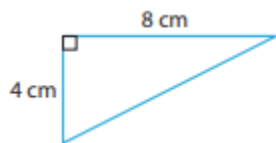


Name: _____ Teacher: _____ School: _____

Grade 8: Lesson 16 The Pythagorean Theorem

Complete the following exercises. You may use a calculator as needed.

Find the length of the missing side of each triangle. Round your answers to the nearest tenth.



1. _____



2. _____

3. The diagonal of a rectangular big-screen TV screen measure 152 cm. The length measures 132 cm. What is the height of the screen? Round your answer to the nearest tenth. (Remember to sketch a picture to help.)
4. Dylan has a square piece of metal that measures 10 inches on each side. He cuts the metal along the diagonal, forming two right triangles. What is the length of the hypotenuse of each right triangle to the nearest tenth of an inch?
5. A painter has a 24 foot ladder that he is using to paint a house. For safety reasons, the ladder must be placed at least 8 feet from the base of the side of the house. To the nearest tenth of a foot, how high can the ladder safely reach? (Remember to sketch a picture to help.)
6. A box used for shipping a volleyball set measures 10 inches by 20 inches by 40 inches. What is the longest length of support pole that will fit into the box, rounded to a tenth of an inch?

