EGYPTIAN TRIANGLE
Surveyors in ancient Egypt had a simple tool for making near-perfect right triangles: a loop of rope divided by knots into twelve equal sections. When they stretched the rope to make a triangle whose sides were in the ratio 3:4:5, they knew the largest angle was a right angle.

Can you fit the five pieces at bottom into the two smaller squares above the right triangle? Then can you fit the same five pieces into the larger square below the right triangle? If you can do both, what have you done?

Answer
Congratulations! You have demonstrated the truth behind the Pythagorean theorem: that the square of the hypotenuse (the side opposite the right angle) is equal to the sum of the squares of the other two sides.