

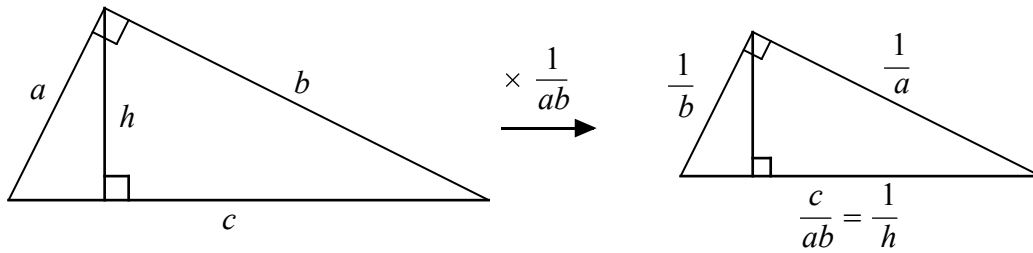
Proof Without Words: A Reciprocal Pythagorean Theorem

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If a and b are the legs and h the altitude to the hypotenuse c of a right triangle, then

$$\left(\frac{1}{a}\right)^2 + \left(\frac{1}{b}\right)^2 = \left(\frac{1}{h}\right)^2.$$

Proof.



NOTE: For another proof, see V. Ferlini, Mathematics without (many) words, *College Math. J.* **33** (2002), 170.

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