**SCRAMBLED SQUARES**

**PUZZLE CHALLENGES**

With no overlaps or voids, arrange all twelve pieces into the following shapes:

1. A single square.
2. A single triangle.
3. Two squares.
4. Two triangles.
5. One square and one triangle (two solutions).

Each solution is to be constructed with no adjacent tiles having the same color (map-coloring).

This puzzle could have been constructed over two thousand years ago—but wasn’t.

**Hints:** The diagram solves #1 as a 5x5 square, and #3 is solved by a 3x3 square and the 4x4 square shown. The bases are 3, 4, and 5 inches, with triangular sides of the squares rearranged to form the new triangle.

Of course, this illustrates the Pythagorean Theorem generalization that similar figures on the sides of a right triangle follow the area relation.

It is also true that each construct is four-colored appropriately.

The solver may be reminded of the Archimedes Square or perhaps Dudeney's famous triangle-to-square puzzle; but here, I think, these are misdirections.
The Scrambled Squares Puzzle is crafted in lasercut acrylic by Kadon Enterprises, Inc. ~ www.gamepuzzles.com in colors of the Canadian and Ottawa flags.

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SCRAMBLED SQUARES PUZZLE
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Made by Kadon Enterprises, Inc.