INSTRUCTION BOOKLET

1. EASY AS 123	39 pt
2. TENTS	25 pt
3. BATTLESHIPS	47 pt
4. WORDS	51 pt
5. MASYU WITH TIPS	61 pt
6. XO	61 pt
7. XO WITH REGIONS	102 pt
8. ROMAN XO	73 pt
9. COOL-L-L	173 pt
10. ROMAN COOL-L-L	70 pt
11. INTERSTELLAR ROUTE	63 pt
12. XII	91 pt
13. MY LOOP	62 pt
14-15. DOMINOES	65, 22 pt
16. KILLER SUDOKU	98 pt
17. BUILD A MAZE	129 pt
18. BUILD A CIRCULAR MAZE	68 pt
TOTAL	1300 pt

TIME 111 minutes

BONUS 12 points per each saved minute if all the puzzles are solved correctly

Puzzles by Riad Khanmagomedov

Thanks to Deb Mohanty, Rakesh Rai, Andrey Boklagov and James McGowan
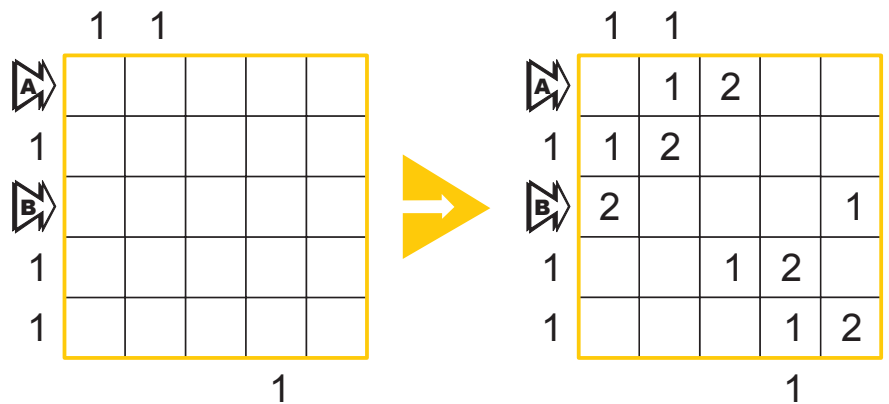
1. EASY AS 123   39 pt

Enter the digits 1, 2, 3 into the grid so that each row and column contains each digit exactly once.
Some cells will remain empty. Numbers outside the grid denote the first digit found in the
corresponding row or column from that direction.

Answer: Enter the contents
of the marked rows from left to
right, using 0 for an empty cell.
Example Answer: 01200, 20001.
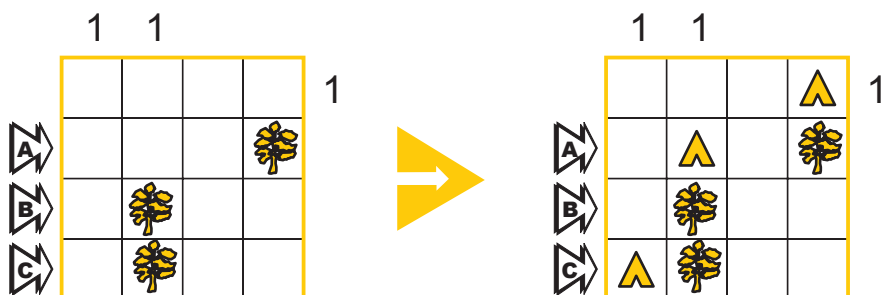
2. TENTS   25 pt

Attach a tent to each tree, in a horizontally or vertically adjacent cell. Cells with tents do not touch
each other, not even diagonally. Digits outside the grid indicate the number of tents in that row or
column.

Answer: For each marked row
from top to bottom, enter the
number of tents in that row.
Example Answer: 101.
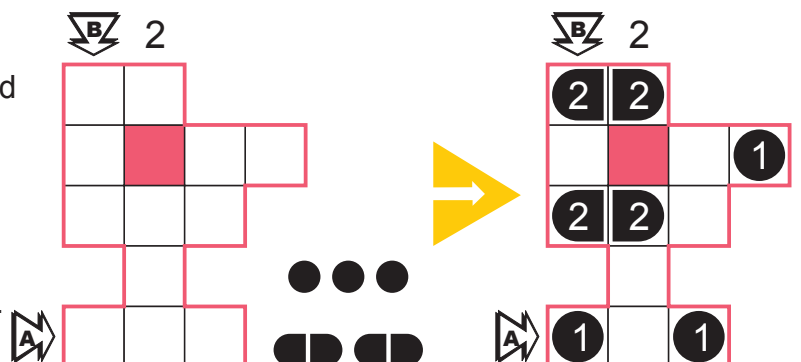
3. BATTLESHIPS   47 pt

Place the given set of ships into the white cells. Ships cannot touch each other, not even
diagonally. Clues outside the grid show the number of cells occupied by ships in the
corresponding row or column. Ignore the pink/grey cells while solving.

Answer: Enter the contents of the marked
row A from left to right and then the
marked column B from top to bottom,
using 0 for seas and N for any ship
segment where N is the size of that ship.
Example Answer: 101, 2021.

4. WORDS

51 pt

Place all of the given words in four 12-cell grids according to standard crossword rules – from left to right and top to bottom. Letters in the cells connected by the arrows must be the same.

AZA

HVOJ

KAVA

KLIK

KOS

KOZA

LJP

SPIK

VJZ

JZYK

Answer: Enter the contents of the marked diagonal A from top to bottom and then the marked diagonal B from bottom to top.

Example Answer: LK, AJO.

5. MASYU WITH TIPS

61 pt

Draw a single loop using only horizontal and vertical lines between the centres of some cells such that the loop does not visit any cell more than once. At every cell containing a white circle the loop must pass straight through that circle and make a 90° turn in at least one of the cells adjacent to the circle. At every cell containing a black circle the loop must make a 90° turn and travel straight through both cells adjacent to the circle. The number in a white circle shows the length of a segment crossing it. The number in a black circle denotes the length of at least one of the segments that make up the corner in a black circle.

Answer: Starting at A and traveling clockwise around the loop, enter the order in which the letters are passed.
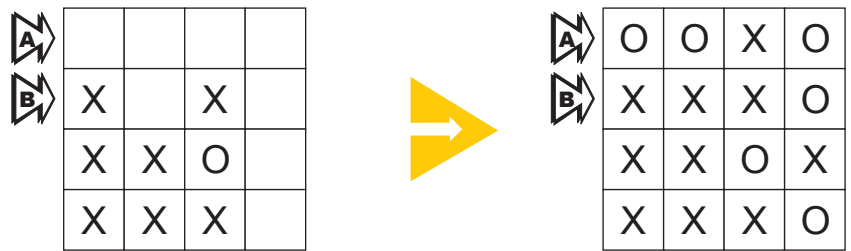
Example Answer: ACB.

6. XO

61 pt

Place either an 'X' or an 'O' into each empty cell such that four consecutive 'X's or 'O's do not appear horizontally, vertically or diagonally.

Answer: Enter the contents of the marked rows from left to right.
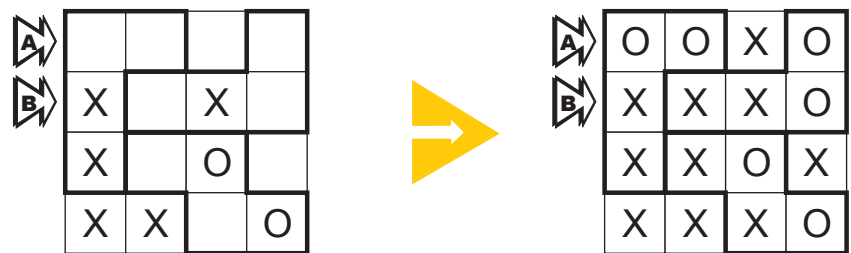
Example Answer: OOXO, XXXO.

7. XO WITH REGIONS

102 pt

Place either an 'X' or an 'O' into each empty cell such that four consecutive 'X's or 'O's do not appear horizontally, vertically or diagonally. In each marked region must be the same number 'X's and 'O's.

Answer: Enter the contents of the marked rows from left to right.
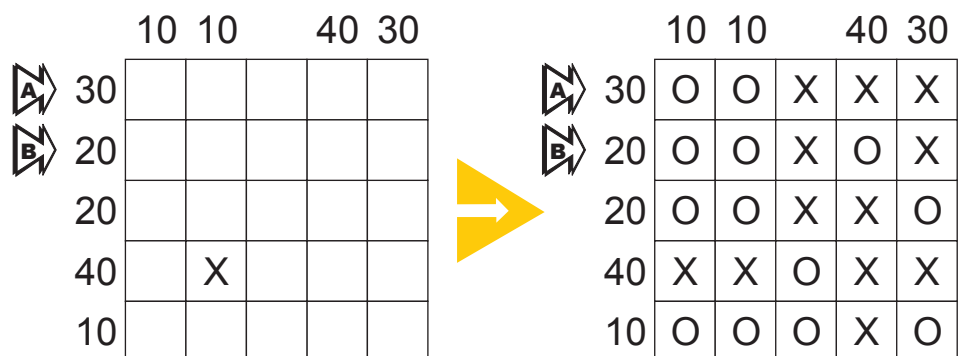
Example Answer: OOXO, XXXO.

8. ROMAN XO

73 pt

Place either an 'X' or an 'O' into each empty cell such that four consecutive 'X's or 'O's do not appear horizontally, vertically or diagonally. According to the Roman system of numbers X=10. Each number outside the grid represent the sum of all 'X's in the corresponding direction.

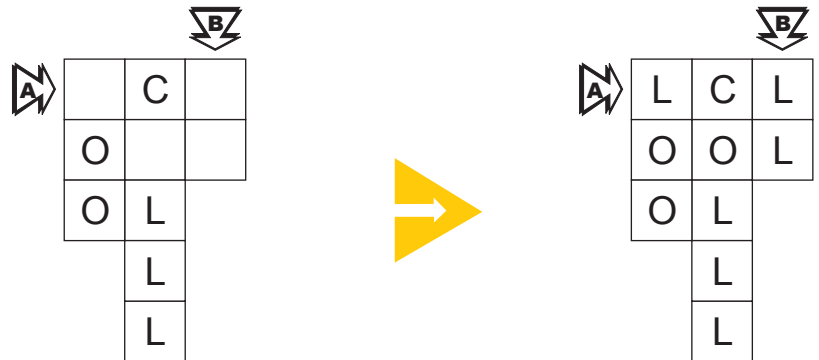Answer: Enter the contents of the marked rows from left to right.

Example Answer: OOXXX, OOXOX.

9. COOL-L-L

173 pt

Write a letter C, O or L in each empty cell so that there never occur two consecutive C, three O or four L in any row, column or diagonal.
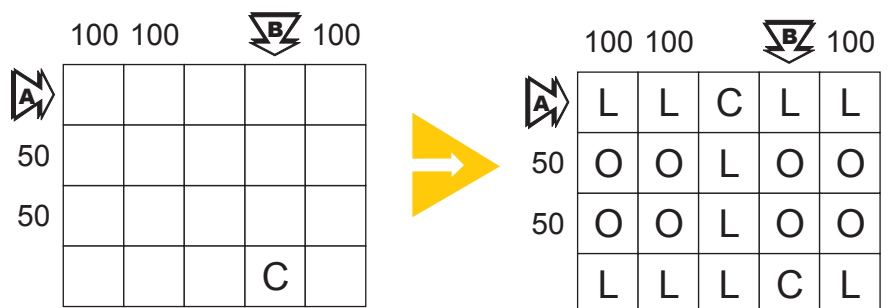
Answer: Enter the contents of the marked row A from left to right and then the marked column B from top to bottom.

Example Answer: LCL, LL.

10. ROMAN COOL-L-L

70 pt

Write a letter C, O or L in each empty cell so that there never occur two consecutive C, three O or four L in any row, column or diagonal. According to the Roman system of numbers C=100, L=50. Each number outside the grid represent the sum of all 'C's and 'L's in the corresponding direction.
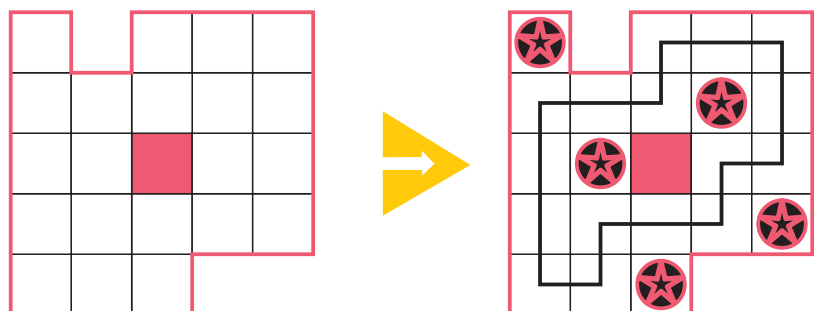
Answer: Enter the contents of the marked row A from left to right and then the marked column B from top to bottom.

Example Answer: LLCLL, LOOC.

11. INTERSTELLAR ROUTE

63 pt

Draw stars in some white cells, so that each row and column contains exactly one star. Cells with stars do not touch each other, not even diagonally. There should be a single loop going between the centres of all empty white cells. The loop consists of horizontal and vertical segments and cannot touch or cross itself.
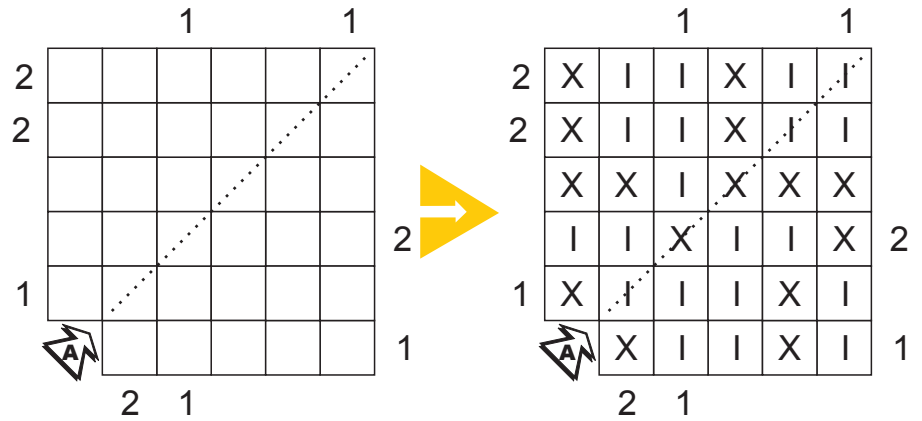
Answer: Enter the number of turns of the loop.

Example Answer: 10.

12. XII   91 pt

Place either an 'X' or an 'I' into each cell such that four consecutive 'X's or 'I's do not appear horizontally, vertically or diagonally. Each digit outside the grid indicates how many groups of 3 consecutive characters formed the number XII in the corresponding direction.

Answer: Enter the content of the marked diagonal from bottom to top.
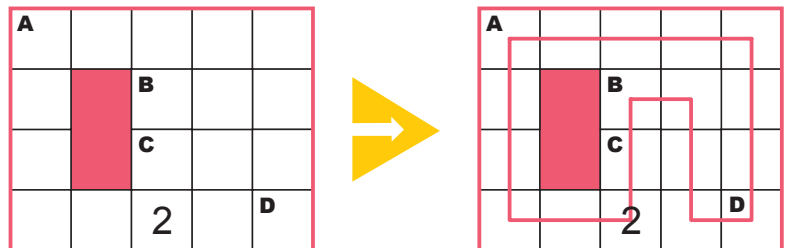Example Answer: IXXII.

13. MY LOOP   62 pt

Draw a single loop, visiting all white cells, using only horizontal and vertical lines between the centres of white cells such that the loop does not cross itself or visit any cell more than once. The loop makes a 90° turn in each cell with a digit. This digit shows the length of each of the loop segments which form the turn.

Answer: Starting at A and traveling clockwise around the loop enter the letters.
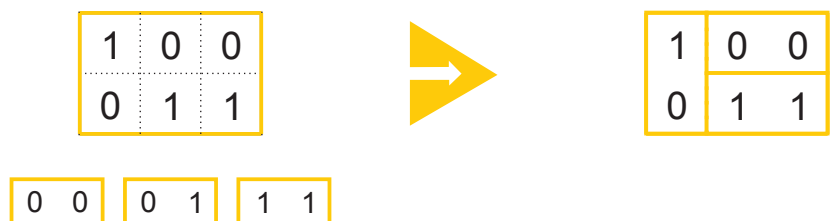Example Answer: ADBC.

14, 15. DOMINOES   65, 22 pt

A set of 21 dominoes from 0–0 to 5–5 (1–1 in the example) has been placed in the grid. Mark the position of each domino.

Answer: Enter the number of horizontal dominoes.
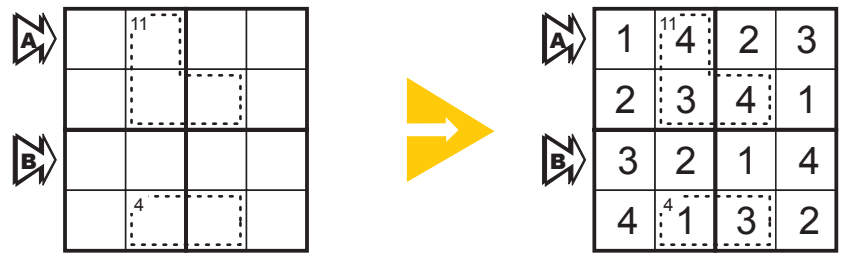Example Answer: 2.

16. KILLER SUDOKU   98 pt

Place the digits 1 through 9 (4 in the example) in empty cells so that each row, column and marked 3 x 3 box contains each digit exactly once. Digits in each dotted region must sum to the total given in its top-left. Digits can repeat in a dotted region.

Answer: Enter the contents of the marked rows from left to right.

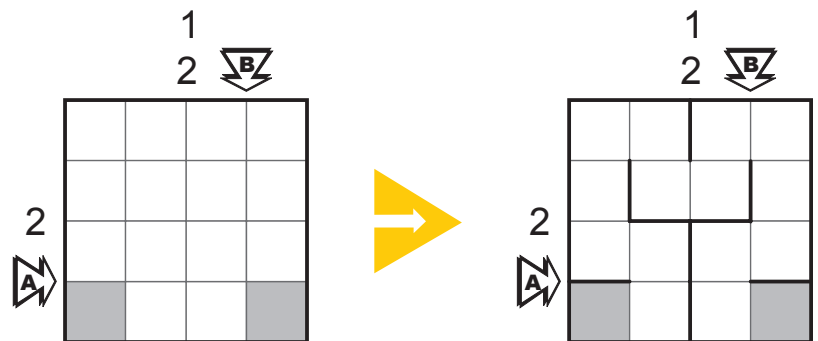Example Answer: 1423, 3214.

17. BUILD A MAZE   129 pt

Place some walls in the grid, creating a path going from one grey cell to another and visiting every cell exactly once. Walls are horizontal or vertical lines going along grid lines with their ends at grid nodes. Digits outside the grid sequentially show the lengths of all wall segments in corresponding direction. There should be at least one empty space between two segments.

Answer: Enter the lengths of all wall segments of the marked row A from left to right and then the marked column B from top to bottom.

Example Answer: 11, 1.

18. BUILD A CIRCULAR MAZE   68 pt

Place some walls in the grid, creating a path going from one grey cell to another and visiting every cell exactly once. Walls are lines/arcs going along grid lines/arcs with their ends at grid nodes. All lines and arcs through which the path passes are the walls. Digits outside the grid sequentially show the lengths of all wall segments in the corresponding radius. There should be at least one empty space between two segments.

Answer: Enter in order the lengths of all wall segments, starting at A and traveling clockwise around the corresponding circle, and then starting at B and travelling clockwise around the corresponding circle.

Example Answer: 0, 6.