

Geometry Review

1. A triangle has sides that are each 8 m long. Find the area of the triangle.
2. A cord of seasoned almond wood contains 128 cubic feet and costs \$190. How much should you pay for a pile of wood that is 5 feet wide, 3 feet high and 8 feet long?
3. In a right triangle having one angle of 60° , the length of the side adjacent to the 60° angle is 7 inches. What is the length of the hypotenuse?
4. A circular swimming pool has a diameter of 45 feet and is surrounded by a concrete sidewalk that is 5 feet wide. What is the area of the sidewalk?
5. A ladder is leaning against a building. If the bottom of the ladder is $7\frac{1}{2}$ feet from the wall and the top of the ladder is 10 feet above the ground, how long is the ladder?
6. Ron Thiele bought an older house and wants to put in a new concrete driveway. The driveway will be 36 feet long, 9 feet wide, and 6 inches thick. Concrete is measured by the cubic yard. One sack of dry cement mix costs \$7.30, and it takes four sacks to mix up 1 cubic yard of concrete. How much will it cost Ron to buy the cement?
7. A 5.4-foot-tall woman casts a shadow of 2 feet at the same instant that a telephone pole casts a shadow of 9 feet. How tall is the pole?
8. The Sears Tower (in Chicago) is the tallest building in the United States. From a point 900 feet from the building, you measure the angle of elevation of the top of the building. If the angle is 58.24° , how tall (to the nearest foot) is the Sears Tower?
9. You jog $\frac{3}{4}$ mile due north, then jog $1\frac{1}{2}$ miles due east, and then return to your starting point via a straight line path. How many miles have you jogged?