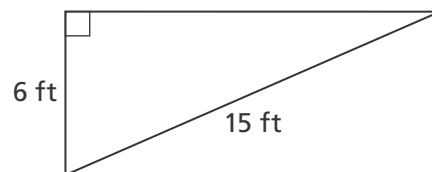


Name _____

Read the problem below. Then answer the questions to identify the steps for solving the problem.

What is the missing side length of the triangle, rounded to the nearest tenth of a foot?



1. How do you know that you can use the Pythagorean Theorem to find the missing side length?
2. Is the unknown side a leg of the triangle or the hypotenuse? Explain how you know.
3. Fill in the boxes to show which values to substitute into the Pythagorean Theorem.

$$a^2 + b^2 = c^2$$
$$\square^2 + b^2 = \square^2$$

4. Using the information from Exercise 3, you can solve for the variable b . Once you have solved for this variable, will you have answered the question? Explain.
5. Would substituting 6 for b and solving for a change the result in this problem? Explain.