

### **Bakuro Blank Grids**

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

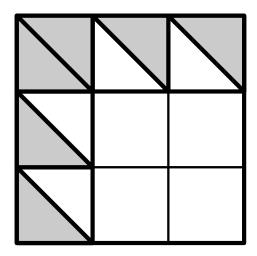
#### First create a solution sheet:

- 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.

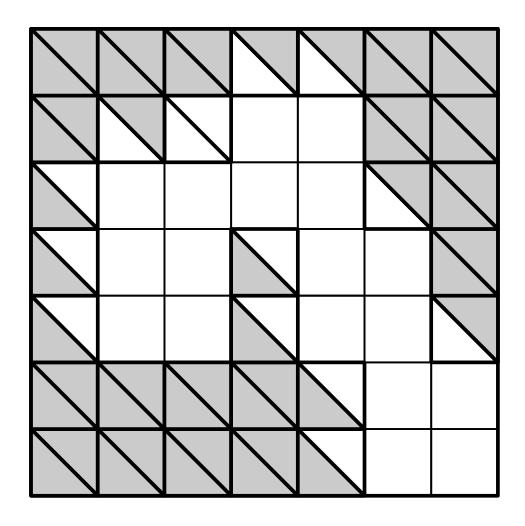
### A 3 x 3 Bakuro







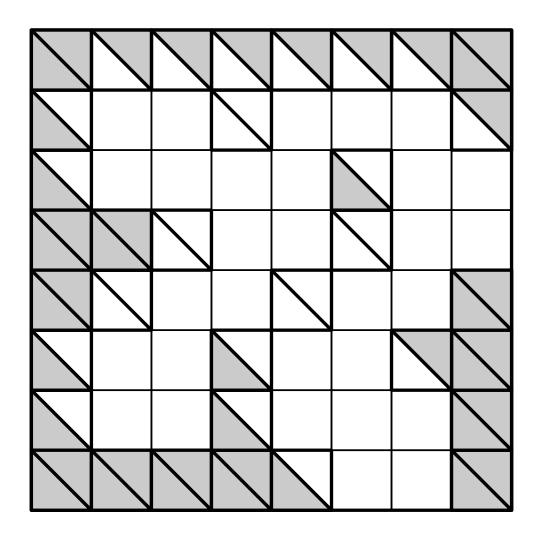
# An 7 x 7 Bakuro







## An 8 x 8 Bakuro







## A 10 x 10 Bakuro

