Undergraduate Math Club
Winter 2007
2nd floor Nesbitt Common Room
Thursday, February 22, 4:10-5:00pm
(free pizza and pop, as always)

Scissors Congruence

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Abstract

Say we have two pieces of construction paper; one in the shape of a square, and one in the shape of a triangle. Both the square and the triangle have the same area. We want to cut the triangle into finitely many pieces (using straight cuts) and rearrange the pieces so that they now form the square. Can we do it? What if we have a tetrahedron and cube of the same volume? In this lecture, we will use some unexpected tools to show why the answer to the first question is yes and why the answer to the second is no.