

**140**

**Course 3** • Triangles and Transformations

NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**6.** **ENTERTAINMENT** Isaac’s television is

25 inches wide and 18 inches high. What is the diagonal size of Isaac’s television? Round to the nearest tenth if necessary.

**5.** **FLAGPOLE** A wire 30 feet long is stretched from the top of a flagpole to the ground at a point 15 feet from the base of the pole. How high is the flagpole? Round to the nearest tenth if necessary.

**3.** **LADDER** A ladder 17 feet long is leaning against a wall. The bottom of the ladder is 8 feet from the base of the wall. How far up the wall is the top of the ladder? Round to the nearest tenth if necessary.

**4.** **TRAVEL** Tara drives due north for

22 miles then east for 11 miles. How far is Tara from her starting point? Round to the nearest tenth if necessary.

**2.** **TRIATHLON** The course for a local triathlon has the shape of a right triangle. The legs of the triangle consist of a 4-mile swim and a 10-mile run. The hypotenuse of the triangle is the biking portion of the event. How far is the biking part of the triathlon? Round to the nearest tenth if necessary.

**1.** **RECREATION** A pool table is 8 feet long and 4 feet wide. How far is it from one corner pocket to the diagonally opposite corner pocket? Round to the nearest tenth.

**Problem-Solving Practice**

***Use the Pythagorean Theorem***

PERIOD

DATE