Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table# \_\_\_\_ Period: \_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_

**7.3E HW**

**Solve each of the following. Please draw a picture and use the Pythagorean Theorem to solve. Be sure to label all answers.**

1. Two sides of a right triangle are 8” and 12”.

A. Find the area of the triangle if 8 and 12 are legs.

B. Find the area of the triangle if 8 and 12 are a leg and hypotenuse. (Round your answer to the nearest tenth.)

2. The area of a square is 81 cm2. Find the perimeter of the square.

3. An isosceles triangle has congruent sides of 20 cm. The base is 10 cm. What is the area of the triangle?

(Round your answer to the nearest tenth.)

4. A baseball diamond is a square that is 90’ on each side. If a player throws the ball from 2nd base to home, how far will the ball travel? (Round your answer to the nearest tenth.)

5. Jill’s front door is 42” wide and 84” tall. She purchased a circular table that is 96 inches in diameter. Will the table fit through the front door? (HINT: turn table to fit through the door diagonally)

Solutions: **1.** A. 48 in2  B. 35 .6 in2 (or 35.8 if used  )**2.** 36 cm **3.** 96.8 cm2 (about 97 cm2) **4.** 127.3 ft.

**5**. The table will NOT fit . Diameter of door is about 93.3 inches