## General Algebra II Unit 13 Pythagorean Proof

I have 'outlined' one common way to use area to prove the Pythagorean Theorem. Your job will be to explain how this can be used to 'prove' the Pythagorean Theorem. Good luck.

Each diagram below shows a square. Clearly, the area of each of the squares can be represented as $(\mathbf{a}+\mathbf{b})^{2}$. However, the areas are divided up differently. The rest is up to you.


Explain how area can be used in the above diagram to 'prove' that $\mathbf{a}^{2}+\mathbf{b}^{2}=\mathbf{c}^{\mathbf{2}}$.

