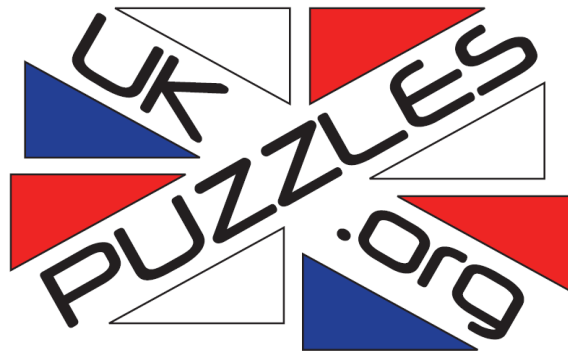




UK Puzzle Championship 2023

INSTRUCTION BOOKLET

Friday 7th - Monday 10th July, 2023

EVENT FORMAT

The event this year will be split into two rounds. Both rounds will run concurrently and participants are able to take part in them in either order. Both rounds will be accessed via a separate competition thread.

REGISTRATION

To participate in the championship, you will need to register online at the UKPA forums – <http://forum.ukpuzzles.org>. During the registration process, you will be required to enter your real name, and your nationality (**Please ensure that your nationality is selected correctly**). International participants are welcomed.

PREPARATION

In order to participate in the championship, you will need access to a printer (with sufficient toner/ink!) to print out the puzzle booklet. To solve the puzzles you will need a pen or a pencil, and possibly an eraser.

COMPETITION SCHEDULE

- The password protected puzzle booklets will be made available online at https://ukpuzzles.org/contest_setup.php?contestid=67 for round 1 and https://ukpuzzles.org/contest_setup.php?contestid=68 for round 2 on Thursday 6th July. It is recommended that you download this password-protected pdfs before you start the competition, but ensure that you are opening the correct booklet for the relevant round.
- The competition will start at **12:00 BST (11:00 GMT) on Friday 7th July** when the password for the pdfs will be made available. Upon retrieving the password for round 1 you will have **90 minutes** to solve the puzzles and submit your answers via the entry page for that round. Upon retrieving the password for round 2 you will have **90 minutes** to solve the puzzles and submit your answers via the entry page for that round. The last time to start either round will be **22:30 BST on Monday 10th July** in order to submit your entries within the time.
- The results will be publicly announced at <http://www.ukpuzzles.org> a few days after the contest. The highest scoring UK participant across round 1 and round 2 will be declared the 2023 UK Puzzle Champion.

ENTERING & SUBMITTING ANSWERS

To submit your answers for round 1 you will need to go to the answer submission page found via https://ukpuzzles.org/contest_setup.php?contestid=67 and for round 2 you will need to go to the answer submission page found via https://ukpuzzles.org/contest_setup.php?contestid=68, where you, you will be required to enter the relevant answer keys into the form on the page. The answer keys for each puzzle are defined as part of the instructions.

Upon hitting the submit button, your answers will be sent to the server. You may submit answers as many times as you like, but only the last received keys will be subject to scoring.

Unless specifically stated otherwise, multiple answer key parts must be entered in the solution box separated by a comma, with no spaces. Participation is anticipated to be very high and appeals will only be upheld in exceptional circumstances. Therefore, it is VERY IMPORTANT that you check that each answer key submitted is correct.

Urgent matters arising during the contest should be directed towards liane@ukpuzzles.org. In the event of the web hosting service failing during your participation, email your answer keys before your time is over. Answers submitted this way will only be accepted if a hosting failure, or equivalent, has occurred.

CODE OF CONDUCT

All participants are expected to solve the puzzles honestly and fairly. You are not permitted to use any external solving aids of any form, including online solving tools or receive assistance from any other individual.

It is strictly forbidden to discuss any details of the championship puzzles, or make their contents known to others, directly or implicitly, via any medium while the contest is live.

The Championship organisers reserve the right to disqualify any participant judged to have acted with improper conduct. The decisions made by the organisers are final.

POINTS & BONUSES

Points will be awarded according to the table on the following page. No bonus points will be awarded for early completion. In the event of a tie the total time taken for both rounds will be used to determine the higher place. Late submissions will not be accepted (as in a WPC environment), so you are advised to submit answers as you solve them, rather than waiting until your time is running out.

N.B. – although the points allocated to a particular puzzle are a general indication of its difficulty and the time expected to solve it, it is possible that your individual experience may vary greatly. Please read the instructions fully and carefully!

Puzzle Examples

The remainder of this instruction booklet gives the instructions as they will appear in the competition booklets, with answer key descriptions, and examples of puzzle types used in the contest. Instructions will be repeated in the competition booklet, but not the examples.

The competition booklets will not have a cover page.

For answer keys that require the information from some rows/columns these should be entered rows from top to bottom followed by columns from left to right with a comma between each row/column. For answer keys that require information about each row then these should be entered as a continuous string without separating commas.

PUZZLE AUTHORS

We are indebted to the following authors for designing and test solving the puzzles used in this contest:

Sam Cappelman -Lynes
Ashish Kumar
Chiel Beenhakker

Murat Can Tonta
Mark Sweep
Tawan Sunathvanichkul

Thanks also to Bram de Laat, David McNeill, Nikola Zivanovic and Prasanna Seshadri for test solving.

UK Puzzle Championship 2023 – Instruction Booklet

The puzzle types and the points attached to them are detailed below.

Round 1			Round 2		
Puzzle		Points	Puzzle		Points
1.1	Mastermind	10	2.1	Skyscrapers	15
1.2	Fillomino	15	2.2	Double Back	10
1.3	Kuromasu	10	2.3	Mochikoro	10
1.4	Shakashaka	14	2.4	Nurimisaki	12
1.5	Cross the Streams	22	2.5	Nanameguri	55
1.6	Canadian Coins	26	2.6	Disconnection	30
1.7	Battleships	28	2.7	Anti-Midloop	34
1.8	Anglers at Sea	45	2.8	Yajisan-Kazusan	27
1.9	Cipher Slitherlink	25	2.9	Tapa (Aqre)	31
1.10	Kropki Pyramid	33	2.10	Yajilin	29
1.11	Shikaku	45	2.11	Double Simple Loop	36
1.12	Star Battle	76	2.12	Triangular Heyawake	44
1.13	Lollipops (Variant)	57	2.13	Underground	48
1.14	Curve Data	59	2.14	Compass	53
1.15	Hidden Words	75	2.15	Japanese Sums	106
		Total 540			Total 540

Please note that the answer sheets will only have the puzzle number and not the round identifier.

Round 1

1.1 Mastermind (10)

Identify a secret code comprised of letters (digits in the example). Each row represents a guess at the secret code, with black dots identifying letters that are in the correct position and white dots letters that are in the guess but in a different position to the code. The dots are given in no specific order, and each letter in the secret code contributes at most one dot, with black dots given priority over white dots in case of ambiguity (for example, if the guess was FREED and the secret code was GEESE, the puzzle would display 1 black and 1 white). Each letter in the secret code appears in at least one guess.

Answer Key: Enter the code.

Example: 2853

9	8	1	3	●●	
4	5	6	7	○	
2	8	9	5	●●○	
					○○○○●●●●

9	8	1	3	●●	
4	5	6	7	○	
2	8	9	5	●●○	
2	8	5	3	●●●●	

1.2 Fillomino (15)

Divide the grid into regions of orthogonally connected cells. Two regions of the same size may not share an edge. Clued cells must belong to a region containing the indicated number of cells.

Answer Key: Enter the contents of the marked rows/columns.

Example: 312466,444226

A		1	2	4	6
		2			3
B		4			2
		2	1	3	6

3	3	2	4	4	4
3	1	2	4	6	6
2	2	3	3	3	6
4	4	4	2	2	6
4	2	1	3	6	6
1	2	3	3	2	2

1.3 Kuromasu (10)

Shade some cells so that no two shaded cells are orthogonally adjacent and the remaining unshaded cells form one orthogonally connected area. Clues cannot be shaded, and represent the total number of unshaded cells that can be seen in a straight line vertically or horizontally, including itself.

Answer Key: Enter the contents of the marked rows/columns using S for shaded cells and E for empty cells.

Example: ESEEEES,SESESE

	5		2		
A					4
	4				
B			6		3

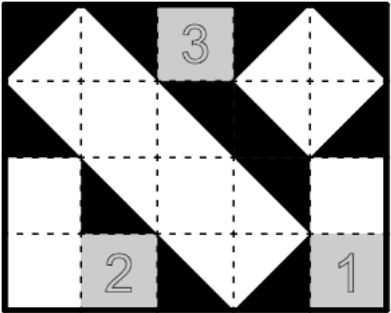
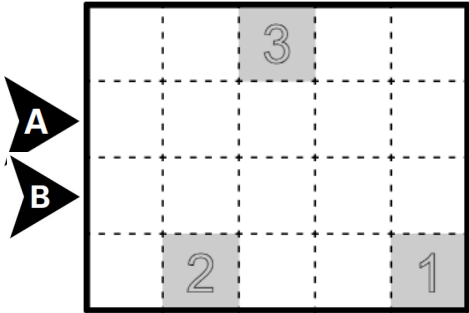
	5		2		
					4
	4				
			6		3

1.4 Shakashaka (14)

Shade a right angled triangle in some empty cells, each of which occupies exactly half the cell it's in. Each unshaded area must be rectangular in shape. A number in a cell represents how many of the (up to) four cells orthogonally adjacent to the clue contain triangles.

Answer Key: Enter the size of the rectangles in the marked rows/columns. If there are no rectangles in the row/column enter 0.

Example: 62,261

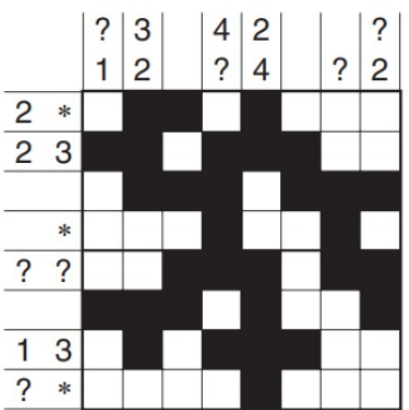
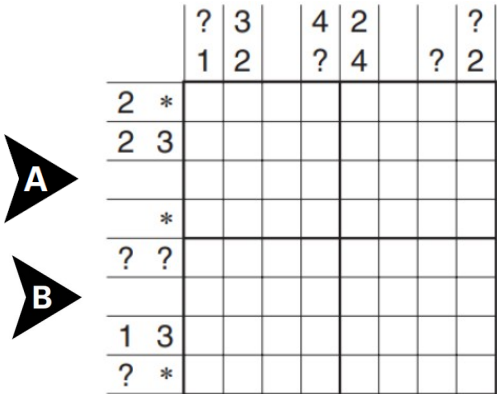


1.5 Cross the Streams (22)

Shade some cells so that all shaded cells form one orthogonally connected area. No 2x2 region may be entirely shaded. Clues outside the grid represent the lengths of the blocks of consecutive shaded cells in the corresponding row or column, in order. A question mark represents one block of an unknown number of cells. An asterisk represents any number of blocks of shaded cells, including none at all.

Answer Key: Enter the contents of the marked rows/columns using S for shaded cells and E for empty cells.

Example: ESSSESS,SSSESEES



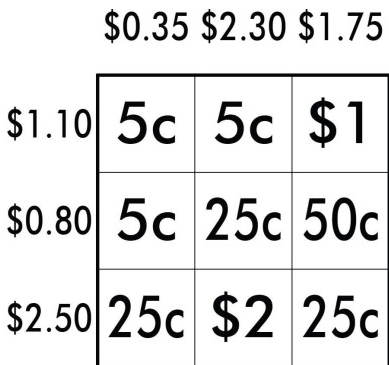
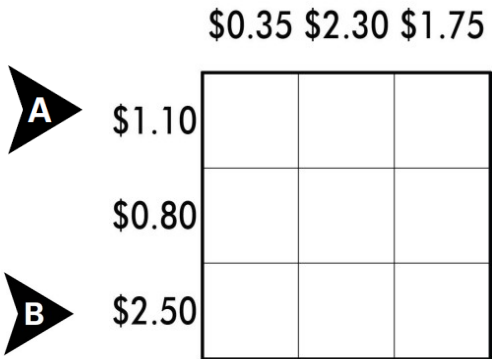
Example – Serkan Yurekli / gmpuzzles.com

1.6 Canadian Coins (26)

Place one Canadian coin into each empty cell so that the total value of each row and column match the given amount. Canadian coins = {5c, 10c, 25c, 50c, \$1, \$2} 100 cents = 1 dollar.

Answer Key: Enter the number contents of the marked rows/columns (ignoring \$ and c symbols).

Example: 551,25225

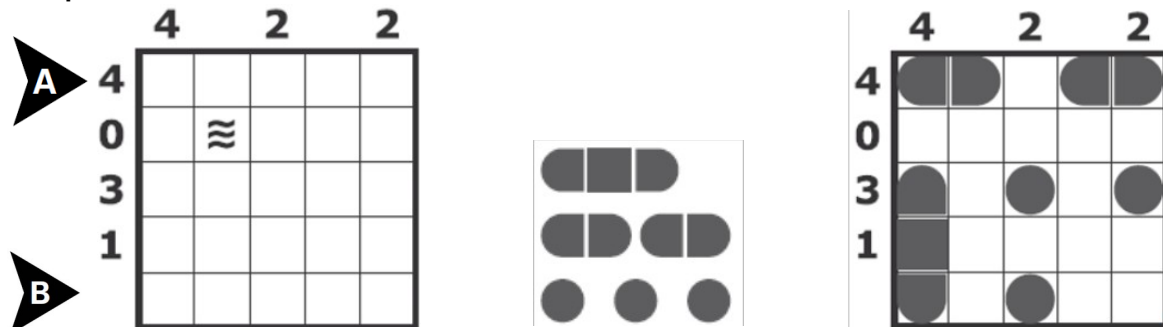


1.7 Battleships (28)

Place the given set of ships into the grid. Cells with ships in cannot touch each other, even at a point. Clues outside the grid show the number of occupied cells in the corresponding row or column. Ships cannot be placed in cells marked with waves.

Answer Key: Enter the contents of the marked rows/columns using S for cells with ships and E for empty cells..

Example: SSESS,SESEE

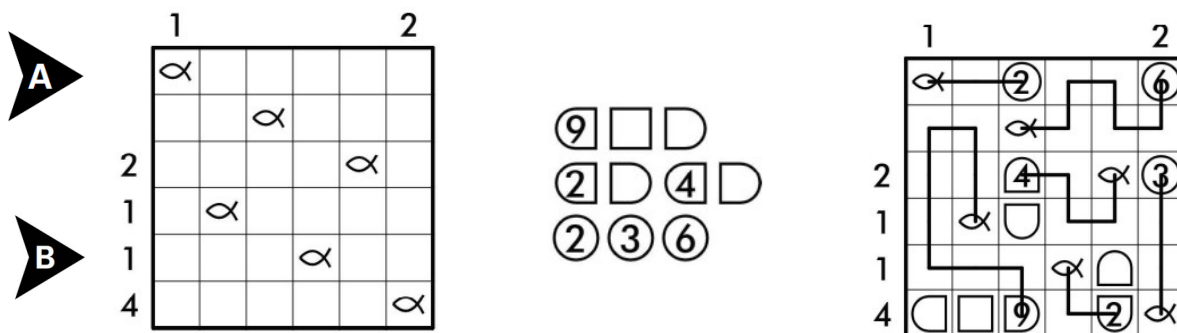


1.8 Anglers at Sea (45)

Place the given set of ships into the grid. Cells with ships in cannot touch each other, even at a point. Clues outside the grid show the number of occupied cells in the corresponding row or column. Ships may be rotated. In addition, numbers on the ships represent anglers. Draw a line from each angler to a fish, so that each fish is caught by exactly one fisherman. The lines run horizontally and vertically, and the length of each line is equal to the number from which it starts. The lines may not cross or overlap each other. All unoccupied cells will be used by an angler.

Answer Key: Enter the lengths of the lines in the marked rows/columns, if there are no horizontal line segments in the row/column enter 0.

Example: 21,2



1.9 Cipher Slitherlink (25)

Draw a closed loop in the grid. The loop may only go horizontally and vertically, and may only turn on the dots and not cross itself. Each number in a cell indicates the number of edges of the cell that are part of the loop. All numbers have been replaced by letters and all instances of the same letter represents the same number and different letters must become different numbers.

Answer Key: Enter the lengths of the lines in the marked rows/columns, if there are no horizontal line segments in the row/column enter 0.

Example: 12,11

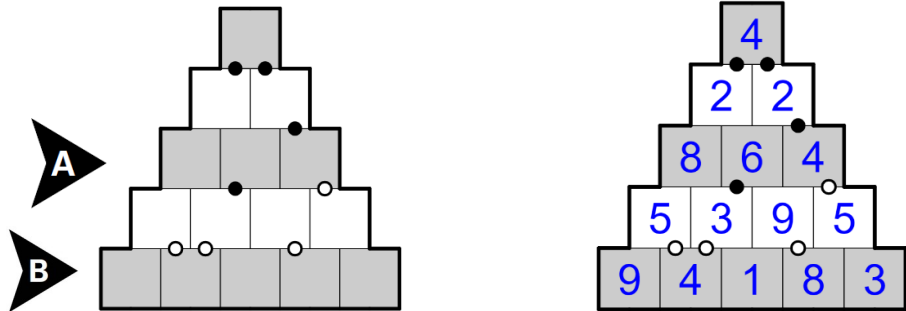


1.10 Kropki Pyramid (33)

Place a digit from 1 to 9 into each cell so that each digit (except in the bottom row) equals the sum or the difference of the two digits underneath it. Digits cannot repeat in a shaded row, at least one digit must repeat in an unshaded row. Additionally, a white dot on the edge of two cells indicates that those two cells must contain consecutive numbers; a black dot on the edge of two cells indicates that a number in one of those cells is double the value of the number in the other cell. If 1 and 2 are in adjacent cells, then the dot between them could be either colour. All possible dots are given.

Answer Key: Enter the contents of the marked rows/columns.

Example: 864,94183

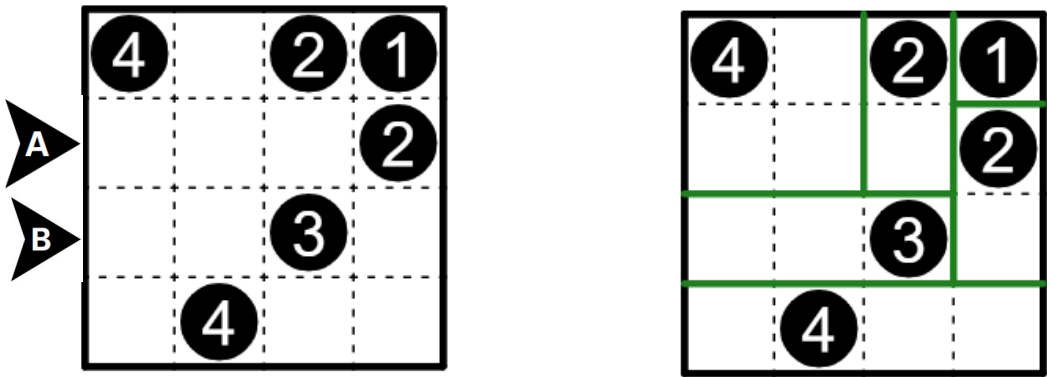


1.11 Shikaku (45)

Divide the grid into rectangular regions of orthogonally connected cells. Each region must contain exactly one circle. A number in a circle represents how many cells are in the region the circle belongs to.

Answer Key: Enter the area of the separate rectangles in the marked rows/columns. Use only the last digit for two digit numbers e.g. enter 0 for a shaded segment of area 10

Example: 422,32

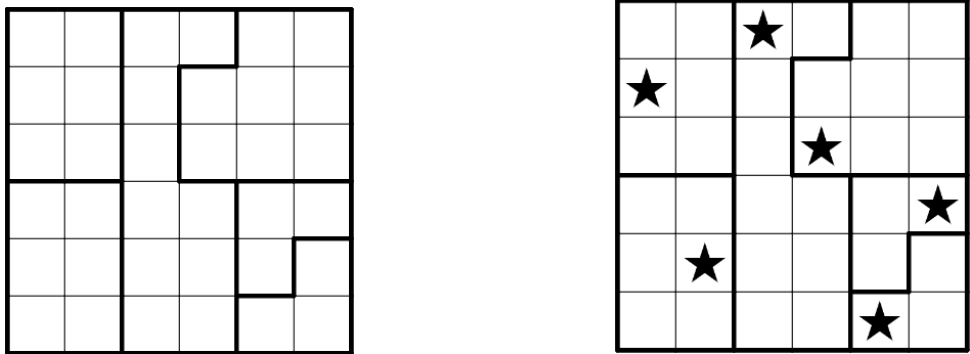


1.12 Star Battle (76)

Place stars into some cells such that each row, column, and outlined region contains exactly 2 stars (1 in the example). Stars may not touch one another, not even diagonally.

Answer Key: Enter the column number of the first star in each row.

Example: 314625



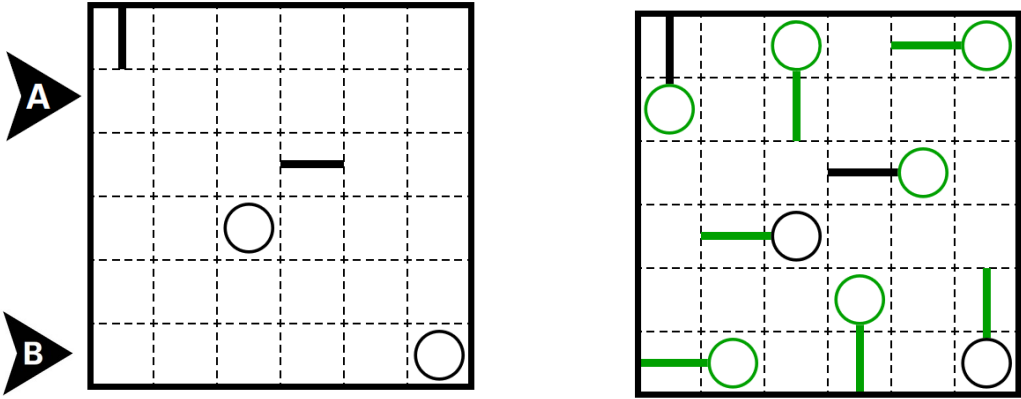
1.13 Lollipops (Variant) (57)

Place lollipops of size 1x2 into the grid. A lollipop consists of a circle and a connected horizontal or vertical line. Some parts are already given. Two lollipops cannot be orthogonally adjacent. Two cells with the same symbol (horizontal line, circle or vertical line) cannot share a row or column, unless another symbol is between them.

Variant rule: No 2x2 square can be completely empty.

Answer Key: Enter the contents of the marked rows/columns using O for circles, - for a horizontal line and I for a vertical line ignoring empty cells.

Example: OI,-OIO

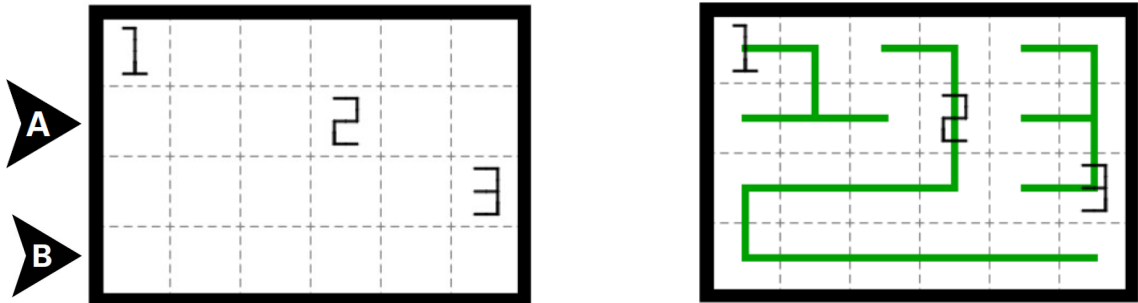


1.14 Curve Data (59)

Draw lines between the centres of cells so that each connected figure goes through exactly one clue, and all cells are used by a figure. Clues show how their figures turn and connect with themselves, not allowing rotation or reflection, but do not indicate the lengths of the line segments.

Answer Key: Enter the lengths of the lines in the marked rows/columns, if there are no horizontal line segments in the row/column enter 0.

Example: 21,5

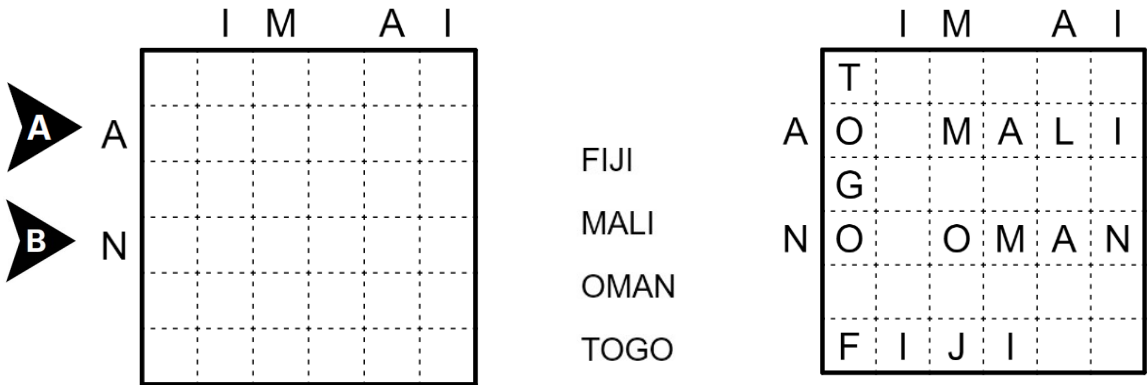


1.15 Hidden Words (75)

Place the listed words into the grid so that they read across from left to right or down from top to bottom. Words may not touch each other, even diagonally. Letters outside the grid must appear at least once in that row/column.

Answer Key: Enter the contents of the marked rows/columns ignoring blank spaces.

Example: OMALI,OOMAN



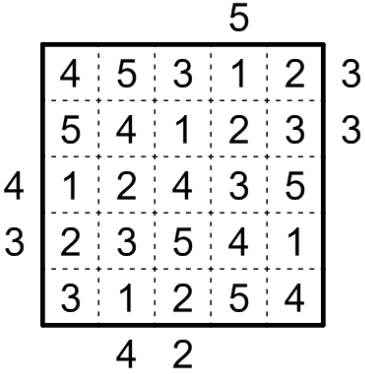
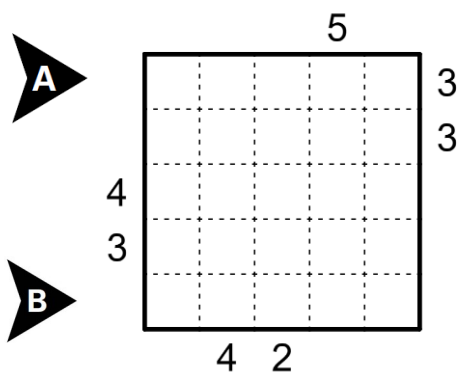
Round 2

2.1 Skyscrapers (15)

Place a number from 1 to N into each cell so that each row and column contains every number from that range with no repeats, where N is the side length of the grid. A clue outside the grid represents how many cells in the corresponding row or column contain a larger number than all cells before it in that row or column from the direction of the clue.

Answer Key: Enter the contents of the marked rows/columns.

Example: 45312,31254

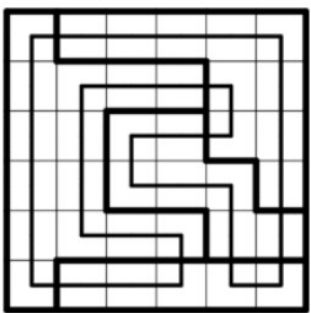
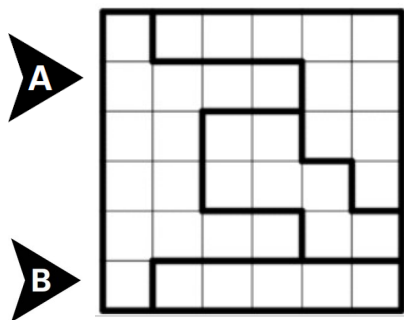


2.2 Double Back (10)

Draw a non-intersecting loop, moving horizontally or vertically through the centres of all empty cells which passes through each region exactly twice.

Answer Key: Enter the lengths of the lines in the marked rows/columns, if there are no horizontal line segments in the row/column enter 0.

Example: 3,31

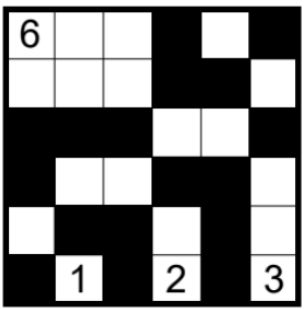
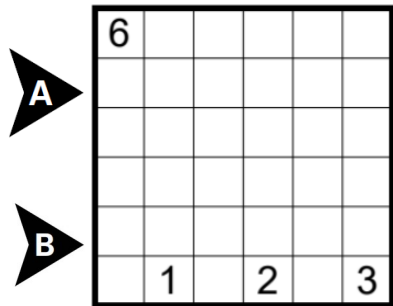


2.3 Mochikoro (10)

Shade some cells so that all areas of orthogonally connected unshaded cells are rectangular. The unshaded rectangles must all be connected diagonally. Clues cannot be shaded, and represent the number of cells in the unshaded area they belong to. An unshaded area of cells cannot contain more than one clue. No 2x2 region may be entirely shaded.

Answer Key: Enter the contents of the marked rows/columns using S for shaded cells and E for empty cells.

Example: EEESSE,ESSESE

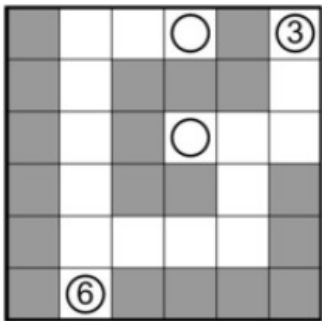
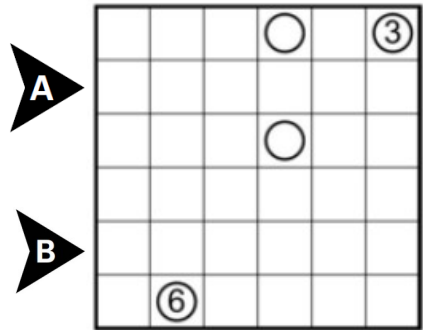


2.4 Nurimisaki (12)

Shade some cells on the board. There cannot be a 2x2 square of all shaded or unshaded cells. Circles mark every instance of a cell which is unshaded and orthogonally adjacent to exactly one other unshaded cell. Clues represent the total number of unshaded cells that can be seen in a straight line vertically or horizontally, including itself. All unshaded cells are connected orthogonally.

Answer Key: Enter the contents of the marked rows/columns using S for shaded cells and E for empty cells.

Example: SESSE,SEEEES

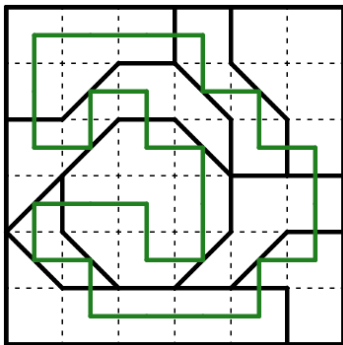
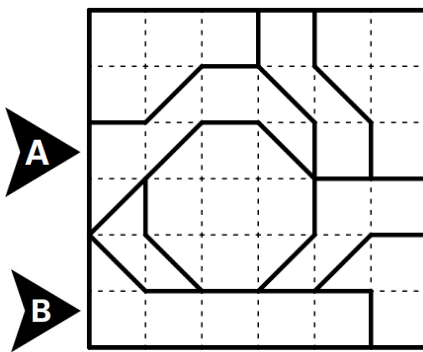


2.5 Nanameguri (55)

Draw a non-intersecting loop through the centres of some cells which passes through each region exactly once. Each cell containing a diagonal portion of a region boundary must be used by the loop in exactly one of the two regions it separates, and the loop must make a 90° turn, as though reflected off it.

Answer Key: Enter the lengths of the lines in the marked rows/columns, if there are no horizontal line segments in the row/column enter 0.

Example: 111,3

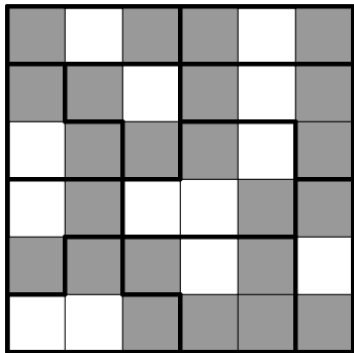
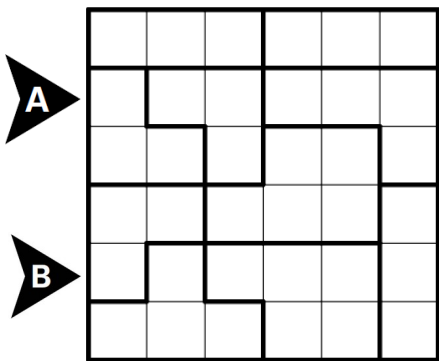


2.6 Disconnection (30)

Shade some cells so that all shaded cells form one orthogonally connected area. Each region must contain exactly two separate orthogonally connected groups of shaded cells. No 2x2 area may be entirely shaded.

Answer Key: Enter the contents of the marked rows/columns using S for shaded cells and E for empty cells.

Example: SSESES,SSSESE

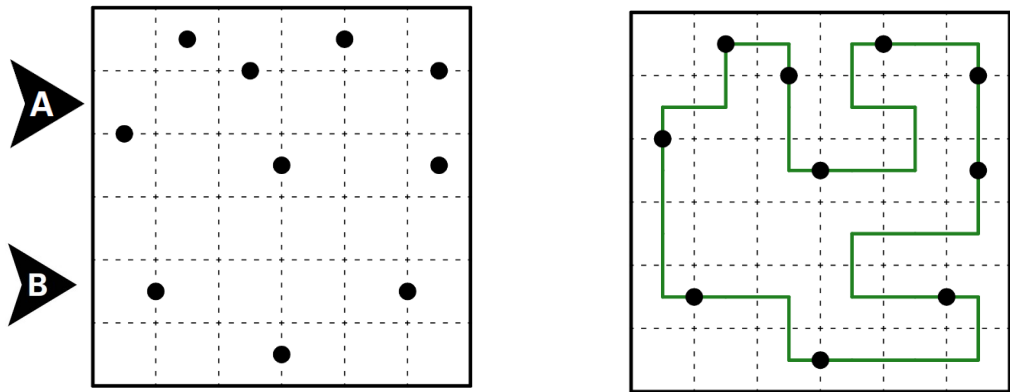


2.7 Anti-midloop (34)

Draw a non-intersecting loop through the centres of some cells that passes through every circle. Circles must not be the midpoint of a line segment.

Answer Key: Enter the lengths of the lines in the marked rows/columns, if there are no horizontal line segments in the row/column enter 0.

Example: 11,22

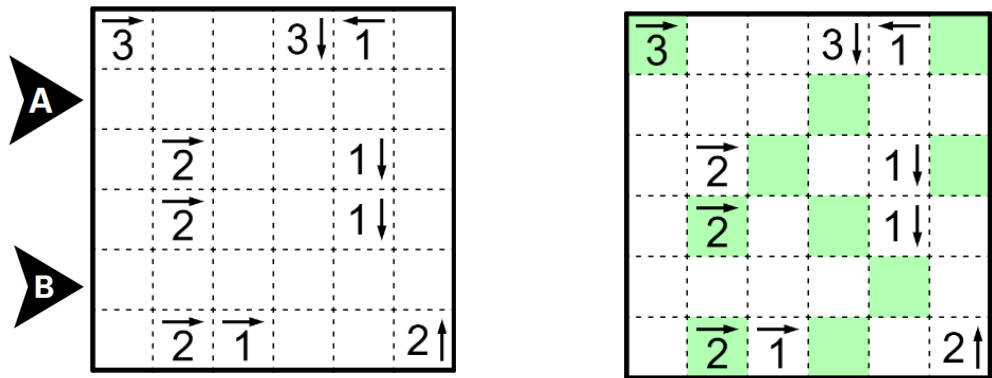


2.8 Yajisan-Kazusan (27)

Shade some cells so that no two shaded cells are orthogonally adjacent and the remaining unshaded cells form one orthogonally connected area. If a cell with a number in it is unshaded, the number represents how many shaded cells are in a straight line in the indicated direction. If a cell with a number in it is shaded, the number is meaningless.

Answer Key: Enter the contents of the marked rows/columns using S for shaded cells and E for empty cells.

Example: EEEEE,EEEESE

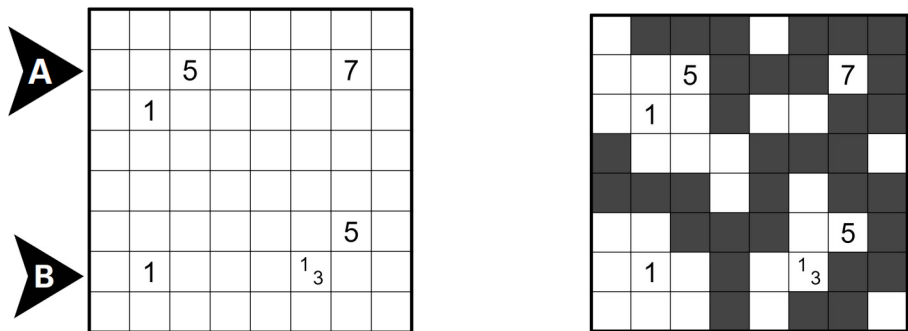


2.9 Tapa (Aqre) (31)

Shade some cells so that all shaded cells form one orthogonally connected area and no 2x2 region is entirely shaded. Clues cannot be shaded, and represent the lengths of the blocks of consecutive shaded cells in the (up to) eight cells surrounding the clue. There may not exist a run of more than three consecutive shaded or unshaded cells horizontally or vertically anywhere in the grid.

Answer Key: Enter the contents of the marked rows/columns using S for shaded cells and E for empty cells.

Example: EEESSES,EEESEESS

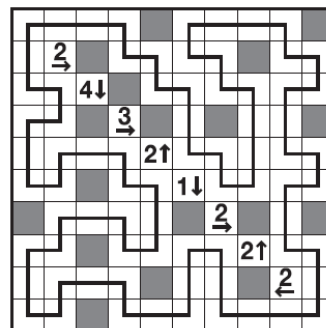
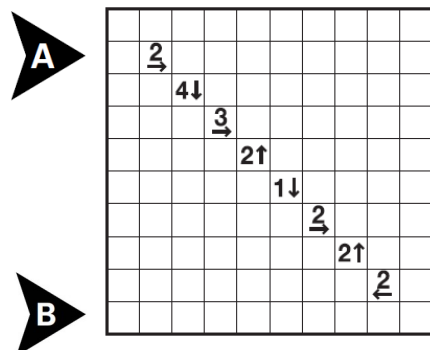


2.10 Yajilin (29)

Shade some cells so that no two shaded cells are orthogonally adjacent and draw a non-intersecting loop through the centres of all the remaining empty cells. Clues cannot be shaded, and represent the number of shaded cells in a straight line in the indicated direction.

Answer Key: Enter the lengths of the lines in the marked rows/columns, if there are no horizontal line segments in the row/column enter 0.

Example: 111,123

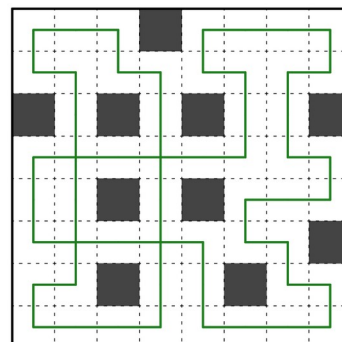
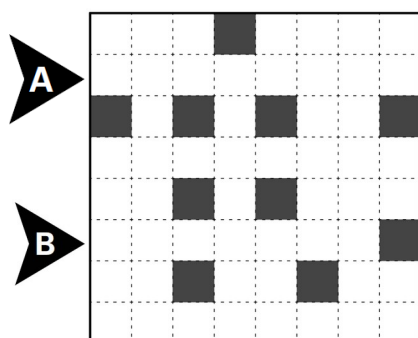


2.11 Double Simple Loop (36)

Draw two loops in the grid moving horizontally or vertically between the centres of cells, such that all empty cells are visited. A loop cannot touch or intersect itself. The two loops can intersect each other without turning, but may not touch each other otherwise.

Answer Key: Enter the lengths of the lines in the marked rows/columns, if there are no horizontal line segments in the row/column enter 0.

Example: 1111,41

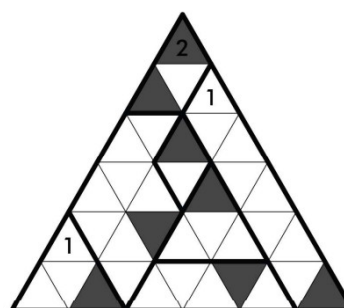
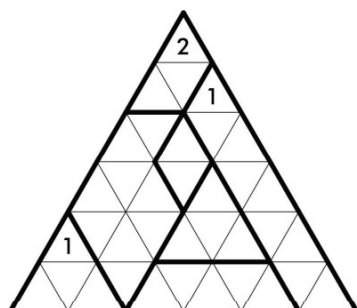


2.12 Triangular Heyawake (44)

Shade some cells to leave a single orthogonally connected unshaded area. Shaded cells cannot touch each other by a side. The unshaded area cannot span over two consecutive bold boundaries in any row or column. Numbers within bold edged regions indicate the number of cells that must be shaded in that region.

Answer Key: Enter the number of shaded cells in each row.

Example: 111113

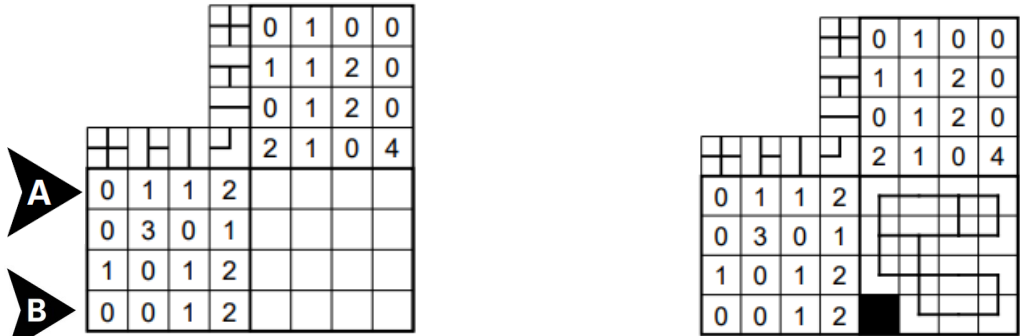


2.13 Underground (48)

Draw a loop network through the centres of some cells, which may branch or turn, but may not have any dead ends. A clue outside the grid indicates how many times the corresponding line shape (i.e. a cross, branch, straight line, or turn) appears in the corresponding row or column, irrespective of the line shape's rotation.

Answer Key: Enter the lengths of the lines in the marked rows/columns, if there are no horizontal line segments in the row/column enter 0.

Example: 3,2

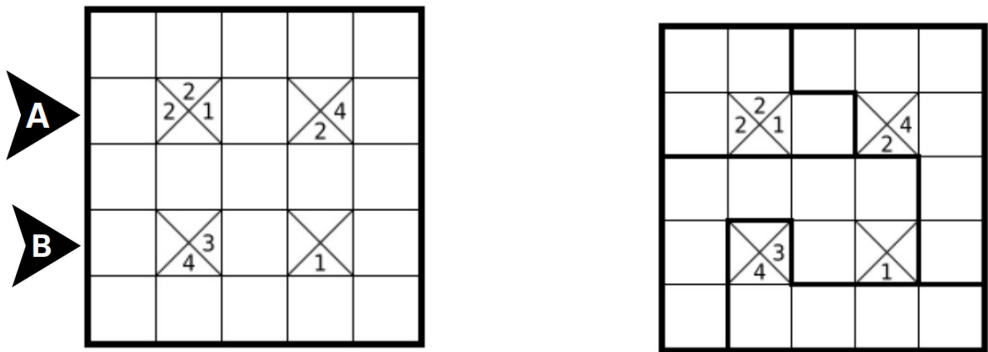


2.14 Compass (53)

Divide the grid into regions of orthogonally connected cells, each containing exactly one compass. A compass may include none, or more numbers indicating how many cells belong to its region that are further in the indicated direction than the compass itself.

Answer Key: Enter the lengths of the region sections in the marked rows/columns.

Example: 32,1121



2.15 Japanese Sums (106)

Place a number from 1 to 9 into some cells so that no number is repeated in any row or column. Numbers outside the grid indicate the sums of the numbers in groups of consecutive numbered cells in the corresponding row or column, in order. A question mark can stand for any positive integer. Sums must be separated by at least one empty cell.

Answer Key: Enter the contents of the marked rows/columns using S for shaded cells (Ignore numbers outside the grid).

Example: S369S1,39S654

