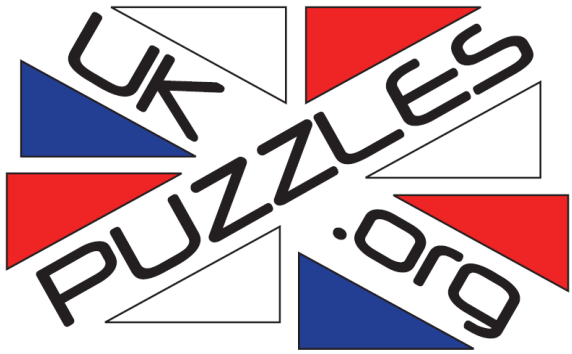


UK Puzzle Championship 2014

Instruction Booklet

Friday 23rd – Monday 26th May 2014

Competition Rules & General Information

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. 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 booklet will be made available online at http://www.ukpuzzles.org/contests.php?contestid=35 on Thursday 22nd May. It is recommended that you download this password-protected pdf before you start the competition.

- The competition will start at **12:00 BST (11:00 GMT) on Friday 23rd May** when the password for the pdf will be made available. Upon retrieving the password, you will have **2.5 hours** to solve the puzzles, and submit your answers via the entry page. You will be able to submit answers until **23:55 BST (22:55 GMT) on Monday 26th May**; as such it is highly recommended that you retrieve the password and start solving before 21:25 BST (20:25 GMT).

- The results will be publicly announced at http://www.ukpuzzles.org a few days after the contest. The highest scoring UK participant will be declared the 2014 UK Puzzle Champion and the top two UK participants will be selected for the UK team for the WPC to be held in Croydon in August. In the event of a tie, placings will be determined by latest submission time. UK participants: Please contact liane@ukpuzzles.org to state whether you would like to be considered for the UK team (or not) for World Championships.

Entering & Submitting Answers

To submit your answers, you will need to go to the answer submission page found at http://www.ukpuzzles.org/contests.php?contestid=35 Here, for each puzzle, 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. Malformed entry keys may be credited later in full or part at the judges' discretion.

If you have any urgent matters arising during the contest, please email liane@ukpuzzles.org UK participants only may call either 07901 648010 or 07707 992420 in an emergency.

In the event of the web hosting service failing during your participation, email me your answer keys before your 2.5 hours is completed. 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 or receive assistance from any other individual.

If you have any questions related to this Instruction Booklet, you can and should freely discuss these matters in the competition discussion thread at http://forum.ukpuzzles.org/

It is strictly forbidden to discuss any details of the live 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.

POINTS & BONUSES

Points will be awarded according to the table on the following page. Participants who submit error free entries to all of the puzzles before the allotted two and a half hours are up will be awarded 3 points per minute, as recorded by the last submission time to the server. 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. A bonus of 1 point per minute saved will be awarded if 24 or 25 puzzles are solved correctly.

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 booklet, with answer key descriptions, and examples of puzzle types used in the contest. The examples are credited to the appropriate authors, and all rights are reserved by the authors. Note that some of the puzzles in the competition may be by different authors. Instructions will be repeated in the competition booklet, but not the examples.

The competition booklet will have a cover page.

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

	Points		Points
#1 – Yin Yang	5	#14 – Three Equations	15
#2 – Loops at a Spool	5	#15 – Hidden Words	15
#3 – Loops at a Spool	10	#16 – Word Snakes	15
#4 – Dissection	5	#17 – Simple Loop	15
#5 – Dissection	10	#18 – Gemini Loop	20
#6 – Masyu	5	#19 – Tapa	20
#7 – Syuma	15	#20 –Regional Yajilin	20
#8 – Cross Maths	10	#21 – Orkney	25
#9 – Statue Park	10	#22 – Kurotto	40
#10 –Blackout Easy as ABC	10	#23 – Pentomino	40
#11 – Killer Skyscrapers	10	#24 – Battleships	40
#12 – Stonehenge	10	#25 – Easy as Skyscrapers	60
#13 – Magic Triangles	10	#26 – Pharmacy	80
		Total:	**520**

Puzzle Authors

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

Bram de Laat
Liane Robinson
Prasanna Seshadri
Serkan Yürekli
Tawan Sunathvanichkul
Gabriele Simionato
Nikola Zivanovic
Salih Alan
Takeya Saikachi

Many thanks also to Alan O'Donnell, Bram de Laat and Helen Arnold for test solving and proof reading.

Thank-you.

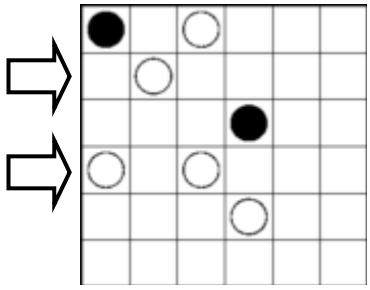
#1 – Yin Yang (5 pts)

Nikola Zivanovic

Fill each cell with either a black or white circle. All white circles should form a single interconnected area and similarly all black circles should form a single interconnected area. No 2x2 region can be completely filled with circles of the same colour anywhere in the grid.

Answer key: Enter the contents of the marked rows/columns using B for black circles and W for white circles.
Example: BWBWBW,WBWWBW

Example:



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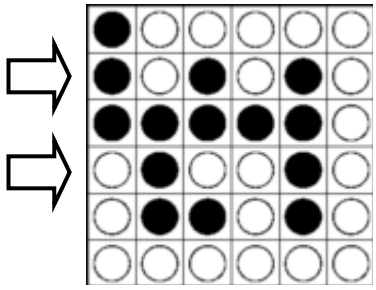


#2&3 – Loops at a Spool (5&10 pts)

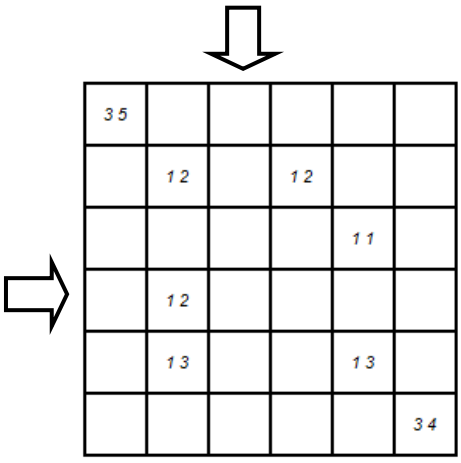
Gabriele Simionata

Draw a closed loop that passes through all numbered cells. The loop may not cross itself. Both numbers in the cells define the length of the two branches of the loop that leave that cell.

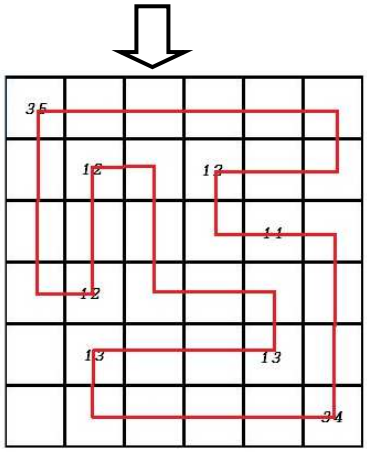
Answer Key: For the marked rows/columns show the contents of each cell: L for a turn, - for the line segment passing horizontally through the cell, I for the line segment passing vertically through the cell and X for blank cells.

Example: LLL-LI,-LIL--

Example:



Solution:



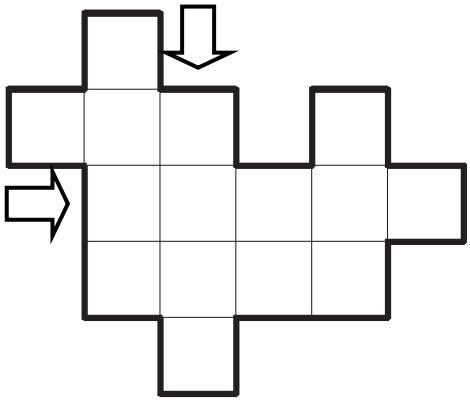
#4&5 – Dissection (5&10 pts)

Serkan Yurekli

Divide the figure into the given number of identical shapes. Shapes may be rotated and/or reflected.

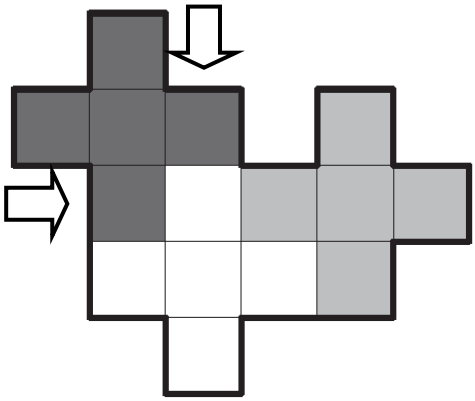
Answer key: For the marked rows/columns identify how many consecutive cells belong to separate shapes.
Example: 113,13

Example:



(3)

Solution:



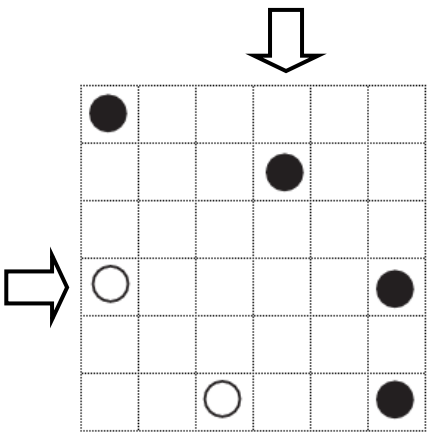
#6 – Masyu (5 pts)

Liane Robinson

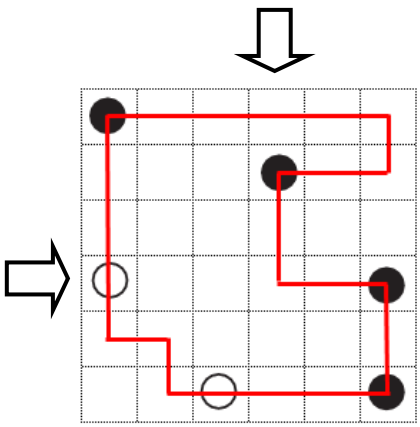
Draw a closed loop in the diagram, travelling horizontally and vertically through the centres of the cells. The loop must pass through every cell containing a circle. At every cell containing a white circle the loop must pass straight through that circle and make a 90 degree turn in at least one of the cells adjacent to the circle. At every cell containing a black circle the loop must make a 90 degree turn and travel straight through both cells adjacent to the circle.

Answer key: For the marked rows/columns show the contents of each cell: L for a turn, - for the line segment passing horizontally through the cell, I for the line segment passing vertically through the cell and X for blank cells.
Example: IXXL-L,-LILX-

Example:



Solution:



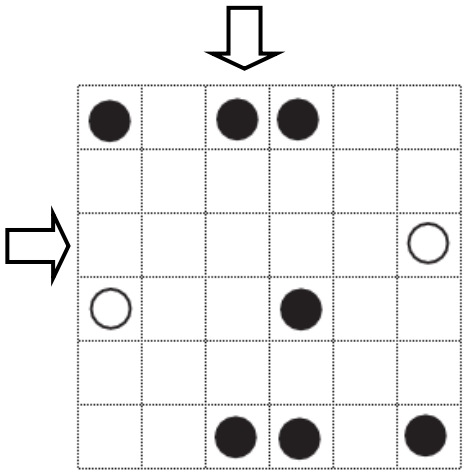
#7 – Syuma (15 pts)

Prasanna Seshadri

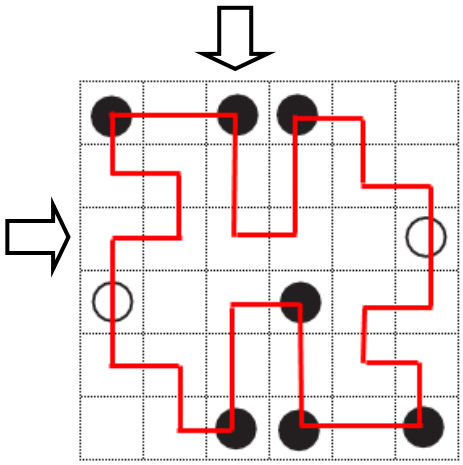
Draw a closed loop in the diagram, travelling horizontally and vertically through the centres of the cells. The loop must pass through every cell containing a circle. At every cell containing a white circle the loop must pass straight through that circle and make a 90 degree turn in both cells adjacent to the circle. At every cell containing a black circle the loop must make a 90 degree turn and travel straight through at least one cell on at least one of the sides.

Answer key: For the marked rows/columns show the contents of each cell: L for a turn, - for the line segment going straight through the cell and X for blank cells.
Example: LLLLXI,LILLIL

Example:



Solution:



#8 – Cross Maths(10 pts)

Salih Alan

Enter the digits 1-9 into the empty cells using each digit once so that all equations are correct. The standard order of operations is used, i.e. multiplication and division before addition and subtraction.

Answer key: Enter the digits in the order that they appear in each of the rows.
Example: 672,381,495

Example:

	+		−		=	11
÷	■	+	■	÷		
	×		×		=	24
+	■	+	■	+		
	+		×		=	49
=		=		=		
6		24		7		

Solution:

6	+	7	−	2	=	11
÷	■	+	■	÷		
3	×	8	×	1	=	24
+	■	+	■	+		
4	+	9	×	5	=	49
=		=		=		
6		24		7		

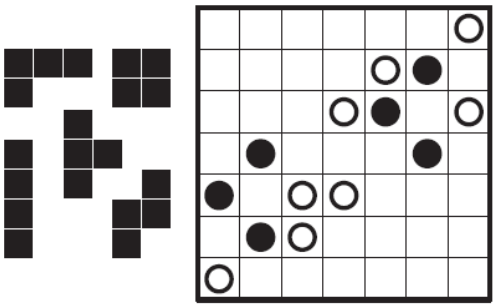
#9 – Statue Park (10 pts)

Serkan Yurekli

Place each of the shapes once into the grid. Shapes may be rotated and/or reflected. No two shapes may overlap or be orthogonally adjacent and all cells not occupied by shapes must be connected orthogonally. Black circles in the grid represent cells that must be contained in one of the shapes and white circles represent cells that must not be contained in a shape.

Answer key: Enter the number of shaded cells in each row.
Example: 5313314

Example:



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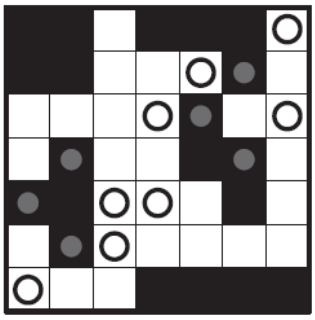


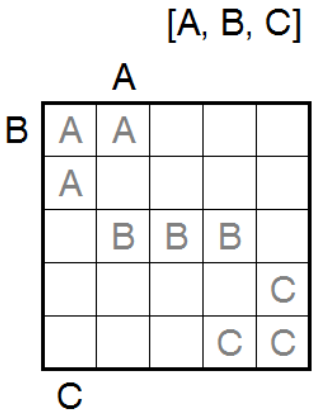
#10 – Blackout Easy as ABC (10 pts)

Takeya Saikachi

Shade some cells black and enter letters in the grid so that each row and column contains each of the given letters exactly once. Cells containing given letters may be shaded and empty cells may be shaded or include a letter. Letters outside the grid indicate the first letter seen from that direction.

Answer key: Enter the contents of the main diagonals (top left to bottom right, then top right to bottom left). Enter – for shaded cells.
Example: -A-A-,A--CC

Example:



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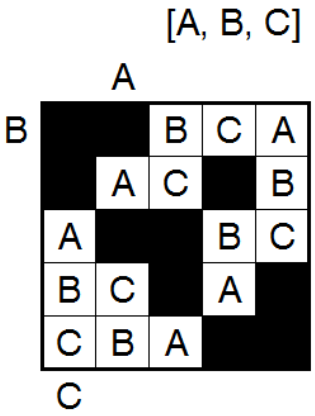


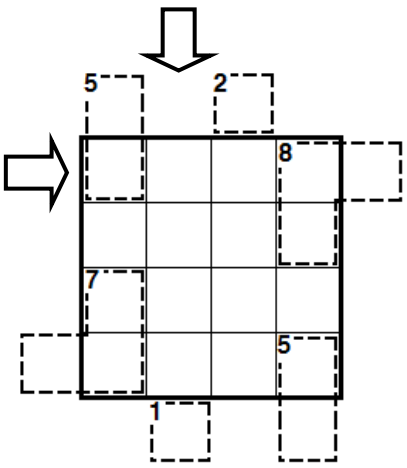
#11 – Killer Skyscrapers (10 pts)

Takeya Saikachi

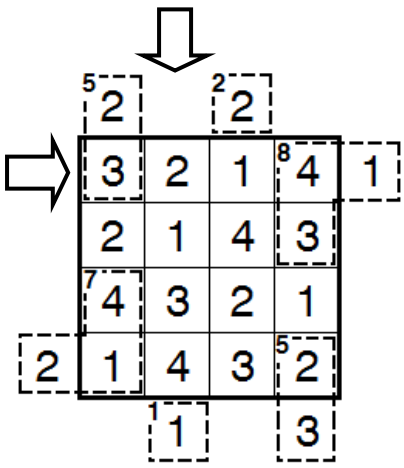
Enter a digit from 1 to 5 into every cell, so that each digit appears once in each row and column. Each digit identifies the height of a building. Numbers outside the grid indicate how many buildings can be seen from that point with taller buildings blocking site of smaller ones behind it. In addition, there are some dashed cages, for which the sum of the digits in the cage is given. Digits cannot repeat within a cage.

Answer key: Enter the digits in the marked rows/columns (ignore clue digits that are outside the grid).
Example: 3214,2134

Example:



Solution:



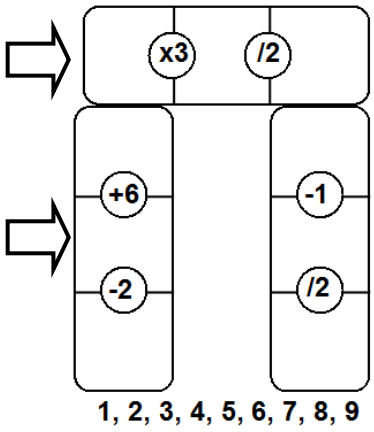
#12 – Stonehenge (10 pts)

Tawan Sunathvanichkul

Enter all the listed numbers into the cells. Reading across or down, each number must be the result of the given operation on the previous number.

Answer key: Enter the content of the marked sections.
Example: 263,78

Example:



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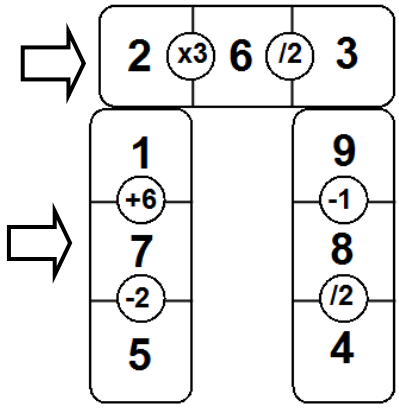


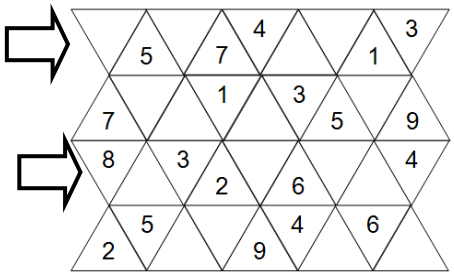
#13 – Magic Triangles (10 pts)

Nikola Zivanovic

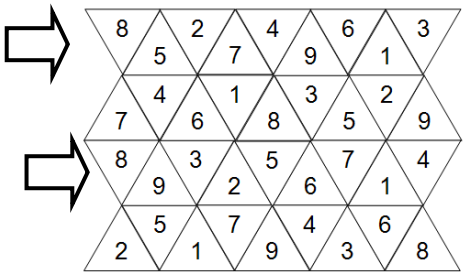
Enter the digits 1-9 in each row, one per cell. The same digit cannot appear in any more than once in any direction.

Answer key: Enter the contents of the marked rows.
Example: 852749613,893256714

Example:



Solution:



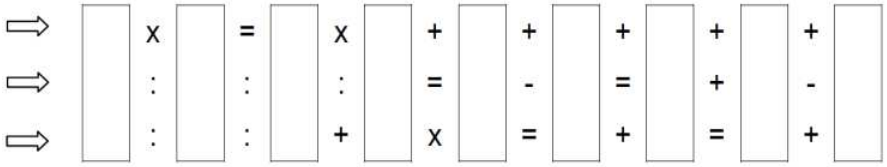
#14 – Three Equations (15 pts)

Nikola Zivanovic

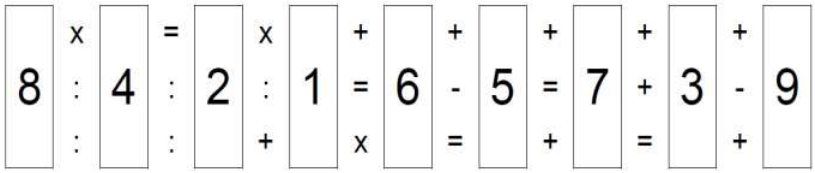
Enter the digits 1-9 in the empty cells such that the results of the operations are correct. Read equations from left to right. Multiplication and division have no priority in this puzzle.

Answer key: Enter the digits in order from left to right.
Example: 842165739

Example:



Solution:



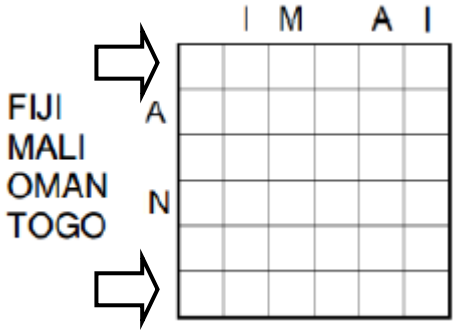
#15 – Hidden Words (15 pts)

Tawan Sunathvanichkul

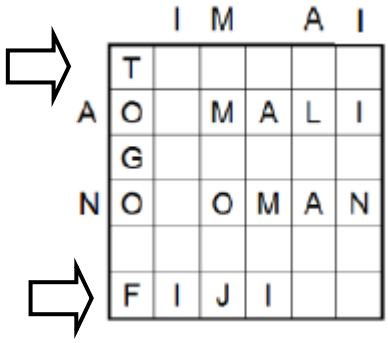
Place the listed words into the grid so that they read across from left to right or down from top to bottom. Words may not touch each other, even diagonally. Letters outside the grid must appear at least once in that row/column.

Answer key: Enter the content of the marked rows/columns. Ignore gaps.
Example: T,FIJI

Example: (by Nikola Zivanovic)



Solution:



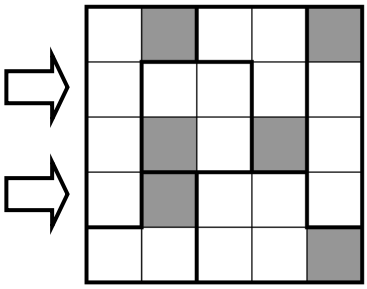
#16 – Word Snakes (15 pts)

Takeya Saikachi

Place the given words into the grid, one per bold outlined area. The shaded cells identify the position of the first letter of each word. Same letters cannot touch, even diagonally. It must be possible to read each word passing horizontally and vertically to the next letter.

Answer key: Enter the contents of the marked rows/columns.
Example: VIVIO,NTHTR

Example:



TWO
FOUR
FIVE
SEVEN
EIGHT
NINE

Solution:

E	S	E	N	F
V	I	V	I	O
E	F	E	N	U
N	T	H	T	R
O	W	G	I	E

#17 – Simple Loop (15 pts)

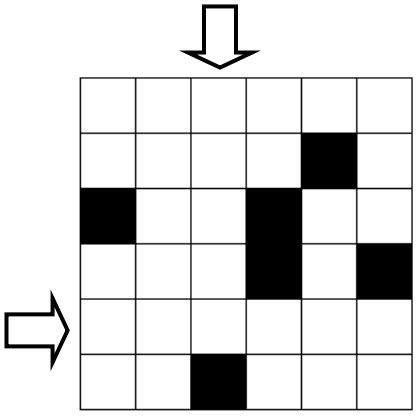
Salih Alan

Draw a closed loop in the grid that visits every unshaded cell once. The line passes horizontally and vertically connecting the centres of the cells. Shaded cells should not be visited.

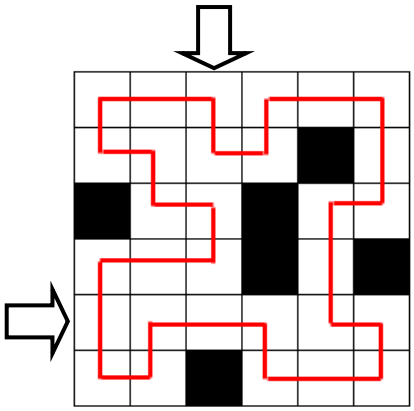
Answer key: For the marked rows/columns show the contents of each cell: L for a turn, - for the line segment going straight through the cell and X for blank cells.

Example: IL-LLL,LLLL-X

Example:



Solution:



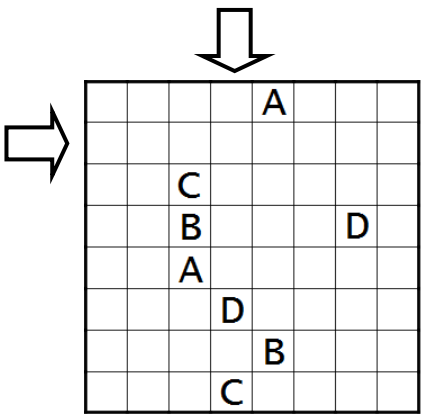
#18 – Gemini Loop (20 pts)

Bram de Laat

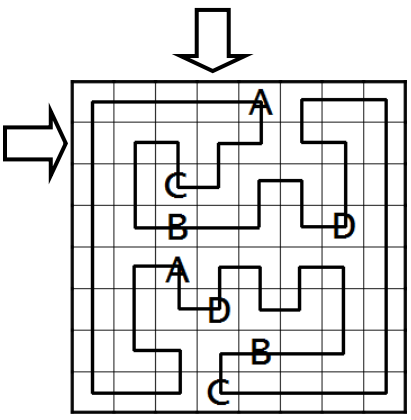
Draw a single closed loop passing through all cells in the grid by connecting them horizontally and vertically. The loop does not touch or cross itself. Cells with the same letter have the same appearance with respect to how the loop passes through them and cells with different letters have a different appearance.

Answer key: For the marked rows/columns show the contents of each cell: L for a turn, - for the line segment passing horizontally through the cell and I for the line segment passing vertically through the cell.
Example: ILLLLLLI,-LL-LLLL

Example:



Solution:



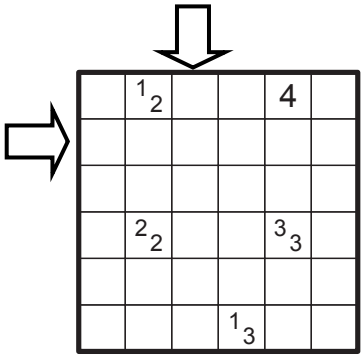
#19 – TAPA (20 PTS)

Prasanna Seshadri

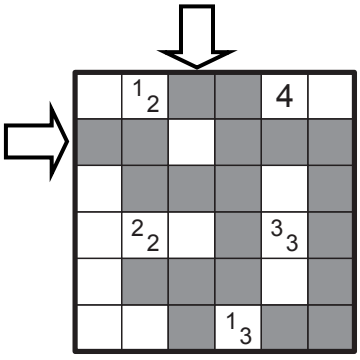
Shade some cells to create a continuous wall. Number(s) in a cell indicate the length of shaded cell blocks on its neighbouring cells. If there is more than one number in a cell there must be at least one white cell between the shaded cell blocks. Shaded cells cannot form a 2x2 square or larger. There are no wall segments on cells containing numbers.

Answer key: Enter the length shaded cell blocks in the marked rows/columns.
Example: 23,112

Example:



Solution:



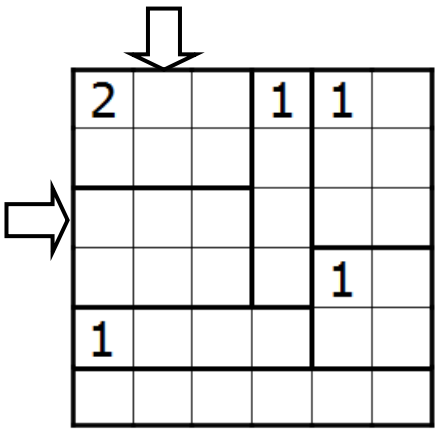
#20 – REGIONAL YAJILIN (20 PTS)

Bram de Laat

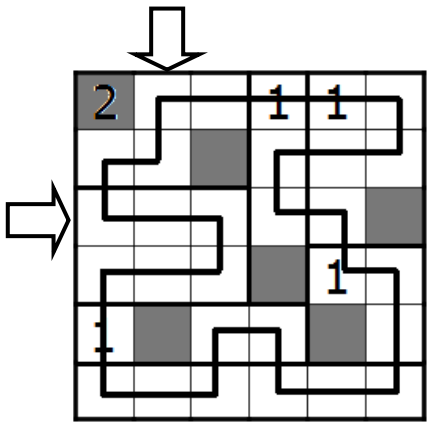
Shade some cells and then draw a single closed loop through all remaining empty cells. The loop passes horizontally and vertically through the centres of the cells and it cannot touch or cross itself. Shaded cells cannot share an edge with each other. The grid is split up into different regions. A number in a region identifies the number of shaded cells that must be in that region.

Answer key: For the marked rows/columns show the contents of each cell: L for a turn, - for the line segment passing horizontally through the cell, I for the line segment passing vertically through the cell and X for shaded cells.
Example: L-LLLX,LL--X-

Example:



Solution:

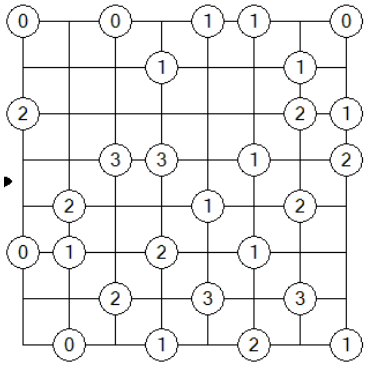


#21 – Orkney (25 pts)

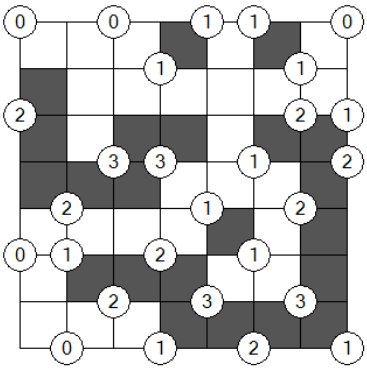
Gabriele Simionata

Shade some cells to create islands. The numbers in the circles show how many cells round that circle are to be shaded. All remaining unshaded cells (sea) must be orthogonally connected.
Answer Key: Identify the longest length of island in each row.
Example: 1123134

Example:



Solution:



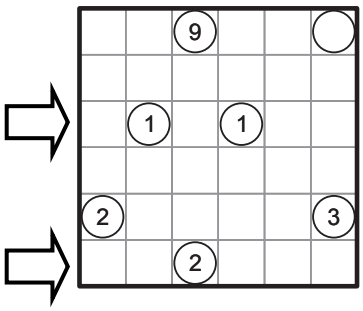
#22 – Kurotto (40 pts)

Prasanna Seshadri

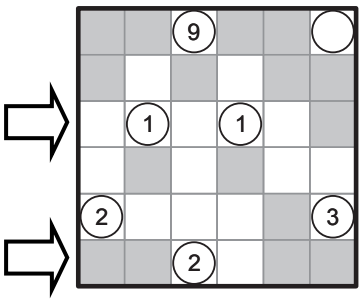
Shade some cells to form regions. The number in a circle gives the sum of the number of cells covered by the regions that are connected to it orthogonally. Regions may touch each other only diagonally. Cells with circles cannot be shaded and empty circles may have any number of shaded regions connected to them.

Answer key: Enter the contents of the marked rows/columns. Use W for unshaded cells or cells with numbers and B for shaded cells.
Example: WWWWWB,BBWWBB

Example:



Solution:



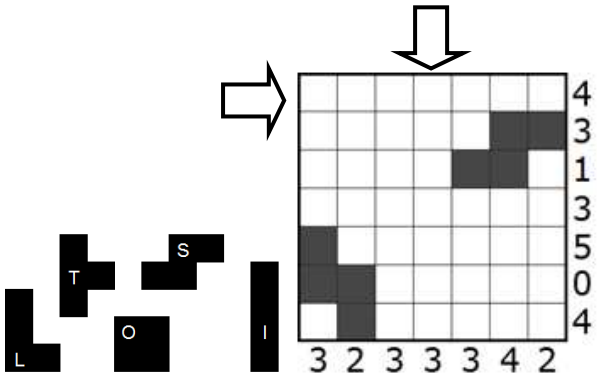
#23 – PENTOMINO (40 PTS)

Bram de Laat

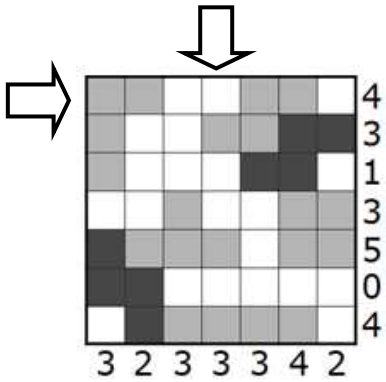
Place all 12 pentominos once in the grid so that they don't touch each other, even diagonally. Pieces may be rotated or reflected. Numbers outside the grid indicate how many cells are occupied by the pentominos in that row or column. Black cells must remain empty. (Example uses tetrominos)

Answer key: Enter the contents of the marked rows/columns using the pentomino letters to identify the shapes and – for empty cells.
Example: LL--SS-,-S--T-I

Example:



Solution:



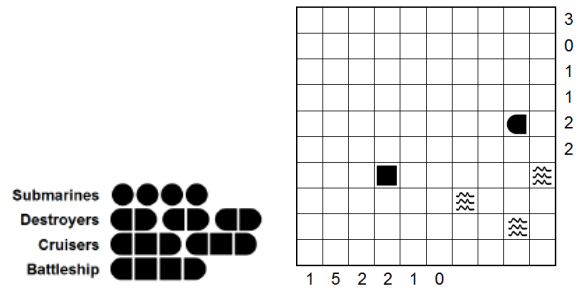
#24 – BATTLESHIPS (40 PTS)

Tawan Sunathvanichkul

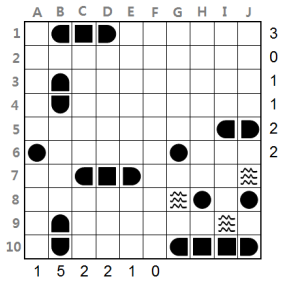
Locate the given fleet in the grid. Ships may not touch each other, even diagonally. Numbers to the right or under the grid define how many cells are occupied by ship(s) in that row/column. Some parts of ships are already given. Ships cannot occupy cells with waves.

Answer key: Enter the co-ordinates of the four submarines from top-bottom and left-right.
Example: A6,G6,H8,J8

Example:



Solution:



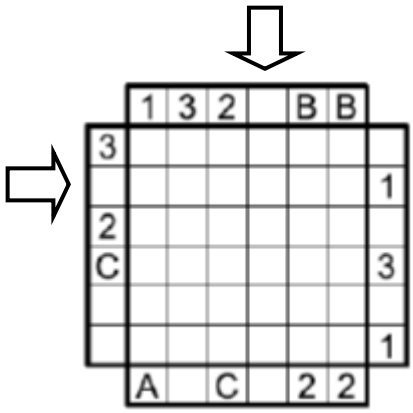
#25 – Easy as Skyscrapers (60 pts)

Salih Alan

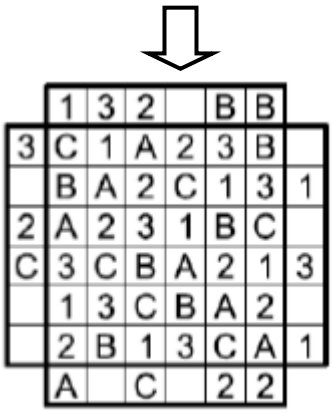
Place either a letter (A, B or C) or a number (1, 2 or 3) into each cell so that no letter or number is repeated in any row or column. Letters outside the grid show the first letter seen in that direction. Numbers inside the grid represent the height of a building in that cell. Numbers outside the grid show the number of buildings that can be seen from that direction (ignoring letters).

Answer key: Enter the contents of the marked rows/columns.
Example: BA2C13,2C1AB3

Example:



Solution:



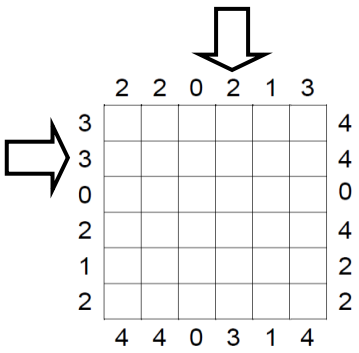
#26 – Pharmacy (80 pts)

Nikola Zivanovic

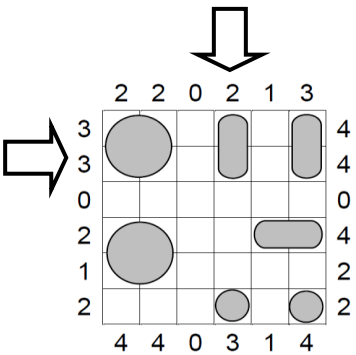
Place in the grid some pills (1x1), capsules (1x2) and effervescent tablets (2x2). Medicaments cannot touch each other, not even diagonally. Numbers to the left and above the grid indicate the number of medicaments in that row/column. Numbers to the right and below the grid indicate the number of used cells in that row/column.

Answer key: Enter the contents of the marked rows/columns using P for pills, C for capsules, E for effervescent tablets and X for empty cells.
Example: EEXCXC,CCXXXP

Example:



Solution:



END OF TEST