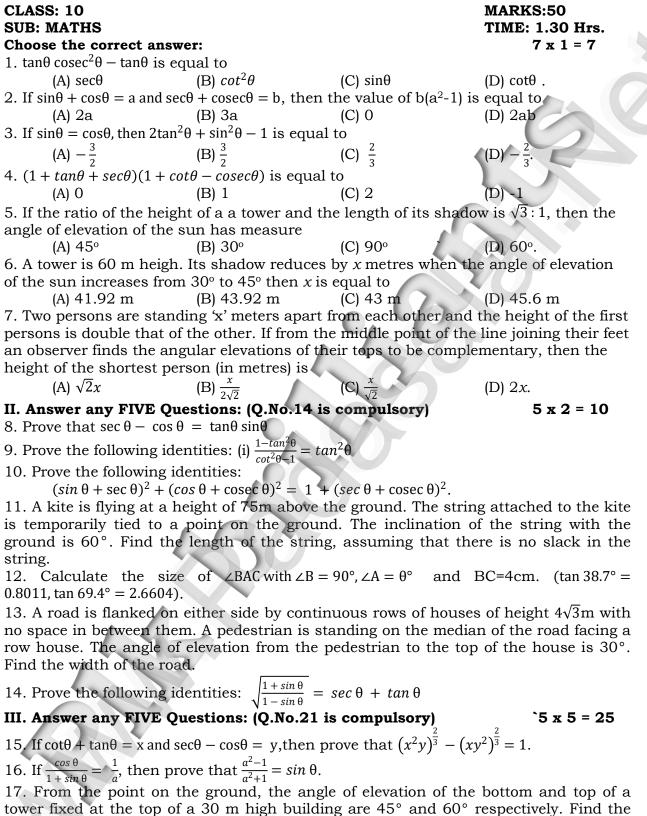
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height of the tower.

18.A statue 1.6 m tall stands on the top of a pedestal. From the point on the ground, the angle of elevation of the top of the statue is 60° and from the same point the angle

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of elevation of the top of the pedestal is 40°. Find the height of the pedestal. (tan40° = 0.8391, $\sqrt{3} = 1.732$).

19. From the top of a tower 50 m high, the angles of depression of the top and bottom of a tree are observed to be 30° and 45° respectively. Find the height of the tree.

20. From the top of a 12 m high building, the angle of elevation of the top of a cable tower is 60° and the angle of depression of its foot is 30° . Determine the height of the tower.

21. The angles of elevation and depression of the top and bottom of a lamp post from the top of a 66 m high apartment are 60° and 30° respectively. Find (i) the height of the lamp post. (ii) the distance between the height of the lamp post and the apartment. (iii) the distance between the lamp post and the apartment.

IV. Answer all the question:

$1 \ge 8 = 8$

(OR)

22. Construct a triangle similar to a given triangle LMN with its sides equal to $\frac{4}{5}$ of the

corresponding sides of the triangle LMN (scale factor $\frac{4}{5} < 1$).

The following table shows the data about the number of pipes and the time taken to till the same tank:

Number of Pipes (x)	2	3	6	9	
Time taken (in min) (y)	45	30	15	10	7) }

Draw the graph for the above data and hence

(i) Find the time taken to fill the tank when five pipes are used

(ii) Find the number of pipes when the time is 9 minutes.