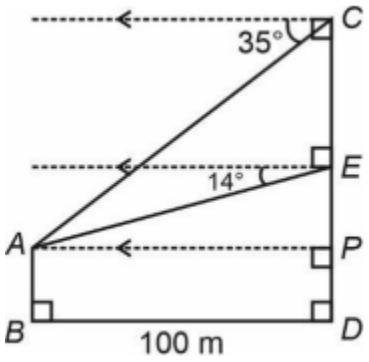
PREVIOUS YEAR QUESTIONS
(Chapterwise)

CHAPTER NAME: HEIGHTS AND DISTANCES

SUMMARY POINTS	

Q.NO.: 1	**In the given diagram, AB is a vertical tower 100 m away from the foot of a 30 storied building CD. The angles of depression from the point C and E. (E being the mid-point of CD), are 35° and 14° respectively.** **(Use mathematical table for the required values rounded off correct to two places of decimals only)** **Find the height of the:**  **(a) tower AB** **(b) building CD**	**YEAR** [2024]
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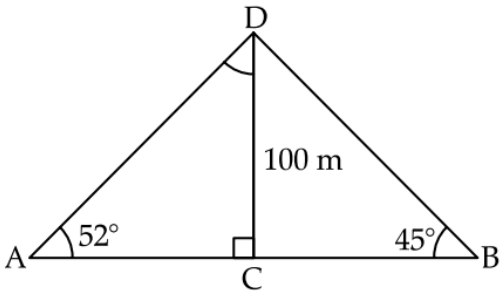
Q.NO.: 1	**The angle of elevation of the top of a 100 m high tree from two points A and B on the opposite side of the tree are 52° and 45° respectively. Find the distance AB, to the nearest metre.**  	**YEAR** [2024]
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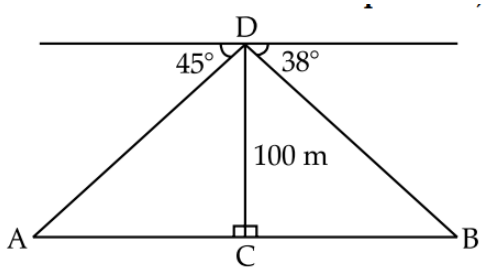
Q.NO.: 2	**From the top of a tower 100 m high a man observes the angles of depression of two ships A and B, on opposite sides of the lower as 45° and 38° respectively. If the foot of the tower and the ships are in the same horizontal line find the distance between the two ships A and B to the nearest metre. (Use Mathematical Tables for this question.)**  	**YEAR** [2023]
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Q.NO.: 3	**A lighthouse is 80 m high. The angle of elevation of its top from a point 80 m away from its foot along the same horizontal line is:** **(a) 60° (b) 45° (c) 30° (d) 90°**	**YEAR** [2022]
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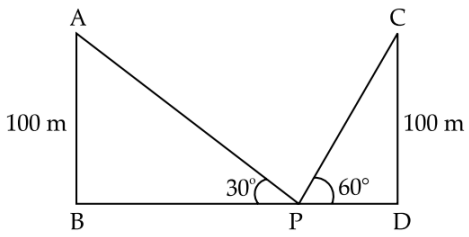
Q.NO.: 4	**Two lamp posts AB and CD each of height 100 m are on either side of the road. P is a point on the road between the two lamp posts. The angles of elevation of the top of the lamp posts from the point P are 60°and 30°. Find the distances PB and PD.**  	**YEAR** [2022]
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Q.NO.: 5	**From the top of a cliff, the angle of depression of the top and bottom of a tower are observed to be 45° and 60° respectively. If the height of the tower is 20 m.** **Find :** **(i) the height of the cliff.** **(ii) the distance between the cliff and the tower.**	**YEAR** [2020]
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Q.NO.: 6	**A man observes the angle of elevation of the top of the tower to be 45°. He walks towards it in a horizontal line through its base. On covering 20 m the angle of elevation changes to 60°. Find the height of the tower correct to 2 significant figures.**	**YEAR** [2019]
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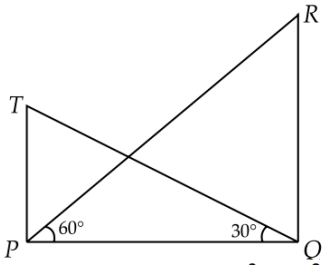
Q.NO.: 7	**The angle of elevation from a point P of the top of a tower QR, 50 m high is 60° and that of the tower PT from a point Q is 30°. Find the height of the tower PT, correct to the nearest metre.**  	**YEAR** [2018]
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