Class 10 Mathematics - Some Applications of Trigonometry

Name: _____

Date: _____

Medium Worksheet 2

Questions

1. An observer is 28.5 m away from a chimney. If the angle of elevation of the top of the chimney is 45° and the observer's eye level is 1.5 m, find the height of the chimney.
2. A tower casts a shadow 20 m long. If the angle of elevation of the Sun is 60°, find the height of the tower.
3. From a point 30 m away from the foot of a tower, the angle of elevation of its top is 30°. Find the height of the tower.
4. A kite is flying at a height of 60 m. If the angle of elevation of the kite is 60°, find the length of the string.
5. A tree is observed from a point on the ground. The angle of elevation of its top is 30°. If the distance from the tree is $15\sqrt{3}$ m, find its height.
6. A ladder is 8 m long and makes an angle of 60° with the ground. Find the height reached by the ladder.

Answer Key

1. 30 m
2. $20\sqrt{3}$ m

3. $10\sqrt{3}$ m
4. $40\sqrt{3}$ m
5. 15 m
6. $4\sqrt{3}$ m