Reasoning Directions Sense

Reasoning Direction Sense Worksheet for MAH MCA CET 2025

For students preparing for MCA Entrance Exam.

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1. Sona goes to a park every day for walking. One morning, she started walking from her home and walked 40 km towards the north. Then she turned to the right and walked 60 km. Again, she turned right and walked 40 km. Lastly, she took a left turn and walked 60 km. In which direction and how far is she from her home?
   A. East, 90 km
   B. West, 60 Km
   C. East, 120 Km
   D. West, 120 Km

2. Pooja drives 4 km towards east from point A. She takes a right turn and drives 2 km. Then she takes a left turn and drives 3 km. Again, she takes a left turn and drives 2 km to reach point B. How far and towards which direction should she drive now in order to reach point A again?
   A. 7 km towards west
   B. 4 km towards east
   C. 4 km towards south
   D. 5 km towards north

3. P is to the north of Q. T is to the east of Q and S is to the east of P. S is to the north-east of T and south-west of R. What is the position of R with respect to Q? (All positions are arranged in GRID pattern)
   A. South
   B. South-west
   C. East
   D. North-east

4. Param drives 8 km towards north from point A. He takes a right turn and drives 8 km. Again he takes a right turn and drives 4 km. Finally, he takes a right tum and drives 8 km to reach point B. How far and towards which direction should he drive in order to reach point A again?
   A. 4 km towards south
   B. 5 km towards north
   C. 3 km towards west
   D. 6 km towards east

5. Stanley starts cycling from Point A He cycles X km towards the west and then turns right and cycles 3 km. He again turns right and cycles for X+1 km. He again turns right and cycles for 2X+1 km. He takes a final right turn and cycles for 1 km to stop at Point B. Point B is 6 km south of Point A. What is the value of X?
   A. 9
   B. 5
   C. 3
   D. 4

6. Q is to the east of S. E is to the south of S. P is to the north-east of Q and north of T. If T is to the south-east of Q. what is the position of S with respect to T? (All positions are arranged in GRID pattern)
   A. South-west
   B. South-east
   C. West
   D. North-west

7. Neha departs from her home and walks 51 m towards the south and then turns left and walks 44m. Now she turns left again and walks

83m.How far is she from a pole that is exactly 32 m north from her home now? (Assuming that all turns are 90 degree turns only)
- A. 14 m
- B. 44m
- C. 7 m
- D. 39m

8. Suman drives 3 km towards north from point A. She takes a right turn and drives 4 km more. Then she takes another right turn and drives 3 km. Finally, she takes one more right turn and drives 6 km to reach point B. How far and towards which direction should she drive in order to reach point A again?
- A. 2 km towards south
- B. 3 km towards north
- C. 3 km towards west
- D. 2 km towards east

9. Ahmet's house faces north. He came out of his house and walked straight for 40 m, turned left and walked for 30 m. He then turned right and walked for 35 m. Finally, he took another two successive right turns and covered 30 m and 25 m, respectively, to reach his final destination. How far and in which direction is he from his house now?
- A. 25 m due south
- B. 50 m due north
- C. 15 m due north
- D. 25 m due east

10. Deepa starts from her house and cycles 4 km towards the north and then turns left and cycles 6 km. She again turns left and cycles for X km to reach her school. Point A is to the east of her school and also 3 km to the south of her house. What is the value of X?
- A. 1 Km
- B. 7 Km
- C. 9 Km
- D. 3 Km

11. Pratima departs from her house and walks 29 m towards the north and then turns right and walks 16 m. Now she turns right again and walks 17 m. She again takes a right turn and stops after walking for 21 m. What is the shortest distance between Pratima and her house now? (Assuming that all turns are 90 degree turns only)
- A. 17 m
- B. 18 m
- C. 13 m
- D. 12 m

12. Rajesh drives 4 km towards west from point A and takes a right turn and drives 8 km. He again takes a right turn and drives 8 km. He again takes one more right turn and drives 4 km. Finally, he takes a right turn and drives 4 km to reach point B. How far and towards which direction should he drive in order to reach point A again?
- A. 3 km towards north
- B. 2 km towards east
- C. 4 km towards south
- D. 4 km towards west

13. Diogo's house faces west. He steps out of his house and walks 22 m straight. Then he turns to his left and walks 20 m. He takes another left turn and walks 25 m. Finally, he turns left once again and walks further for 24 m to reach his school. How far is the school from his house and in which direction with respect to his house?
- A. 5 m due north-east
- B. 7m due north-east
- C. 5 m due north-west
- D. 25 m due south-east

14. Anita starts from her house and cycles 6 km towards the south and then turns left and cycles 8 km. She again turns left and cycles for X km to reach her school. Point A is to the west of her school and also 3 km to the north of her house. What is the value of X?
- A. 9 km
- B. 3 km
- C. 7 km
- D. 11 km

15. From its nest, a bird flew 25 m towards the north-east. It then took a right turn and flew 7 m. Again, it took a right turn and flew 75 m. In which direction is the bird now from its nest?
- A. North-East
- B. East
- C. South-West
- D. North-West

16. Reema starts from her house and cycles 4 km towards the west and then turns right and

cycles 6 km. She again turns right and cycles for X km to reach her school. Point A is to the south of her school and also 2 km to the west of her house. What is the value of X?

A. 6 km
B. 8 km
C. 2 km
D. 4 km

17. Rocky starts from point A and drives 3 km towards east. He takes left turn and drives 4 km. He again takes a left turn and drives 3 km. He takes one more left turn and drives 2 km and stops at B. How far and towards which direction should he drive in order to reach point A again?

A. 2 km towards south
B. 3 km towards south
C. 3 km towards east
D. 2 km towards north

18. City A is located to the North of city B. City D is located to the East of city B. City C is located to the West of city D. City E is located to the South of city C and to the South-West of city A. What is the position of city B with respect to city C?

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

19. Ritu drives 2 km towards south from point A. She takes a right turn and drives 2 km more. She again takes a right turn and drives 2 km. Finally, she takes one more right turn and drives 4 km to reach point B. How far and towards which direction should she drive in order to reach point A again?

A. 3 km towards east
B. 2 km towards west
C. 2 km towards south
D. 3 km towards north

20. On a certain day John decided to go school using his newly purchased skates. So, he left his house and skated 15 km northwards, then turned left and skated 7 km, then he took another left turn and skated 15 km, and then finally turned right and skated 13 km. How far exactly is his school from his house?

A. 20 km
B. 6 km

C. 2 km
D. 28 km

21. Karan drives 6 km towards north from point A. He takes a left turn and drives 3 km. Again he takes a left turn and drives 3 km. He takes a left turn and drives 6 km. He takes a right turn and drives 3 km to reach point B. How far and towards which direction should he drive in order to reach point A again?

A. 5 km towards east
B. 3 km towards west
C. 4 km towards north
D. 2 km towards south

22. Prince drives 6 km towards east from point A and takes a right turn and drives 3 km. He again takes a right turn and drives 8 km. He takes one more right turn and drives 3 km to reach point B. How far and towards which direction should he drive in order to reach point A again?

A. 4 km towards west
B. 2 km towards north
C. 2 km towards east
D. 4 Km towards south

23. Mohan is at the railway station of a certain district. He wants to reach the nearest bus stand. He walked 120 m towards the east, took a right turn and walked another 100 m. He then took a left turn and walked 30 m. Again, he took a left turn and walked 140 m, where he met his friend and had a conversation. From there, he finally took a left turn and walked 150 m to reach the bus stand. How far and in which direction is the bus stand from the railway station?

A. 40m, North-East
B. 40 m, South
C. 140 m, North
D. 40 m, North

24. Six houses, A, B, C, D, E and F, are situated in a colony. D is 60 m south of E. F is 40 m south of B. A is 30 m north of E. F is 50 m east of A. C is 50 m west of B. Find the location of C with reference to A.

A. 30 m east
B. 50 m north
C. 40 m north
D. 40 m south

25. Srinjia walked 9 km towards the west from her home, then turned towards the south and walked 11 km. Then she walked 13 km towards the east, and finally walked 4 km towards the west. How far is Srinjia from her initial position.
   A. 11 km
   B. 15 km
   C. 13 km
   D. 10 km

26. One morning Chitrashi and Ayaan sit facing each other. if the shadow of Ayaan falls to the left of Chitrashi, then in which direction is Ayan facing?
   A. North
   B. East
   C. South
   D. West

27. Shweta starts walking from her office and walks 150 m towards the south, then she turns right and walks 80 m and then she turns left and walks 60 m. She finally turns left and walks 280 m to reach a bank. What is the shortest distance between her office and her Bank?
   A. 280 m
   B. 290 m
   C. 410 m
   D. 370 m

28. Vijendra walks a certain distance, say X meters, from his home towards the west, Then he turns left and walks 23 meters, after that, he turns left and walks 36 meters. Then he turns left again to walk 23 meters. He finally turns left and walks 18 meters to reach home. find the value of X.
   A. 41
   B. 18
   C. 20
   D. 22

29. Shashank walks a certain distance, say X m, towards the west, then turns left and walks 35 m, and then turns right and walks 18 m, from there, he turns left and walks 9 m, and then turns left again and walks 60 m, from there, he turns left and walks 9 m and then turns left again and walks 12 m He finally turns right and walks 35 m to reach a point that is exactly 10 m to the east of the starting point. What is the value of X?

   A. 20
   B. 22
   C. 30
   D. 36

30. Ratan walks 15m towards the north and then turns right and walks 23 m. Then he turns left and 'walks 16m.: After that, he turns left and walks 11m. Then he turns right and walks 17m. Then, he turns left and walks 12m. He finally turns right and walks 19m. In which direction and how far is hè now with reference to the starting point?
   A. North, 52m
   B. South, 51m
   C. North, 67m
   D. North, 48m

31. Kartik walks 40 m straight from his home towards the North, Then he turns left and walks 25 m. He turns left again and walks 15 m. Finally, he turns left and walks 25 m to reach point X. What is the shortest distance between his Home and Point-X?
   A. 55
   B. 22
   C. 25
   D. 15

Answer Key

1. C	2. A	3. D	4. A	5. D	6. D	7. B	8. D	9. B	10. B
11. C	12. C	13. A	14. A	15. C	16. C	17. A	18. C	19. B	20.A
21. B	22. C	23. D	24. C	25. A	26.C	27. B	28. B	29. A	30. C
31. C									