

Study Material on Reasoning for SSC Combined Graduate Level Exam 2012: Distance Concept

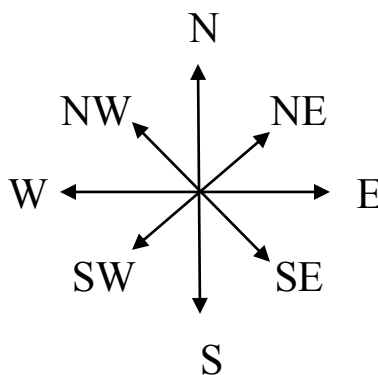
The Questions in the Reasoning segment will include questions of both verbal and non-verbal type. The questions will be asked from different segments like analogies, similarities and differences, space visualization, spatial orientation, problem solving analysis, coding & decoding, arithmetical reasoning, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc.

Find Here the explanation for a problem based on Distance Series of the Reasoning Segment

Explaining a Problem based on the Distance Series

In these types of questions a successive follow-up of different directions is formulated then a candidate is required to find out the final direction or the distance between two points.

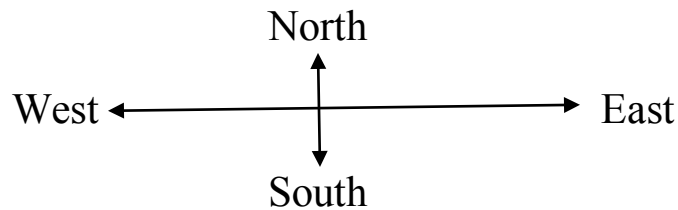
Following figure shows the four main directions and four cardinal directions to help the candidates.



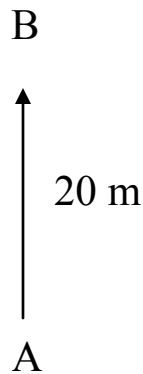
Example:- Priya walks 20 meters towards North. She then turns left and walks 40 meters. She again turns left and walks 20 meters. Further, she moves 20 meters after turning to the right. How far is she from her original position?

Solution:- We will step by step calculate the actual distance between the initial point and the end point.

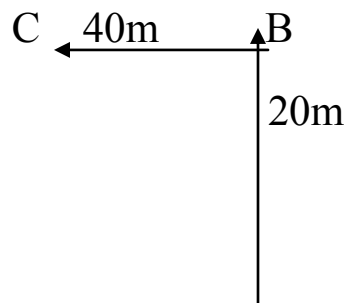
Step I:- we can represent the four directions East, West, North, south in the following manner.



Given that initially Priya walks 20 meters towards North

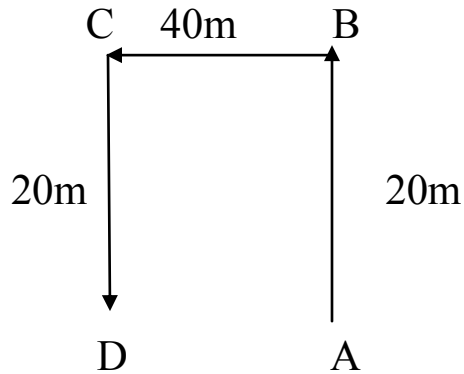


Step II :- She then turns left and walks 40 meters

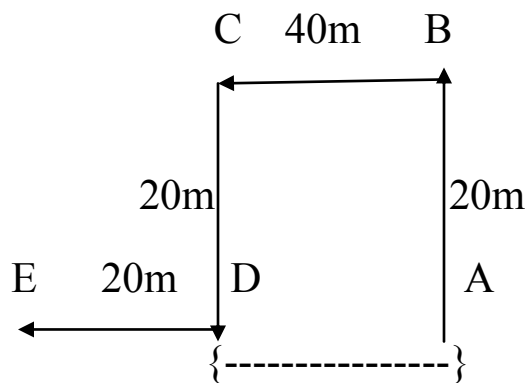


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Step III :- She again turns left and walks 20 meters



Step IV :-Further, she moves 20 meters after turning to the right



$$\begin{aligned} \text{Then the actual distance covered by Priya} &= AD + DE \\ &= BC + DE \{ \text{Because } AD = BC \} \\ &= 40\text{m} + 20\text{ m} \\ &= 60\text{m}. \end{aligned}$$

Hence, Priya's distance from her original position is 60m.