# Lunch Theorems

ERIC RASMUSEN
JAN 16, 2025



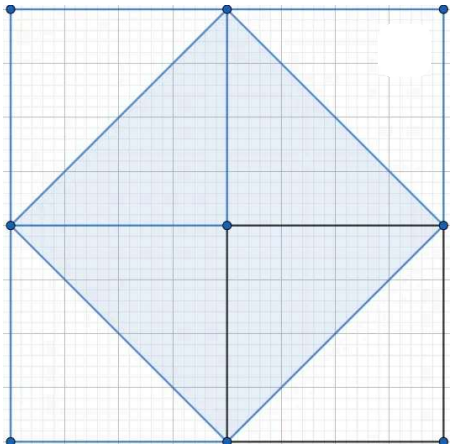

Figure 1: Meno's Theorem

My weekly Curmudgeons' Lunch at the Cloverleaf Cafe met today. One of us has resolved that finally, at over 70 years of age, he is going to read through the *Great Books of the Ancient World* series of 54 classics that his mother bought him around fifty years ago. One of those books contains some of Plato's dialogs, so I mentioned we'd been reading *Meno* in my combined 2nd-grade, 7th-grade class the day before,. I told them how the concept of the Size of a square being its Area was hard for the second-graders and I didn't explain well enough to them how the Size of a line would be in Inches but the Size of a shape would be in Square Inches.

I showed them the *Meno* proof diagram above. Mr. Sagarin, a sports mathematician who has guest-lectured for my class in past years and might again this spring, said it reminded him of the clever Pythagorean Theorem proof I showed him once— the "Behold Proof"— so I drew that too. We will do that proof in class in a few weeks. It's actually related to the Meno theorem and proof, which boil down to doing the Pythagorean Theorem when the two short sides of a triangle are equal to each other so you can make a square out of two copies rather than a rectangle.

Another curmudgeon, someone who is in his college's basketball hall of fame from back in the 80's, wondered if anyone else in Cloverleaf was proving theorems that day. Probably not. But proving theorems can actually be good lunchtime conversation, so I

thought I'd tell you the story. Here are the diagrams, as drawn at lunch and as tidied up by my personal secretary, Judah Kim. I won't try to explain them here, but I will do so in some future Substack.

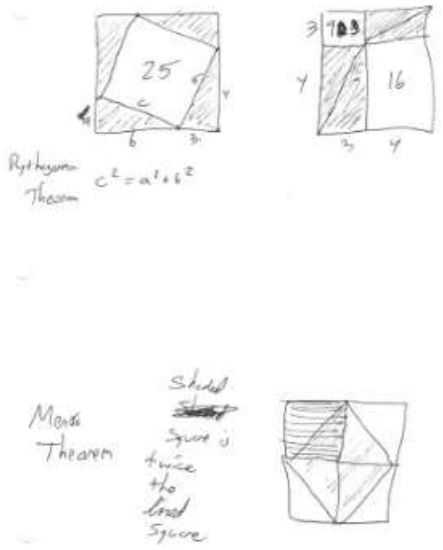


Figure 2: The Cloverleaf Cafe Diagrams, As Drawn Then on Scratch Paper

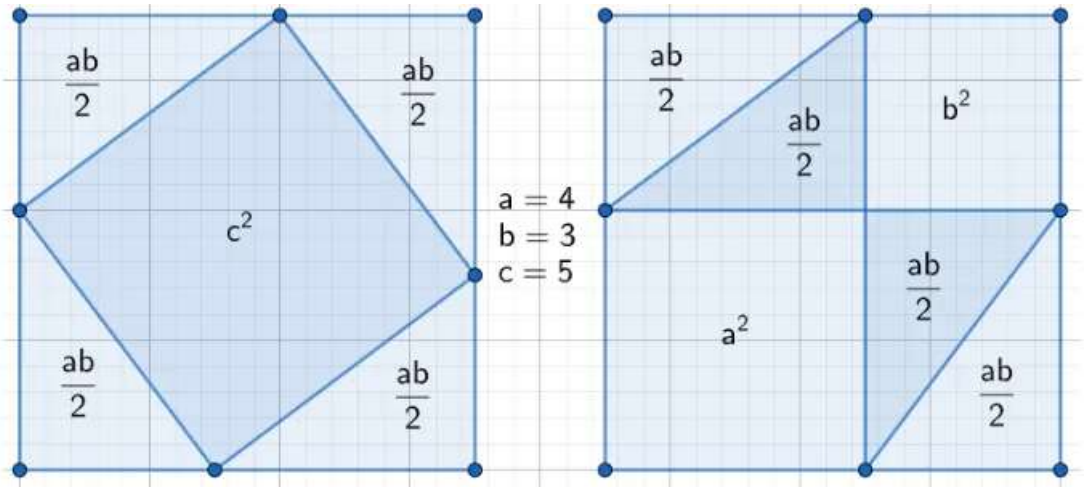


Figure 3: The Pythagorean Theorem. Behold!

1 Like · 1 Restack

← Previous

## Discussion about this post