

Trig Word Problems Worksheet (1)

1. At a point on the ground 50 meters from the foot of a tree, the angle of elevation of the top of the tree is 48° . Find the height of the tree to the nearest meter.
2. A wooden beam 6 meters long leans against a wall and makes an angle of 71° with the ground. How high up the wall, to the nearest meter, does the beam reach?
3. A wire attached to the top of a pole is also attached to a stake in the ground 20 ft. from the foot of the pole and makes an angle of 22° with the pole. Find, to the nearest foot, the length of the wire.
4. From the top of a lighthouse 190 ft. high the angle of depression of a boat out at sea is 34° . Find, to the nearest foot, the distance from the boat to the foot of the lighthouse.
5. A straight road to the top of a hill is 2500 meters long and makes an angle of 12° with the horizontal. Find, to the nearest hundred meters, the height of the hill.
6. Find, to the nearest degree, the angle of elevation of the sun when a person 170 cm tall casts a shadow 170 cm long.
7. The top of a 40 ft. ladder touches a point on the wall 36 feet off the ground. Find, to the nearest degree, the measure of the angle that the ladder makes with the wall.
8. In a playground, a slide that is 9 m long runs over a horizontal distance of 6 meters along the ground. Find, to the nearest degree, the angle the slide makes with the ground.
9. Find, to the nearest degree, the angle of elevation of the sun when a person 170 cm tall casts a shadow 220 cm long.