A Pythagorean-like Theorem

Consider the right triangle
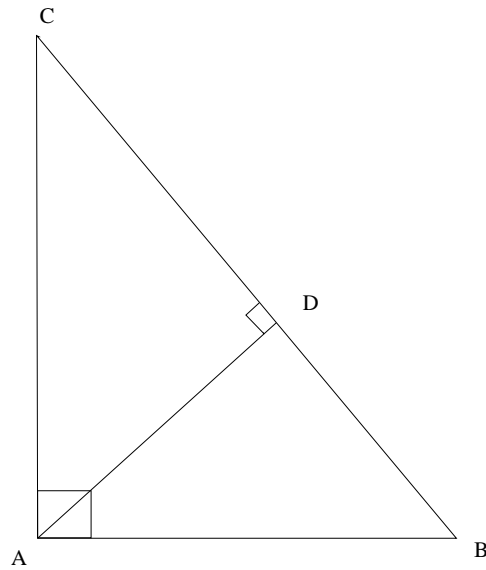
Let the length of **AB** be a, the length of **AC** be b and the length of **AD** be h. Prove that

$$\frac{1}{a^2} + \frac{1}{b^2} = \frac{1}{h^2}$$