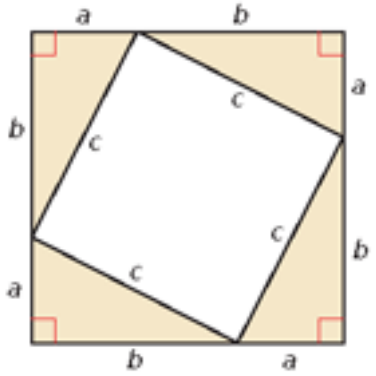
Name:_____ Date:_____ Band:_____
Geometry

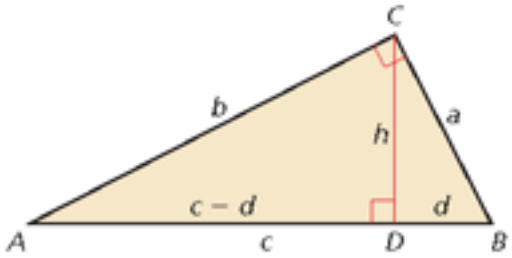
**Pythagorean Theorem Proofs (Without Words) Activity**

**Proof 1: Proving the Pythagorean Theorem without Words**

Write an informal proof using the diagram to prove the Pythagorean Theorem.




**Proof 2: Similar Triangles Proof**




**A.** Explain why $\Delta ABC, \Delta ACD$, and $\Delta CBD$ are similar.

**B.** Use the similar triangles in part (a) to prove that $a^2 + b^2 = c^2$.

**Proof 3: Bhaskara's Proof**

One very famous proof of the Pythagorean Theorem is by the Hindu mathematician Bhaskara. It is often called the "Behold" proof because, as the story goes, Bhaskara drew the diagram below and offered no verbal argument other than to exclaim, "Behold!" Use algebra to fill in the steps, explaining why this diagram proofs the Pythagorean Theorem.