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Sahi Prep Hai Toh Life Set Hai

Distance & Direction

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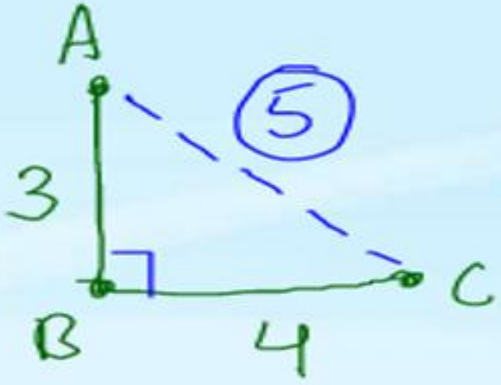
Direction & Distance.

Agenda of the session

1. To find Distance
2. " " Direction
3. " " D + D
4. Shadow.

Total Distance travelled.

$3 + 4 = 7$



Dist (Shortest Dist)

(Air distance)

(Displacement)

$AC^2 = AB^2 + BC^2$

$= 3^2 + 4^2$

$AC = \sqrt{9+16} = \sqrt{25} = 5$

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Based on the two principles: ④ Main direction

1. Distance
2. Direction

❖ To find out the required answer, we need to make a diagram follow up with the information given.

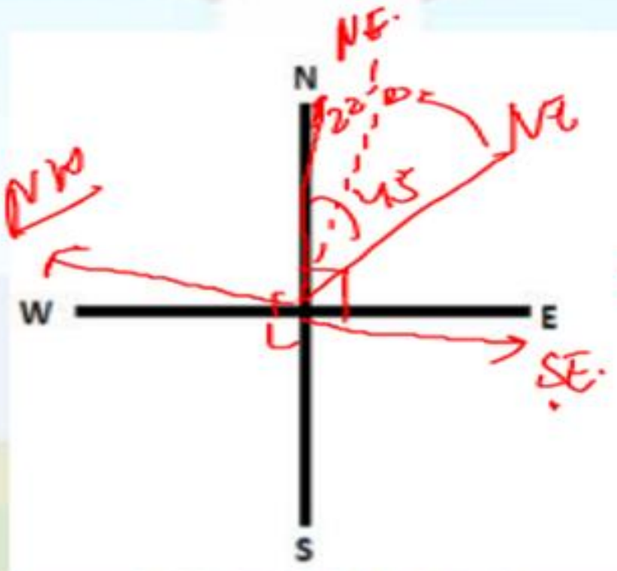
❖ Thus, these kinds of questions are based on simple distance and direction puzzle.

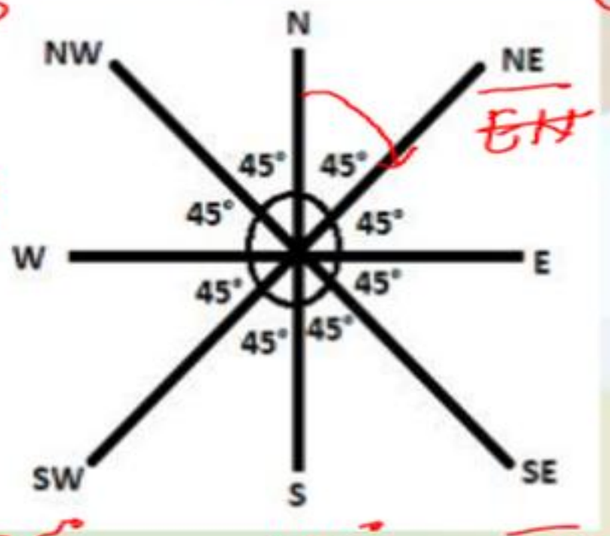
❖ The direction chart given below shows the four main directions,

④ Cardinal / Subordinate Direction

two Main direction

Q In a clock the time is 2:16 Minute hand :?





0°/360°
45°
90°
135°
180°
225°
270°
315°

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Tricks

Left / Right turn = 90°.

1 Left + 1 Right = 0° (No change).

2 Left OR 2 Right = 180° (Opp direction).

3 Left = 1 Right (vice versa)

4 Left / 4 Right = 0° (360°) (No change)

45° CW + 45° ACW = No change.

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Clockwise | Right

Anti clockwise | left

Counter clockwise

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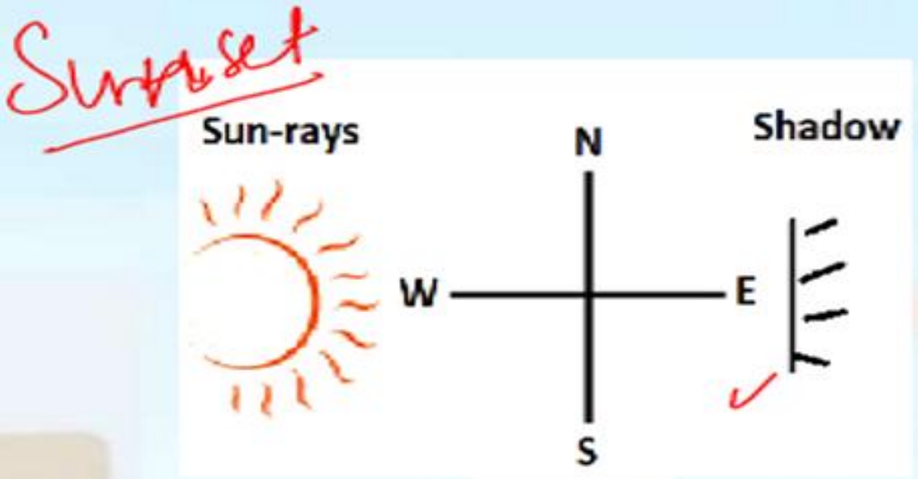
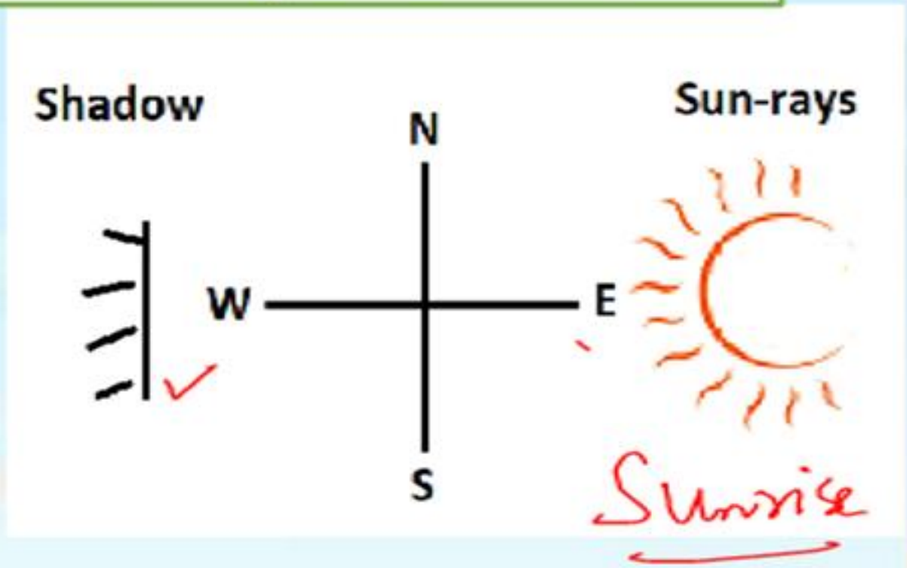
Important Points To Keep In Mind





- At exactly 12o'clock there is no shadow formed.

- **Note:** If it is given that a person moved towards the left or right side, we assume that the movement is at an angle of 90 degrees.

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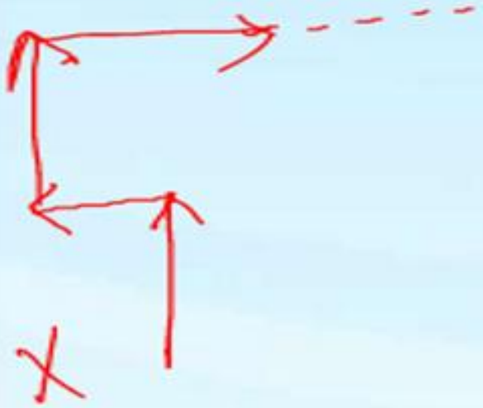

Ques- A man starts for his office in the north direction. He turns to his left and then to his right and and again to his right. In which direction will he be facing now?

A. North

B. East

C. West

D. South

E. Can't be determined

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6 + 4 − 2 = 8.

Ques- A man is facing west. He turns 45degree in the clockwise direction and then another 180degree in the same direction and then 270 in the anticlockwise direction. In which direction is he facing now?

A. North east

B. East

C. West

D. South west

E. Can't be detremined

SW

45° ACW + 180° CW + 270 ACW

225° CW + 270 ACW

45° ACW

-7+3=-5

-12+3

-9

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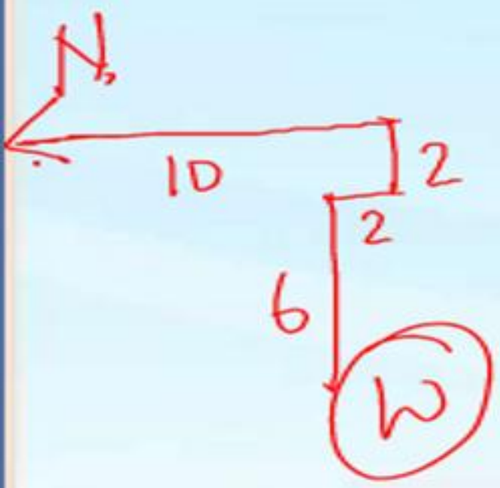


Ques- After walking 6km, I turned right and walked 2km then turned left and covered a distance of 2km then again I turned left and covered a distance of 10km. In the end I was walking towards the north. From which direction did I start my journey?

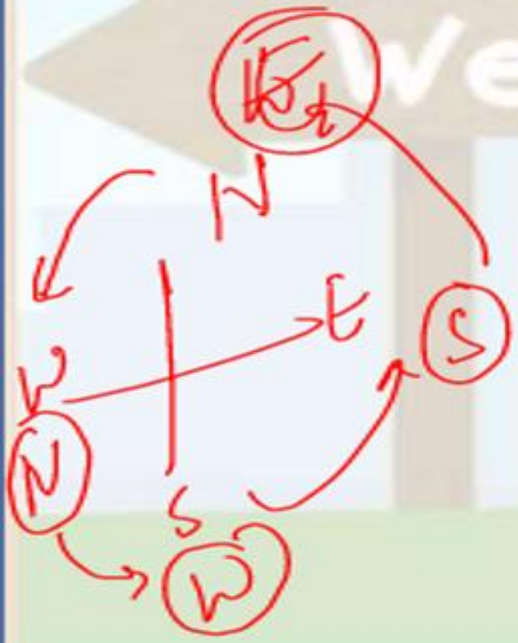
A. North

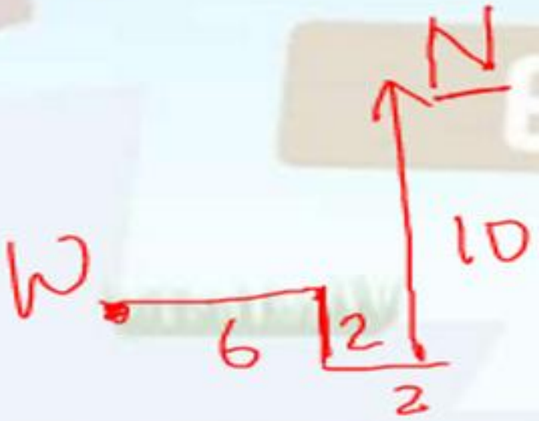
B. East

C. West

D. South

E. Can't be detremined





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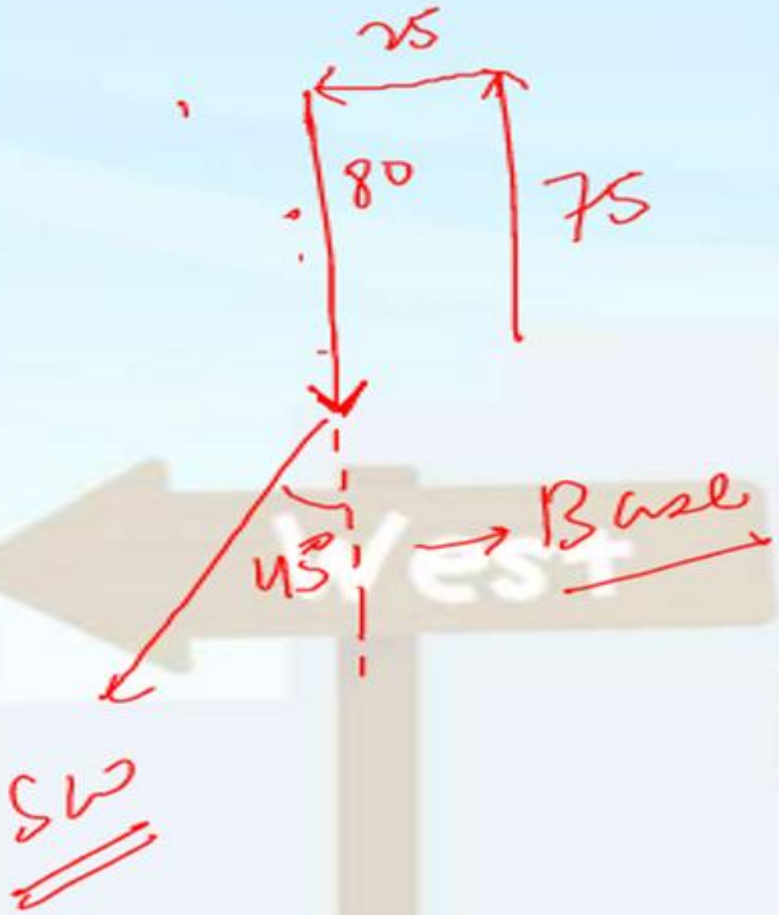

Ques- Deepika moved a distance of 75m towards the north. She then turned to the left and walking for about 25m turned left again and walked 80m ,finally she turned to the right at an angle of 45 degree. I n which direction was she facing now?

A. North west

B. East

C. West

D. South west

E. None

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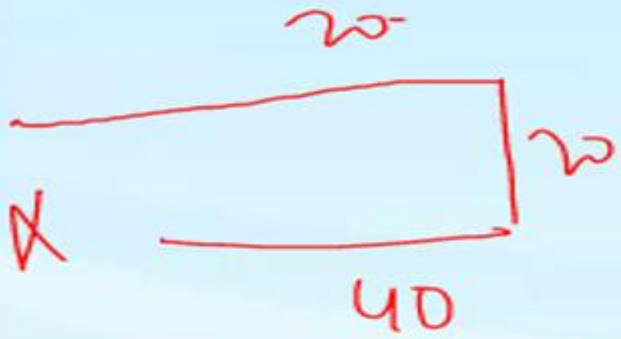

Ques- A cyclist rides 40km to east, turns north and rides 20km,again turns left and rides 20km. How far is he from the starting point?

A. 20 √3km

B. 20√2km

C. 20km

D. 80km

E. None

20^2+20^2

$400+400 = \sqrt{800} = \sqrt{2\times2\times2\times10\times10}$

$10\times2\sqrt{2}$

$20\sqrt{2}$

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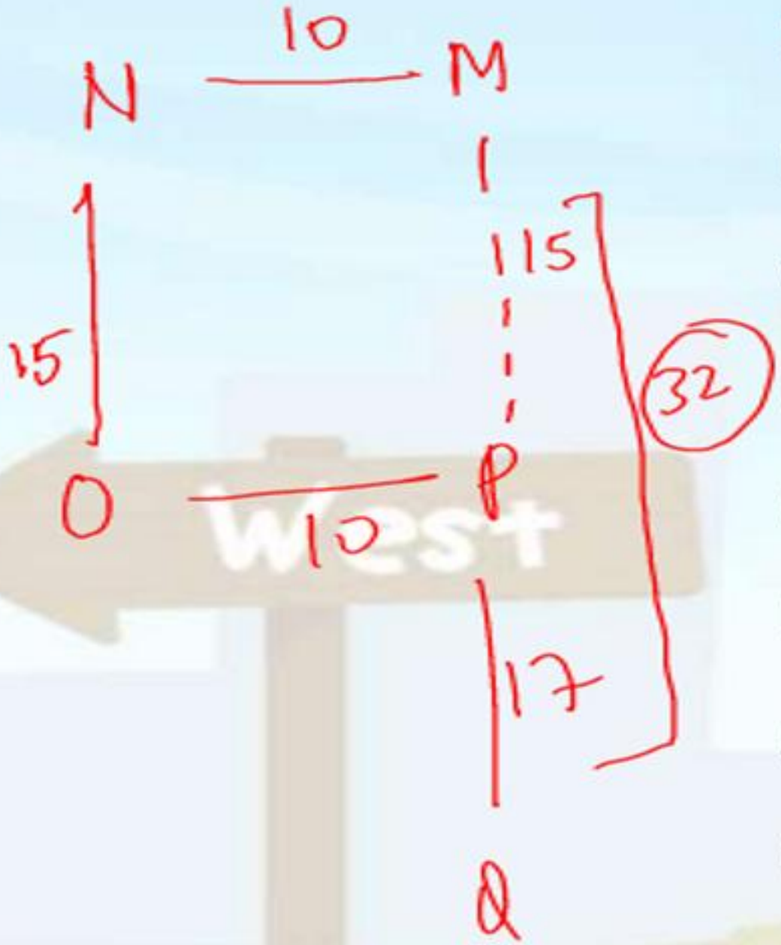

Q. Point M is in the east of Point N at a distance of 10m. Point N is in the north of Point O at a distance of 15m. Point O is in the west of Point P at a distance of 10m. Point P is in the north of Point Q at a distance of 17m.

Find the distance between M and Q?

A. 35m

B. 32m

C. 22m

D. 27m

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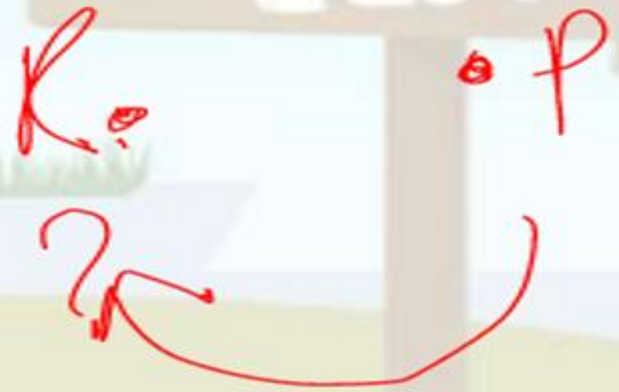
Q. Shop P is at a distance of 14 cm in the east direction of Shop Q. Shop R is at a distance of 9 cm in the east direction of Shop Q. What is the distance between Shop R and Shop P and find the direction of Shop R with respect to Shop P?

A. 5 cm, West

B. 5 cm, East

C. 7 cm, North

D. 7 cm, East



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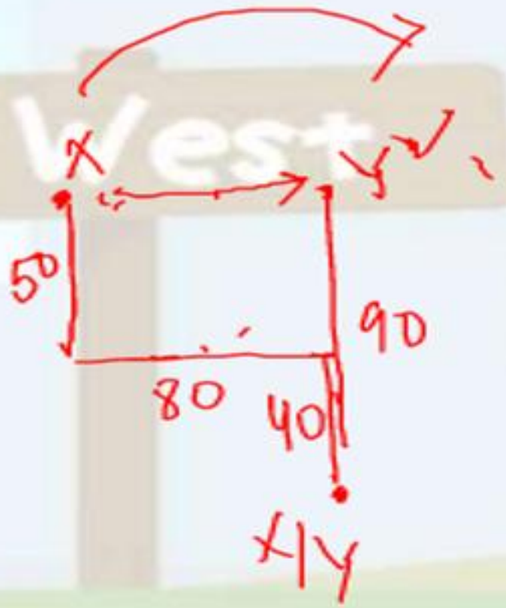
Q. X and Y start from the same point. X walks 40 m North, then turns West and walks 80 m, then turns to his right and walks 50 m. At the same time, Y walks 90 m North. Where is Y now with respect to the position of X?

A. Y is 30 m to the East of X

B. Y is 80 m to the West of X

C. Y is 30 m to the West of X

D. Y is 80 m to the East of X



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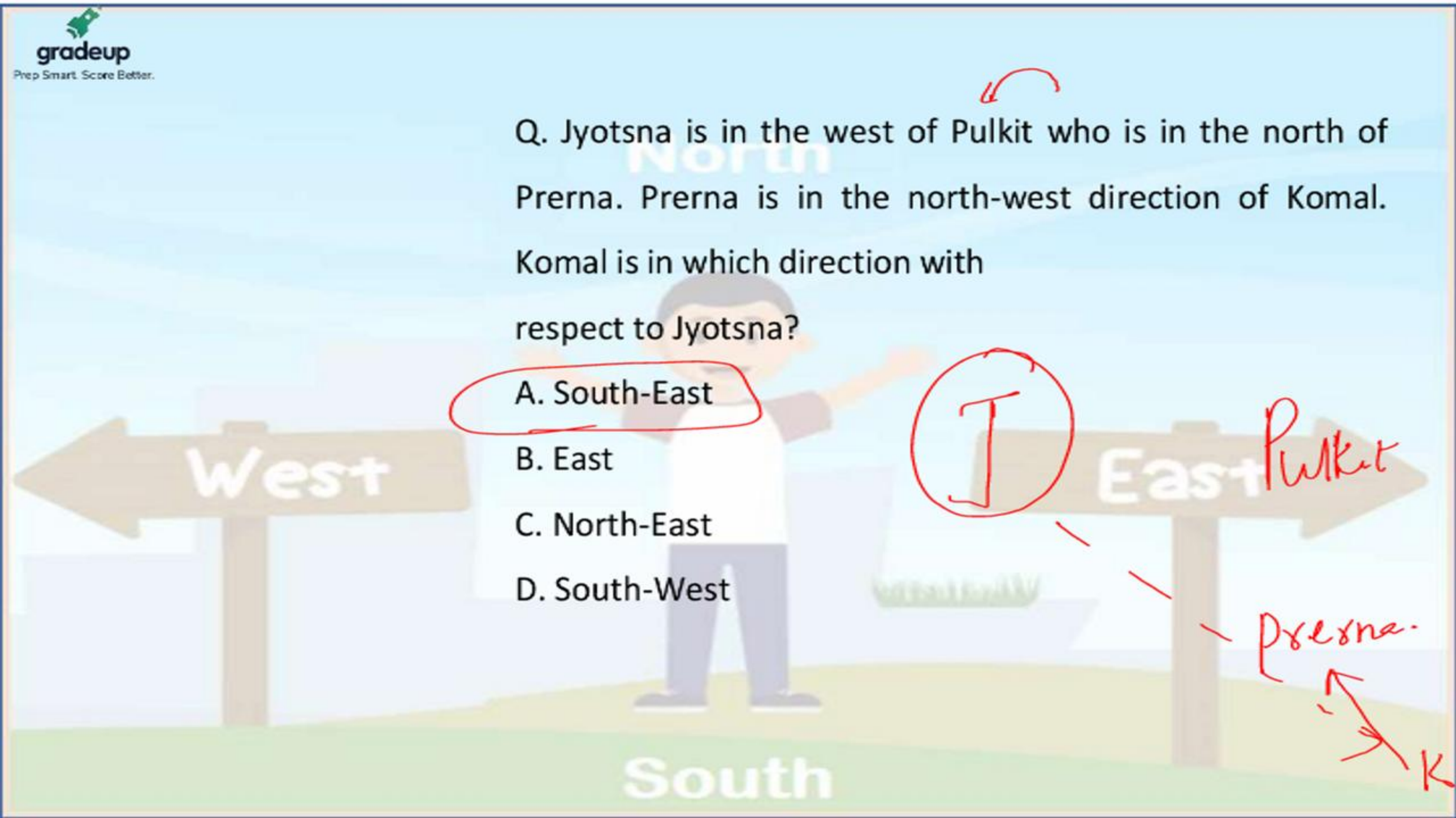
Q. Jyotsna is in the west of Pulkit who is in the north of Prerna. Prerna is in the north-west direction of Komal. Komal is in which direction with respect to Jyotsna?

A. South-East

B. East

C. North-East

D. South-West



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Q. .Neeraj is facing north, then turns 45 degree right and goes 25 m, then turns in south-east direction to move 25m and from there 25 m to east.

In which direction is he from his original place?

A. North

B. East

C. West

D. South

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Q. A man walks 7 km towards south and turns to the left. After walking 5km, he turns to the right and walks 7 km. In which direction is he now from the starting point?

A. West

B. South

C. South-East

D. North-East

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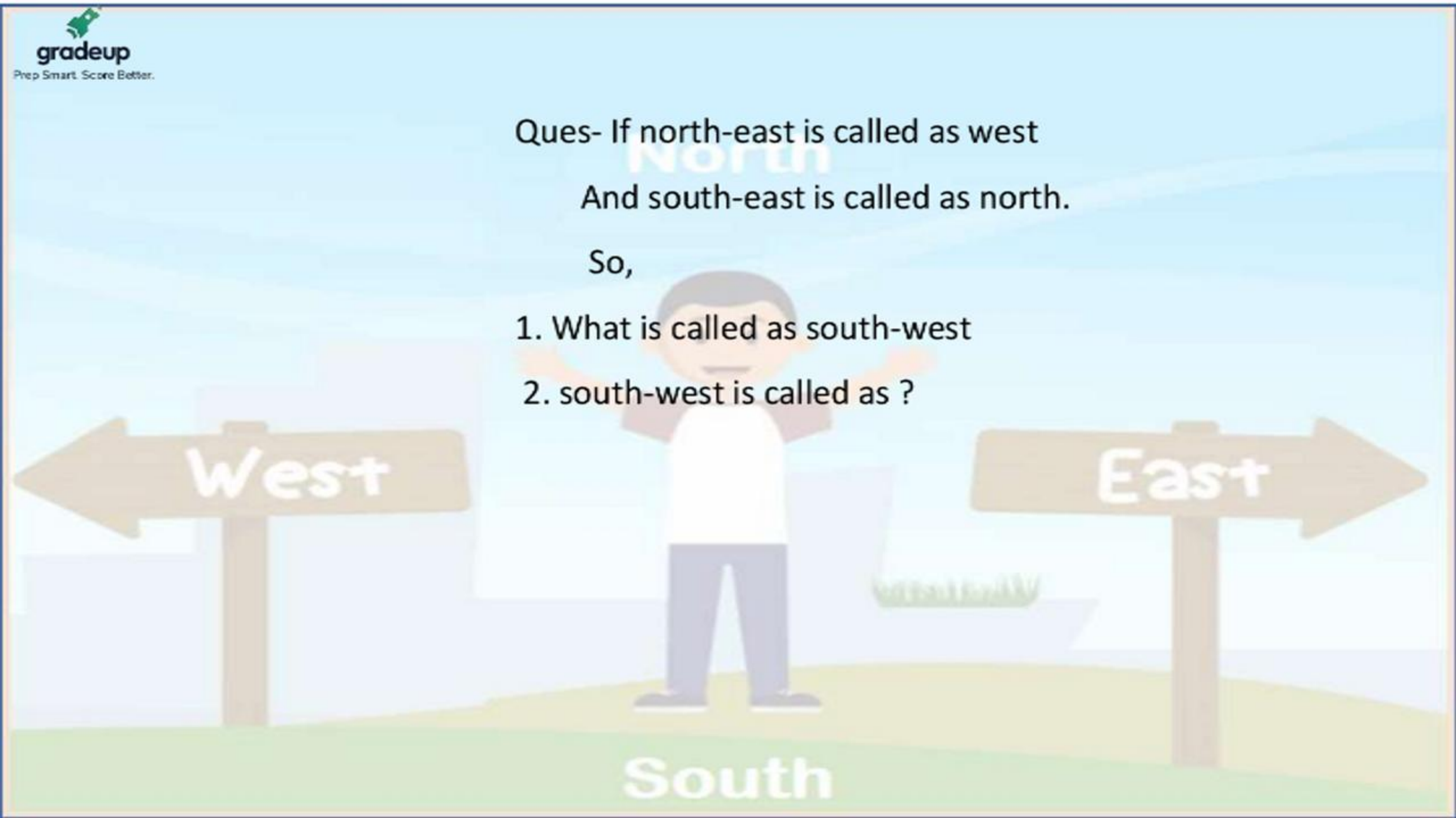
Ques- If north-east is called as west

And south-east is called as north.

So,

1. What is called as south-west

2. south-west is called as ?



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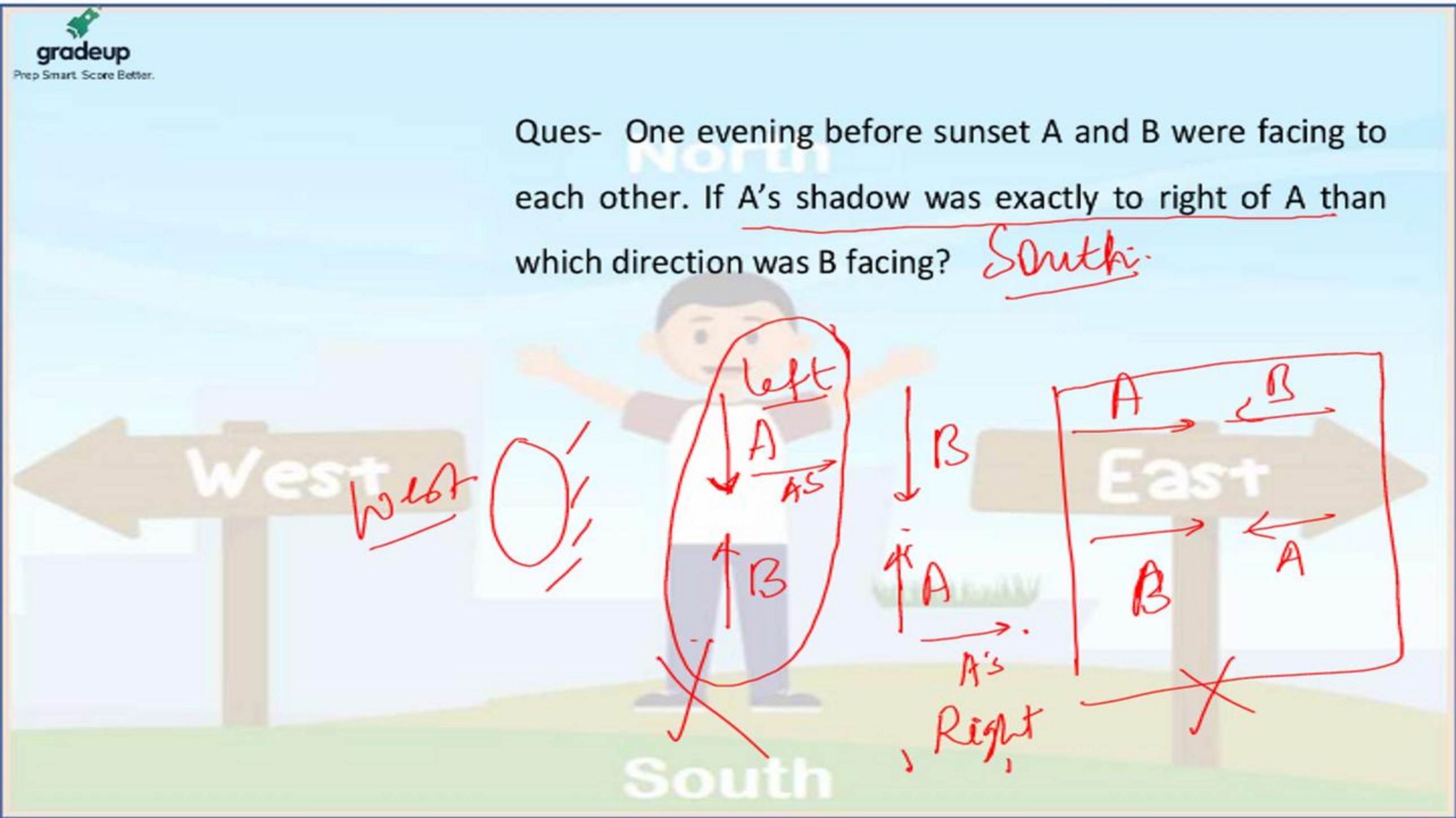
Ques- One evening before sunset A and B were facing to each other. If A's shadow was exactly to right of A than which direction was B facing? South.



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Ques- I am standing that the center of a circular plain , I move down south till the edge of the plain and walks 3/8 of its length in left direction.

Find-1. In which direction I am from starting point?

2. In which direction I am facing now?

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Left | Right = 90

Key Takeaways

Main
Cardinal | Subordinate
Shadow

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① 160, 183, 213, 252, 302, 355, 443.

23 30 39 50 63

7 9 11 13

② odd → 358, 853, 538, 240.

16 16 16 6

③

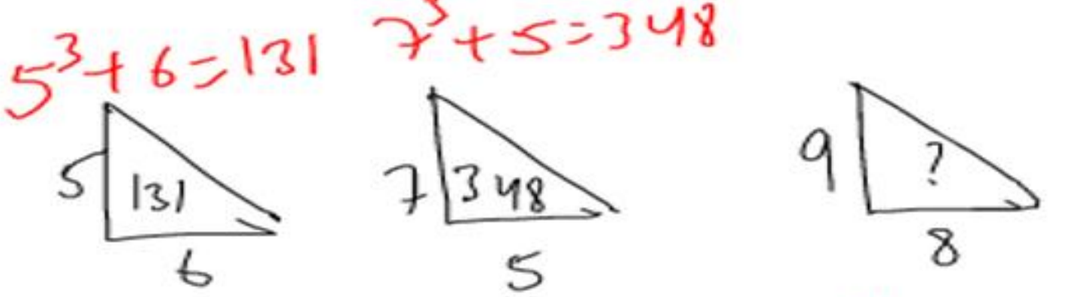
16	30	18
4	34	?
10	32	40

$16+4=\frac{20}{2}=10$

$30+34=\frac{64}{2}=32$

$18+\frac{x}{2}=40$ $x=62$

④



$9^3+8=729$

8

737

⑤ 2nd

8	64	2
5	5	1
7	?	3

$8^2=64$

$5^1=5$

$7^3=343$