

Pythagorean Theorem Word Problems

Name: _____

Solve each word problem using the Pythagorean Theorem. For each problem:

- Draw a picture!
 - Show your work!
 - Round to the nearest tenth, if necessary.
1. Clayton is responsible for changing the broken light bulb in a streetlamp. The streetlamp is 12 feet high. Clayton places the base of his ladder 4 feet from the base of the streetlamp. How tall does Clayton's ladder need to be?

 2. Leah walks to soccer practice on Saturday. She leaves her home and walks 600 meters blocks north. Leah then turns east and continues on to the soccer field. The soccer field is 1000 meters from her home. How far east did she walk?

 3. Tom and Susan want to put a custom-made, round table in their dining room. The table top has a diameter of 85 inches. The front door is 36 inches wide and 80 inches tall. Tom thinks the table top will fit through the door, but Susan does not. Who is correct and why?

 4. A television is identified by the diagonal measurement of the screen. A 70-inch television has a width of 61 inches. What is the height of the television screen?

 5. John is building a custom wall for a kitchen remodel. He knows the space for the wall is square with an area of 121 feet. How long is each side of the square wall? How long does his diagonal brace need to be? Round your answer to the nearest tenth of a foot.