

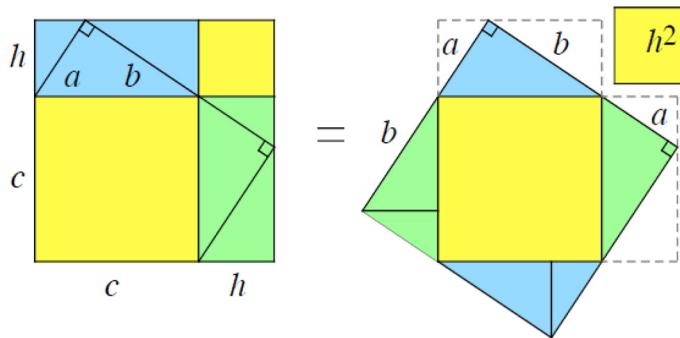
Proof Without Words: Another Pythagorean Theorem

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Theorem 1. *In a right triangle let a , b , c , and h denote the lengths of the two legs, the hypotenuse, and the altitude to the hypotenuse, respectively. Then*

$$(c + h)^2 = (a + b)^2 + h^2.$$

Proof.



■

Summary. We illustrate a Pythagorean-like theorem for the lengths of the two legs, the hypotenuse, and the altitude to the hypotenuse in a right triangle.