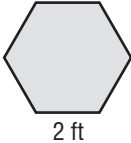


Lesson 4 Problem-Solving Practice

Changes in Dimension

Solve.

<div>1. A classroom bulletin board in the shape of a regular hexagon is shown below. The dimensions of a hallway bulletin board are tripled. What is the perimeter of the hallway bulletin board?</div> <div><p>A regular hexagon is shown with a side length of 2 ft.</p></div>	<div>2. Refer to Exercise 1. Suppose the classroom bulletin board has an area of about 10.75 square feet. What is the approximate area of the hallway bulletin board?</div>
<div>3. Mrs. Willis is making a dress from fabric with two different sizes of squares. A side of the larger square is twice the length of a side of the smaller square. What is the perimeter of the larger square if the perimeter of the smaller square is 32 centimeters?</div>	<div>4. Refer to Exercise 3. Suppose the area of the larger square is 100 square centimeters. What is the area of the smaller square?</div>
<div>5. A design for a triangular-shaped T-shirt logo has dimensions $\frac{1}{3}$ the size of the T-shirt logo. The sides of the T-shirt logo are 6 inches, 12 inches, and 15 inches. What is the perimeter of the design?</div>	<div>6. Refer to Exercise 5. Suppose the area of the T-shirt logo is about 34.2 square inches. What is the approximate area of the design.</div>