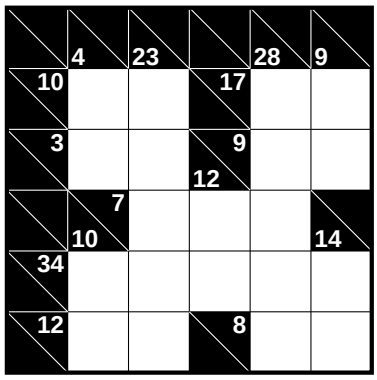
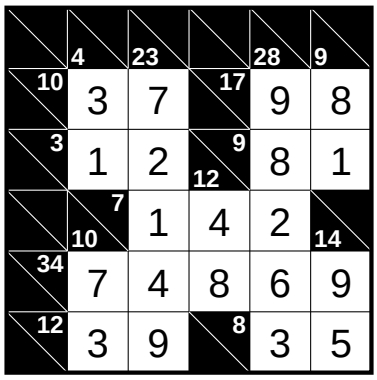
Round 9 – Finals

Time limit: 60 minutes

9.1 Kakuro

Fill the grid with numbers 1 to 9. A hint gives the sum of the numbers in the corresponding „word“. In a „word“, each number can be used at most once.





Solution code: The first and the last column with numbers. Use - for clue cells. The answer for the example would be 31-73, 81-95

9.2 Word-Hitori

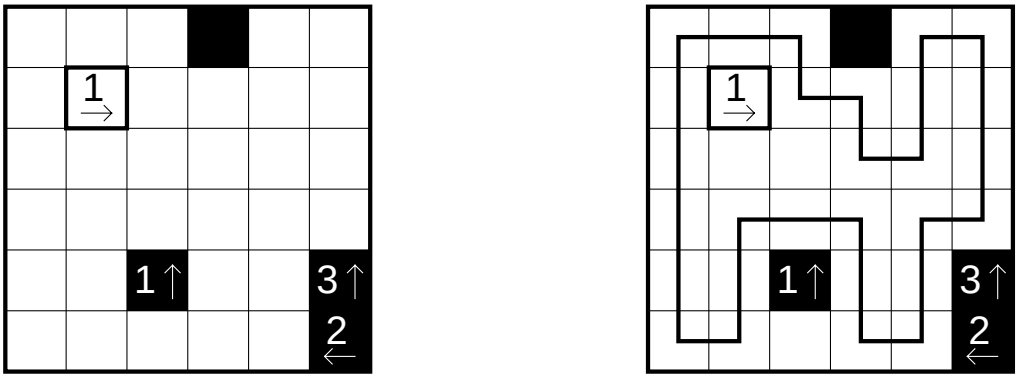
Blacken some fields, so that no letter occurs more than once in a row or column. Blackened fields may not be adjacent and all remaining white fields have to be connected. Then divide the remaining white fields into some of the given words, so that neighboring letters are adjacent (i.e. the words can be read by horizontal and vertical moves in the grid). Each remaining letter in the grid has to be used exactly once, each word can be used at most once. There may be unused words on the list.

Words: *EINS, ZWEI, DREI, VIER, FUENF*

Solution code: Number of blackened fields in each row. The answer for the example would be 20120.

9.3 Castle Wall

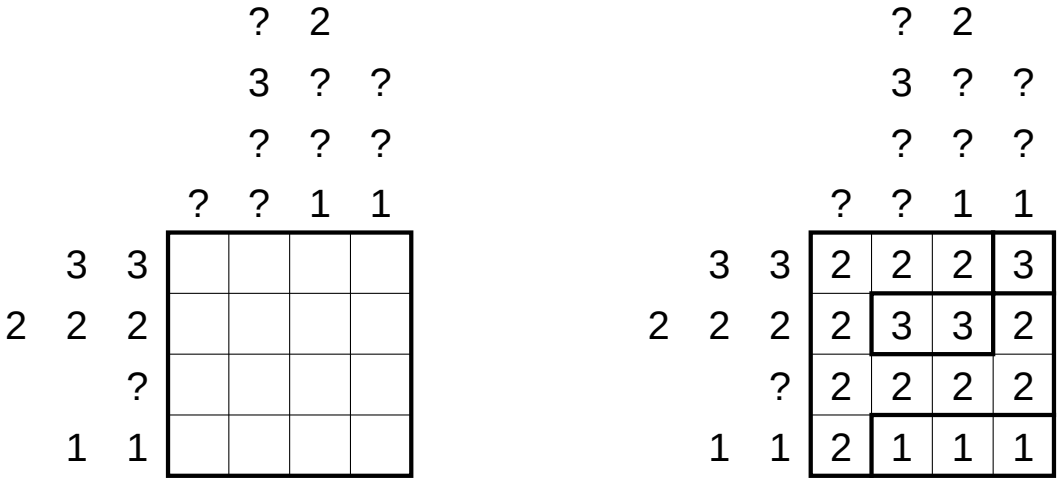
Draw a single closed loop into the grid, which moves horizontally and vertically from field to field. Fields with a bolded border are hints, and can't be visited by the loop. White hints have to be inside the loop, black hints have to be outside. An arrow with a number gives the length of loop segments in the corresponding direction (alternativly: it gives the number of crossed field borders in the corresponding direction.)



Solution code: Number of unused fields in each row (including clues). The answer for the example would be 112022.

9.4 123-Box

Fill the grid with numbers 1 to 3. Each hint at the border stands for a connected group of equal numbers, and gives either the size of this group or it's value. I.e. a '3' stands for a group of three fields with equal (but unknown) value, or a group of '3's of unknown length. A '?' stands for a group with an unknown value and unknown (positive) length. For a row or column, all groups are given and adjacent groups have different value.



Solution code: The two main diagonals, first from upper left to lower right, then from upper right to lower left. The answer for the example would be 23213322.

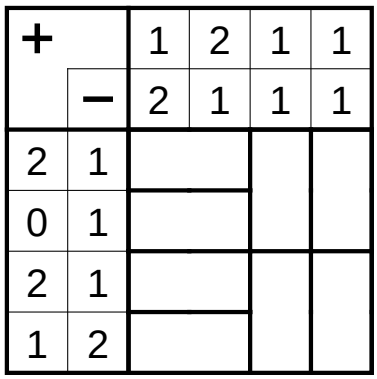
9.5 Sackbahnhöfe

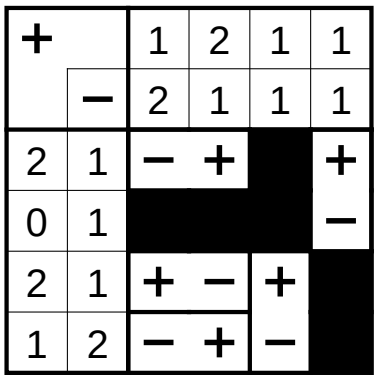
Draw a loop with some branches into the grid, which visits every field of the grid. The loop crosses itself only at the marked crossings. Fields with numbers are railway stations. The loop branches in the field before the railway station. There may be only one branch in a field. The branch then moves straight through the railway station, and ends in the field after it. The branches with the stations have to be in increasing order along the loop.

Solution code: Number of turns in each row. Branching fields don't count as a turn. The answer for the example would be 42221.

9.6 Magnets

Put neutral and magnetic plates into the grid. Each magnetic plate has two poles (+ and -). There can't be adjacent plate-halfes with the same polarity. Hints outside the grid gives the number of the different poles in the corresponding row or column.





Solution code: The two main diagonals, first from upper left to lower right, then from upper right to lower left. Use +,- for poles and N for neutral plates. The answer for the example would be -N+N+N−.