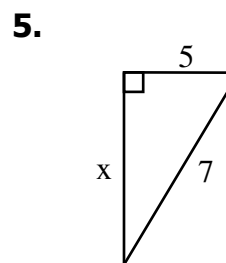
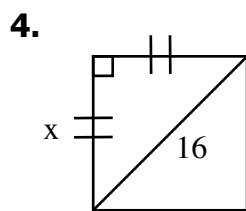
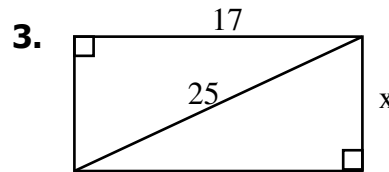
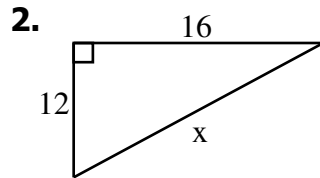


Geometry  
Worksheet 7.1 – Pythagorean Theorem

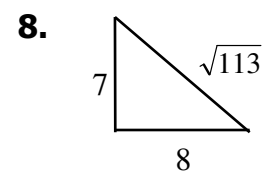
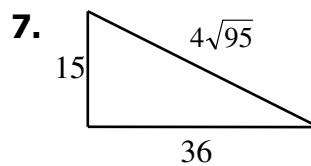
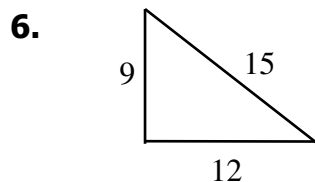
Name \_\_\_\_\_

1. Write the **Pythagorean Theorem**

**Solve for x. (Simplified radical answers)**



**Are the triangles below right triangles?**



**Decide if each set of numbers represents a Pythagorean triple. (Yes or no)**

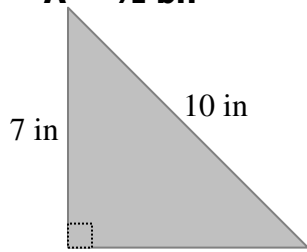
9. 5, 12, 13

10. 10, 17, 24

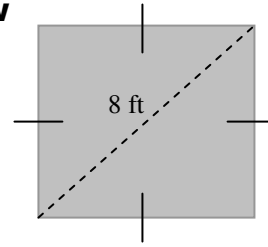
11. 7, 14,  $7\sqrt{5}$

Find the area of each figure. (answers rounded to nearest hundredth)

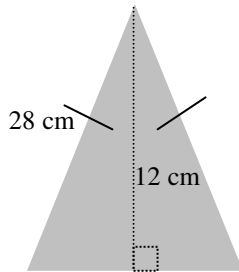
12.  $A = \frac{1}{2} bh$



13.  $A = lw$



14



Solve each application problem. Draw a sketch and show work!  
(answers rounded to nearest hundredth)

15. Find the length of the diagonal of a square which has a perimeter of 12 feet.

16. One leg of a right triangle is twice as long as the other leg. The area of the triangle is 49 square feet. What is the length of the hypotenuse? (Hint: if you label one leg  $x$ , what could you call the other?)

17. A shipping dock has a ramp that is used to help load and unload cargo from trucks. The ramp is 125 inches long and has a base that is 120 inches long. What is the height of the ramp?