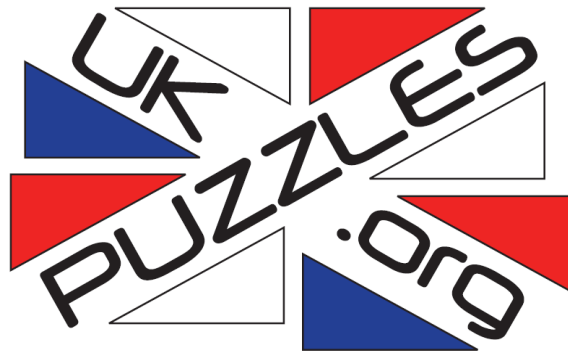




UK Puzzle Championship 2024

INSTRUCTION BOOKLET

Wednesday 26th June - Monday 1st July, 2024

Competition Rules & General Information

INTRODUCTION

These are the instructions for the 2024 UK Puzzle Championship, hosted and organised by the UK Puzzle Association. This is an online Puzzle competition to be printed out and solved against the clock. Any questions related to these instructions should be raised and discussed in the competition discussion thread: <https://forum.ukpuzzles.org/viewtopic.php?p=18411#p18411>

UK PUZZLE CHAMPIONSHIP

Results of participants eligible for a British passport will be considered for the UK Puzzle Championship. The highest scoring British participant will be the UK Puzzle Champion for 2024. Additionally, the top two scoring participants will qualify to represent the UK team at the 2024 World Puzzle Championships in Beijing, China. For more information on the qualifying process see:

<http://www.ukpuzzles.org/qualification.php> .

International participation is warmly welcomed.

REGISTRATION

To participate in the championship, you will need to be registered online at the UKPA forums. You can register here: <http://forum.ukpuzzles.org/ucp.php?mode=register> . During the registration process, you will be required to enter your real name, and your nationality (**Please ensure that your nationality is selected correctly**).

EVENT FORMAT

The event 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.

COMPETITION SCHEDULE

- The password protected puzzle booklets will be made available online at <https://www.ukpuzzles.org/contests.php?contestid=70> for round 1 and <https://www.ukpuzzles.org/contests.php?contestid=71> for round 2 on Tuesday 25th June. It is recommended that you download the 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 (13:00 GMT) on Wednesday 26th June** 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 1st 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 2024 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://www.ukpuzzles.org/contests.php?contestid=70> and for round 2 you will need to go to the answer submission page found via <https://www.ukpuzzles.org/contests.php?contestid=71>, where 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:

Chiel Beenhakker	Gareth Moore
Prasanna Seshadri	Tawan Sunathvanichkul
Mark Sweep	

Thanks also to Maurice Blount, Freddie Hand and Alex Robinson for test solving.

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

Round 1			Round 2		
Puzzle		Points	Puzzle		Points
1.1	Kropki Square	5	2.1	Finishing Touch	18
1.2	Suguru	15	2.2	LITS	15
1.3	Skyscraper Product	12	2.3	LITS (Double)	21
1.4	Skyscraper Product	44	2.4	Team China	28
1.5	Country Road	18	2.5	Voxas	21
1.6	Balance Loop	26	2.6	Hashi	18
1.7	Numberlink (Diagonal)	15	2.7	Snake	12
1.8	Numberlink (Toroidal)	49	2.8	Train Tracks	27
1.9	Fillomino	36	2.9	Rail Pool	27
1.10	Fillomino (No Rectangles)	43	2.10	Rail Silai	24
1.11	Cocktail Lamp	18	2.11	Greater Wall	28
1.12	Araf	36	2.12	Persistence of Memory	38
1.13	Tren	26	2.13	Slovak Sums	52
1.14	Word Mark	76	2.14	Pentominoes	86
1.15	Touching Polyominoes	51	2.15	Kakuro (Non-consecutive)	71
		Total			470
					486

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

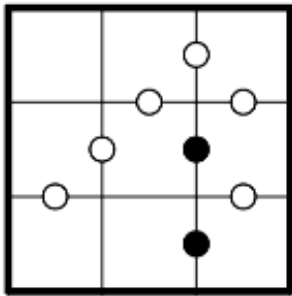
Round 1

1.1 Kropki Square (5)

Place the numbers 1-9 in the square (one per cell). Cells separated by a white dot must contain numbers whose values differ by exactly 1. Cells separated by a black dot must contain numbers where one is double the other. All possible dots are given.

Answer Key: Enter the numbers on each row without commas

Example: 954763812



9	5	4
7	6	3
8	1	2

1.2 Suguru (15)

Place a number into each cell so that each region contains the numbers from 1 to N with no repeats, where N is the number of cells in the region. Numbers of the same value may not touch one another, not even diagonally.

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

Example: 231325,525414

A			5		
	3				5
	3			2	
B		2			
			3		5

1	4	2	5	1	3
2	3	1	3	2	5
1	5	2	4	1	4
3	4	1	3	2	3
5	2	5	4	1	4
1	4	1	3	2	5

1.3 & 1.4 Skyscraper (Product) (12 & 44)

Fill each cell of the grid with a number from 1-N (where N is the number of cells in a row), so that each number appears once in each row and column. Each number represents a building with the height of that number. Numbers outside the grid show the product of the heights of the buildings that are visible from that point, with taller buildings hiding shorter ones.

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

Example: 42153,14532

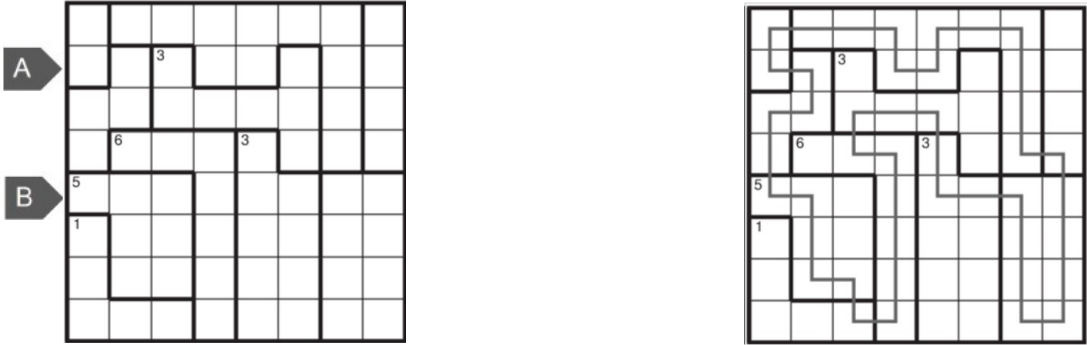
		60		60
A				
10				
B				
				20
5				

		60		60	
	4	2	1	5	3
10	2	5	3	1	4
	3	1	4	2	5
	1	4	5	3	2
	5	3	2	4	1
					20
5					

1.5 Country Road (18)

Draw a non-intersecting loop through the centres of some cells which passes through each region exactly once. A number in a region represents how many cells in the region are visited by the loop. Orthogonally adjacent cells across a region border may not both be unused. Some regions may be shaded solely for aesthetic purposes.
Answer Key: Enter the lengths of the horizontal line segments in the marked rows. If there are no horizontal line segments in the row enter 0.

Example: 11,12

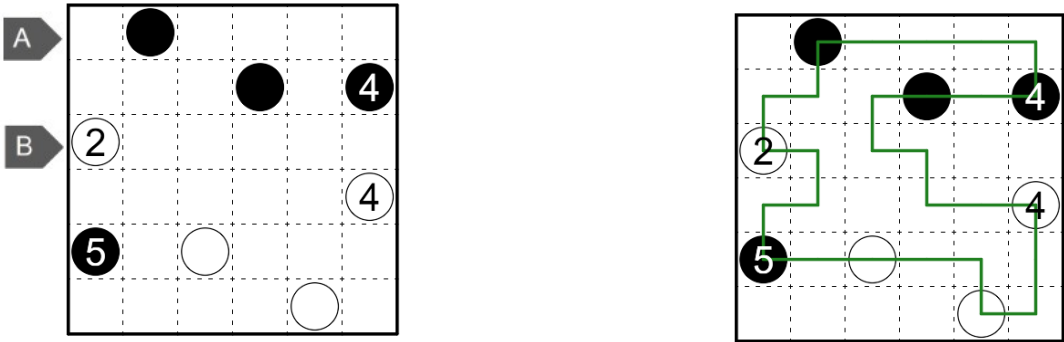


1.6 Balance Loop (26)

Draw a non-intersecting loop through the centres of some cells that passes through every circle. The straight line segments coming out of a white circle must have equal length, while the straight line segments coming out of a black circle must have different lengths. A clue in a circle represents the sum of the lengths of these two line segments.

Answer Key: Enter the lengths of the horizontal line segments in the marked rows. If there are no horizontal line segments in the row enter 0.

Example: 4,11

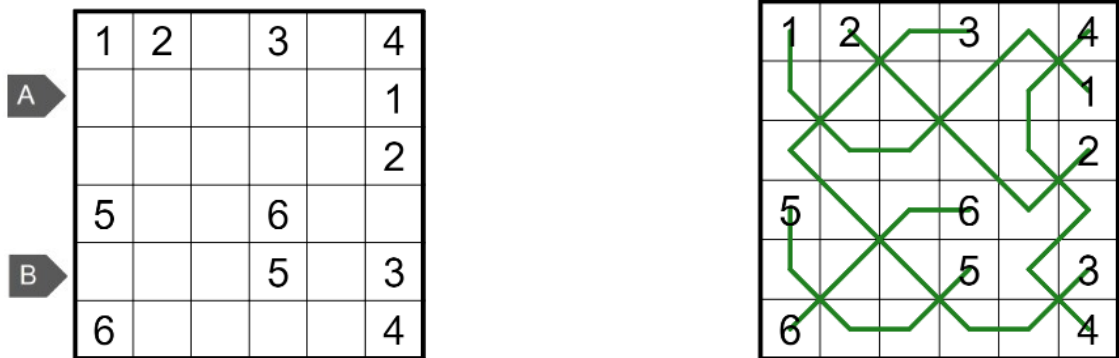


1.7 Numberlink (Diagonal) (15)

Connect each pair of identical numbers with a continuous line that only passes horizontally, vertically or diagonally between cells. Each cell must be visited once and no two lines can occupy the same cell.

Answer Key: Enter the number of the line that passes through each cell in the marked rows/columns.

Example: 132141,563543



1.8 Numberlink (Toroidal) (49)

Connect each pair of identical numbers with a continuous line that only passes vertically or horizontally between cells. Lines cannot pass through the same cell twice and no two lines can cross each other or occupy the same cell. In addition, the lines can wrap around the edges of the grid.

Answer Key: Enter the number of the line that passes through each cell in the marked rows/columns.

Example: 224446,145531

	1	2	3			
A						
				3	4	
	2		5			6
B						1
			4	5		6

	1	2	3			
				3	4	
	2		5			6
						1
			4	5		6

1.9 Fillomino (36)

Divide the grid into different regions along the grid lines. Regions of the same size cannot share an edge. Numbers in the grid indicate the size of the region the cell is part of. Clued cells must belong to a region containing the indicated number of cells and regions may contain one, none, or multiple clue cells.

Answer Key: Enter the size of the region for each cell in the marked rows/columns.

Example: 332444,123322

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

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

1.10 Fillomino (No Rectangles) (43)

Divide the grid into different regions along the grid lines. Regions of the same size cannot share an edge. Numbers in the grid indicate the size of the region the cell is part of. Clued cells must belong to a region containing the indicated number of cells and regions may contain one, none, or multiple clue cells. In addition, regions may not be rectangular.

Answer Key: Enter the size of the region for each cell in the marked rows/columns

Example: 455455,334485

	4	4		4	3
	4			4	
A				4	
	3	4			
B					
					5

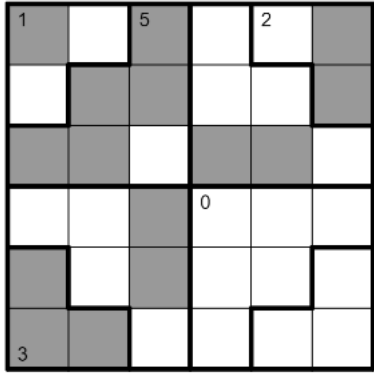
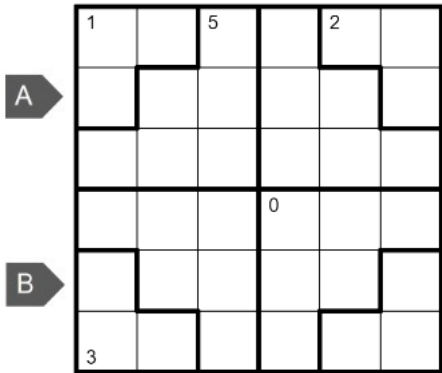
4	4	5	4	3	3
4	5	5	4	4	3
4	5	5	4	5	5
3	4	4	8	8	5
3	3	4	4	8	5
8	8	8	8	8	5

1.11 Cocktail Lamp (18)

Shade some cells such that all shaded cells within a region form a single orthogonally connected group. Shaded groups may not be orthogonally adjacent, but must all form a single diagonally connected network. Regions with numbers must contain that number of shaded cells. No 2x2 area may be entirely shaded.

Answer Key: Enter the number of consecutive shaded and unshaded cells in each marked row/column, using the unit digit only for double digit lengths.

Example: 1221,1113

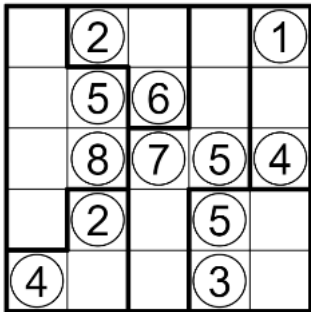
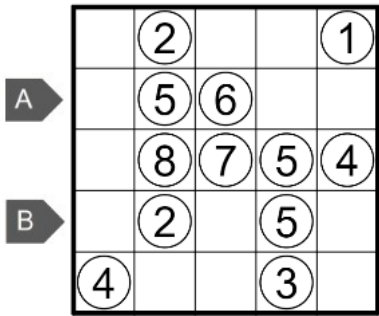


1.12 Araf (36)

Divide the grid into regions formed of adjacent cells. Each region must contain exactly two given numbers. The size of each region must be between the two numbers in that region.

Answer Key: Enter the size of each region in the marked row/columns. Use the unit digit only for double digit sums.

Example: 6363,6364

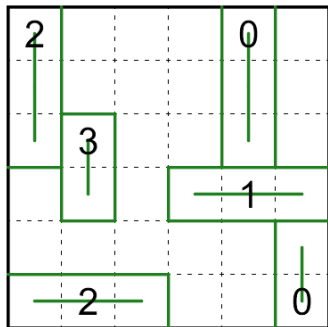
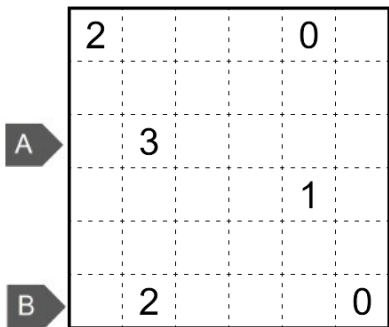


1.13 Tren (26)

Locate some blocks in the grid, either 1x2 or 1x3 in size, with each block containing one of the given numbers. Each block is allowed to move in its long direction, stopped only by an edge of the grid or another block. A block's number must indicate the total possible movement of the block.

Answer Key: Enter the contents of each cell in the marked row/column using the size of each block and X for empty cells.

Example: 32XX3X,333XX2

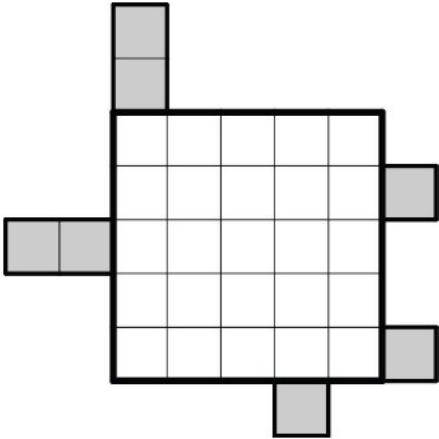


1.14 Word Mark (76)

Enter the given words (ignoring any spaces) in the diagram so that each word begins in one of the marks extending outside the grid. Words are read from the end of the mark into the diagram. Words must occupy at least one cell in the inner grid. Words can intersect each other but no other unlisted words may appear inside the grid.

Answer Key: Starting at the top left and travelling clockwise, enter the first letter of each word.

Example: QRKBK



- 4 KING
- ROOK
- 5 QUEEN
- 6 BISHOP
- KNIGHT

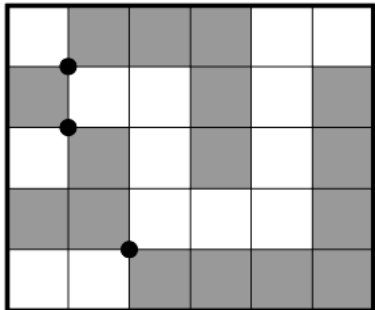
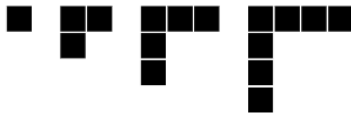
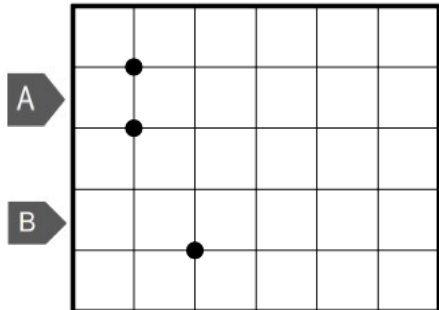


1.15 Touching Polyominoes (51)

Place each polyomino from the given set once into the grid so that no polyominoes touch one another orthogonally. Rotating and reflecting polyominoes is allowed. Every grid point on which two polyominoes touch diagonally is marked with a dot.

Answer Key: Enter the number of consecutive shaded and unshaded cells in each marked row/column, using the unit digit only for double digit lengths.

Example: 12111,231



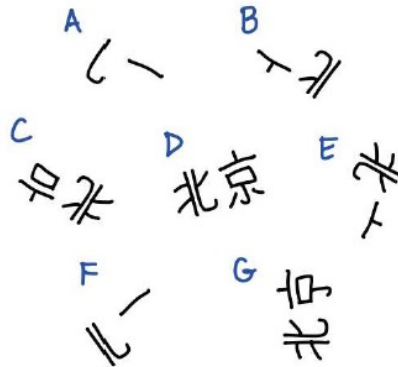
Round 2

2.1 Finishing Touch (18)

You are given a series of images that represents a progression of a drawing. With each step, more details are added to the picture with no deletion or modification. Identify the correct order in which the drawing is being completed.

Answer Key: Enter the letters of the drawing sections in the order that it is completed.

Example: AFBECGD

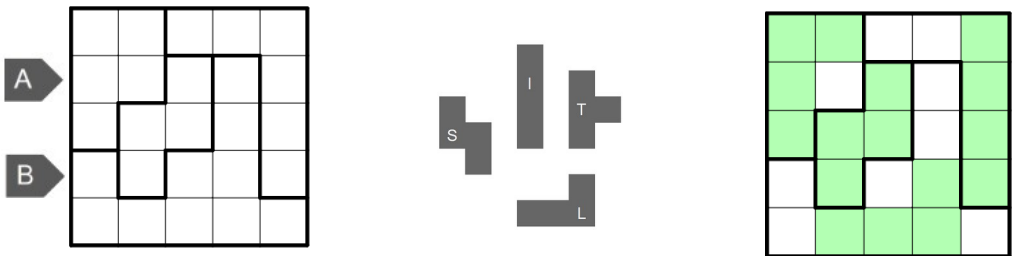


2.2 LITS (15)

Shade four connected cells in each region to form an L, I, T or S tetromino so that the following conditions are true: 1) All shaded cells are connected with each other; 2) No 2x2 group of cells can be entirely shaded; 3) When two tetrominoes in adjacent regions share an edge, they must not be of the same type (L, I, T or S) regardless of rotations or reflections.

Answer Key: Enter the letters of the LITS pieces that are seen in the marked rows/columns.

Example: LSI,SLI

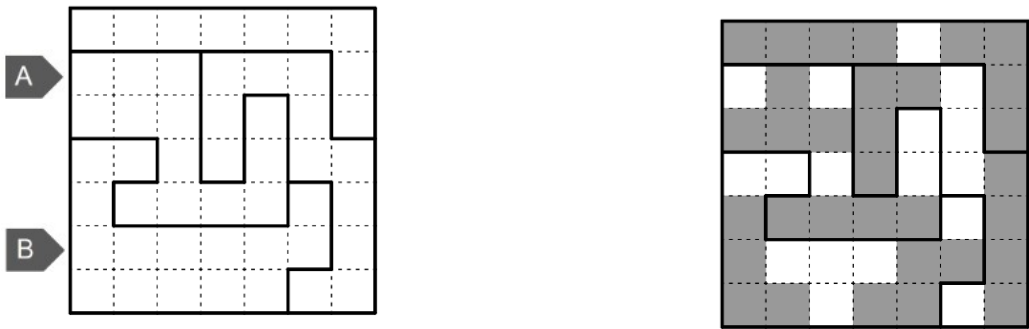


2.3 LITS (Double) (21)

Shade some cells to form two L, I, T or S tetrominoes in each region so that the following conditions are true: 1) All shaded cells are connected with each other; 2) No 2x2 group of cells can be entirely shaded; 3) When two tetrominoes in adjacent regions share an edge, they must not be of the same type (L, I, T or S) regardless of rotations or reflections; 4) The two tetrominoes in each region cannot touch each other and can be the same or different types.

Answer Key: Enter the letters of the LITS pieces that are seen in the marked rows/columns.

Example: TLL,LSI



2.4 Team China (28)

Find the listed names in the grid. Names are found in a continuous string (ignoring spaces in the name) and can be found in a straight line in any one of the eight directions.

Answer Key: For each marked column, enter the letters that are used from top to bottom.

Example: UI, ID, NC

A		B		C	
A	N	M	A	M	N
N	U	Y	I	A	C
D	Y	G	D	L	A
N	A	N	A	O	I
I	I	O	N	N	Y
L	C	L	O	G	U

CAI YUN
LIN DAN
MA LONG

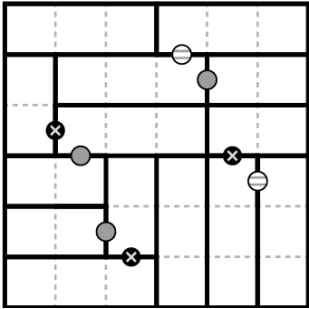
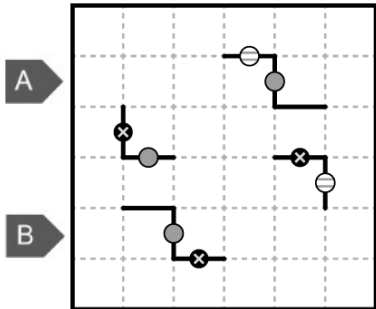
A	N	M	A	M	N
N	U	Y	I	A	C
D	Y	G	D	L	A
N	A	N	A	O	I
I	I	O	N	N	Y
L	C	L	O	G	U

2.5 Voxas (21)

Divide the grid into 1x2 and 1x3 regions. Given borders must separate two different regions. Borders with white dots separate regions with the same size and orientation. Borders with black dots separate regions with neither the same size nor the same orientation. Borders with grey dots separate regions with either the same size or the same orientation, but not both.

Answer Key: Enter the area of each region in the marked rows/columns.

Example: 232,22333

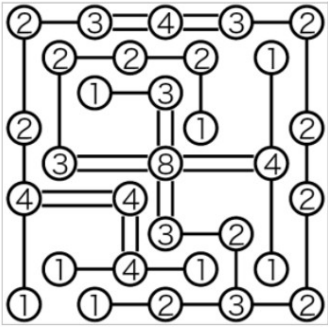
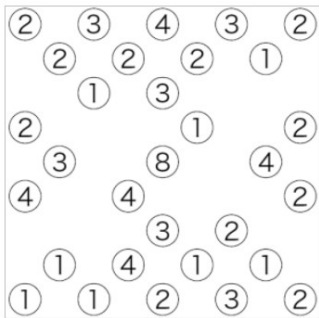


2.6 Hashi (18)

Each circle containing a number represents an island. Connect each island with vertical or horizontal bridges so that the number of bridges connected to an island equals the number inside the island and there must be a continuous path connecting all the islands. There can be up to two bridges between a pair of islands. Bridges cannot cross islands or other bridges.

Answer Key: Enter the number of horizontal double bridges followed by the number of vertical double bridges.

Example: 5,3

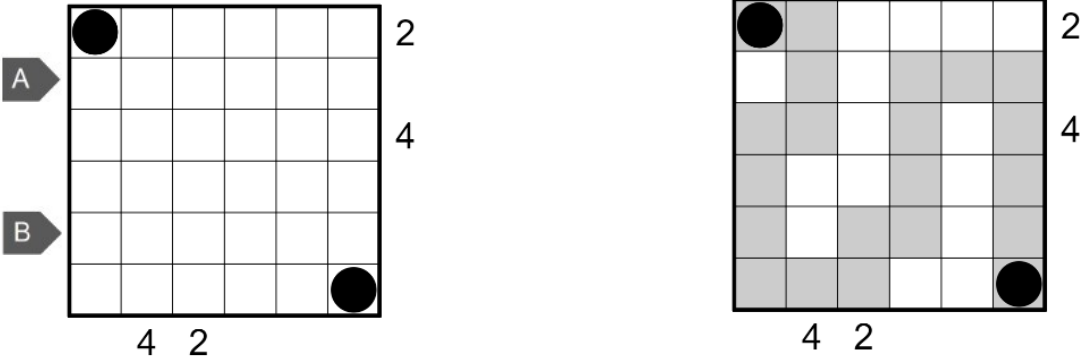


2.7 Snake (12)

Draw a one cell wide snake in the grid. The snake cannot touch itself, not even diagonally (cells that have one other cell between them can touch diagonally where the snake turns). Black circles identify the ends of the snake and white circles must lie somewhere along the path. Numbers outside the grid indicate the number of cells occupied by the snake in that row or column.

Answer Key: Enter the length of horizontal sections of the snake on the marked rows.

Example: 2,1

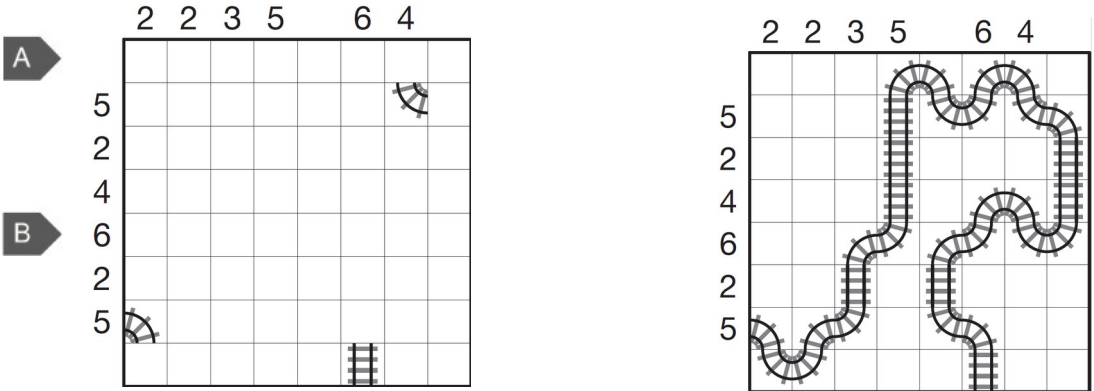


2.8 Train Tracks (27)

Draw track pieces in some cells to complete a single track that travels from its entrance in the leftmost column to its exit in the bottom row. It cannot otherwise exit the grid or cross itself. Numbers outside the grid reveal the number of track pieces in each row and column. Every track piece must either go straight or turn a right-angled corner.

Answer Key: Enter the length of horizontal sections of the track on the marked rows.

Example: 11,222

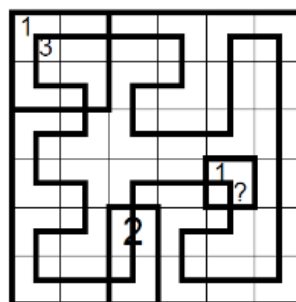
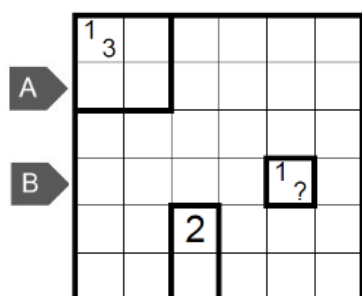


2.9 Rail Pool (27)

Draw a non-intersecting loop through the centres of all cells. Clues represent all of the different lengths of the straight line segments that are at least partially contained within the region. Each number within a region must be represented by at least one line segment. Each ? represents a positive integer, and numbers cannot repeat within a region.

Answer Key: Enter the length of horizontal sections of the loop on the marked rows.

Example: 11,12

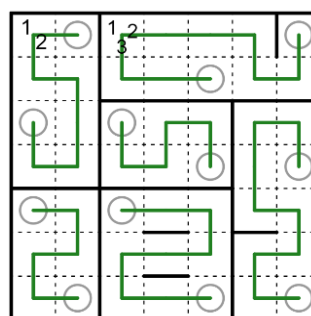
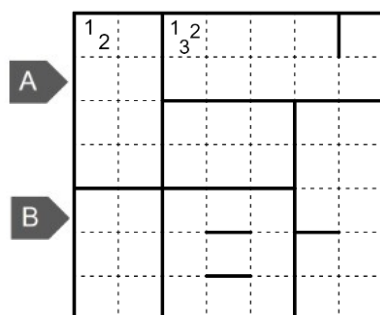


2.10 Rail Silai (24)

Within each region draw a non-intersecting path that travels horizontally or vertically through the centres of all cells. No two cells in the grid containing endpoints of the paths may touch one another, not even diagonally. In addition, numbers in the regions identify the lengths of the line segments, with each number represented by at least one line segment. Each ? represents a positive integer and numbers cannot repeat within a region.

Answer Key: Enter the length of horizontal sections of the paths on the marked rows.

Example: 121,121

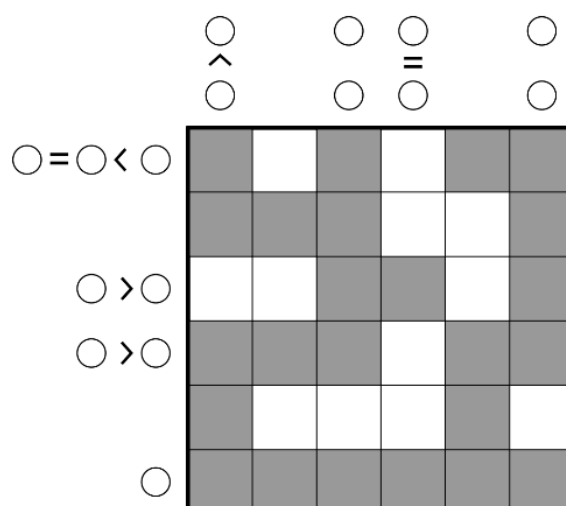
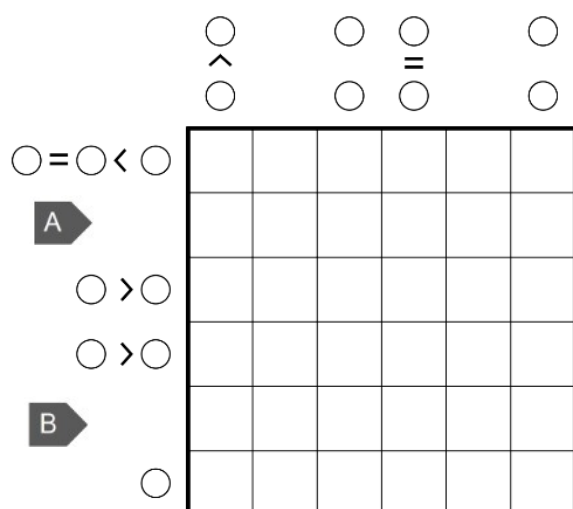


2.11 Greater Wall (28)

Shade some cells so that all shaded cells form one orthogonally connected area and no 2x2 region is entirely shaded. Where given, circle clues outside the grid indicate all connected groups of shaded cells in that row or column, in the correct order. Relationship indicators between two clues apply to the lengths of the corresponding groups of shaded cells.

Answer Key: Enter the number of consecutive shaded and unshaded cells in each marked row/column using the unit digit only for double digit lengths.

Example: 321,1311

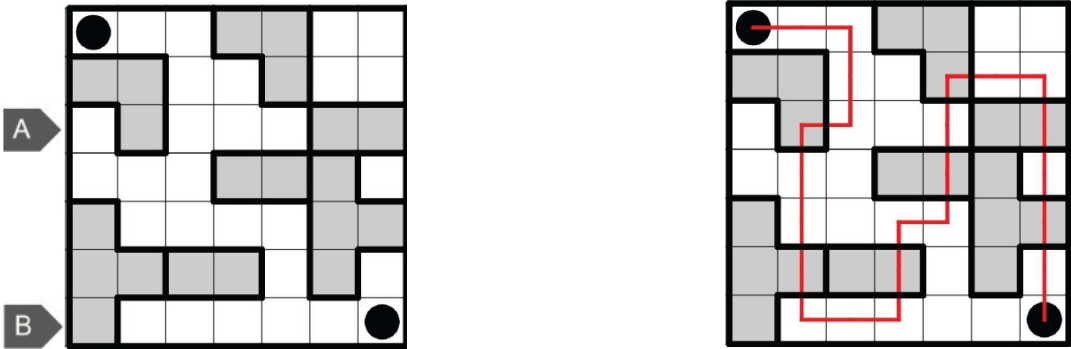


2.12 Persistence of Memory (38)

Draw a snake (a 1-cell wide path) from one dot to the other by moving horizontally or vertically between adjacent cells. The snake cannot touch itself, not even diagonally. All highlighted regions must be visited by the snake, and may be re-entered. If two or more highlighted regions have the same shape and orientation, then the route the path takes through those shapes must be identical.

Answer Key: Enter the length of horizontal sections of the path on the marked rows.

Example: 1,2

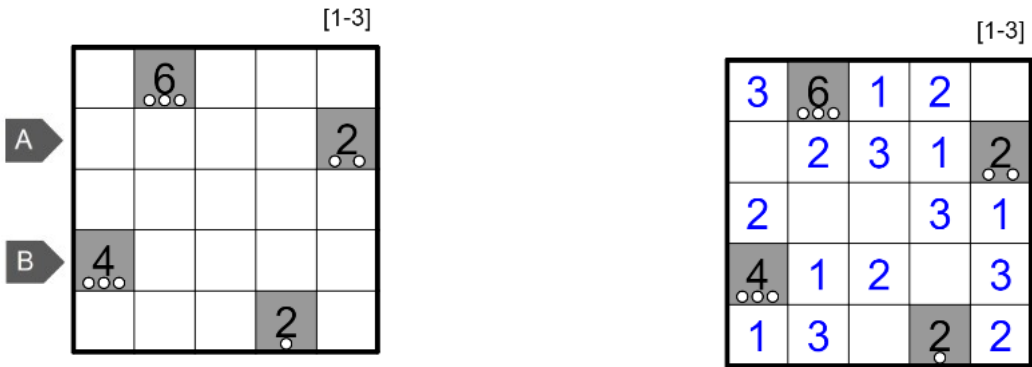


2.13 Slovak Sums (52)

Place numbers from the range given outside the grid into some empty cells so that each row and column contains each number exactly once (not counting clued cells). A clue cell contains some quantity of circles, which represents how many of the orthogonally adjacent unclued cells contain a number; if a clue cell contains a number, then that is the sum of the numbers in orthogonally adjacent unclued cells.

Answer Key: Enter the contents of the marked rows/columns using X for empty or clue cells.

Example: X231X,X12X3

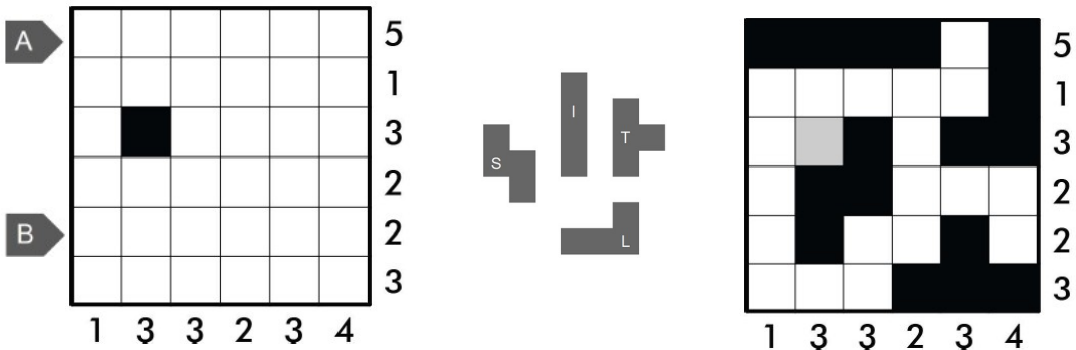


2.14 Pentominoes (86)

Find the given set of pentominoes (tetrominoes in the example) in the grid. Pentominoes can be rotated and reflected but cannot touch each other, not even at a point. Numbers outside the grid represent how many cells in that row or column are occupied by pentominoes. Shaded cells cannot be used by any pentominoes.

Answer Key: Enter the letters of the pentominoes (tetrominoes in the example) that are seen in the marked rows/columns

Example: IL,ST



2.15 Kakuro (Non-consecutive) (71)

Place a number from 1 to 9 into each empty cell so that no number is repeated in any unobstructed horizontal or vertical line. A clue on the bottom of a blocked cell represents the sum of the numbers in the vertical line below it. A clue on the right side of a blocked cell represents the sum of the numbers in the horizontal line to its right. Clues cannot see numbers through other blocked cells. Pairs of orthogonally adjacent cells may not contain consecutive numbers.

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

Example: 4293,14275

