Directions Questions and Answers

Q 1. Sharad started from home for his work and drove 50 km towards the east, then took a right turn and drove another 30 km. He again took a left turn and drove 30 km in that direction. Then, he turned to his right and drove 30 km to reach his final destination. What is the shortest distance between Sharad’s home to his office?

1. 65 km
2. 98 km
3. 100 km
4. 120 km
5. 75 km

Answer: (3) 100 km

Solution:

Using Pythagoras theorem,

\[ H = \sqrt{P^2 + B^2} \]

\[ H = \sqrt{60^2 + 80^2} \]

\[ H = \sqrt{3600 + 6400} \]

\[ H = \sqrt{10000} \]

\[ H = 100 \text{ km} \]

Thus, the shortest distance between Sharad’s home and the office is 100 km

Directions (Q2 - Q3): Analyse the image given below and answer the following questions:
Q 2. In which direction is point F with respect to point B?
1. South
2. North West
3. North East
4. South East
5. South West

Answer: (4) South East

Q 3. What is the total distance travelled between point A and point G?
1. 150 km
2. 123 km
3. 195 km
4. 170 km
5. 190 km

Answer: (5) 190 km

Solution:
Total distance = AB + BC + CE + ED + DF + FG
= 45 + 30 + 35 + 25 + 30 + 25
= 190 km

Q 4. To reach his school, Ritesh started from his house and walked 10 km towards the south. He then took a right turn and walked 5 km and finally took a left turn. After walking for 7 km, he finally reached his school. In which direction is Ritesh's house from his school?
1. South-West
2. North-East
3. North-West
4. South-East
5. East

Answer: (2) North-East

Solution:
The house is in the North-East direction with respect to the school.

Directions (Q5 - Q6): Study the information given below and answer the following questions:

Every morning Tanisha goes for cycling and follows a fixed route. From her hostel, she goes in the north direction and cycles 20 km. She then takes a right turn and moves 30 km, followed by a right turn again and cycles for 35 km. She then turns left and cycles for 15 km. Finally, she takes a left turn and cycles for 15 km.

Q 5. In which direction is Tanisha from her hostel, when she reaches the final destination?
   1. North
   2. North East
   3. West
   4. South West
   5. East

   Answer: (5) East

Q 6. How far is the final destination from Tanisha’s hostel?
   1. 45 km
   2. 115 km
   3. 25 km
   4. 95 km
   5. 55 km

   Answer: (1) 45 km

Solution (Q5 - Q6):
Since the hostel and the final destination, both are in the same line. Thus, the direction of the final destination from Tanisha's hostel is in the East.
The distance between the two points = 30km + 15km = 45 km.

Q 7. Starting from point M, Jaishree walked 15 metres to her west. She then turned left and walked 20 metres. She again took a left turn and walked 15 metres. Finally, she took a right turn and walked for 12 metres. How far is Jaishree from point M and in which direction?

1. 32m, South
2. 54m, North
3. 42m, North
4. 32m, East
5. 54m, West

Answer: (1) 32m, South

Solution:
Jaishree is in the south direction from point M.
Distance between point M and Jaishree final destination = 20m + 12m = 32 m.
Q 8. Ashish has to go to his coaching class 5 days in a week. He walks to the Institute all by himself. Starting from his house, he starts moving East and walks 90 m. He then turned right and walked 20 m. He then took a right turn and walked for 30 m. From there, Ashish moved 100 m to the north and reached his Coaching Institute. How far is his house from the coaching centre?

1. 240 m
2. 100 m
3. 210 m
4. 150 m
5. 125 m

Answer: (2) 100 m

Solution:

Distance between Ashish' Coaching Institute and his house = \( \sqrt{(100-20)^2 + (90-30)^2} \)
= \( \sqrt{(80)^2 + (60)^2} \)
= \( \sqrt{6400 + 3600} \)
= \( \sqrt{10000} \)
= 100 metre

Directions (Q9 - Q10): Study the information given below carefully and accordingly answer the following questions:

Akshat is going shopping at a mall nearby with his friends. They start from point X and move 15 km to the north. They then take a right turn and move 20 km, followed by a left turn. After moving for another 40 km, they turn left and walk 20 km.

Q 9. In which direction is Akshat along with his friends with reference to point X?

1. North
2. South
3. East
4. West
5. North East

Answer: (1) North
Q 10. What is the distance between point X and the final destination?

1. 45 km
2. 35 km
3. 65 km
4. 55 km
5. 75 km

Answer: (4) 55 km

Solution (Q9 - Q10):

Distance between point X and the final destination = 15 + 40 = 55 km

Q 11. In a room with four students, Q is sitting to the North of P. R is in the East of Q and S is to the left of P. Based on the given information, in which direction is S sitting with respect to R?

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

Answer: (2) South West

Solution:
Since S and R both are not in the straight line, then it can be concluded that S is in the South-west direction with respect to R.

Q 12. Kashish is heading towards her office. She starts moving towards in the south-east direction and travels for 7 km. She then moves towards the west direction and travels a distance of 14 km. She then moves towards the north-west and travels is a distance of 7 km. Finally, Kashish moves towards the east and travels for 4 km and reaches her Office. How far is Kashish’s office from the starting point?

1. 14 km
2. 12 km
3. 10 km
4. 13 km
5. 16 km

Answer: (3) 10 km

Solution:

Based on the information given, the figure formed is in the form of a Rhombus.
Thus, the distance between the point from where Kashish had started to the her final destination = 14 - 4 = 10 km

Directions (Q13 - Q14): Analyse the information given below and answer the following questions:
Six friends Dinesh, Siddhesh, Karunesh, Naresh, Alpesh and Pritesh are standing in a cricket ground and all of them are facing towards the North. Siddhesh is 60 metres to the south of Naresh. Naresh is towards the west of Alpesh and there is a gap of 25 metres between these two. Karunesh is 40 metres to the right of Alpesh, whereas Dinesh is at a distance of 60 metres from Karunesh. Such that Dinesh is to the south of Karunesh. Pritesh is standing towards the north of Dinesh at a distance of 90 metres.

Q 13. In which direction is Siddhesh with respect to Alpesh?
   1. North East
   2. South West
   3. South East
   4. North West
   5. South

   Answer: (2) South West

Q 14. In which direction is Pritesh standing with respect to Naresh’s position?
   1. North
   2. South
   3. East
   4. West
   5. North East

   Answer: (5) North East

Solution (Q13 - Q14):

Q 15. Lalit along with his family decided to take a road trip to a nearby resort and spend the weekend there. He started from his home and from there drove 70 km to the south, he then took a right turn and
drove 30 km. Next, he took a right turn and drove 30 km and stopped at a restaurant. What is the shortest distance between his house and the restaurant?

1. 75 km
2. 35 km
3. 95 km
4. 25 km
5. 85 km

**Answer: (4) 25 km**

**Solution:**

The shortest distance between Lalit's house and the restaurant can be determined by the Pythagoras theorem

\[ H = \sqrt{P^2 + B^2} \]

\[ H = \sqrt{(70-30)^2 + (30)^2} \]

\[ H = \sqrt{40^2 + 30^2} \]

\[ H = \sqrt{1600 + 900} \]

\[ H = \sqrt{2500} \]

\[ H = 25 \text{ km} \]

The questions given above have been made keeping in consideration the questions asked in the final bank and other Government exams. Candidates can solve these questions and practise themselves for the upcoming competitive exams.

Interested candidates can also check a few other important logical reasoning concepts in the table given below and start their preparation:
<table>
<thead>
<tr>
<th>Reasoning Puzzles</th>
<th>Seating Arrangement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Sufficiency</td>
<td>Machine Input and Output</td>
</tr>
<tr>
<td>Blood Relations</td>
<td>Alphanumeric Series</td>
</tr>
<tr>
<td>Statement and Conclusions</td>
<td>Statement and Assumptions</td>
</tr>
</tbody>
</table>