

## ${\bf Utah\,Math\,Olympiad}$

## Saturday, March 18, 2017 1:00 - 4:00 pm

Participation is free. Prize money will be distributed to the top scorers.

For more information and to register, visit www.utmath.org. Registration ends March 11. Contact us at contact@utmath.org.

## Sample Problem

When a square is subdivided into n rectangles, the resulting figure is called a *simple tiling* if there is no set of at least 2 (but not all n) of the rectangles which forms a larger rectangle. For example, here are simple tilings with 2 and 5 rectangles:



A *four-corners point* in a subdivision of a square into rectangles is a point where the corners of four rectangles meet. Is there a simple tiling with a four-corners point? University of Utah LeRoy Cowles Building Room 225

Brigham Young University Talmage Building Room TBA