

Direction sense questions with answers

15 exam-shaped questions with full worked solutions.
For IBPS · SBI · RRB · SSC reasoning.

Free, share it forward. Every question in this set was generated and verified by the Deduce engine — the same one behind the free daily puzzle round at deducepuzzles.com.

The questions

Work them on paper first. Full solutions start after question 15 — the numbering matches.

QUESTION 1

How far and in which direction is Kavya from the starting point?

Kavya starts from a point and walks 12 m towards North. She then walks 10 m towards West. She then walks 12 m towards South.

- A. 10 m West
 - B. 10 m South
 - C. 34 m West
 - D. 10 m North
 - E. 10 m East
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QUESTION 2

How far and in which direction is Kavya from the starting point?

Kavya starts from a point and walks 11 m towards East. She then walks 9 m towards North. She then walks 11 m towards West.

- A. 9 m North
 - B. 9 m West
 - C. 9 m South
 - D. 31 m North
 - E. 11 m North
-

QUESTION 3

How far and in which direction is Suresh from the starting point?

Suresh starts from a point and walks 14 m towards North. He then walks 13 m towards East. He then walks 3 m towards South. He then turns right and walks 15 m. He then turns left and walks 9 m.

- A. $2\sqrt{2}$ m North
 - B. 4 m North-West
 - C. 2 m North-West
 - D. $2\sqrt{2}$ m South-East
 - E. $2\sqrt{2}$ m North-West
-

QUESTION 4

How far (in metres) is Kavya from the starting point?

Kavya starts from a point and walks 4 m towards North. She then walks 11 m towards East. She then walks 8 m towards North. She then turns left and walks 6 m.

- A. 12 m
 - B. 11 m
 - C. 13 m
 - D. 5 m
 - E. 17 m
-

QUESTION 5**How far (in metres) is Deepak from the starting point?**

Deepak starts from a point and walks 3 m towards East. He then turns right and walks 9 m. He then walks 3 m towards West. He then walks 4 m towards North. He then walks 12 m towards West.

- A. 5 m
 - B. 11 m
 - C. 15 m
 - D. 12 m
 - E. 13 m
-

QUESTION 6**In which direction is Priya facing now?**

Priya starts from a point and walks 15 m towards South. She then turns right and walks 11 m. She then turns right and walks 10 m. She then turns right and walks 10 m. She then walks 8 m towards North. She then turns right and walks 9 m.

- A. South
 - B. East
 - C. Cannot be determined
 - D. North
 - E. West
-

QUESTION 7**How far and in which direction is Karan from the starting point?**

Karan starts from a point and walks 10 m towards West. He then walks 5 m towards North. He then walks 10 m towards East.

- A. 7 m North
 - B. 25 m North
 - C. 5 m North
 - D. 3 m North
 - E. 5 m East
-

QUESTION 8**How far and in which direction is Manish from the starting point?**

Manish starts from a point and walks 4 m towards West. He then walks 13 m towards North. He then walks 4 m towards East.

- A. 13 m North
 - B. 13 m West
 - C. 11 m North
 - D. 13 m East
 - E. 21 m North
-

QUESTION 9

In which direction is Rohan facing now?

Rohan starts from a point and walks 7 m towards East. He then turns right and walks 14 m. He then turns right and walks 15 m. He then walks 2 m towards North. He then turns left and walks 3 m.

- A. North
 - B. East
 - C. South
 - D. Cannot be determined
 - E. West
-

QUESTION 10

In which direction is Kavya facing now?

Kavya starts from a point and walks 7 m towards East. She then walks 8 m towards North. She then turns left and walks 4 m. She then walks 5 m towards South. She then turns right and walks 6 m.

- A. Cannot be determined
 - B. South
 - C. West
 - D. North
 - E. East
-

QUESTION 11

How far and in which direction is Ritu from the starting point?

Ritu starts from a point and walks 6 m towards North. She then turns left and walks 4 m. She then walks 4 m towards South. She then walks 2 m towards East.

- A. 4 m North-West
 - B. $2\sqrt{2}$ m North-West
 - C. $2\sqrt{2}$ m North
 - D. $2\sqrt{2}$ m South-East
 - E. $4\sqrt{2}$ m North-West
-

QUESTION 12

In which direction is Deepak facing now?

Deepak starts from a point and walks 2 m towards North. He then turns right and walks 12 m. He then turns left and walks 6 m. He then turns right and walks 11 m. He then turns right and walks 14 m. He then turns right and walks 11 m.

- A. South
 - B. West
 - C. Cannot be determined
 - D. North
 - E. East
-

QUESTION 13**How far and in which direction is Rohan from the starting point?**

Rohan starts from a point and walks 14 m towards East. He then walks 13 m towards South. He then walks 14 m towards West.

- A. 41 m South
 - B. 11 m South
 - C. 15 m South
 - D. 13 m South
 - E. 13 m East
-

QUESTION 14**How far and in which direction is Divya from the starting point?**

Divya starts from a point and walks 2 m towards West. She then walks 7 m towards South. She then walks 2 m towards East.

- A. 7 m East
 - B. 9 m South
 - C. 7 m South
 - D. 7 m West
 - E. 11 m South
-

QUESTION 15**How far and in which direction is Rohan from the starting point?**

Rohan starts from a point and walks 11 m towards West. He then walks 10 m towards South. He then turns left and walks 13 m. He then turns left and walks 6 m. He then turns right and walks 2 m.

- A. $6\sqrt{2}$ m South-East
 - B. 4 m South-East
 - C. $4\sqrt{2}$ m South-East
 - D. $4\sqrt{2}$ m North-West
 - E. $4\sqrt{2}$ m South
-

Answers and worked solutions

Each walkthrough is the engine's own elimination order, step for step — not a reconstruction written after the fact.

SOLUTION 1

Answer: **10 m West**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 12 m towards North → (0, 12).
 3. Step 2: walks 10 m towards West → (-10, 12).
 4. Step 3: walks 12 m towards South → (-10, 0).
 5. Net position (-10, 0): the other moves cancel, leaving 10 m West of the start.
 6. So Kavya is 10 m West of the starting point.
-

SOLUTION 2

Answer: **9 m North**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 11 m towards East → (11, 0).
 3. Step 2: walks 9 m towards North → (11, 9).
 4. Step 3: walks 11 m towards West → (0, 9).
 5. Net position (0, 9): the other moves cancel, leaving 9 m North of the start.
 6. So Kavya is 9 m North of the starting point.
-

SOLUTION 3

Answer: **$2\sqrt{2}$ m North-West**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 14 m towards North → (0, 14).
 3. Step 2: walks 13 m towards East → (13, 14).
 4. Step 3: walks 3 m towards South → (13, 11).
 5. Step 4: turns right (now facing West) and walks 15 m → (-2, 11).
 6. Step 5: turns left (now facing South) and walks 9 m → (-2, 2).
 7. Net position (-2, 2) = 2 m West and 2 m North — equal components point exactly North-West, and the distance is $2\sqrt{2}$ m.
 8. So Suresh is $2\sqrt{2}$ m North-West of the starting point.
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SOLUTION 4

Answer: **13 m**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 4 m towards North → (0, 4).
 3. Step 2: walks 11 m towards East → (11, 4).
 4. Step 3: walks 8 m towards North → (11, 12).
 5. Step 4: turns left (now facing West) and walks 6 m → (5, 12).
 6. Net position (5, 12) = 5 m East and 12 m North; distance from start = $\sqrt{5^2 + 12^2} = \sqrt{169} = 13$ m.
 7. So Kavya is 13 m from the starting point.
-

SOLUTION 5

Answer: **13 m**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 3 m towards East $\rightarrow$ (3, 0).
 3. Step 2: turns right (now facing South) and walks 9 m $\rightarrow$ (3, -9).
 4. Step 3: walks 3 m towards West $\rightarrow$ (0, -9).
 5. Step 4: walks 4 m towards North $\rightarrow$ (0, -5).
 6. Step 5: walks 12 m towards West $\rightarrow$ (-12, -5).
 7. Net position (-12, -5) = 12 m West and 5 m South; distance from start = $\sqrt{(12^2 + 5^2)} = \sqrt{169} = 13$ m.
 8. So Deepak is 13 m from the starting point.
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SOLUTION 6

Answer: **East**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 15 m towards South $\rightarrow$ (0, -15).
 3. Step 2: turns right (now facing West) and walks 11 m $\rightarrow$ (-11, -15).
 4. Step 3: turns right (now facing North) and walks 10 m $\rightarrow$ (-11, -5).
 5. Step 4: turns right (now facing East) and walks 10 m $\rightarrow$ (-1, -5).
 6. Step 5: walks 8 m towards North $\rightarrow$ (-1, 3).
 7. Step 6: turns right (now facing East) and walks 9 m $\rightarrow$ (8, 3).
 8. She faces the direction she last walked, and every turn is tracked above.
 9. So Priya is now facing East.
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SOLUTION 7

Answer: **5 m North**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 10 m towards West $\rightarrow$ (-10, 0).
 3. Step 2: walks 5 m towards North $\rightarrow$ (-10, 5).
 4. Step 3: walks 10 m towards East $\rightarrow$ (0, 5).
 5. Net position (0, 5): the other moves cancel, leaving 5 m North of the start.
 6. So Karan is 5 m North of the starting point.
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SOLUTION 8

Answer: **13 m North**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 4 m towards West $\rightarrow$ (-4, 0).
 3. Step 2: walks 13 m towards North $\rightarrow$ (-4, 13).
 4. Step 3: walks 4 m towards East $\rightarrow$ (0, 13).
 5. Net position (0, 13): the other moves cancel, leaving 13 m North of the start.
 6. So Manish is 13 m North of the starting point.
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SOLUTION 9

Answer: **West**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 7 m towards East $\rightarrow$ (7, 0).
 3. Step 2: turns right (now facing South) and walks 14 m $\rightarrow$ (7, -14).
 4. Step 3: turns right (now facing West) and walks 15 m $\rightarrow$ (-8, -14).
 5. Step 4: walks 2 m towards North $\rightarrow$ (-8, -12).
 6. Step 5: turns left (now facing West) and walks 3 m $\rightarrow$ (-11, -12).
 7. He faces the direction he last walked, and every turn is tracked above.
 8. So Rohan is now facing West.
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SOLUTION 10

Answer: **West**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 7 m towards East $\rightarrow$ (7, 0).
 3. Step 2: walks 8 m towards North $\rightarrow$ (7, 8).
 4. Step 3: turns left (now facing West) and walks 4 m $\rightarrow$ (3, 8).
 5. Step 4: walks 5 m towards South $\rightarrow$ (3, 3).
 6. Step 5: turns right (now facing West) and walks 6 m $\rightarrow$ (-3, 3).
 7. She faces the direction she last walked, and every turn is tracked above.
 8. So Kavya is now facing West.
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SOLUTION 11

Answer: **$2\sqrt{2}$ m North-West**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 6 m towards North $\rightarrow$ (0, 6).
 3. Step 2: turns left (now facing West) and walks 4 m $\rightarrow$ (-4, 6).
 4. Step 3: walks 4 m towards South $\rightarrow$ (-4, 2).
 5. Step 4: walks 2 m towards East $\rightarrow$ (-2, 2).
 6. Net position (-2, 2) = 2 m West and 2 m North — equal components point exactly North-West, and the distance is $2\sqrt{2}$ m.
 7. So Ritu is $2\sqrt{2}$ m North-West of the starting point.
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SOLUTION 12

Answer: **West**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 2 m towards North $\rightarrow$ (0, 2).
 3. Step 2: turns right (now facing East) and walks 12 m $\rightarrow$ (12, 2).
 4. Step 3: turns left (now facing North) and walks 6 m $\rightarrow$ (12, 8).
 5. Step 4: turns right (now facing East) and walks 11 m $\rightarrow$ (23, 8).
 6. Step 5: turns right (now facing South) and walks 14 m $\rightarrow$ (23, -6).
 7. Step 6: turns right (now facing West) and walks 11 m $\rightarrow$ (12, -6).
 8. He faces the direction he last walked, and every turn is tracked above.
 9. So Deepak is now facing West.
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SOLUTION 13

Answer: **13 m South**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 14 m towards East → (14, 0).
 3. Step 2: walks 13 m towards South → (14, -13).
 4. Step 3: walks 14 m towards West → (0, -13).
 5. Net position (0, -13): the other moves cancel, leaving 13 m South of the start.
 6. So Rohan is 13 m South of the starting point.
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SOLUTION 14

Answer: **7 m South**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 2 m towards West → (-2, 0).
 3. Step 2: walks 7 m towards South → (-2, -7).
 4. Step 3: walks 2 m towards East → (0, -7).
 5. Net position (0, -7): the other moves cancel, leaving 7 m South of the start.
 6. So Divya is 7 m South of the starting point.
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SOLUTION 15

Answer: **$4\sqrt{2}$ m South-East**

1. Take the start as (0, 0), with East as +x and North as +y.
 2. Step 1: walks 11 m towards West → (-11, 0).
 3. Step 2: walks 10 m towards South → (-11, -10).
 4. Step 3: turns left (now facing East) and walks 13 m → (2, -10).
 5. Step 4: turns left (now facing North) and walks 6 m → (2, -4).
 6. Step 5: turns right (now facing East) and walks 2 m → (4, -4).
 7. Net position (4, -4) = 4 m East and 4 m South — equal components point exactly South-East, and the distance is $4\sqrt{2}$ m.
 8. So Rohan is $4\sqrt{2}$ m South-East of the starting point.
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One round a day beats one set a month.

A worked set teaches the shape; a clock teaches the speed. Deduce serves a free timed round every day, with a streak, a leaderboard and the full walkthrough after every round.

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