#### **Pythagorean Puzzle B - Activities**

#### Proof of the Pythagorean Theorem using four right triangles

#### **Opening Activity**

- 1) Compare the lengths of the given squares with the sides of the right triangle.
- 2) State your findings.



# Activity 1

- 1) Use the four congruent right triangles, and the two smaller squares to fill the frame.
- 2) Express the area of the frame in terms of the areas of the pieces.

# Activity 2

- 1) Now use the four triangles and the big square to fill the same frame.
- 2) Express the area of the frame in terms of the areas of the pieces.

# Comparing Activity 1 and 2

What can you conclude about the area of the square on the hypotenuse and the squares on the legs?