Radical Pi presents:

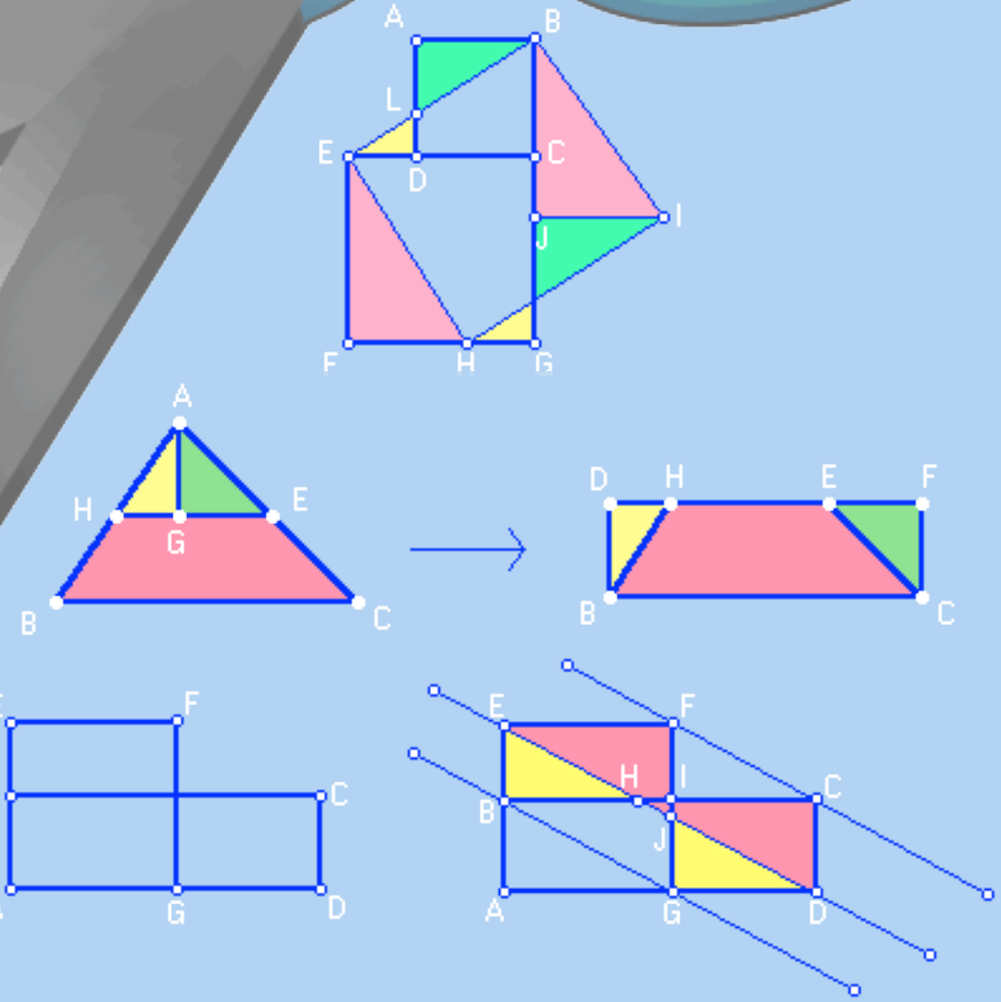
Scissors-Congruence

by Professor Daniel Shapiro

Two plane polygons A and B are "scissors-congruent" if there is a way to use a finite number of straight cuts to separate A into pieces that can then be rearranged (using rigid motions and with only trivial overlaps) into a polygon congruent to B. Certainly if A and B are scissors-congruent then they have equal areas. We will outline a proof of the converse:

Polygons with equal area are scissors-congruent.

How can this result be generalized? We will mention a few different possibilities.



Thursday, September 19, 5 PM
Undergraduate Math Study Space (MA 052)
Free pizza!