
Problem 1) The area of the small square is $(a - b)^2$, that of the large square c^2 . Adding the areas of the four triangles, $4ab/2$, to that of the small square yields the area of the large square, as follows: $c^2 = (a - b)^2 + 4ab/2 = a^2 + b^2$. This completes the proof of the Pythagorean theorem.
