Bakuro Blank Grids

Here is an algorithm for creating your own Bakuro puzzles with solutions.

First create a solution sheet:
1) Fill out a blank Bakuro grid, with the numbers 1, 2, 4 or 8, so that none appears more than once in each horizontal or vertical sections of the grid.
2) Write the binary equivalent to each number in each square.
   • As the numbers are powers of two notice that each will only contain a single 1 digit: 0001, 0010, 0100, or 1000).
3) Fill out the sum of the numbers in each row section in the upper triangle of the square to the left of the section.
4) Fill out the sum of the numbers in each column section in the lower triangle of the square above the section.
5) Write the binary for each number in the squares under the decimal version.
   • One way to get the binary version is just to note the position of the 1s in the numbers that it is the sum of. The binary number has a 1 in each of those positions.
6) Check all the entries carefully ensuring all the sums are correct, the binary is correct, only powers of 2 are used and no number appears twice in any section.
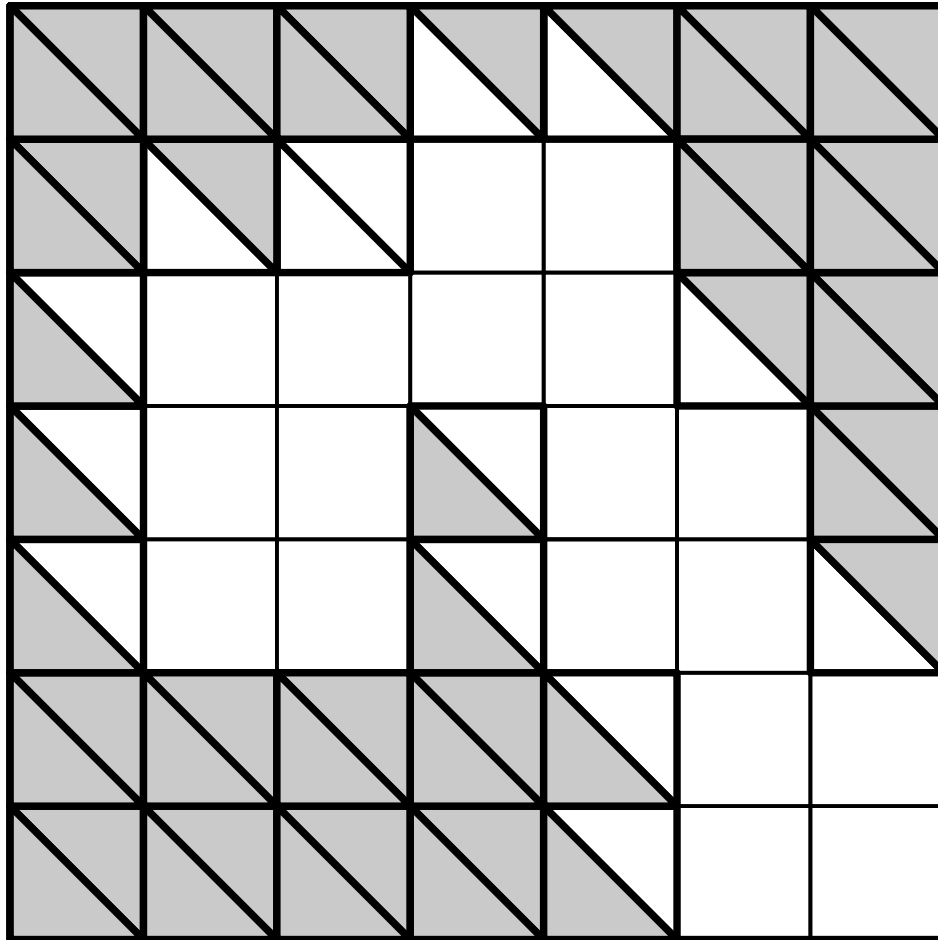
Next create a puzzle sheet:
1) Create a new version of the Bakuro, by copying the clues from the triangles of the solution sheet, leaving the square cells blank.
2) Check it is exactly the same as the solution.
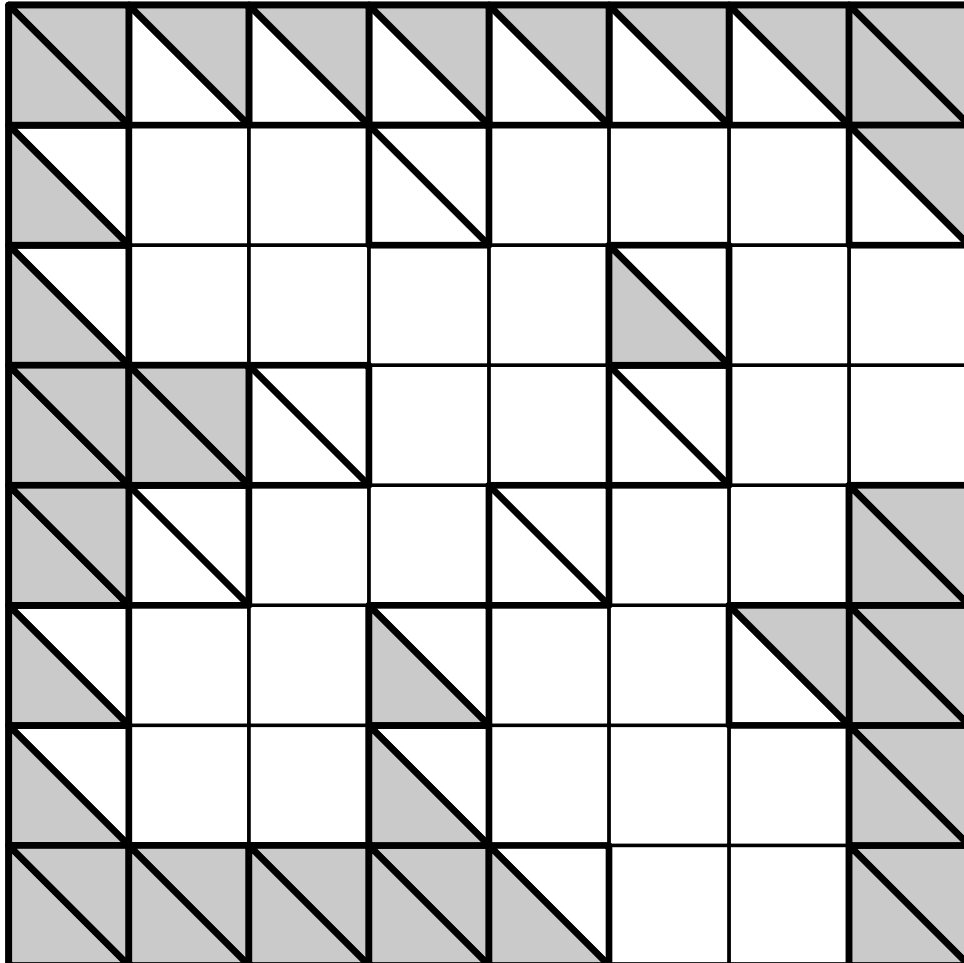3) Make a copy of this and then solve it, to check that it is possible and there aren't multiple possible answers.

A 3 x 3 Bakuro
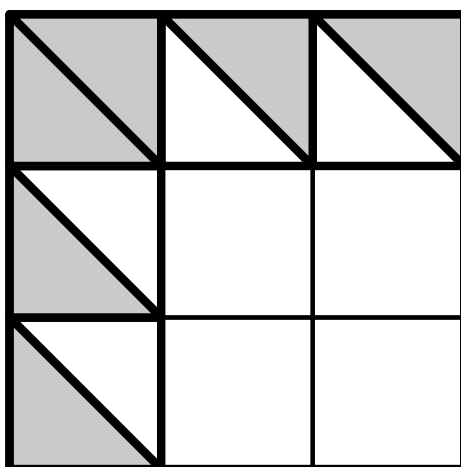
An 7 x 7 Bakuro

An 8 x 8 Bakuro

A 10 x 10 Bakuro