REVIEW TRIG RATIOS

FIND THE INDICATED RATIO AS A SIMPLIFIED FRACTION.



Solve each problem. Draw a diagram for each problem and round measurements to the nearest tenth.

13) A 20-foot ladder leans against a wall so that the base of the ladder is 8 feet from the base of the building. What angle does the ladder make with the ground?

14) A 50-meter vertical tower is braced with a cable secured to the top of the tower. The cable is ties 30 meters from the base of the tower. What is the measure of the angle formed by the cable and the tower?

At a point on the ground 50 feet from the foot of a tree, the angle of elevation to the top of the tree is 53°.
Find the height of the tree.

16) A 210 foot lighthouse sits at the edge of the sea at sea level. From the top of a lighthouse, the angle of depression to a boat out at sea is 27°. Find the distance the boat is from the base of the lighthouse.

17) Richard is flying kite. The kite string makes a 57° angle with the ground. Richard is standing 100 feet from the point that is directly below the kite. Find the length of the string.

18) An airplane rises vertically 1000 feet over a horizontal distance of 1 mile. What is the angle of elevation of the airplane's path?