

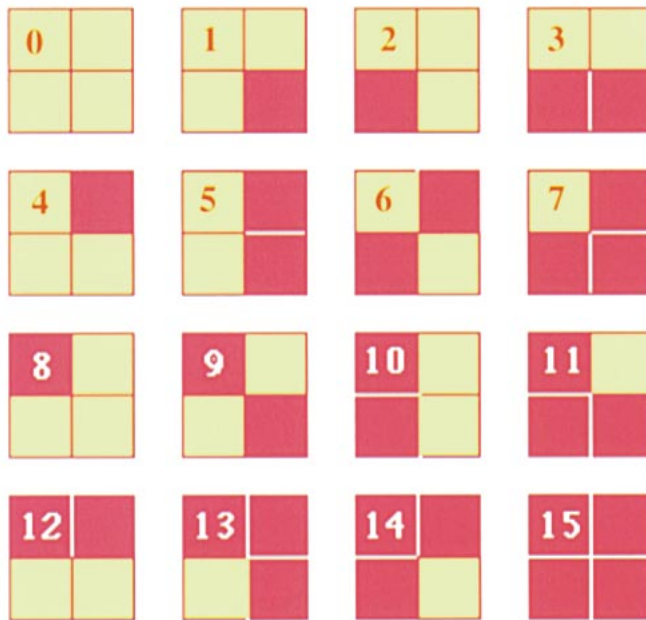
The Colormatch Square

Problem-of-the-Week

The Problem

Sixteen square tiles are numbered and shaded as shown. The goal of the puzzle is to arrange the tiles into a square so that the adjacent side of two tiles match. For example, the right side of tile 0 can be matched with the top sides of tiles 1, 2, and 3; the right side of tiles 2, 8, and 10; the left side of tiles 1, 4, and 5; and the bottom side of tiles 4, 8, and 12.

Find all the solutions that use tile 0 in the upper-left corner. Include only the solutions in which the tiles are not rotated.



Strategies and Hints

1. One solution to the puzzle is shown. Describe the solution by listing the numbers of the tiles from left to right and top to bottom.
2. Which tiles can go to the right of tile 0?
3. There are 10 more solutions that satisfy the conditions of the problem.

