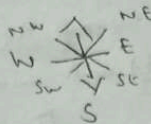


Directions

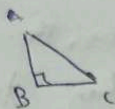


Primary Direction - angle - 90°
Secondary direction - 45°

↻ - clockwise
↺ - anticlockwise

for N
let ↑ - right
for S
right ↓ - left

Try to bring it onto
Δ format



$$\vec{AC} = \vec{AB} + \vec{BC}$$

at 12 Noon - no shadow

Morning - shadow on west evening - shadow on east

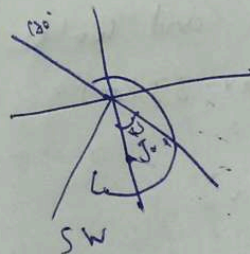
N -

S - facing
sunrise shadow right

Sunrise - shadow left

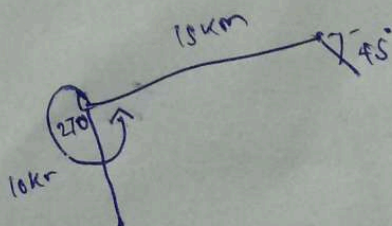
Sunset - shadow right

- 1.) Joe is facing toward South and is anticlockwise.
He turns again 180° in anti clockwise direction. now
he turns 270° clockwise. which direction he is
South west



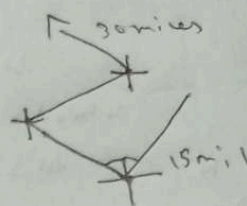
- 2.) Morris is facing North and walks 10 km S. He turns
270° anti clockwise and walks 15 km S. Now again turns
45° clockwise and walks for 25 km. which direction
is he facing now

South East



- 3.) Mary is walking towards South-west for 15 miles, turns right and walks another 10 miles. She turns 90° clockwise and walks 10 miles. Now she again turns left and walks 30 miles, which direction is she facing?

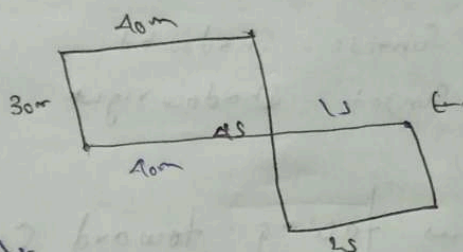
turns right -90°
North west



- 4.) Maria walked 30m towards north. She turned right and walked 40m. She then turned right and walked 45m. She turned left and walked 25m. Finally she turned left and walked 15m. How far is she from starting position?

65m
Z

Diagram will be
of regular form
or make it regular



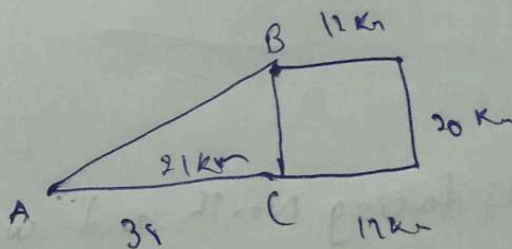
- 5.) A boy walks 12 kms towards east. He turns 90° clockwise and walks 20 kms then turned right and walked for 33 kms. How far is he from starting point?

$$\vec{H} = \vec{S}_1 + \vec{S}_2$$

$$AB = 400 + ac$$

$$AB = 29$$

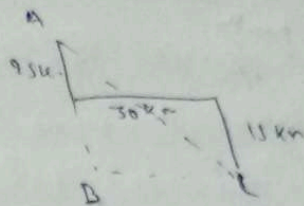
Z



- 6) A car travels 25 km towards South from garage. It turns left and travels 30 km, then turns right and travels 15 km. How far car is from garage.

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

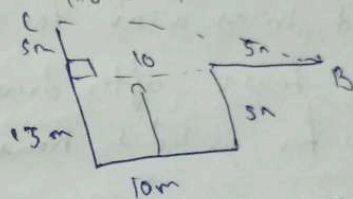
$$AC = \frac{50 \text{ km}}{2}$$



- 7) Martin walked 13 m towards South from his gym. He turned left and walked 10 metres. He took turn and walked 5 metres and then he turned right and walked for 5 metres. How far is he from gym.

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

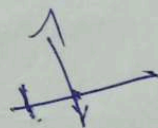
$$BC = 17$$



- 8) One morning after sunrise, Joe was standing facing a pole. The shadow of pole fell exactly to his right. To which direction was he facing.

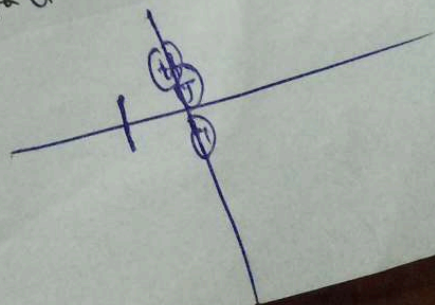
It was to his right

South



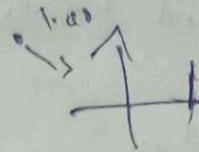
- 9) James and Henry were standing facing each other at 8 am. shadow of Henry fell to his right. To which direction James was facing.

J - facing North



- 10.) Prince was standing facing to pole at 1:00 p.m.
Shadow of pole fell towards his right. To which direction was Prince facing?

North
↖



- 11.) Ted drives a car 10 miles towards North from his office. He turns 270° clockwise and drives for 20 miles. Now, he turns 270° anti clockwise and drives a car for 37 miles. Finally he reaches his house after driving for 20 mile to his right. How far is Ted's house and in which direction?

47 North direction

