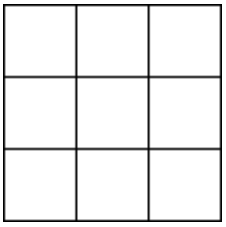
1.G Counting Squares

Alignments to Content Standards: 1.G.A.2

Task

How many squares are in this picture?



IM Commentary

This task is intended to be a simpler form of 1.G.A.2 Overlapping Rectangles. The purpose of this task is to give students an opportunity to compose and decompose squares. This is a challenging problem for first graders and it would be inappropriate to use it as an assessment. However, if presented as a brainteaser it can be useful for giving the students practice in recognizing squares, and stimulate interest as students compete to try to find the most squares. Furthermore, older students may also benefit from such an exercise as well, which could be aligned with 2.G.1.

This task includes an experimental GeoGebra worksheet, with the intent that instructors might use it to more interactively demonstrate the relevant content material. The file should be considered a draft version, and feedback on it in the comment section is highly encouraged, both in terms of suggestions for improvement and for ideas on using it effectively. The file can be run via the free online application GeoGebra, or run locally if GeoGebra has been installed.

Edit this solution

Solution

In addition to the nine small squares, there are four 2×2 squares (shown below), and one 3×3 square, for a total of 14 squares.