

Class 10 Mathematics - Some Applications of Trigonometry

Name: _____

Date: _____

Advanced Worksheet 2

Questions

1. From the top of a 50 m high tower, the angle of depression of a car on the ground is 45° . Find the distance of the car from the foot of the tower.
2. From the top of a building, the angle of depression of a point on the ground is 30° . If the building is $20\sqrt{3}$ m high, find the distance of the point from the building.
3. The angle of depression of the top of a building from the top of a tower is 30° . If the horizontal distance between them is 40 m, find the difference in their heights.
4. A bridge is 6 m above the water level. The angles of depression of the banks on opposite sides are 30° and 45° . Find the width of the river.
5. A lighthouse is 60 m high. The angle of depression of a ship is 30° . Find the distance of the ship from the lighthouse.
6. From the top of a cliff 80 m high, the angle of depression of a boat is 45° . Find the distance of the boat from the foot of the cliff.

Answer Key

1. 50 m
2. 60 m
3. $40/\sqrt{3}$ m
4. $6(\sqrt{3} + 1)$ m
5. $60\sqrt{3}$ m
6. 80 m

