Km before taking each turn, towards which direction will Raman have to walk from point S to reach point Q?

1) North 2) South 3) West 4) East 5) North west

Model 4: Problems on Shadows

10. If at 3pm the shadow of a person is on his right then the person is facing which direction?



1) North 2) South 3) East 4) West 5) None of these

11. One morning Uday and Vishal were talking each other face to face at a crossing. If Vishal's shadow was exactly to the left of Uday, which direction was Uday facing?

1) East 2) West 3) North 4) South 5) None of these

12. One evening before Sunset, Rekha and Hema were talking to each other face to face. If Hema's shadow was exactly to the right of Hema, which direction was Rekha facing?

1) North 2) South 3) East
4) Data inadequate 5) None of these

Answers

| | | | | | | | | | |
|---------|----------|-----------|--------|-------|-------|-------|-------|-------|-------|
| 1(i)- 1 | 1(ii)- 4 | 1(iii)- 5 | 2 - 3 | 3 - 1 | 4 - 1 | 5 - 4 | 6 - 1 | 7 - 4 | 8 - 3 |
| 9 - 1 | 10 - 1 | 11 - 3 | 12 - 2 | | | | | | |

Additional Examples

Directions (1-5): Study the following information carefully and answer the questions given below:

- i) A # B means A is to the right of B at a distance of 1m.
- ii) A π B means A is to the left of B at a distance of 1m.
- iii) A \$ B means A is to the north of B at a distance of 1m.
- iv) A η B means A is to the south of B at a distance of 1m.
- v) In each of the following questions all persons face south.

1. If P # L η M # K, then K is in which direction with respect to P?

- 1) Southeast 2) North 3) East 4) Northwest 5) None of these

2. If H η E # C π D, then D is in which direction with respect to C?

- 1) North 2) East 3) South
4) Cannot be determined 5) None of these

3. If P \$ L π Q η J, then J is in which direction with respect to P?

- 1) East 2) West 3) South 4) North 5) Cannot be determined

4. If G # P # D η S \$ T, then T is in which direction with respect to G?

- 1) South 2) Northeast 3) East
4) Cannot be determined 5) None of these

5. If $R \pi Q \eta L \# N$, then N is in which direction with respect to Q?

- 1) Northeast 2) South 3) Southeast 4) West 5) None of these

Answers

| | | | | |
|-------|-------|-------|-------|-------|
| 1 - 1 | 2 - 5 | 3 - 2 | 4 - 3 | 5 - 3 |
|-------|-------|-------|-------|-------|