

Name:

Math Olympiad Exploring! – Problem Due: – February 19, 2004

Counting Rectangles

How many rectangles are there in this staircase?

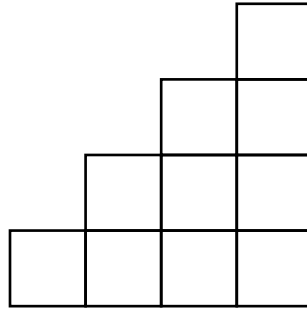


Figure 1: This Staircase

Remember, squares are rectangles as well. (You may first want to think about what kind of rectangles you can find in the picture.)

Color the bottom right square black. How many rectangles are there in the staircase that do not use the black square?