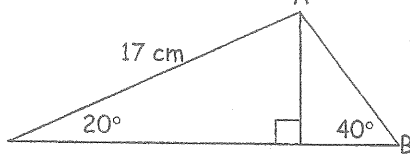


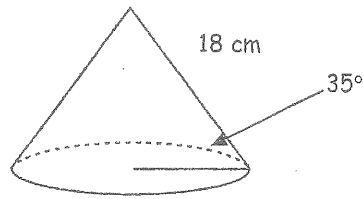
Name _____

Trig Day 2 Homework

_____ 1) Find AB.



_____ 2) Find the volume of the cone.



3-7 Draw a picture for each problem, then write a trig. equation and solve. Round to thousandths.

_____ 3) The angle of depression from a submarine that's 234 m above the ocean floor, to a treasure chest on the ocean floor, is 21° . Find the distance from the submarine to the treasure chest.

_____ 4) A support wire runs from a point on the ground to the top of a utility pole. The wire makes a 70° angle with the ground. The length of the wire is 12ft. 3in. Find the height of the utility pole.

_____ 5) The angle of elevation from the top of a control tower up to a plane is 17° . At that moment, the plane is at an altitude of 500m. How far is the plane from the top of the control tower? The height of the tower is 70m.

_____ 6) The angle of depression from the top of a tree to the top of a 12 ft. pole is 47° . The distance between the base of the pole and the base of the tree is 34 ft. Find the height of the tree.

_____ 7) Find the angle of elevation of the sun when a 6ft. man casts a 7ft. 6in. shadow.

Name _____

Homework Trig. Day 3

1-7 Draw a picture for each problem, then write a trig. equation and solve. Round to thousandths.

Do all work on a separate piece of paper.

_____ 1) Jonah rides his motorcycle for 12 miles on a bearing of 90° . He then turns and rides his motorcycle on a bearing of 180° for 4 miles. What is the bearing from where Jonah started to where he is now?

_____ 2) A plane departs city A and travels on a bearing of 100° . City B is 200 miles directly south of city A. How far has the plane traveled when it is due east of city B?

_____ 3) The bearing from A to B is 70° , the bearing from B to C is 160° , and the bearing from A to C is 110° . If $AB=18$ ft, then $AC=?$

_____ 4) The distance from A to B is 18 km and the bearing from A to B is 0° . The bearing from B to C is 270° . If $AC=28$ km, then what's the bearing from A to C?

5-6 The height of a radar tower is 200 m. A plane flying at a height of 6000 m is directly over the radar tower at 1:00 pm. At 1:30 pm, the bearing from the top of the radar tower to the plane is 310° (the plane is still at a height of 6000m).

_____ 5) What's the distance between the plane and the top of the radar tower at 1:30 pm?

_____ 6) What's the speed of the plane between 1:00 and 1:30 pm? (in m/hr)

_____ 7) Miguel plans to make a skateboard ramp for his little brother. His brother wants the ramp to rise 4.2 ft off the ground at an angle of 41° . How long does the ramp need to be?