Name _____ Class _____ Date _____

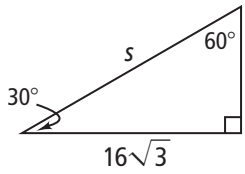
8-2 Standardized Test Prep

Special Right Triangles

Multiple Choice

For Exercises 1–5, choose the correct letter.

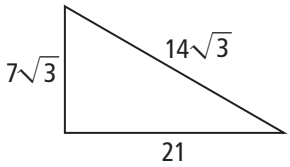
1. What is the value of *s*?



(A) 8 (C) $16\sqrt{2}$

(B) 16 (D) 32

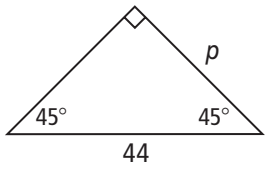
2. What are the angle measures of the triangle?



(F) 30°, 60°, and 90° (H) 60°, 60°, and 60°

(G) 45°, 45°, and 90° (I) They cannot be determined.

3. What is the value of *p*?



(A) 22 (C) 44

(B) $22\sqrt{2}$ (D) $44\sqrt{3}$

4 In the center of town there is a square park with side length 30 ft. If a person walks from one corner of the park to the opposite corner, how far does the person walk? Round to the nearest foot.

(F) 21 ft (G) 42 ft (H) 52 ft (I) 60 ft

5. An equilateral triangle has an altitude of 15 m. What is the perimeter of the triangle?

(A) $30\sqrt{2}$ m (B) 45 m (C) $30\sqrt{3}$ m (D) $60\sqrt{3}$ m

Short Response

6. The hypotenuse of a 30°-60°-90° triangle is 24.2 ft. Explain how to find the lengths of the legs of the triangle.