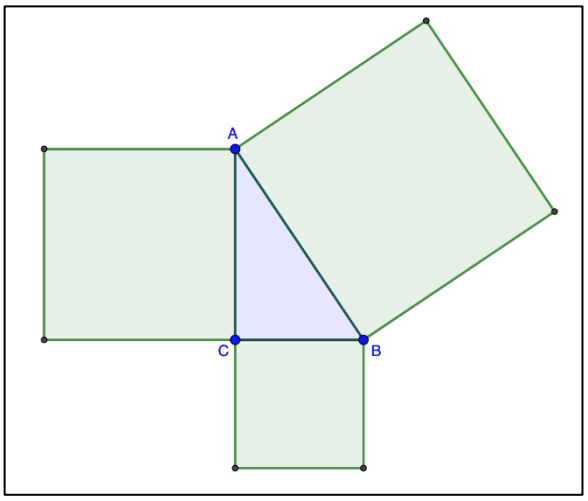
LAB–The Pythagorean Theorem Name _____
https://www.geogebra.org/m/g2dqktaf



WARMUP:
What does the Pythagorean Theorem say?

In the Pythagorean Theorem, which letter symbolizes the longest side of the triangle?

PROCEDURE:
Open the file Pythagorean Theorem or use the Construction Notes to create the figure.

1. Move one of the vertices of the triangle to change its shape. What do you notice?

2. Show the side lengths and the squares. What happens to them when you drag points A, B, or C?

3. Record the area data in the chart below, moving a vertex to create a new set of areas for each row.
   Column 3 is for the sum of the two smaller squares.

Square on $\overline{BC}$	**Square on $\overline{AC}$**	**Sum of squares**	**Square on $\overline{AB}$**

4. What conjecture can you make about the areas of the three squares?
   Does this relationship always hold when a vertex of $\triangle ABC$ is dragged to a different location?

5. Explain why this diagram models the Pythagorean Theorem.