

# 4A.8 Learning Opportunity

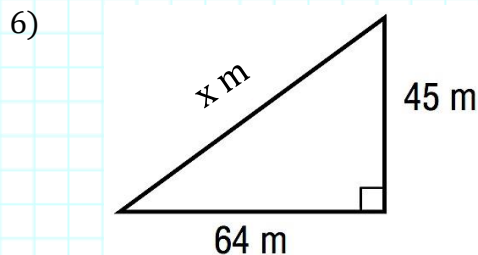
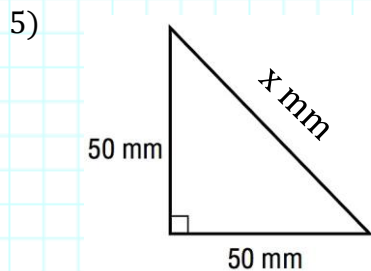
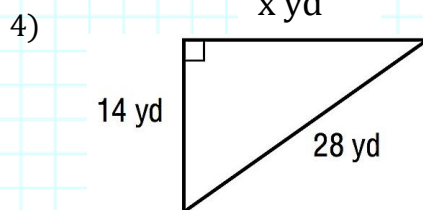
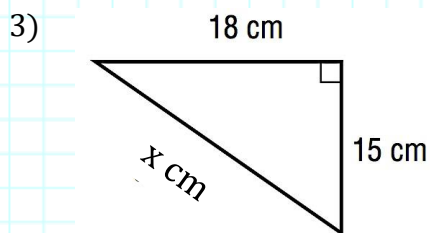
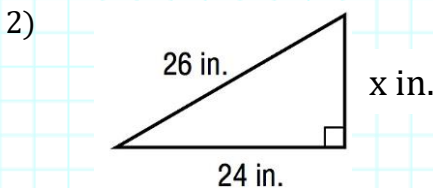
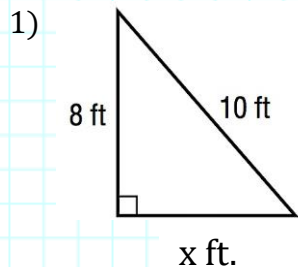
## The Pythagorean Theorem

Name: \_\_\_\_\_



For this assignment, please use your calculator to calculate square roots only. Square numbers by hand as this will help you begin to memorize perfect squares.

Find the missing side length in each of the right triangles pictured below. Round your answer to the nearest tenth.



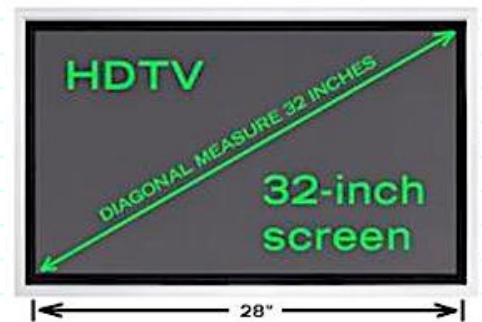
Determine whether each triangle with sides of given lengths is a right triangle. The side lengths must create a true equation when substituted into the Pythagorean Theorem if the triangle is a right triangle.

7) 18 ft., 23 ft., 29 ft.

8) 7 yd., 24 yd., 25 yd.

9) The hypotenuse of a right triangle is 15 inches, and one of its legs is 11 inches. Find the length of the other leg (round to the nearest tenth).

10) Find the height of this TV to the nearest tenth of an inch.



11) A square is positioned in quadrant I on graph paper so that two vertices lie on the axes, while a third vertex lies at the point (7,4). Find the area of the square.

