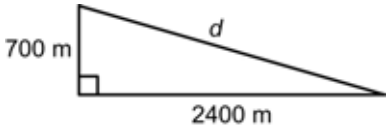
Name: _____ Date: _____

BLM 3–16

Section 3.5 Extra Practice

1. Fill in the blanks to find the missing distance.



$d^2 = 700^2 + \_\_\_\_^2$

$d^2 =$ _____ + _____

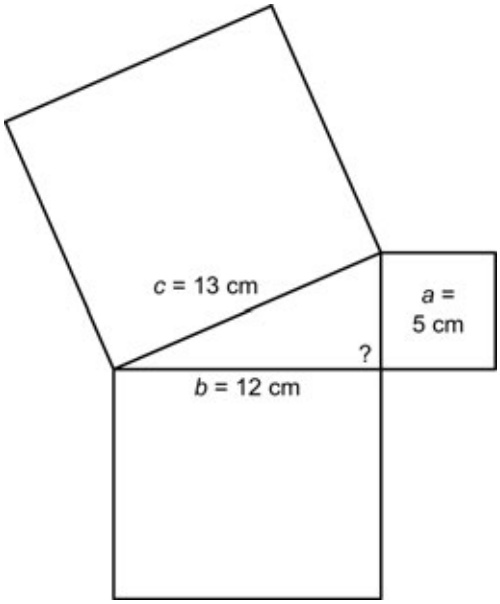
$d^2 =$ _____

$d = \sqrt{}$

$d =$ _____

The hypotenuse is _____ m.

2. Fill in the blanks to determine if the triangle is a right triangle. Use the Pythagorean relationship, $c^2 = a^2 + b^2$.



Left Side

$13^2 =$ _____

The area of the large square is _____ cm^2.

Right Side

$5^2 + 12^2 =$ _____ + _____

= _____

The sum of the areas of the two smaller squares is _____ cm^2.

Is the triangle a right triangle? YES NO

How do you know?

_____

_____

Name: _____ Date: _____

3. A rectangular field measures 20 m × 40 m. Stefan walked along the diagonal from one corner to its far corner. Megan walked along the two sides of the field.

a) Draw a diagram to match this situation.

b) What is the distance Stefan walked? Give your answer to the nearest tenth of a metre.

c) What is the distance Megan walked?

d) Which distance is shorter and by how much? Give your answer to the nearest tenth of a metre.

4. Before Larissa's father builds the roof of a shed, he asks her to check if the walls meet at a right angle. She makes a mark at 150 cm from the corner on each wall. She measures the diagonal length as 220 cm. Do the walls meet at a right angle? Justify your response.