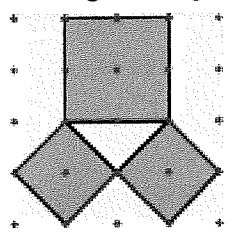


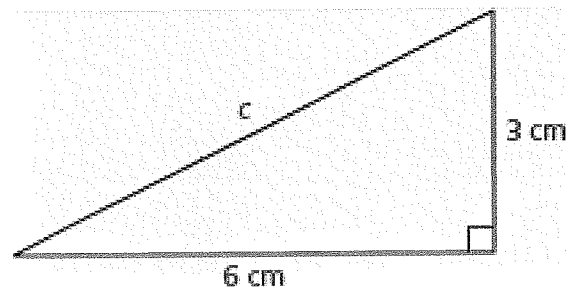
LFP - Homework 3.1 Name: _____

1. The diagram below shows a right triangle with a square on each side.



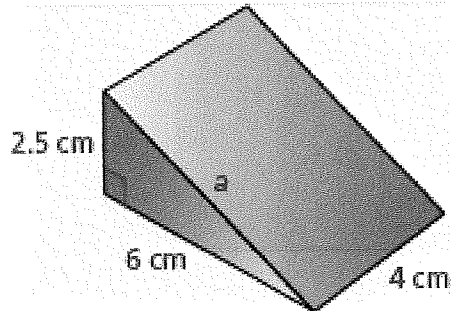
- a. Find the areas of the three squares.
 - b. Use the areas from part (a) to show that the squares on the sides of this triangle satisfy the Pythagorean relationship, $a^2 + b^2 = c^2$.
3. A right triangle has legs of length 5 inches and 12 inches.
- a. Find the area of a square drawn on the hypotenuse of the triangle.
 - b. Find the length of the hypotenuse.

4. Use the Pythagorean Theorem to find the length of the hypotenuse of this triangle.



Connections

17. The prism below has a base that is a right triangle.



- What is the value of a ? (Hint: make sure you use $a^2 + b^2 = c^2$)
- What is the surface area? (Hint: Find the area of each side and add them together)
- What is the volume? (Hint: $V = Bh$)
- Sketch a net for the prism

Extensions

27. Find the missing lengths.

