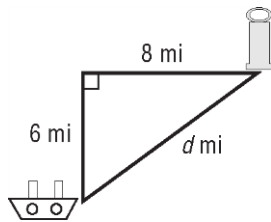


Lesson 6 Homework Practice

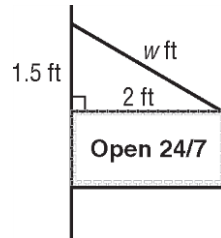
Use The Pythagorean Theorem

Write an equation that can be used to answer the question. Then solve. Round to the nearest tenth if necessary.

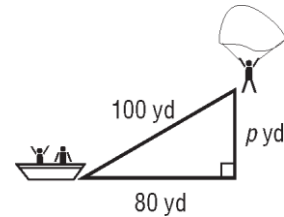
1. How far is the ship from the lighthouse?



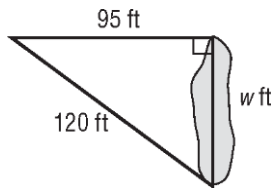
2. How long is the wire supporting the sign?



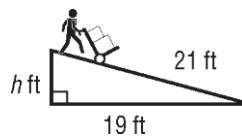
3. How far above the water is the person parasailing?



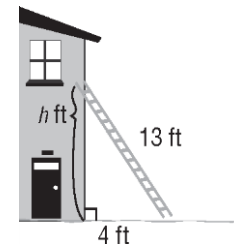
4. How wide is the pond?



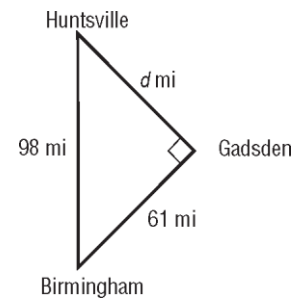
5. How high is the ramp?



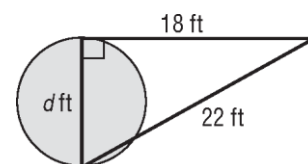
6. How high is the end of the ladder against the building?



7. **GEOGRAPHY** Suppose Birmingham, Huntsville, and Gadsden, Alabama, form a right triangle. What is the distance from Huntsville to Gadsden? Round to the nearest tenth if necessary.



8. **GEOMETRY** Find the diameter d of the circle in the figure at the right. Round to the nearest tenth if necessary.



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 11 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 31 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>