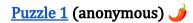
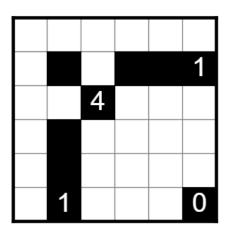
Puzzles made by our class! (Handout 1)

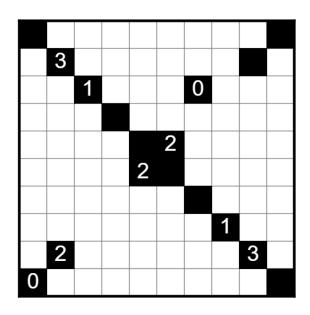
This handout has 15 puzzles! (The other 17 puzzles are on handout 2, which will be shared later tonight. Or you can partner up with someone who has handout 2.)

Akari

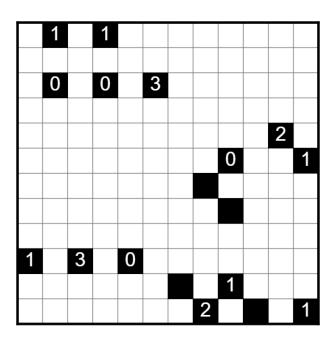




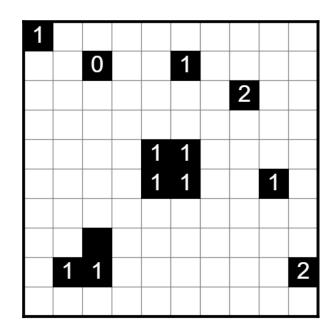
Puzzle 2 (by Rachel Wilson)



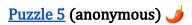
Puzzle 3 (anonymous)

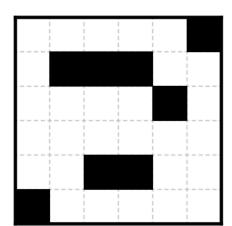


Puzzle 4 (by Will Ozeas)

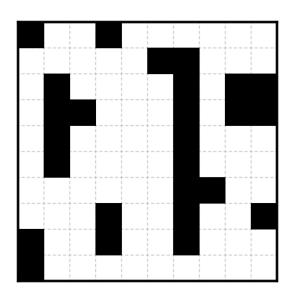


Simple Loop



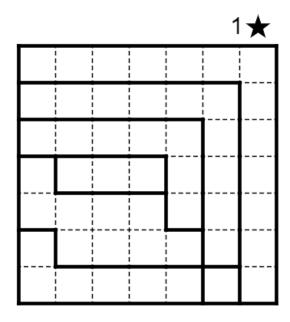


Puzzle 6 (by Sarthak Vishnoi)

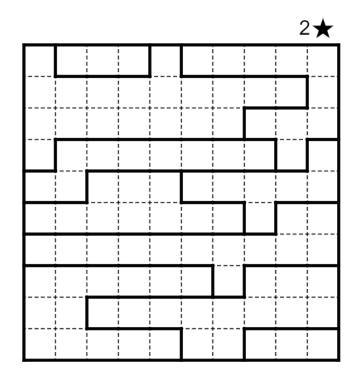


Star Battle

Puzzle 7 (by Ryan Judge)



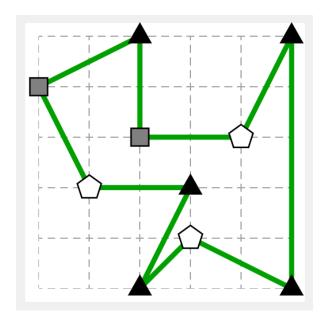
Puzzle 8 (anonymous)

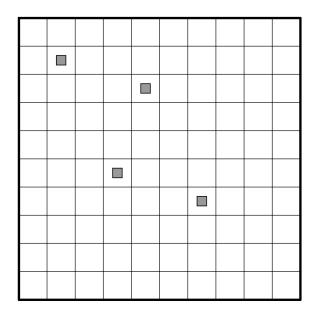


Puzzle 9 (by Alan Abraham)

This is an Angle Loop (toroidal) puzzle. An example for a normal Angle Loop is on the left.

- Draw a loop that goes through all the shapes.
- The loop's endpoints only lie on the shapes. \blacktriangle = acute angle, \blacksquare = right angle, \bigcirc = obtuse angle.
- The grid is a torus! The left and right edges are the same, and the top and bottom edges are the same. Furthermore there are exactly 2 solutions (apologies).

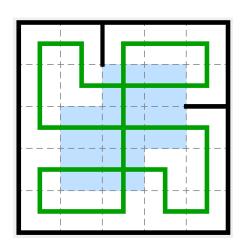


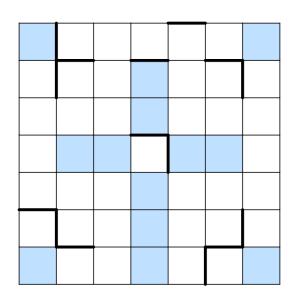


Puzzle 10 (by Xander Brick)

This is a Barns (toroidal) puzzle. An example for a normal Barns puzzle is on the left.

- Draw a loop through all cells.
- The loop cannot go through thick borders.
- The loop may cross itself on icy (blue, but gray on the printout) cells. The loop can never turn on an icy cell.
- Again, the puzzle is on a torus!





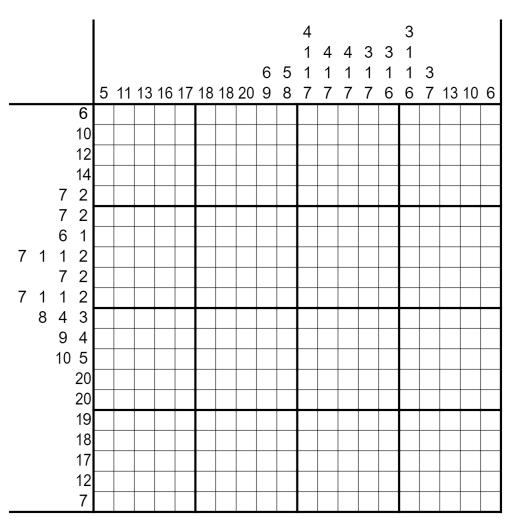
Puzzle 11 (anonymous)

This is a Nonogram puzzle.

- Shade some cells on the board.
- Clues outside the grid represent the lengths of each of the blocks of consecutive shaded cells in the corresponding row or column, in order from left to right or top to bottom.

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	6	1	1										
	3	2	1										
		2	4										

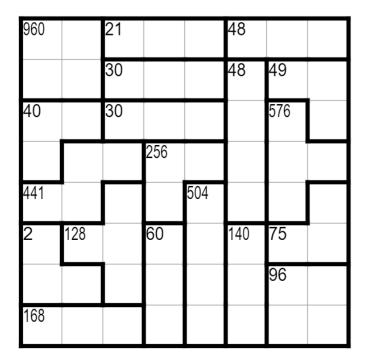
Puzzle 12 (by Grant Allvin)



Puzzle 13 (by Justin Hsieh)

This is a Rooms of Factors puzzle.

- Place a number from 1-N in each row and column, where N is the side length of the grid.
- Each room has a number which tells the product of the numbers within the room. (Numbers may repeat in a room.)

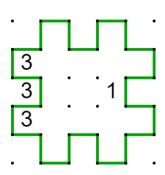


Puzzle 14 (by Edward Hou)

This is a Slitherlink (equal lengths) puzzle. Example on the left.

- Draw lines along the edges of some cells to form a non-intersecting loop.
- A number indicates how many of the 4 edges around the cell are used by the loop.
- Equal lengths variant: Each segment of the loop must have the same length!

This puzzle is possible to solve without bifurcation, but you may need to play around to first find and prove a theorem.



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Puzzle 15 (by Kiera O'Flynn)

This is a Shakashaka puzzle. An example is to the right.

- Shade a right triangle (which occupies half of the square it's in) in some cells.
- Each unshaded area must be a rectangle (it may be upright or at a 45° angle).
- A number tells how many of the 4 horizontally/vertically adjacent cells around it have a shaded triangle.

