Round 5 – Bastelrunde

Time limit: 50 minutes

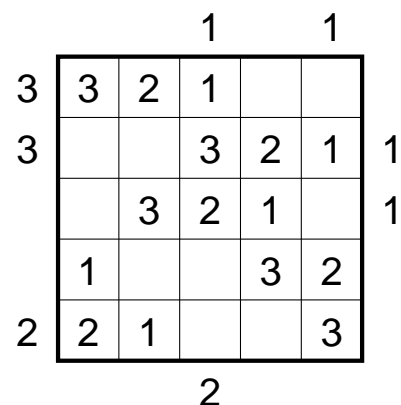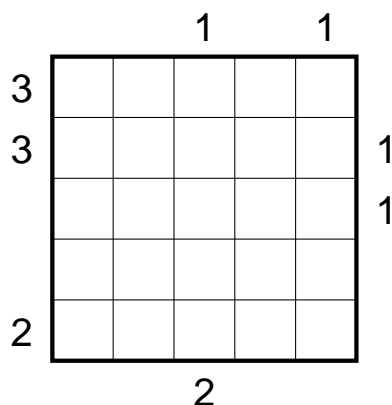## Time bonus: 1 point per 20 seconds

This puzzle consists of nine separate smaller puzzles which by themselves have no unique solution. For the unique overall solution, the puzzles have to be positioned in a 3x3-grid, in which they influence each other according to the following rules. There is exactly one positioning for which all puzzles are uniquely solvable. The puzzles may not be rotated or shifted with respect to each other.

Hints that are positioned between two grids have to be correct for both grids. If a hint is invalid according to the rules of either of the two puzzles (for example a 5 for the Easy as 1234), then this positioning isn't allowed. Two hints can not end up on the same position between two grids. This is even true if both hints have the same value. A row or column is allowed to have hints on both sides, as long as both of them are correct. (For some puzzle types this requires both hints to have the same value - this is allowed.) Kurotto has some further limitations, which are explained together with the Kurotto rules.
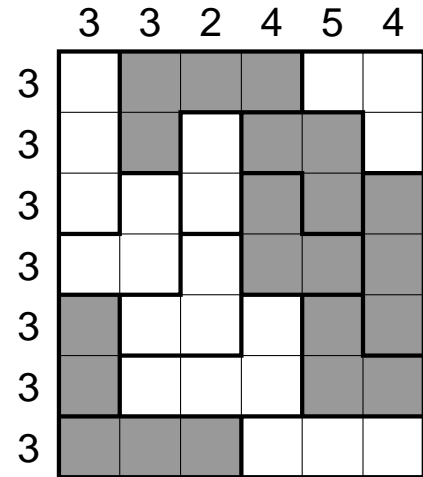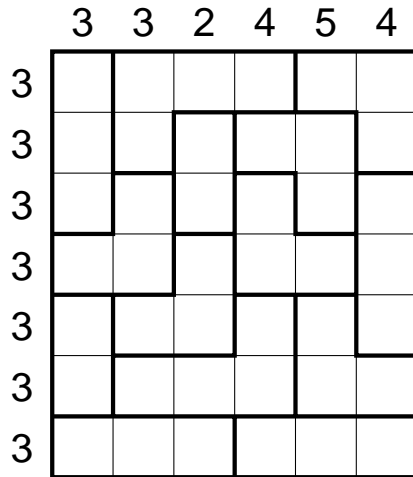
The puzzle types:

(A) Easy as 1234 – 15 Punkte

Enter the numbers from 1 to 4 into the grid, so that in every row and every column every number occurs exactly once. The numbers at the borders indicate the number that comes first in the corresponding row or column.
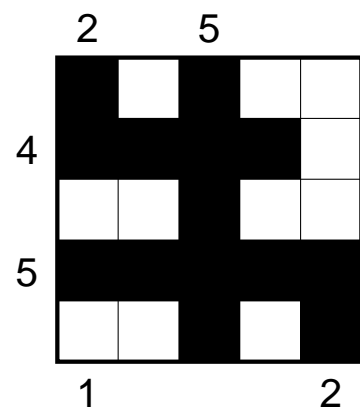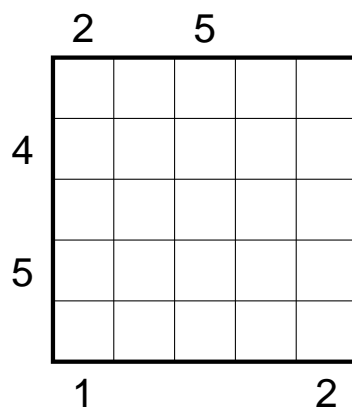

Example with numbers from 1 to 3

(B) Crazy Pavement – 15 Punkte

Blacken some fields in the grid so that for each region either all its fields are blackened or none at all. Numbers outside the grid indicate the number of blackened fields in that row/column.
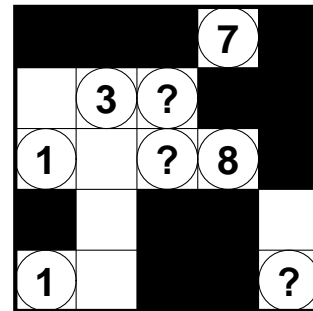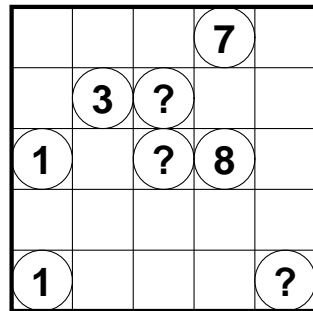

(C) Coral (first seen) – 15 Punkte

Blacken some fields to get a single connected set of fields (the coral) that does not touch itself, not even diagonally (that means there aren't any surrounded white areas) and does not contain any 2x2 blackened area. Numbers outside the grid indicate the size of the first group of consecutive blackened fields in that row or column.
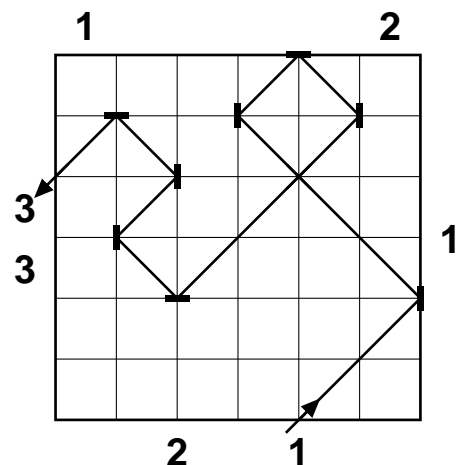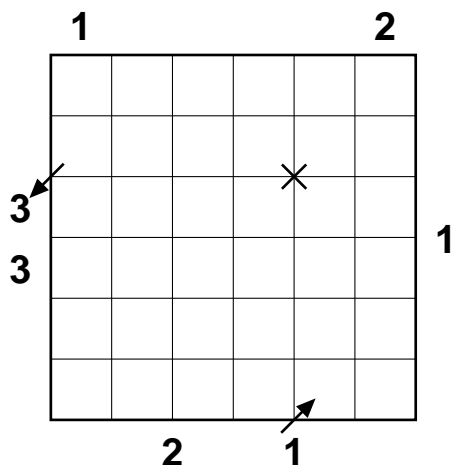
(D) Kurotto – 15 Punkte

Blacken some fields so that each circled number represents the total count of blackened fields in orthogonally connected groups sharing an edge with that number. Fields with circles can not be blackened. Special limitations: The puzzle contains only empty circles in the beginning, the hints are positioned beside the grid. Before solving the Kurotto, the hints have to placed in the nearest circle in their row or column. Two same numbers from different sides can share a circle. There has to be a circle for each hint beside the grid (especially the ones shared with other grids). Some circles may remain empty.
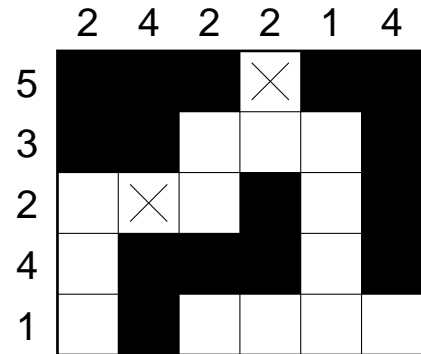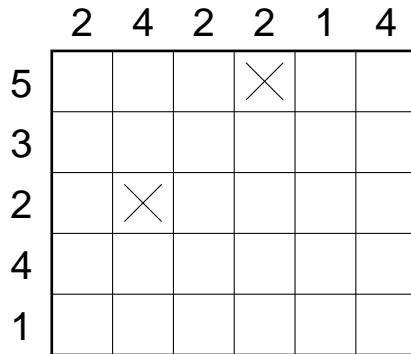
(E) Laser – 15 Punkte

Draw a laser beam, which moves diagonally through the fields of the grid and crosses itself only at the marked points. The entrance and exit are marked by arrows. Also draw some horizontal and vertical mirrors on the intersections of the grid lines. The laser beam hits each mirror exactly once. It moves straight forward unless it hits a border or a mirror, in this case it gets reflected. Numbers beside fields tell you, how often the laser beam passes through a fields in that row or column. Numbers beside lines tell you, how many mirrors have to be put on that line.
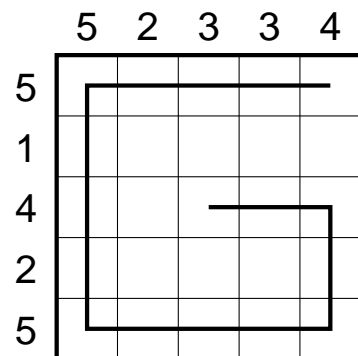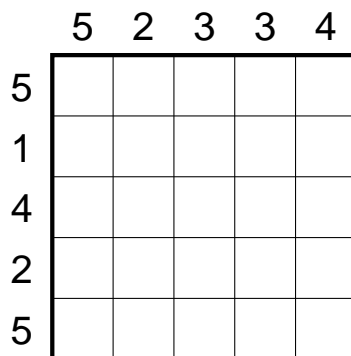
(F) Pentomino Search – 15 Punkte

Put the pentominoes ILTXZ into the fields of the grid. They may not touch, not even diagonally. The pentominoes may be rotated or reflected. The numbers at the borders give the number of fields, that are occupied by the pentominoes in that row or column. Some fields may be marked as empty.
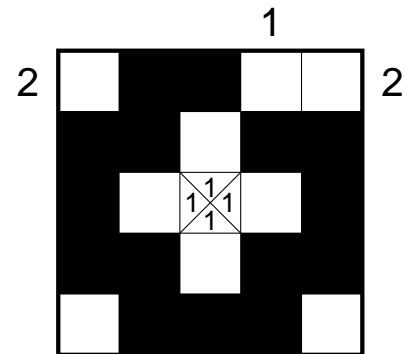
	2	4	2	2	1	4
5				✕		
3						
2		✕				
4						
1						

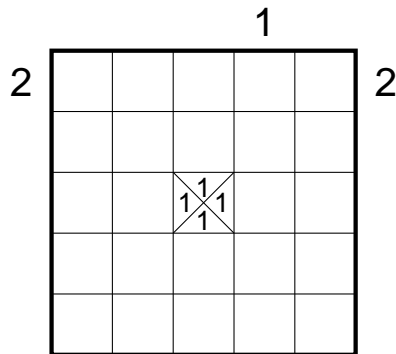|	2	4	2	2	1	4
5	■	■		✕	■	■
3	■					■
2		✕		■		■
4		■	■			■
1		■				

Example with Pentominos L, P, Z

(G) Snake – 15 Punkte

Find a snake beginning and ending in the marked fields. The snake goes from field to field vertically or horizontally, but not diagonally. The snake does not touch itself, not even diagonally. The numbers outside the grid indicate how many fields are used by the snake in that row or column.

	5	2	3	3	4
5					
1					
4					
2					
5					

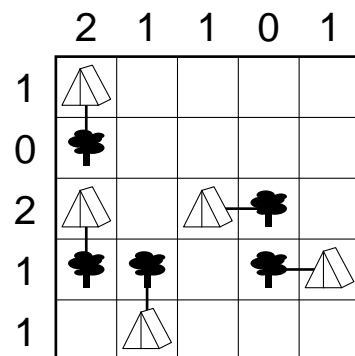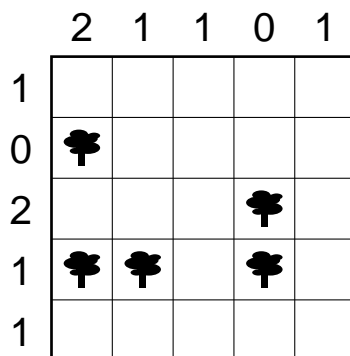|	5	2	3	3	4
5					
1					
4					
2					
5					

(H) Tapa (first seen) – 15 Punkte

Blacken some fields to create a single continuous wall. Number(s) in a field indicate the length of blackened blocks on its neighbouring fields. If there is more than one number, there must be at least one white field between the blackened blocks. Blackened fields cannot form a 2x2 square or larger. There are no wall segments on fields containing numbers. Additionally, numbers outside the grid indicate the size of the first group of consecutive blackened fields in that row/column.
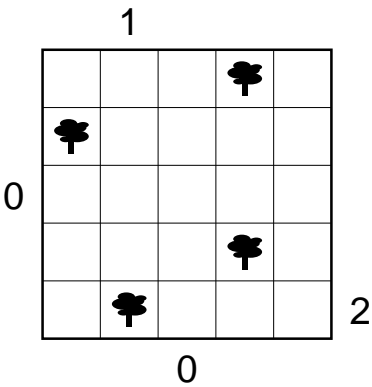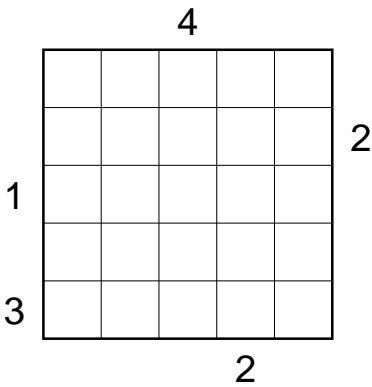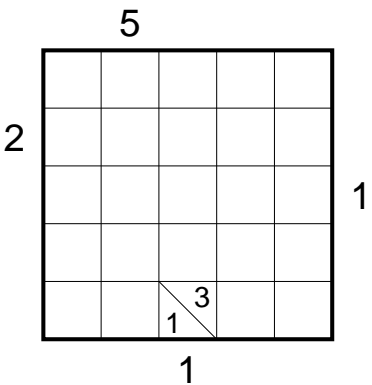

(I) Tents – 15 Punkte

Draw some tents into the grid, so that every tree has exactly one tent, that is located horizontally or vertically adjacent. Tents do not touch each other, not even diagonally. The numbers at the borders give the number of tents in that row or column.

Example with puzzles Kurotto, Tapa, Tents and Easy as 1234

Kurotto (top-left)

Column clues: 2 2
Right clues: 3, 2
Left clue: 2
Bottom clue: 4

Tapa (top-right)

Top clue: 5
Left clue: 2
Right clue: 1
Interior clue: 3 / 1
Bottom clue: 1

Easy as 1234 (bottom-left)

Top clue: 4
Right clue: 2
Left clues: 1, 3
Bottom clue: 2

Tents (bottom-right)

Top clue: 1
Left clues: 0
Right clue: 2
Bottom clue: 0