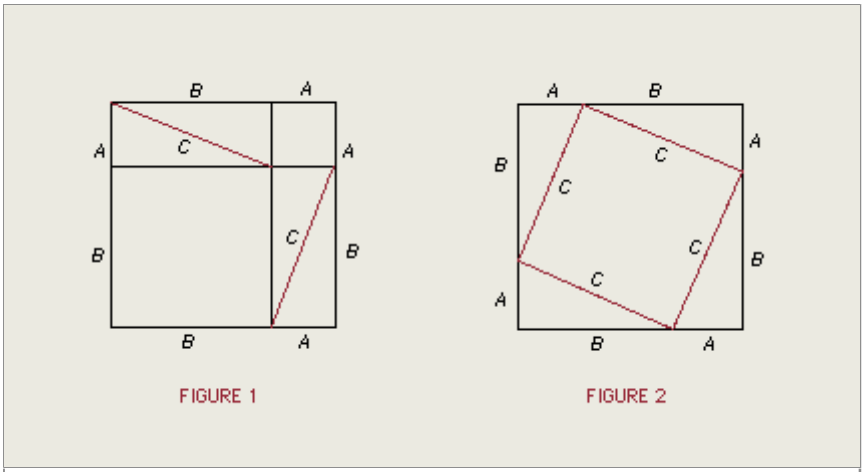

Mathematical Proof: Figures 1 and 2

Pythagoras' theorem states that if a right-angled triangle has sides of length *A* and *B*, and a hypotenuse of length *C*, then $A^2 + B^2 = C^2$. Figure 1 and figure 2 each contain four equal right-angled triangles with sides of length *A* and *B*, and a hypotenuse of length *C*. Since figure 1 and figure 2 both have the same area, removing the four triangles from figure 1 leaves a region that must have the same area as the region left when the four triangles are removed from figure 2. The area of the region left in figure 1 is $A^2 + B^2$, and the area of the region left in figure 2 is C^2. Thus $A^2 + B^2 = C^2$, proving Pythagoras' theorem.