Name: _____ Date: _____ Hour: _____

Unit 4A: Day 7: A Proof of the Pythagorean Theorem

Focus Question: How do I know the Pythagorean Theorem works for all right triangles?

A. Puzzle set up.

1. Is your triangle a right triangle? Explain.

yes the sides are vertical & horizontal

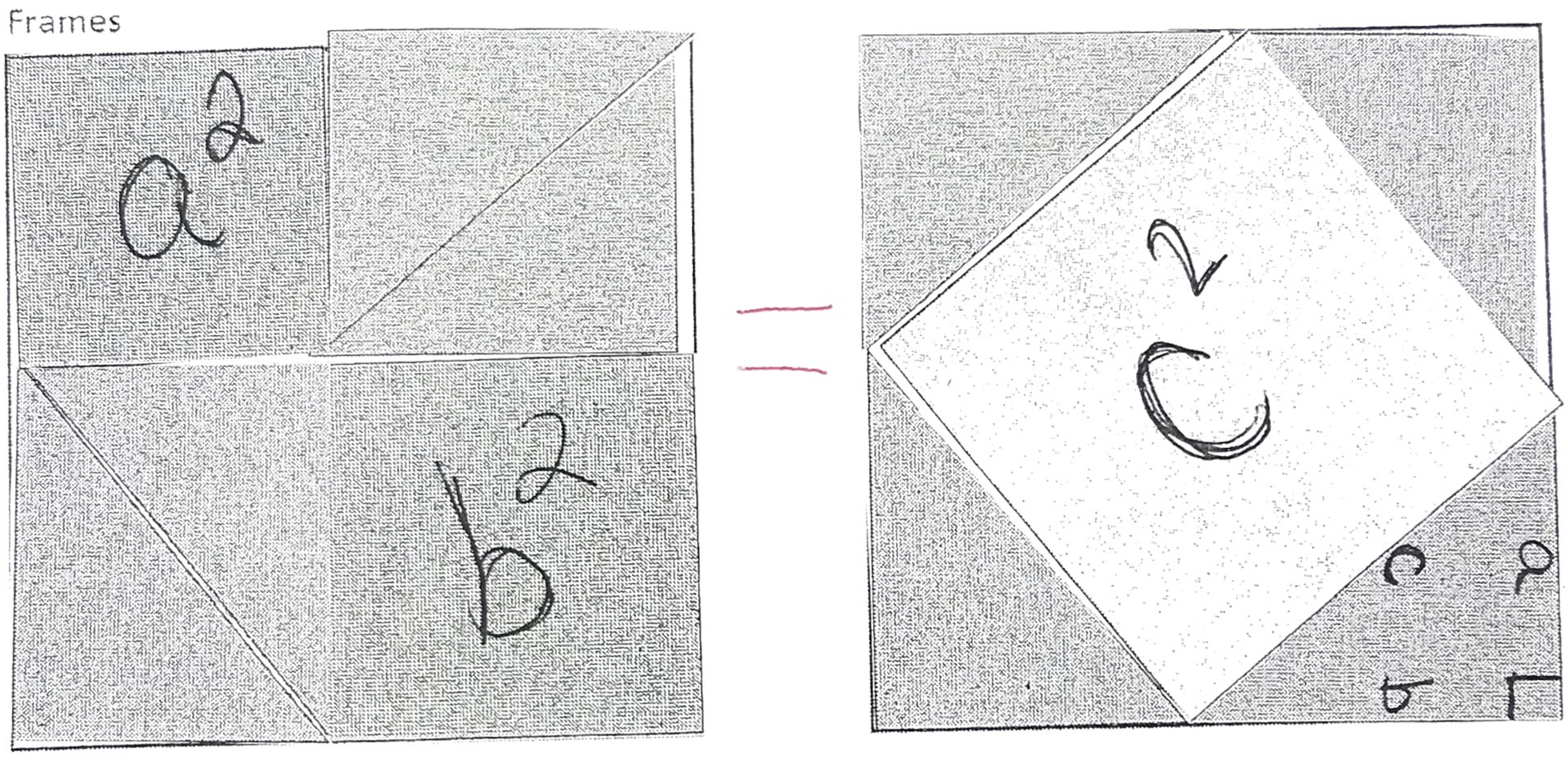
2. On ONE triangular puzzle piece, label the sides *a*, *b*, and *c* on the **inside** of the triangle. Cut out that puzzle piece.

3. Using the sides of the triangle, label the 3 squares as either a^2, b^2, or c^2 (on the inside).

4. Cut out all remaining triangles and the three labeled squares.

B. The puzzle

Arrange all 11 puzzles pieces so that they fit exactly in the two squares. Glue them down after you know it is correct.



1. What shapes are in the square on the left?

4 right Δ's + a^2 + b^2

2. What shapes are in the square on the right?

4 right Δ's + c^2

3. How does this prove the Pythagorean theorem?

the same so they can be subtracted from both sides what remains is...

$a^2 + b^2 = c^2$