

## Note on Pythagorean theorem

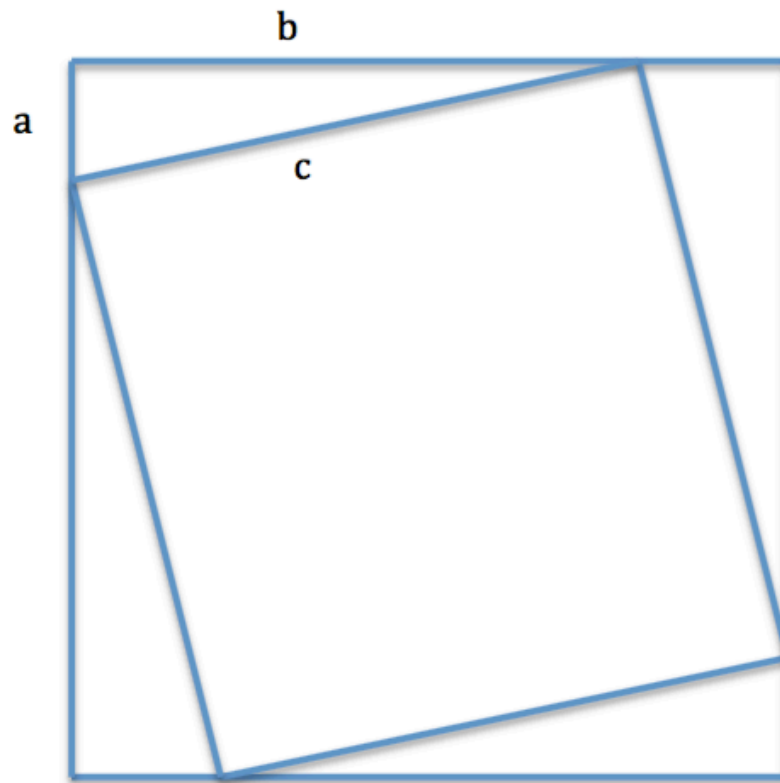


Figure 1:  $(a+b)^2 = 4\frac{1}{2}ab + c^2$  what gives  $a^2 + 2ab + b^2 = 2ab + c^2$  and finally  $a^2 + b^2 = c^2$

In Figure 1 the proof of the Pythagorean theorem is presented. We always have for a rectangular triangle

$$a^2 + b^2 = c^2 \quad (1)$$

where  $a$  and  $b$  are the lengths of the rectangular triangle sides at the right angle and  $c$  is the side length of the rectangular triangle side opposite to the

right angle.

Pawel Jan Piskorz (paweljs@gmail.com)