

## Counting Rokudoku-Pair Squares

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A rokudoku-pair square is an order-6 sudoku Latin square for both  $2 \times 3$  and  $3 \times 2$  tiling regions simultaneously. We count the distinct rokudoku-pair squares as well as orbits under the action of a suitable group. Our arguments employ group actions and list colorings of graphs. As an application we determine which rokudoku-pair squares are based on groups.

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