The Pythagorean Theorem Assignment

Name:_____ Class:_____ Date:_____

Find the length of the missing side in the following examples. Round answers to the nearest tenth, if necessary. **Please do and show all work on a separate piece of paper!**

1.
6cm   c
3 cm

2.
c   5 cm
12 cm

3.
2 m   5m
c

4.
2.4 m   c
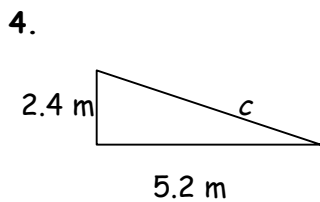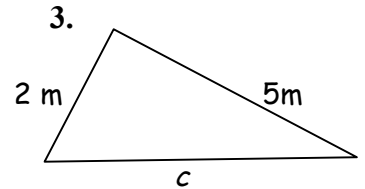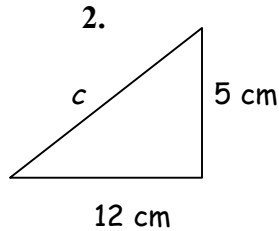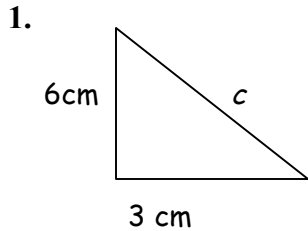5.2 m

5.
c   10cm

6.
8cm
30m   c

7.
5m
7m   c

8.
3cm
c
40m   50

9.
22cm
15cm   c
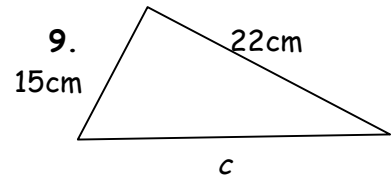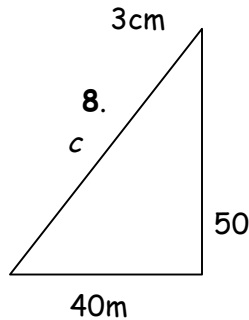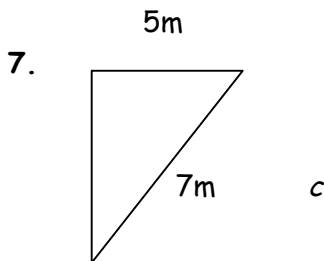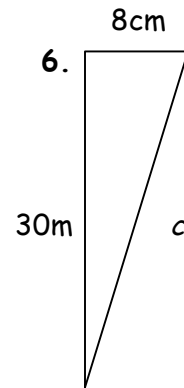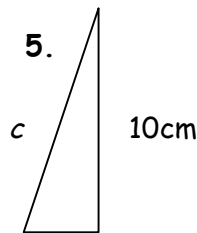
What is the length of the hypotenuse, c, of the following right angle triangles? **Show all work on a separate piece of loose leaf!**

10.	a = 3 ; b = 4 ; c = ?	15.	a = 8 ; b = 10 ; c = ?
11.	a = 6 ; b = 8 ; c = ?	16.	a = 15 ; b = 17 ; c = ?
12.	a = 12 ; b = 5 ; c = ?	17.	a = 40 ; b = 50 ; c = ?
13.	a = 9 ; b = 12 ; c = ?	18.	a = 4 ; b = 2 ; c = ?
14.	a = 15 ; b = 20 ; c = ?	19.	a = 1.2 ; b = 3.5; c = ?

20.   A ladder is leaning against the side of a 10m house. If the base of the ladder is 3m away from the house, how tall is the ladder? **Please draw a diagram and show all work.**