

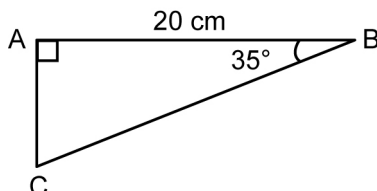
Name: _____

Date: _____

BLM 2.5.1

Practice: Solve Problems Using Right Triangles

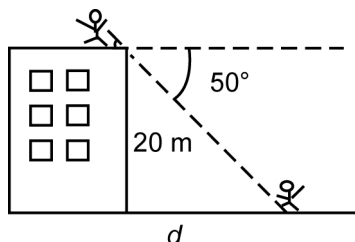
1. Determine the length of AC to the nearest tenth of a centimetre.



2. From a point 6.5 m from the base of the school flagpole, the angle of elevation to the top of the flagpole is 46° . What is the height of the flagpole?



3. Ralph is on the roof of a building, while his friend Ajay is on the ground. Ralph can see Ajay at a 50° angle of depression. The vertical height of the building is 20 m. What is the horizontal distance from the base of the building to where Ajay is standing? Round your answer to the nearest tenth of a metre.

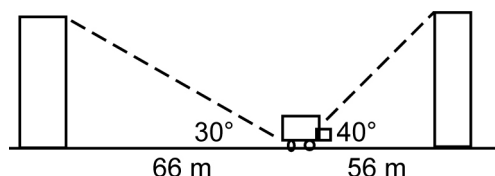


4. From a point 15 m from the base of a picket fence, the angle of elevation to the top of the fence is 20° . How tall is the fence?

5. Alex's pet dog is lying on the ground 2.5 m away from him. The angle of elevation from the dog to Alex's head is 30° . How tall is Alex?

6. Sheryl's tree house is 3 m above the ground. Sheryl looks down at an angle of depression of 30° and can see her poodle's doghouse. What is the horizontal distance from the doghouse to the tree house?

7. A truck parked on the street is 56 m from the base of the apartment building on the right. The angle of elevation from the truck to the top of the building is 40° . The truck is 66 m from the base of the apartment building on the left. The angle of elevation from the truck to the top of that building is 30° . Which building is taller?



8. A delivery truck has packages that have to be delivered to two different stores. The driver can see both stores and wants to go to the store that is closer first. Store A is 20 m tall. The angle of elevation from the truck to the top of the store is 38° . Store B is 25 m tall. The angle of elevation from the car to the top of that store is 40° . Which store is closer?