Name_____ Date_____ Period_____

Pythagorean Theorem Worksheet

Solve for each variable. Write in simplified radical form. Show all work.

1.

8   c

6

2.

a   26

24

3.

5   13

b

4.

a $\sqrt{137}$

11

5.

3   x

4

6.

x   6

10

7.

12

15

x

8.

3

6   x

10
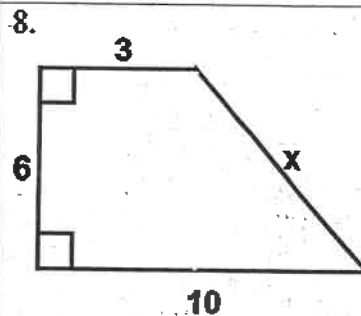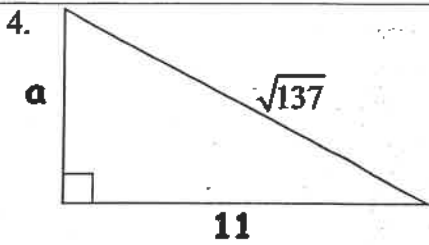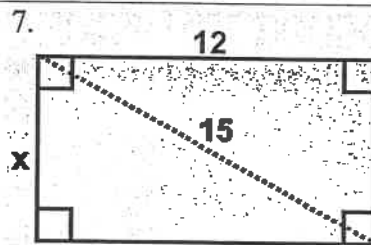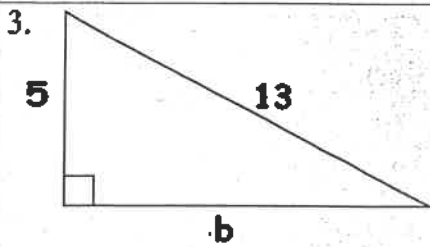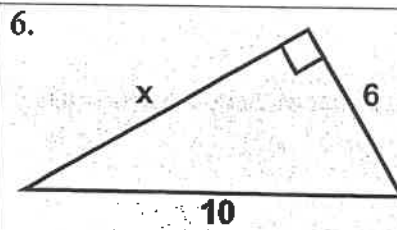
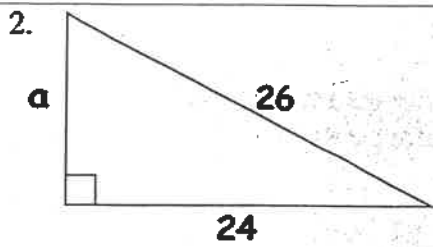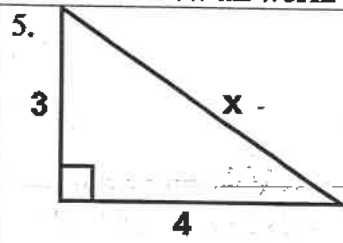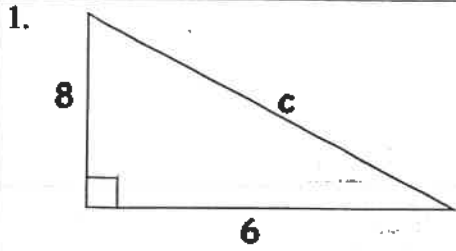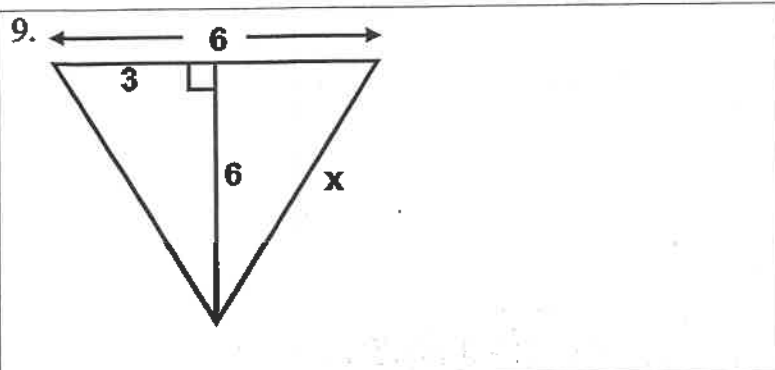|	
9. 6 3 ☐ 6 x	12. Find the length of the diagonal of a square whose side length is 10 inches
10. The length of one of the legs in a right triangle is 4 inches. If the hypotenuse is 12 inches long, what is the length of the other leg?	13. The diagonal crossbar of an old wooden gate has rusted. The gate is rectangular, 3 feet by 4 feet. How long is the crossbar (diagonal)?
11. Find the length of a diagonal of a square enclosure with a perimeter of 16 feet.	14. What is the diagonal measurement of the TV screen shown in the figure below? 44 in 38 in

Determine if the following numbers are Pythagorean triples. Show all work.

15. 3, 4, 5	17. 9, 12, 15
16. 13, 14, 15	18. 20, 25, 45

BONUS:
Solve for x:

$x+1$

x

7