HW: Pythagorean Theorem/Word Problems

Name

Find the length of the third side of the right triangle.



In a right triangle, find the length of the side not given. Give an exact answer and an approximation to three decimal places.

3. *a* = 3, b = 4 _____

4.	a = 5, b = 12	

5. a = 15, c = 17 _____ 6. b = 12, c = 18 _____

Word Problems: DRAW a picture to help!!

7) If one leg of a right triangle is 12 and the other leg is 16, what is the length of the hypotenuse in this right triangle?

8) The measures of three sides of a triangle are given. Determine whether a triangle with sides 9, 40 and 41 is a right triangle. Explain your answer or show work.



10) A telephone pole support cable attaches to the pole 20 feet high. If the cable is 25 feet long, how far from the bottom of the pole does the cable attach to the ground?



11) The size of a television screen is given by the length of the diagonal of the screen. What size is a television screen that is 21.6 inches wide and 16.2 inches high?

12) If the diagonal of a rectangle measures 60 inches and one side measures 48 inches, what is the length of the other side of the rectangle?

13) Find the missing side of the triangle.



14) Tara leaned a 17 foot ladder against the house. The bottom of the ladder is 8 feet from the house. How high up the side of the house is the top of the ladder?

