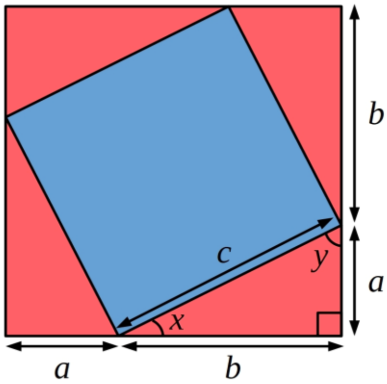
Pythagoras Proofs – Method 1

Can you prove Pythagoras' Theorem?

Here is a diagram and a proof that has been scrambled up.
Can you rearrange it into its original order?



Along each side of the large square there is a point where an angle of the enclosed quadrilateral, an angle x and an angle y meet	A
Therefore the enclosed quadrilateral is a square	B
Take a square with side lengths $a + b$, divided up into four identical right-angled triangles and an enclosed quadrilateral of sides c	C
The area of the four right-angled triangles $= 4 \times \frac{1}{2}ab = 2ab$	D
Area of enclosed square $= a^2 + 2ab + b^2 - 2ab = a^2 + b^2$	E
The area of the large square $= (a + b)^2 = a^2 + 2ab + b^2$	F
These three angles add up to 180°, therefore each angle of the enclosed quadrilateral is a right angle	G
The angles of the triangles x and y add up to 90°	H
The area of the enclosed square = area of the large square – area of four triangles	I
The area of the enclosed square is also given by c^2, therefore $a^2 + b^2 = c^2$	J
Therefore, in any right-angled triangle, the area of the square on the hypotenuse equals the sum of the areas of the squares on the other two sides	K