

Lesson 6 Problem-Solving Practice

Use the Pythagorean Theorem

<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>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.</p>