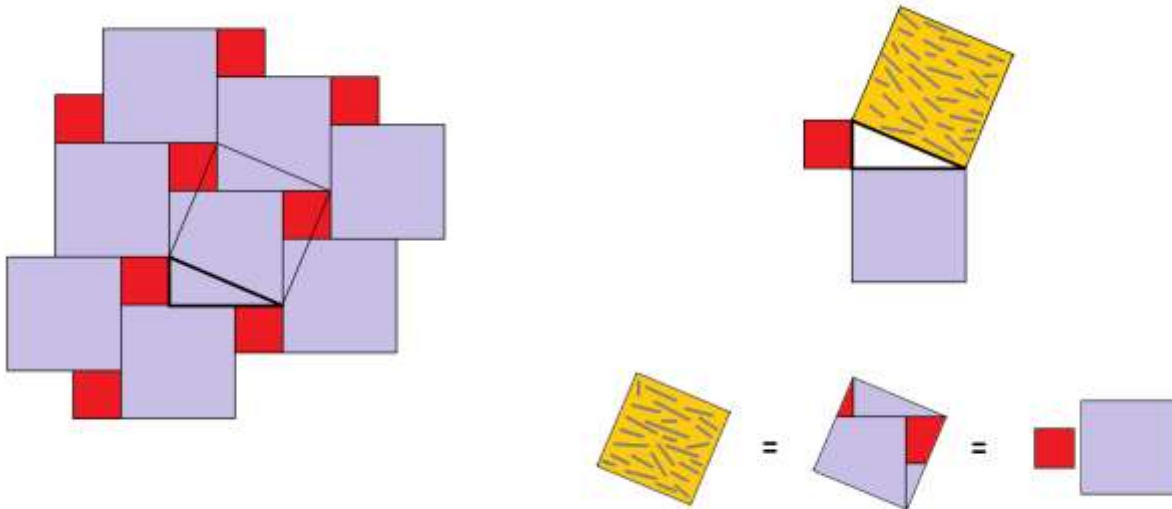


# MORE WITHOUT WORDS

*Mathematical Puzzles to Confound and Delight*

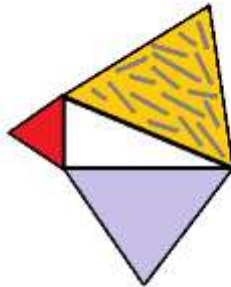


## MWW 29: SOLUTION



By tiling the floor with two differently sized square tiles we see a proof of the *Pythagorean Theorem*: *The largest square drawn on the sides of a right triangle has area the sum of the areas of the two smaller squares.*

This question asks for a similar tiling proof of the triangular version of the Pythagorean Theorem: If one draws equilateral triangles on the sides of a right triangle, it is indeed true that the area of the largest triangle equals the sum of the areas of the smaller two.



But this MWW29 is a bit of an unfair question as I don't know if such a purely visual tiling proof is possible! I've been wondering about this for years.

Have you come up with nice, purely visual, proof? (If so, let me know!)