



## 22<sup>ND</sup> 24 HOURS PUZZLE CHAMPIONSHIP

29-30 SEPTEMBER, 2025 HOTEL EGER&PARK, EGER

# INSTRUCTION BOOKLET ROUND 1 - ROUND 6

EDITED BY: PÁL MADARASSY

PUZZLE AUTHORS:

ROUND1 NIKOLA ŽIVANOVIĆ

ROUND2 BRAM DE LAAT, CHIEL BEENHAKKER, MARK SWEEP

ROUND3 CHRISTIAN KÖNIG, SILKE BERENDES

ROUND4 RYOTARO CHIBA, TAIGO ANDO, KAZUYA YAMAMOTO, JOTARO MIYAMOTO, SOJI KUBOTA, AOI NAKANO, RINTARO MATSUMOTO, FUMITAKA FURUHASHI, SHOICHI HASEGAWA

ROUND5 WEI-HWA HUANG

ROUND6 TAWAN SUNATHVANICHKUL

#### 24H PUZZLE CHAMPIONSHIP SCORING SYSTEM

#### **DEFINITIONS**

In what follows, the term "puzzle score" always refers to points achieved in a particular puzzle set (out of 1000), whereas "tournament score" describes the points system that actually counts and is based on the puzzle scores.

#### **SCORING**

In each round, the winner on puzzle scores (or winners, if tied on top) will receive 1 tournament point, with their result being the "maximum puzzle score" for that round. All other puzzlers get the amount of tournament points that is in the same proportion to 1 as their puzzle score is to the maximum puzzle score.

E.g. if Alice scores 800 points, Bob has 780 and Cecil 320, Alice will get 1.000, Bob will get 0.975 while Cecil ends up scoring 0.400 points.

The championship is won by the highest total tournament score over all rounds.

#### **TOURNAMENT TIMETABLE**

Sunday	19:00-20:30	Dinner	
	20:30–21:30	Questions' Hour	
Monday	09:00	OFFICIAL START	(rounds by authors below)
	09:00–10:40 10:50–12:30	NIKOLA ŽIVANOVIĆ TEAM NETHERLANDS	
	12:40–14:20	CHRISTIAN KÖNIG, SILKE BERE	ENDES
	14:40–16:20	UTOKYO PUZZLE CLUB	
	16:30–18:10	Wei-Hwa Huang	
	18:20-20:00	Tawan Sunathvanichkul	
	20:10-21:50	TEAM CHINA	
	22:00-23:40	PUZZLE DUEL	
Tuesday	00:00-01:40	PAKO TEAM & SERKAN YÜRE	KLİ
	01:50-03:30	Siniša Hrga	
	03:40-05:20	Anda, alemdar, Boz, Yücel	- Turkey
	05:30-07:10	Matej Uher	
	07:20-09:00	Prasanna Seshadri	
	CONTINUOUSLY	Puzzlers Club	
	09:00-10:00	Breakfast	
	11:00-onwards	FINAL CEREMONY	



## 22<sup>ND</sup> 24 HOURS PUZZLE CHAMPIONSHIP

29TH-30TH SEPTEMBER 2025. EGER

#### PUZZLES BY:

## NIKOLA ŽIVANOVIĆ

PASSWORD BATTLESHIPS 55 (20+35)

VAMA 30

FILLOMINO 60 (20+40)

CAVE 65 (30+35)

TRAMPOLINE SUDOKU 65

T-JUNCTION SCRABBLE 55

TAPA EGG 60 (25+35)

SNAKE 55

FALLING LETTERS 100

SUMS 45

STATUE PARK 125 (45+80)

DOUBLE BLOCK (GIVEN) 55 (35+20)

DECRYPTING 75

HIROIMONO 35

SKYSCRAPERS 65 (40+25)

YAJILIN 10

PILLS 45

total 1000 points

Test solver:

#### PASSWORD BATTLESHIPS

Locate the indicated fleet in the grid. Each segment of a ship occupies a single cell. Ships can be rotated. Ships do not touch each other, even diagonally. Password given below should be read through the ship parts in order from top to bottom and from left to right.

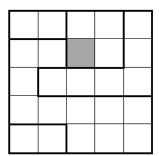
Α	Т	Α	Ε	Α	Т
L	L	Α	S	В	Е
Α	S	L	Т	Е	В
Ε	Н	Т	Е	В	Α
Ε	Т	Α	В	В	Е
В	S	Т	Е	Е	Т

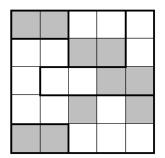
Α	Т	Α	Ε	Α	Т
L	L	Α	S	В	Е
Α	S	L	Т	Е	В
Е	Н	Т	Е	В	Α
Е	Т	Α	В	В	Е
В	S	Т	Е	Ш	Т



#### **VAMA**

In each row, column and outlined region draw exactly two black cells. All black cells are orthogonally or diagonally connected. Some black cells may be already given.





**FILLOMINO** 

(Classic rules)

**CAVE** 

(Classic rules)

#### TRAMPOLINE SUDOKU

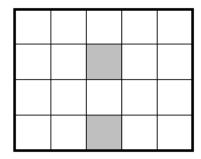
Place a digit from 1-9 in each empty cell in the grid such that each row, column and marked  $3\times3$  box contains each digit exactly once. Digits on a trampoline (circle) will jump vertically to the height of the corresponding digit and then at this new height, each digit must reach (be orthogonally or diagonally adjacent to) two copies of itself, one to the left and one to the right.

				4				
	7			5			9	
8			6		3			4
	5	1		9		3	7	
			7	8	1			
			5		6			
		7				4		
	3						1	

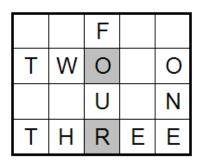
3	$\sim$	5	1	4	9	7	8	6
J	2	5	ı	4	9	1	0	0
4	7	6	2	5	8	1	9	3
8	1	9	60	7	3	5	2	4
6	5	1	4	9	2	3	7	8
9	4	3	7	8	1	2	6	5
7	8	2	5	3	6	ത	4	1
1	9	7	8	6	5	4	3	2
5	თ	8	ഗ	2	4	6	1	7
2	60/	4	3	1	1	8	5	9

#### **T-JUNCTION SCRABBLE**

Place all the listed words in the grid. Each word crosses with at least one other word and all words are interconnected. Words that are not on the list cannot appear anywhere in the grid (not even two-letter words). All letters with exactly three orthogonally adjacent letters in the grid (T-junction crossings) are shaded.



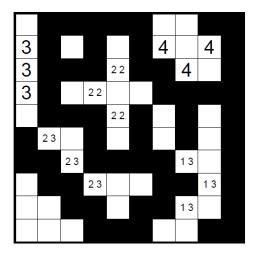
ONE TWO THREE FOUR



#### **TAPA EGG**

Standard Tapa rules apply (see Classic Booklet). Additionally, all white cells (including clue cells) must form exactly nine areas, one of each size from 1 to 9.

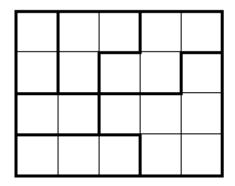
3					4		4	
3 3				22		4		
3			22					
				22				
	23							
		23				13		
			23				13	
						13		

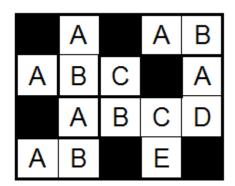


**SNAKE** (Classic rules)

#### **FALLING LETTERS**

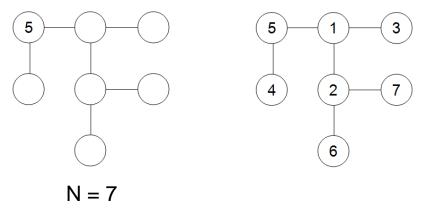
Fill in the grid with the letters and black cells. The same letter cannot share a side, and black cells cannot share a side, too. Each outlined region must be filled in alphabetical order from left to right and from top to bottom. Each outlined region contains at least one black cell. Cells with the letters create a single continuous area.





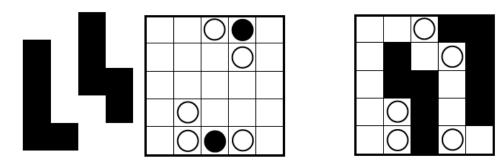
#### **SUMS**

Place numbers from 1 to N in the circles so that sum on each straight line is equal. The sum is not given, it is a part of solving to determine the sum.



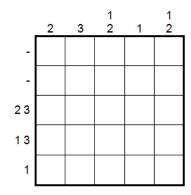
#### **STATUE PARK**

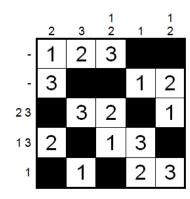
A bank of shapes is given with the grid. Place each of the shapes exactly once into the grid, with rotations and reflections allowed. No two shapes can overlap or be orthogonally adjacent, and all of the space not occupied by shapes must be connected. Black circles in the grid represent spaces that must be contained in one of the shapes, and white circles represent spaces that may not be contained in a shape.



#### **DOUBLE BLOCK (GIVEN)**

Shade exactly 2 cells in each row and column. Fill remaining white cells with digits from 1 to N-2 where N is the size of the grid. Each digit appears exactly once on each row and column. Numbers outside the grid represent digits between two shaded cells in corresponding row or column. Numbers are given in ascending order. If a dash is given outside the grid, that means there are no digits between two shaded cells.





#### **DECRYPTING**

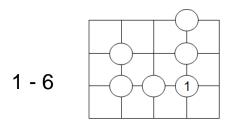
Replace the given letters with numbers from 0 to 9 (1 to 9 in the example) such that the results of the operations are correct. Same letter should always be replaced by same number, and different letter should always be replaced by different number. Multi-digit number cannot start with 0.

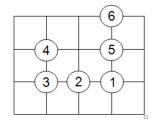
AxB=C
BD+CE=FFF
DxG=HD
I-G=B

1	2	3	4	5	6	7	8	9
F	В	Н	Α	D	Ε	G	С	1

#### **HIROIMONO**

Remove all the stones according to a following set of rules. The first stone to be removed is number 1. From the starting stone, you may travel along any grid line to the first stone encountered, which is then removed. After that, you may continue in the same direction or turn left or right, but you may not reverse direction. Each time you remove a stone, write a number in the circle as a reminder that the stone now represents an empty intersection.





#### **SKYSCRAPERS**

(Classic rules)

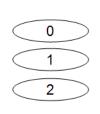
### **YAJILIN**

(Classic rules)

#### **PILLS**

Locate in the grid 13 pills (3 in the example). A pill is a rectangle of size 3x1 or 1x3 cells. The value of a pill is the sum of the numbers in the three cells of the pill. There exists exactly one pill with every value from 0 to 12. A number at the edge of the grid indicates the sum of the values in the pill cells in the corresponding row and column.

	2	0	0	1
0	1	0	0	0
1	0	0	0	1
2	2	1	2	1
0	0	0	0	1



	2	0	0	1
0	1	0	0	9
1	<b>O</b> /	Q	0	$\nearrow$
2	2	1	2	1
0	0	0	0	1

NAME:	COUNTRY:	POINTS:



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#### **PUZZLES BY:**

## Bram de Laat + Chiel Beenhakker + Mark Sweep

TOTAL 1000 POINTS

Many thanks to our testers:

Sam Cappleman-Lynes (UK) + Mariëlle Hoexum (NL) + Wessel Strijkstra (NL)

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## PUZZLES BY Bram de Laat + Chiel Beenhakker + Mark Sweep

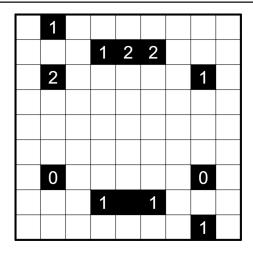
1. Akari 5 points

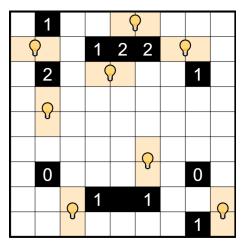
Classic rules.

#### 2. Akari (Large Bulbs)

30 points

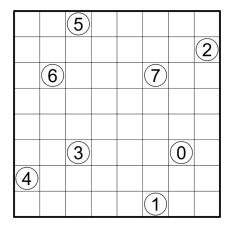
Place lights of size 1x2 into some empty cells so that every cell is illuminated. Lights illuminate the cells they are in as well as all cells seen in a straight line horizontally or vertically, not obstructed by a black cell. Lights may not illuminate each other. Clues represent the number of lights in the (up to) four cells surrounding the clue.

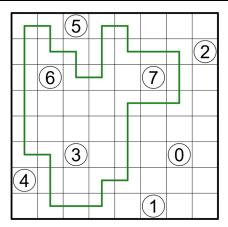




3. Linesweeper 15 points

Draw a non-intersecting loop through the centres of some empty cells. Clues represent how many of the (up to) eight cells surrounding the clue are used by the loop.

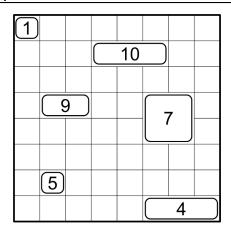


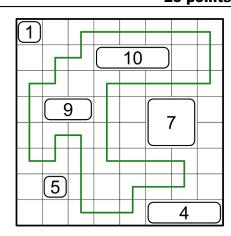


#### 4. Linesweeper (Large Clues)

25 points

Draw a non-intersecting loop through the centres of some empty cells. Clues represent how many of the cells surrounding the clue are used by the loop.





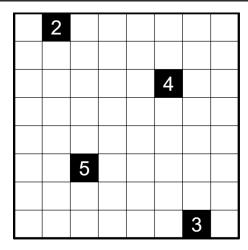
## 22<sup>ND</sup> **24** HOURS PUZZLE CHAMPIONSHIP 29–30 SEPTEMBER 2025 EGER

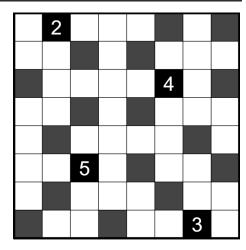


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5. Aquapelago 15 points

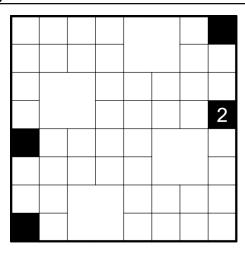
Shade some cells so that no two shaded cells are orthogonally adjacent and the remaining unshaded cells form one orthogonally connected area. No 2x2 area may be entirely unshaded. Clued cells must be shaded, and indicate the number of shaded cells in the diagonally connected group they belong to.

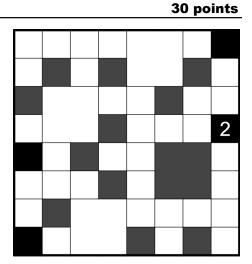




#### 6. Aquapelago (Large Cells)

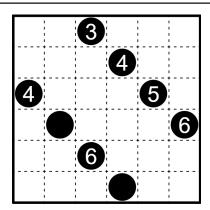
Shade some cells so that no two shaded cells are orthogonally adjacent and the remaining unshaded cells form one orthogonally connected area. No inner grid point may be entirely unshaded. Clued cells must be shaded, and indicate the number of shaded cells in the diagonally connected group they belong to. Large cells count as a single cell.

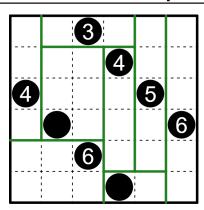




7. Shikaku 15 points

Divide the grid into rectangular regions along the grid lines. Each region must contain one black circle. A number in a black circle indicates the number of cells in that region.





## $22^{ND}$ **24** Hours puzzle championship 29–30 September 2025 EGER

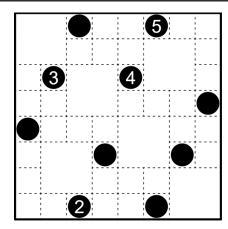


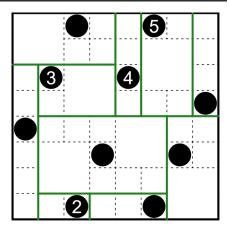
## PUZZLES BY Bram de Laat + Chiel Beenhakker + Mark Sweep

#### 8. Shikaku (Large Cells)

30 points

Divide the grid into rectangular regions along the grid lines. Each region must contain one black circle. A number in a black circle indicates the number of cells in that region. Large cells count as one cell.





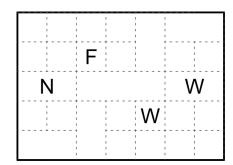
9. Pentominous 25 points

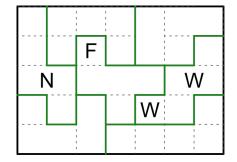
Classic rules.

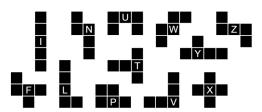
#### 10. Pentominous (Large Cells)

25 points

Divide the grid into pentomino-shaped regions so that no two regions of the same shape share an edge, counting rotations and reflections as the same. Clued cells must belong to a region with the pentomino shape associated with that letter. Individual large cells must entirely belong to the same pentomino. Black cells, if given, are not part of the grid.







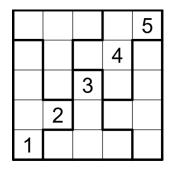
## 22<sup>ND</sup> **24** HOURS PUZZLE CHAMPIONSHIP 29–30 SEPTEMBER 2025 EGER



## PUZZLES BY Bram de Laat + Chiel Beenhakker + Mark Sweep

11. Capsules 20 points

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. Black cells, if given, are not part of the grid.

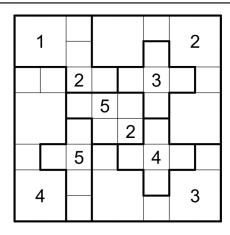


2	3	5	3	5
5	4	2	4	2
3	1	3	1	3
4	2	4	5	4
1	5	1	2	1

#### 12. Capsules (Large Cells)

40 points

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. Black cells, if given, are not part of the grid. Large cells count as one cell.



,	1	5 4		1	4 5	2	2
2	5	2	3	2	3	4	3
3		1	5	4	1		
	)	4	3	2	3	5	
1	2	5	1	5	4	2	4
1		3		0	1		
	4		4	_	5		)

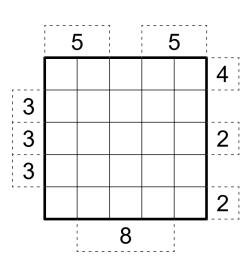
13. Skyscrapers 30 points

Classic rules.

#### 14. Skyscrapers (Large Clues)

35 points

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(s) or column(s) contain a larger number than all cells before it in <u>all</u> row(s) or column(s) from the direction of the clue.



	5		1 1 1 1	5			
	5	2	4	3	1	4	
3	2	3	5	1	4		
3	1	4	3	5	2	2	
3	3	1	2	4	5		
	4	5	1	2	3	2	
			8				

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## PUZZLES BY Bram de Laat + Chiel Beenhakker + Mark Sweep

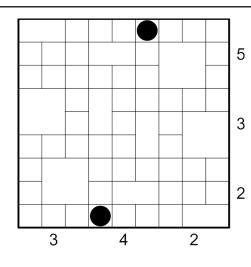
15. Snake 35 points

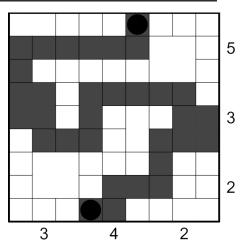
Classic rules.

#### 16. Snake (Large Cells)

35 points

Shade some cells to form a nonintersecting path which does not touch itself, not even diagonally. Black circles must lie on one end of the path. A number outside the grid represents how many cells in the corresponding row or column are shaded. Large cells count as a single cell.





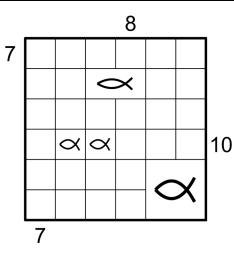
17. Anglers 35 points

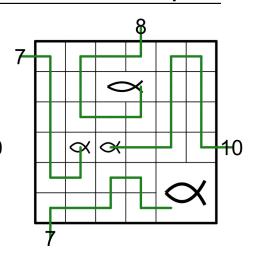
Classic rules.

#### 18. Anglers (Large Fish)

35 points

From each number outside the grid, draw a path which immediately goes into the nearest cell of the grid and then travels through the centres of some cells until arriving at a fish. Paths may not cross themselves, each other, or fish. The number at the beginning of a path indicates how many cells in the grid the path occupies, including the cell with the fish. Every fish is reached by exactly one path. Large cells count as one cell.





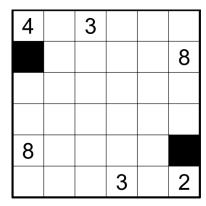
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## PUZZLES BY Bram de Laat + Chiel Beenhakker + Mark Sweep

19. Arrow Flow 25 points

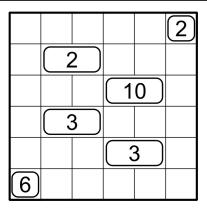
Place an arrow into each empty cell, each pointing in one of the four orthogonal directions.
Orthogonally adjacent arrows may not point in the same direction.
After all arrows are placed, starting from any cell and stepping one cell in the direction of the arrow must lead to a cell with a number clue. Numbers indicate how many arrows lead to that clue. Black cells, if given, are not part of the grid.



4	<b>←</b>	3	<b>+</b>	<b>→</b>	<b>\</b>
	<b>↑</b>	<b>+</b>	<b>↑</b>	<b>+</b>	8
<b>↓</b>	<b>←</b>	<b>↑</b>	<b>↓</b>	<b>→</b>	<b>↑</b>
<b>→</b>	1	<b>+</b>	<b>→</b>	<b>↑</b>	<b>+</b>
8	<b>←</b>	<b>↓</b>	<b>+</b>	<b>↓</b>	
<b>→</b>	<b>↑</b>	<b>→</b>	3	<b>†</b>	2

#### 20. Arrow Flow (Large Clues)

Same as 19. Arrow Flow.

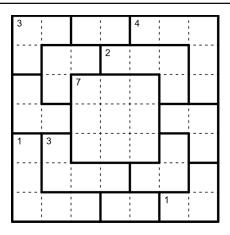


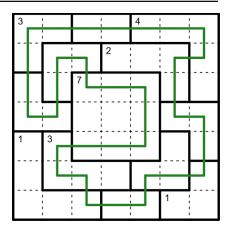
$\rightarrow$	<b>↓</b>	<b>→</b>	<b>↓</b>	<b>→</b>	2
<b>↓</b>		2	<b>†</b>	<b>↓</b>	<b>↑</b>
<b>→</b>	<b>+</b>	<b>→</b>	1	0	<b>+</b>
<b>1</b>		3	<b>→</b>	<b>↑</b>	1
<b>→</b>	<b>↓</b>	<b>←</b>		3	<b>↑</b>
6	+	1	<b>→</b>	<b>↑</b>	<b>+</b>

50 points

21. Country Road 25 points

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.





## 22<sup>ND</sup> **24** HOURS PUZZLE CHAMPIONSHIP 29–30 SEPTEMBER 2025 EGER



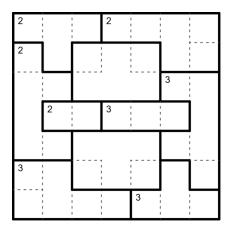
## PUZZLES BY Bram de Laat + Chiel Beenhakker + Mark Sweep

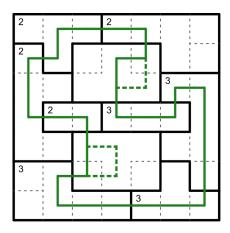
#### 22. Country Road (Large Cells)

50 points

Draw a non-intersecting loop through some cells that visits each cell at most once. Each region is visited 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.

Large cells count as a single cell. If a large cell is used, the loop enters and exits the cell exactly once, after which the whole cell has been visited. How the loop is drawn within a large cell is irrelevant, as long as it is clear from which cell it is entered and to which cell it exits.





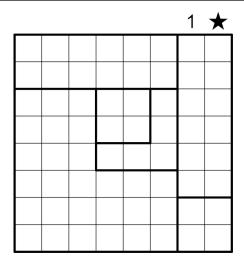
23. Star Battle 25 points

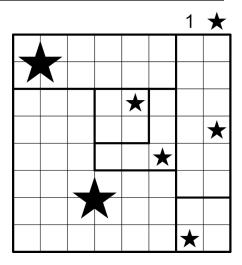
Classic rules.

#### 24. Star Battle (Large Stars)

60 points

Place some stars in the grid, so that every row, column and region contains the number of stars indicated above the grid. Stars are not allowed to touch each other, not even diagonally. Stars can come in 2 sizes: 1x1 cells and 2x2 cells. Stars may not cross region boundaries.





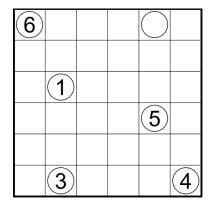
## $22^{ND}$ **24** Hours puzzle championship 29–30 September 2025 EGER

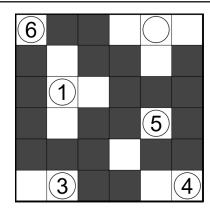


## PUZZLES BY Bram de Laat + Chiel Beenhakker + Mark Sweep

25. Canal View 40 points

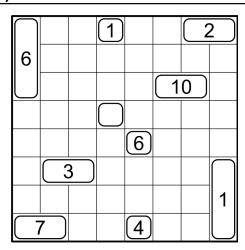
Shade some cells so that all shaded cells form one orthogonally connected area and no 2x2 region is entirely shaded. Clues cannot be shaded, and represent the number of shaded cells connected in a straight line horizontally or vertically to the clue.

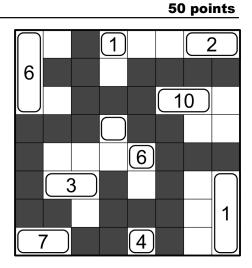




#### 26. Canal View (Large Clues)

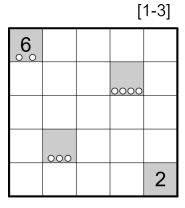
Same as 25. Canal View.





27. Slovak Sums 30 points

Place numbers from the given range into some empty cells so that each row and column contains each number once (not counting clued cells). Given numbers represents the sum of the numbers in orthogonally adjacent cells. Circles represent how many of the orthogonally adjacent empty cells contain a number. Clues do not necessarily give both types of information.



<b>6</b>	3	1	2	
3		2	0000	1
	2		1	3
1	000		3	2
2	1	3		2

[1-3]

## $22^{ND}$ **24** Hours puzzle championship 29–30 September 2025 EGER



## PUZZLES BY Bram de Laat + Chiel Beenhakker + Mark Sweep

#### 28. Slovak Sums (Large Clues)

65 points

[1-3]

Same as 27. Slovak Sums.

3	5	1		2	
	1	3	1	1	2
	2		3	1	
	3	2			1
2	00	00	1	3	
1			2	8	3

#### 29. Turning Fences

40 points

Connect some pairs of orthogonally adjacent dots to form a single non-intersecting loop. Clues represent the number of turns the loop makes on the four dots surrounding the cell.

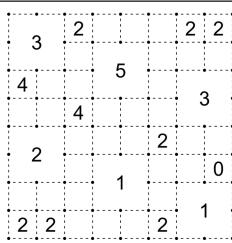
	1			3	
4		2	1		4
	3			3	
	2			2	
4		1	1		2
	3			4	

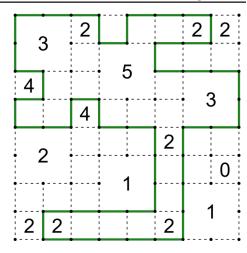
	1			3	
4		2	1		4
	3			3	
	2			2	
4		1	1		2
	3			4	

#### 30. Turning Fences (Large Clues)

60 points

Connect some pairs of orthogonally adjacent dots to form a single non-intersecting loop. Clues represent the number of turns the loop makes on the four or eight dots surrounding the cell, for small and large clues respectively.





NAME:	COUNTRY:	POINTS:



## 22<sup>ND</sup> 24 HOURS PUZZLE CHAMPIONSHIP

29–30 SEPTEMBER 2025 EGER

#### **PUZZLES BY:**

## **CHRISTIAN KÖNIG**

**AND** 

### **SILKE BERENDES**

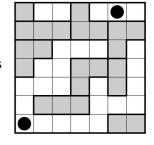
Masyu + Persistence Of Memory	45	Points $(10 + 20 + 15)$
LITS + Aquarium	45	Points $(10 + 10 + 25)$
Slitherlink + Star Battle	60	Points $(10 + 15 + 35)$
Kuromasu +Yajisan-Kazusan	75	Points $(20 + 30 + 25)$
Choco Banana + Touching Pentominoes	85	Points $(35 + 30 + 20)$
Icewalk + Rollercoaster	115	Points $(20 + 45 + 50)$
Fillomino + Country Road	130	Points $(10 + 60 + 60)$
Penthouse + Numbered Rooms	125	Points $(20 + 25 + 80 (4 \times 20))$
Tapa + Skyscrapers	145	Points $(45 + 20 + 80)$
Magnets + Underground	175	Points $(15 + 70 + 90)$
TOTAL	1000	Points

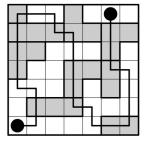
#### Instructions for the round by Christian König and Silke Berendes

#### 1. Masyu: Standard (10 points)

#### 2. Persistence of Memory: (20 points)

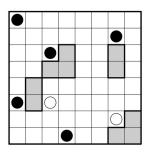
Draw a non-intersecting path through the centers of some cells, starting at one black circle and ending at the other. It may not touch itself, not even diagonally. All shaded regions must be visited at least once. If two shaded regions are the same shape and orientation, the line segments within them must be identical.

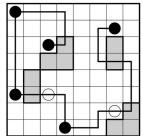




#### 3. Masyu + Persistence of Memory: (15 points)

Draw a non-intersecting path through the centers of some cells, starting at one black circle and ending at another. It may not touch itself, not even diagonally. All shaded regions must be visited at least once. If two shaded regions are the same shape and orientation, the line segments within them must be identical. The other black circles and all white circles are standard Masyu hints. All Masyu circles must be visited and the path follows standard Masyu rules when passing a circle.

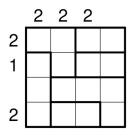


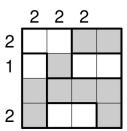


#### 4. LITS: Standard (10 points)

#### 5. Aquarium: (10 points)

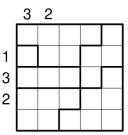
Shade some cells (representing "water") such that the numbers on the top and left edges of the grid indicate the number of shaded cells in the corresponding row or column. Thick lines separate groups of cells into regions ("aquariums"). If two cells in a region are in different rows and the higher one is shaded, then the lower one must be shaded ("water obeys gravity"). If two cells in a region are in the same row and at least one of them is shaded, then the other one must be shaded ("water seeks its own level").

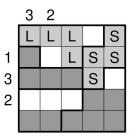




#### 6. LITS Aquarium Permaculture: (25 points)

Divide the grid alongs the region borders into two puzzles. Each of them has to be orthogonally connected. Solve one as LITS and one as Aquarium. All numbers are Aquarium hints. There may not be any Aquarium without water in this puzzle!





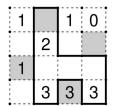
7. Slitherlink: Standard (10 points)

8. Star Battle: Standard (2 Stars) (15 points)

### 9. Slitherlink + Star Battle: (35 points)

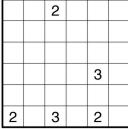
Standard Slitherlink rules apply. Additionally, place two stars per row / column / region. (Example: One star.) Stars may not touch, not even diagonally. Regions: The inside of the loop and each of the outside areas of the loop.

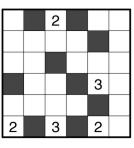




#### 10. Kuromasu: (20 points)

Shade some cells so that all remaining cells are connected orthogonally and no two shaded cells share an edge. Each numbered cell indicates the total count of unshaded cells connected in line vertically and horizontally to the numbered cell including the cell itself.





#### 11. Yajisan-Kazusan: (30 points)

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.

12. Kuromasu + Yajisan-Kazusan: (25 points) 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 is a Kuromasu clue. If a cell with a number in it is shaded, the number is meaningless.

1	†a			
2 2				
2↓	2↓			
	2	1		
		1↓		
		1	<del>1</del>	

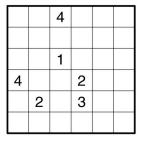
	8	3		
			2	
1				
	7	12		
		3	4	6

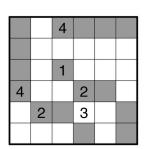
<del>1</del>	2			
2				
2↓	2↓			
	2	1		
		1↓		
		1	<del>1</del>	



#### 13. Choco Banana: (35 points)

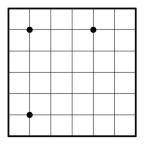
Divide the grid along the grid lines into regions. Each region must either be "chocolate" (in the shape of a rectangle or square), or "banana" (not in the shape of a rectangle nor square). No two "chocolate" regions may touch each other along a cell's edge, and no two "banana" regions may touch each other along a cell's edge. Each given number indicates the area of the region that number is in. It is possible for a region to contain no numbers, or to contain multiple numbers.

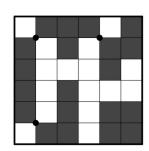




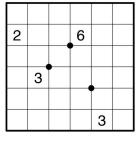
#### 14. Touching Pentominoes: (30 points)

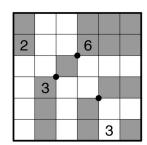
Place each pentomino from the bank given outside the grid into the grid so that no pentominoes touch one another orthogonally. Rotating and reflecting pentominoes is allowed. Every grid point on which two pentominoes touch diagonally is marked with a dot. (Example: A full set of tetrominoes instead of pentominoes.)





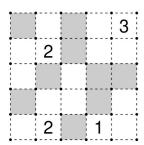
15. Choco Banana + Touching Pentominoes: (20 points) Standard Choco Banana rules apply. Every point where two different "chocolate" regions touch diagonally is marked with a dot.

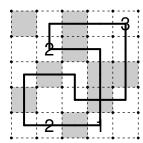




#### 16. Icewalk: (20 points)

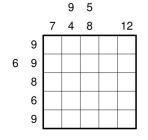
Draw a single loop that passes orthogonally through centers of cells. (The loop does not need to go through all the cells.) Some cells are shaded, representing "ice". The loop cannot turn in an ice cell. The loop cannot intersect itself in a nonice cell. The loop will alternate between going through groups of one or more ice cells and groups of one or more non-ice cells. Consider each one of these groups to be a "road segment"; the number of cells in each road segment is the size of that road segment. Some non-ice cells are marked with numbers. The loop must pass through all cells with numbers, but not through all ice cells. Each number is the size of the road segment that number's cell belongs to.

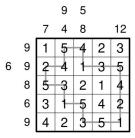




#### 17. Rollercoaster: (45 points)

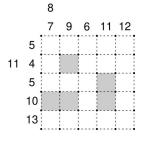
Place a number from 1 to 9 into each cell so that each row and each column contains every number exactly once. Draw a non-intersecting loop orthogonally through the centers of some cells. Numbers outside the grid indicate the sum of numbers appearing along the straight loop segments in the corresponding row or column. Some entries may be given. (Example 1-5)

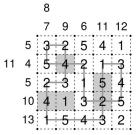




#### 18. Rollercoaster on Ice: (50 points)

Place a number from 1 to 9 into each cell so that each row and each column contains every number exactly once. Draw a loop orthogonally through the centers of some cells. The loop may not touch itself, but intersect itself on shaded cells (ice cells). The loop cannot turn in an ice cell. Numbers outside the grid indicate the sum of numbers appearing along the straight loop segments in the corresponding row or column. Some entries may be given. (Example 1-5)

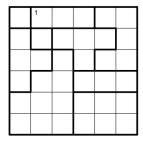




#### 19. Fillomino: Standard (10 points)

#### 20. Country Road: (60 points)

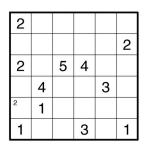
Draw a non-intersecting loop that passes orthogonally through centers of cells. The loop must enter every outlined region exactly once (that is, for each region, all used cells must be consecutive along the loop's path). Cells not in the loop cannot share a region-boundary edge (that is, any pair of unused cells that share an edge boundary must belong to the same region). If a region contains a number, then that number of cells in the region must be used by the loop. The cell that contains the number may or may not be used.

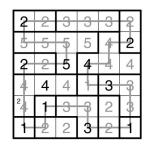


	1		
L			
		L	
			Ш

#### 21. Fillomino + Country Road: (60 points)

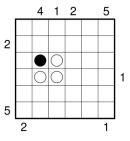
Divide the grid into regions with standard Fillomino rules. Solve the resulting Country Road with standard country road rules. Large numbers are Fillomino clues, small numbers are Country Road clues.

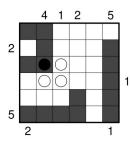




#### 22. Penthouse: (20 points)

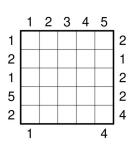
Shade some empty cells so that the shaded cells form the shapes of different pentominoes. Each pentomino shape is used at most once. Pentominoes cannot touch along edges or corners. Numbers left of and above the grid give the number of shaded cells in the corresponding row or column. Numbers right of and below the grid give the number of different pentominoes in the corresponding row or column. Some black and white cells may be given.





#### 23. Numbered Rooms: (25 points)

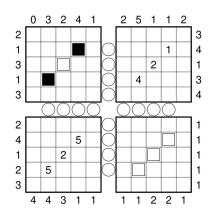
Place a number from 1 to 9 into each cell so that each row and each column contains every number exactly once. A clue outside the grid indicates which number appears in the Xth cell of the corresponding row or column from this direction, where X is the first entry in the corresponding row or column from this direction. Some entries may be given. (Example 1-5)



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

#### 24. Penthouse + Numbered Rooms: (80=20+20+20+20 points)

Solve two Numbered Rooms puzzles with numbers from 1 to 8 and two Penthouse puzzles. (Partial points of 20 for solutions of single puzzles, if they are the same as in the overall solution.) Fill the circles with clues that apply to both puzzles they touch. (Filling in those numbers is not necessary for getting points, only the entries inside the grids.) Some entries and some black and white cells may be given. The two Penthouse puzzles may use same pentominoes. (Example: 1-5)



	0	3	2	4	1		2	5	1	1	2	
2	X	Χ			Χ		5	3	1	2	4	3
1	Х	Х	Х		Х	1	4	2	3	1	5	4
3	Х		X			2	3	5	2	4	1	1
1	Х		Х	Х	Х	1	1	4	5	3	2	3
3	Х				Χ	1	2	1	4	5	3	4
		1	2	2	1		1	1	3	2		
2	5	1	3	4	2	4					Χ	1
4	3	2	4	5	1	1	Χ	Х		X	Χ	1
1	1	4	2	3	5	1	Χ	Х	X	Х		1
2		-	4	2	3	(1)	Х	Χ	Х	Х		1
~	4	5	1		J	$\vee$	^	$ \Delta $				٠.
3	2	3	5	1	4		X	X	^	^		1

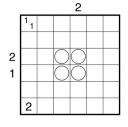
25. Tapa: Standard. (45 points)

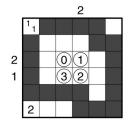
Questionmarks stand for arbitrary Tapa clues, consisting of one or multiple numbers.

#### 26. Skyscrapers: Standard (20 points)

#### 27. Tapa + Skyscrapers: (80 points)

Put a single digit in every circle such that digits do not repeat in each row and column. Numbers outside the grid are Skyscraper clues for the corresponding row or column of circled digits. Together with existing Tapa clues, the circled digits form a Tapa with standard Tapa rules.

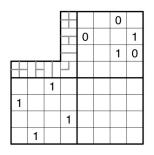


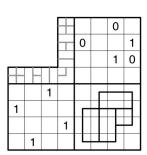


#### 28. Magnets: Standard (15 points)

#### 29. Underground: (70 points)

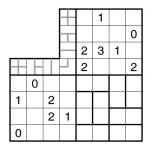
Draw orthogonal connections through centers of cells to form one connected network. It is not allowed to have any cell with only one connection. It is allowed for any cell to have no connections. Each cell with connections will therefore be one of these four types: A turn, a straight line, a "T"-shaped crossing or an "X"-shaped crossing. The numbers above and to the left of the grid indicate the exact number of cells of the specified type that must be placed in each column or row, respectively. If a number is not given, there might be any number of cells of the specified type.





#### 30. Magnets + Underground: (90 points)

Draw an Underground network (by Underground rules) and put some magnets in the grid (by Magnets rules) such that the Underground network does not go through magnets. Clue numbers for "T"-shaped crossings and turns count the cells with the corresponding Underground type. "X"-shaped crossings and straight line clues indicate the sum of the corresponding Underground clue and the corresponding Magnets clue. It is possible for dominoes to stay completely empty or be only half filled by the Underground network.



			$\pm$			1			
									0
				2	2	3	1	1	
$\Box$	$\vdash$		Ц	2	2				2
	0							1	
1		2				+			
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Puzzles by authors: Christian 10-12, 13-15, 19-21, 25-27, 28-30. Silke 1-3, 4-6, 7-9, 16-18, 22-24. Many thanks to our testsolvers: Benedikt Hahn, Florian Habermann, Jonas Seiler, Jörg Schneider, Luisa Gerlach, Nils Miehe, Paula Welz and Verena Möhler.

NAME:	COUNTRY:	POINTS:



## 22nd 24 HOURS PUZZLE CHAMPIONSHIP

29-30 September 2025 Hotel Eger & Park, Eger

Puzzles written & tested by UTokyo Puzzle Club (Ryotaro Chiba, Taigo Ando, Kazuya Yamamoto, Jotaro Miyamoto, Soji Kubota, Aoi Nakano, Rintaro Matsumoto, Fumitaka Furuhashi, Shoichi Hasegawa)

Balance Loop	55 points
Tapa	70 points
Partiti	30 points
Tren	50 points
Triangular Dissection	20 points
Hitori Slitherlink	30 points
Japanese Sums	40 points
Atomic Attraction	20 points
Double Area Division	20 points
Kropki Loop	20 points
Coral	45 points
Antiknight Sudoku	65 points
Magnets	55 points
Compass	15 points
Bosnian Road	35 points
White Pentominoes	60 points
Four Snails	85 points
Stitches	30 points
Pins	45 points
Earthworms	50 points
International Borders	50 points
Kakuro	20 points
Battleships	15 points
Countries	50 points

TOTAL 1000 points



#### **Foreword**

Hello! We are the University of Tokyo's Puzzle Club. Established in 2005, our club nowadays is a hub for top Japanese puzzle solvers and setters. Among its founding members is Yuki Kawabe, a prominent figure in the Japanese WPC team. It was during a gathering of the club in 2011 that Ken Endo, now the World Champion, was introduced to competitive puzzling by fellow club member, Kota Morinishi. Those days are long gone but the club is still full with puzzling talents!

The writing team is headed by Ryotaro Chiba. Additionally, the puzzles were authored by

- Taigo Ando, an expert solver who participated in the 2022 & 2023's Puzzle GP Finals,
- Kazuya Yamamoto, a regular of the Japanese WPC team and Toketa writing team,
- Jotaro Miyamoto, competition director of the 2022 UTokyo Puzzle Championship,
- Soji Kubota, who runs Puzzle Square JP, one of the biggest online puzzling platforms,
- Aoi Nakano, one of the authors for the popular online puzzle series Puzzle Boss Rush,
- Rintaro Matsumoto, a regular author in various Nikoli publications,
- Fumitaka Furuhashi, an avid fencer and Shogi enthusiast, and
- Shoichi Hasegawa, whose Discord profile message simply says "Baba Is You is good".

Our round's theme is **Around the Puzzling World in 24 Puzzles**, an allusion to the "Around the World in 80 Puzzles" series held in the 2013 WPC. One of the things I (R.C.) love the most about 24hPCs is that the puzzles are always authored by people with differing puzzling backgrounds. Along with the host nation Hungary, authors from India, Thailand, Japan, Turkey, Germany, Poland, Serbia, Belarus... as well as from an online entity whose nationality is undefined, often contribute. Thanks to that, we can always enjoy the unique style and flavour in each of the 24hPC's puzzle sets. This puzzle set is the outcome of my attempt to capture the same essence and amplify it. 24 puzzle types invented by puzzle authors from 24 different countries are featured. Hope you enjoy!

#### Theme

The table below should be self-explanatory.

	Loop	Shading	Numbers & Letters	Object	Region
	INDIA	TURKEY	VIETNAM	JAPAN	CHINA
Acia	Balance Loop	Tapa	Partiti	Tren	Triangular Dissection
Asia	Prasanna Seshadri	Serkan Yürekli	Lại Văn Đức Thịnh	Shin'ichi Aoki	Yanzhe Qiu
	2015	2007	2017	2006	2021
	FR.A	NCE	NETHERLANDS	ITALY	UNITED KINGDOM
Western Europe	Hitori S	litherlink	Japanese Sums	Atomic Attraction	Double Area Division
Western Europe	Denis	Auroux	Tim Peeters	Alberto Fabris	David McNeill
	2011		2003	2009?	2014
	SLOVAKIA	HUNGARY	POLAND	CZECHIA	GERMANY
Central Europe	Kropki Loop	Coral	Antiknight Sudoku	Magnets	Compass
Centrat Europe	Matúš Demiger	Zoltán Horváth	Michał Stajszczak	Jaroslav Müller	Silke Berendes
	2016	2001	2006	2001	2013
	BOSNIA	CROATIA	SERBIA	BULGARIA	BELARUS
Eastern Europe	Bosnian Road	White Pentominoes	Four Snails	Stitches	Pins
Eastern Europe	Dragan Tolomanoski	Zrinka Kokot	Nikola Živanović	Atanas Georgiev	Vladimir Portuglaov
	2009	2012	2009	2019	2015
	BRAZIL	UNITED STATES	CANADA	ARGENTINA	RUSSIA
Other	Earthworms	International Borders	Kakuro	Battleships	Countries
Other	Ricardo Kossatz	Palmer Mebane	Jacob Funk	Jaime Poniachik	Andrey Bogdanov
	2007	2009	1966	1982	2003

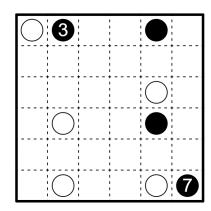


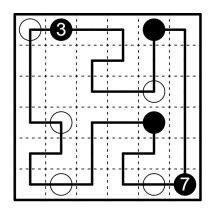
### Asia/Loop & Path: Balance Loop (55 points)

History: Invented by Prasanna Seshadri (India). First appeared on *The Art of Puzzles* blog on 10th February 2015.

**Rules:** Draw a single closed loop that passes through every cell containing a circle. For white circles, the loop segments extending from the circle on both sides must be of equal length before turning; for black circles, these segments must be of unequal length. If a number is provided, it indicates the sum of the lengths of the loop segments on both sides of the circle.

#### **Example and Solution:**





### Asia/Shading: Tapa [Classic] (70 points)

**History:** Invented by Serkan Yürekli (Turkey). First appeared on the 2nd round of the Internet Puzzle Solvers' Test in 2007.

### Asia/Numbers & Letters: Partiti (30 points)

**History:** Invented by Lại Văn Đức Thịnh (Vietnam). First appeared as a submission to the Puzzle Innovations Contest on 3rd October 2017.

**Rules:** Fill each cell with one or more digits from 1 to 9 such that no digit appears more than once in any cell. Any two cells that share a digit must not be adjacent, not even diagonally. The clue numbers indicate the sum of the digits entered in the associated cells.

1	5	5	1
3	6		4
3		6	8
8	5	11	11

<sup>1</sup> 1	<sup>5</sup> 5	23	<sup>1</sup> 1
<sup>3</sup> 3	<sup>6</sup> 6	7	<sup>4</sup> 4
<sup>3</sup> 12	9	່ຳ23	8 <sup>8</sup>
8 <sup>8</sup>	<sup>5</sup> 5	47	<sup>1</sup> 56

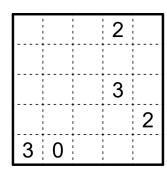


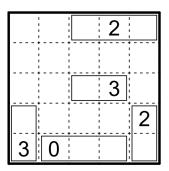
### Asia/Object: Tren (50 points)

**History:** Invented by Shinichi Aoki (Japan). First appeared on the semifinals of the 15th All-Japan Puzzle Championship in 2006.

Rules: Place train cars into the grid; each car occupies either 1×2 or 1×3 cells. Every numbered cell must belong to a train car, with the number indicating the count of unoccupied cells available for the car's movement along its longest axis, without being obstructed by another car or the edge of the grid. Each train car must contain exactly one number.

#### Example and Solution:

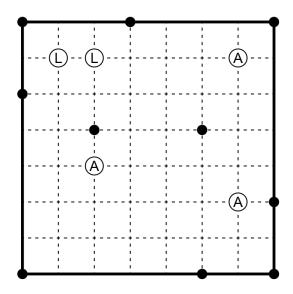


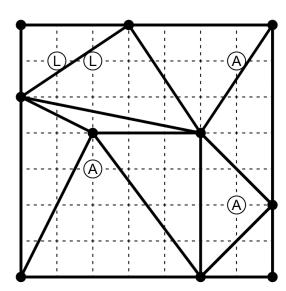


### Asia/Region: Triangular Dissection (20 points)

**History:** Invented by Yanzhe Qiu (China). First appeared at the World Sudoku+Puzzle Convention (13th-21st November 2021).

Rules: Divide the grid into triangles so that every vertex of each triangle lies on a marked dot. Each triangle may contain at most one letter. A triangle that contain an "L" must be a right triangle (one 90° angle), while a triangle that contain an "A" must be an isosceles triangle (two sides of equal length). Letters must lie entirely within a single triangle (they may not rest on an edge), and no dot may be located inside or on the edge of any triangle.







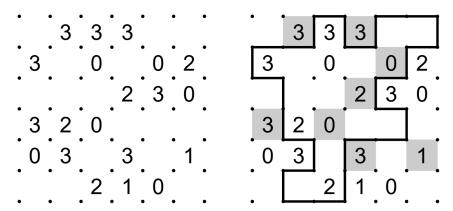
### Western Europe/Loop & Path+Shading: Hitori Slitherlink (30 points)

**History:** Invented by Denis Auroux (France). First appeared during the 4th round of the 2010 French / Belgian qualification test on 26th June 2010.

**Rules:** Shade some of the cells containing numbers so that each row and each column contains no duplicate digits. Shaded cells must not touch each other horizontally or vertically, and all unshaded cells must form one connected region. Then, draw a single closed loop along the grid lines so that each **unshaded** numbered cell indicates how many of its four edges are used by the loop.

For credit, it is sufficient to draw the loop.

#### Example and Solution:



### Western Europe/Numbers & Letters: Japanese Sums [Classic] (40 points)

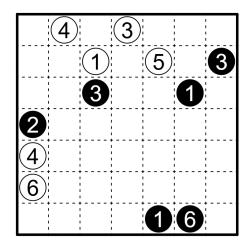
**History:** Invented by Tim Peeters (Netherlands). First appeared during the 5th round of the 12th World Puzzle Championship on 16th October 2003.

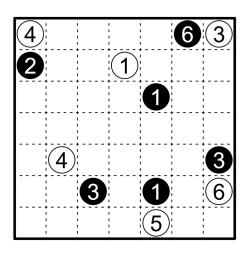
### Western Europe/Object: Atomic Attraction (20 points)

History: Likely invented by Alberto Fabris (Italy) in the late 2000s.

**Rules:** Each black and white circle in the grid represents an atom. Move each atom horizontally or vertically by the number of cells indicated on it. After all moves, the atoms must form a set of molecules, each consisting of one white atom and one black atom that are connected horizontally, vertically, or diagonally. Molecules must not touch each other, not even diagonally.

A blank grid will be provided with the puzzle. You may either mark the final positions on the blank grid or indicate the movements with arrows on the puzzle.







### Western Europe/Region: Double Area Division (20 points)

**History:** Originally an unnamed instructionless puzzle by David McNeill (Northern Ireland). First appeared during the 5th round of the 23rd World Puzzle Championship on 14th August 2014.

**Rules:** Divide the two grids identically. In the corresponding regions of the two grids, there must be exactly one blank cell, and no region may contain duplicate numbers.

For credit, it is sufficient to divide either of the grids.

#### **Example and Solution:**

1	1	8	7	5
2				6
4	7	1	5	7
5	6	3	6	8
3	7	8	3	

3	6	5	3	1
4	5	2	4	2
8	6	4	2	3
1				4
2	5	6	1	,

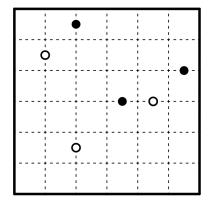
1	1	8	7	5
2	8	4	8	6
4	7	1	5	7
5	6	3	6	8
3	7	8	3	

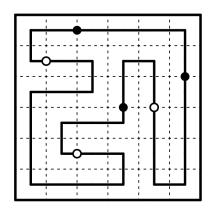
3	6	5	3	1
4	5	2	4	2
8	6	4	2	3
1	7	2	7	4
2	5	6	1	

### Central Europe/Loop & Path: Kropki Loop (20 points)

**History:** Invented by Matúš Demiger (Slovakia). First appeared during the 3rd round of the 25th World Puzzle Championship on 20th October 2016.

**Rules:** Draw a single closed loop that passes through every cell and all of the given dots. When the loop passes through a white dot, the number of cells on one side (prior to turning) must differ by 1 from the number on the opposite side; when it passes through a black dot, the number on one side must be exactly twice that on the other side. (If a straight segment passes through multiple dots, ignore all but the first when counting cells.) Not all possible dots are marked.





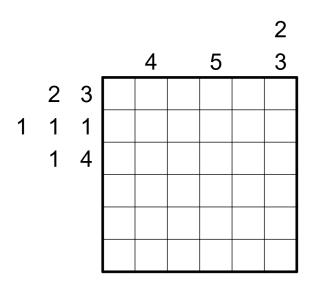


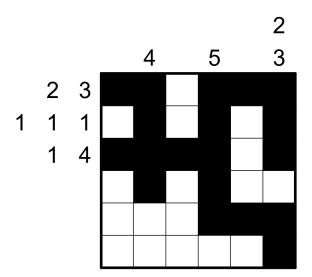
### Central Europe/Shading: Coral (45 points)

History: Invented by Zoltán Horváth (Hungary). First appeared in Logika magazine in December 2001.

**Rules:** Shade some cells so that all shaded cells form one connected group. The numbers outside the grid indicate, in any order, the lengths of contiguous blocks of shaded cells in the corresponding row or column. Every unshaded cell must be connected to the grid's boundary. No 2×2 block of cells may be entirely shaded.

#### Example and Solution:





### Central Europe/Numbers & Letters: Antiknight Sudoku (65 points)

History: Invented by Michał Stajszczak (Poland). First appeared on Ed Pegg Jr.'s website on 20th August 2006.

Rules: Fill each empty cell with digits from 1 to 9 so that each digit appears exactly once in every row, column, and 3×3 box. No two identical digits may be placed a knight's move apart.

1			
	2		5
თ		4	
			3

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



### Central Europe/Object: Magnets [Classic] (55 points)

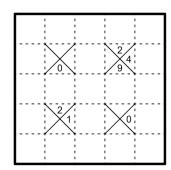
**History:** Likely invented by Jaroslav Müller (Czech Republic) for the 13th round on 10th World Puzzle Championship on 12th October 2001.

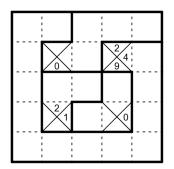
### Central Europe/Region: Compass (15 points)

**History:** Invented by Silke Berendes (Germany). First appeared during the 5th round of Logic Masters 2013 (7th-9th June 2013).

**Rules:** Divide the grid so that each region contains exactly one compass. In each region, the number on the compass indicates the count of cells within that region that lie in the specified direction, beyond the compass cell.

#### **Example and Solution:**

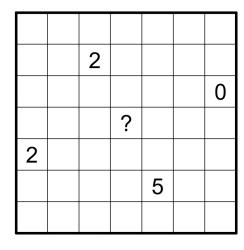


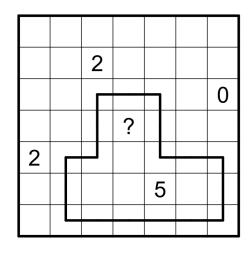


### Eastern Europe/Loop & Path: Bosnian Road (35 points)

**History:** Likely invented by Dragan Tolomanoski (Bosnia and Herzegovina) for the 2009 Zagorje Open (14th–16th August 2009).

**Rules:** Draw a single closed loop that does not touch itself, not even diagonally. The loop must not pass through any cell containing a number. Each number indicates the total count of adjacent cells (horizontally, vertically, and diagonally) that are part of the loop.





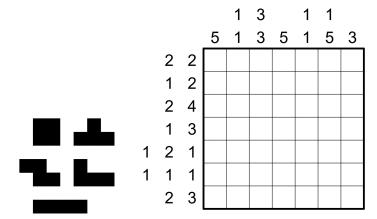


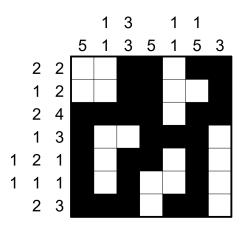
### Eastern Europe/Shading: White Pentominoes (60 points)

**History:** Taken from a puzzle by Zrinka Kokot (Croatia) for the 5th round of the 21st World Puzzle Championship on 4th October 2012.

**Rules:** Shade some cells so that The numbers on the left and top indicate the lengths of contiguous sequences of shaded cells in each row or column (order is irrelevant). All remaining unshaded cells must form polyominoes in the list that do not touch one another, not even diagonally. Polyominoes may be rotated but not reflected.

#### **Example and Solution:**





### Eastern Europe/Numbers & Letters: Four Snails (85 points)

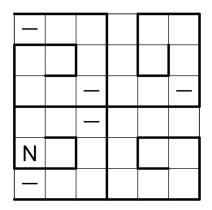
History: Invented by Nikola Živanović (Serbia) in around 2009.

**Rules:** Fill some cells with letters so that each provided word can be read along a snail-shaped path that spirals inward from the outer edge. In every row and column, each letter may appear at most once, and each cell may contain at most one letter. Cells marked with a hyphen ("-") must remain empty. Some letters are already provided.

#### **Example and Solution:**

CZECHIA
HUNGARY
POLAND
SLOVAKIA

Visegrád Group



_	Н	U	С	I	
R	Υ	Z	Z	Α	Н
Α	G		Ш	C	
	Α		0	L	S
Z	D	┙	٧		Α
	Р	0	Α	K	



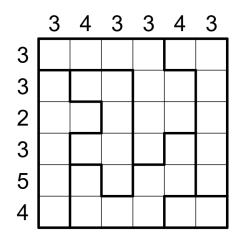
### Eastern Europe/Object: Stitches (30 points)

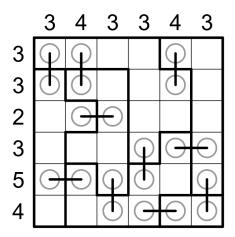
History: Invented by Atanas Georgiev (Bulgaria). First appeared on his website in 2019.

**Rules:** Each region must be connected to every one of its adjacent regions by exactly one stitch. A stitch is a line segment spanning two orthogonally adjacent cells from different regions. The numbers on the left and top indicate the required number of stitch endpoints in the corresponding row or column.

It is not necessary to mark the endpoints of the stitches.

#### **Example and Solution:**

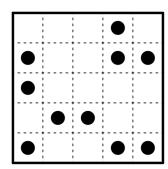


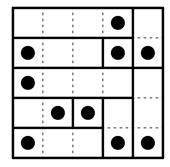


### Eastern Europe/Region: Pins (45 points)

**History:** Invented by Vladimir Portuglaov (Belarus). First appeared as an instructionless puzzle during the 8th round of the 24th World Puzzle Championship on 16th October 2015.

**Rules:** Divide the grid into rectangles of size 1×1, 1×2, 1×3, or 1×4. Each rectangle must contain exactly one dot, and no two rectangles of the same size may touch one another, not even diagonally.





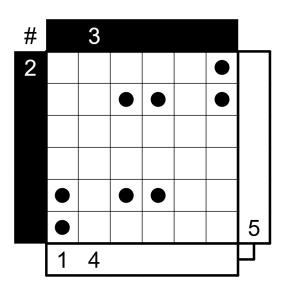


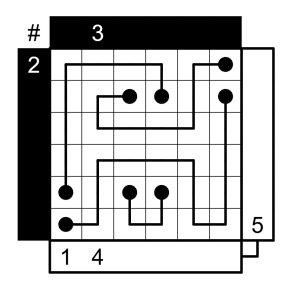
### Other/Loop & Path: Earthworms (50 points)

**History:** Invented by Ricardo Kossatz (Brazil). First appeared during the 4th round of the 16th World Puzzle Championship on 8th October 2007.

**Rules:** Connect each dot to exactly one other dot with a path. Every cell must be part of a path. The numbers on the **left and top** indicate the number of distinct paths crossing each row or column, while the numbers on the **right and bottom** indicate the total number of turns made by the paths in that row or column.

#### Example and Solution:

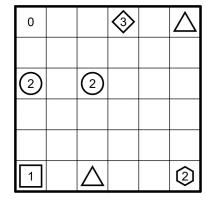


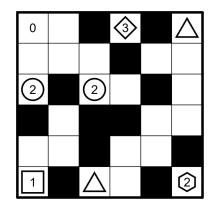


### Other/Shading: International Borders (50 points)

History. Invented by Palmer Mebane (United States). First appeared on Palmer's blog on 19th September 2009.

Rules: Shade some cells to partition the grid into edge-connected regions of unshaded cells ("countries"), one for each shape indicated by the clues. Each country must contain all clues of its associated shape. Clues without a designated shape may belong to any country. The clue numbers indicate the count of shaded cells among the four adjacent cells. In addition, every shaded cell must be a border cell; that is, it must be adjacent to at least two unshaded cells that belong to different countries.







### Other/Numbers & Letters: Kakuro [Classic] (20 points)

History: Invented by Jacob E. Funk (Canada). First appeared on Official Crossword Puzzles magazine in 1950.

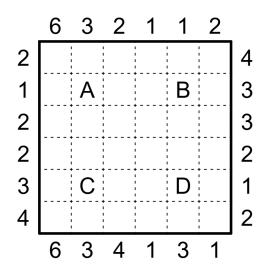
### Other/Object: Battleships [Classic] (15 points)

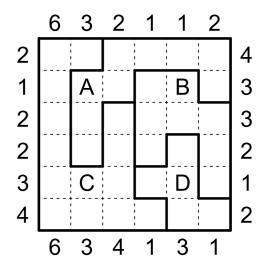
**History:** A version without outside clues was invented by Jaime Poniachik (Argentina) and first appeared on *Humor & Juegos* magazine in 1982. Outside clues were added by Peter Gordon and Mike Shenk (both United States) in 1992.

### Other/Region: Countries (50 points)

History: Invented by Andrey Bogdanov (Russia). First appeared on Internet Puzzle Solvers' Test (IPST) in June 2003.

**Rules:** Divide the grid into connected regions such that each region contains exactly one of the given letters. Every region must extend to the edge of the grid. The numbers outside the grid indicate the number of cells in the corresponding row or column that belong to the same region as the one that is adjacent to the number.





NAME:	COUNTRY:	POINTS:



## 22<sup>ND</sup> 24 HOURS PUZZLE CHAMPIONSHIP

29–30 SEPTEMBER 2025 EGER

#### **PUZZLES BY:**

### Wei-Hwa Huang (USA)

Skyscrapers (Classic) 95 POINTS (5+80+10)

Skyscrapers (Regions but no Columns) 30 POINTS
Skyscrapers (Regions but no Rows) 30 POINTS

Easy As (Classic) 25 POINTS (5+15+5)

Easy As (Regions but no Columns) 20 POINTS Easy As (Regions but no Rows) 25 POINTS

Kropki (Classic) 115 POINTS (10+10+95)

Kropki (Regions but no Columns) 50 POINTS

Kronki (Regions but no Columns) 30 POINTS

Kropki (Regions but no Rows) 95 POINTS Classic Not-Quite-Sudoku 20 POINTS (5+5+10)

XV Not-Quite-Sudoku 120 POINTS (10+45+65)

Odd/Even Not-Quite-Sudoku 70 POINTS (15+5+50)
Diagonal Not-Quite-Sudoku 100 POINTS (20+20+60)

Antiknight Not-Quite-Sudoku 120 POINTS (15+45+60)

Non-Consecutive Not-Quite-Sudoku 85 POINTS (25+60)

TOTAL 1000 POINTS

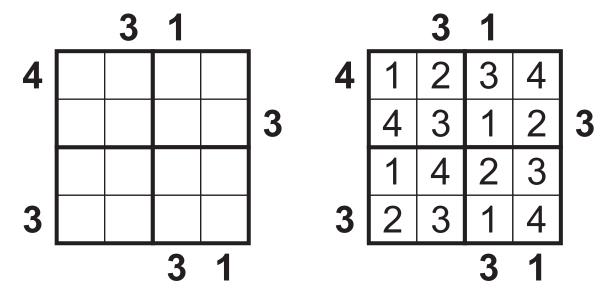


# Skyscrapers (Classic) Standard puzzle, no instruction given here.

# Skyscrapers (Regions but no Columns) Follow the rules for classic Skyscrapers, but with the following two changes:

Each outlined region must contain every number exactly once.

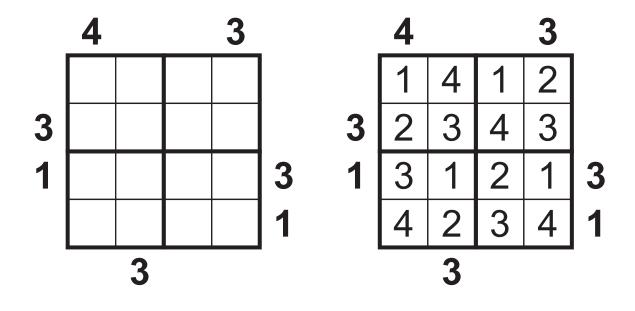
There are no constraints on how many times a number can appear in each column.



# Skyscrapers (Regions but no Rows) Follow the rules for classic Skyscrapers, but with the following two changes:

Each outlined region must contain every number exactly once.

There are no constraints on how many times a number can appear in each row.





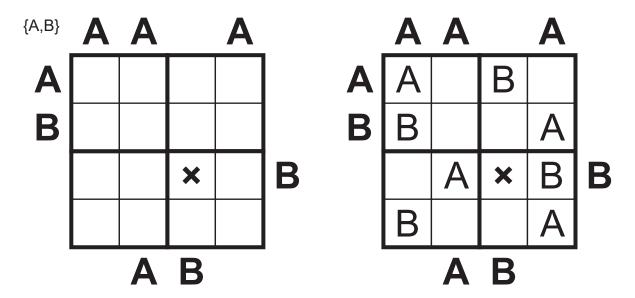
**PUZZLES BY** Wei-Hwa Huang (USA)

# Easy As (Classic) Standard puzzle, no instruction given here.

# Easy As (Regions but no Columns) Follow the rules for classic Easy As, but with the following two changes:

Each outlined region must contain every letter exactly once.

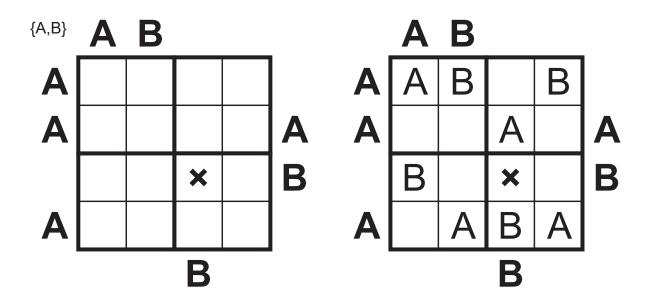
There are no constraints on how many times a letter can appear in each column.



# Easy As (Regions but no Rows) Follow the rules for classic Easy As, but with the following two changes:

Each outlined region must contain every letter exactly once.

There are no constraints on how many times a letter can appear in each row.



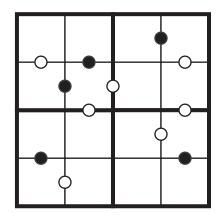


Kropki (Classic)
Standard puzzle, no instruction given here.

Kropki (Regions but no Columns)
Follow the rules for classic Kropki, but with the following two changes:

Each outlined region must contain every number exactly once.

There are no constraints on how many times a number can appear in each column.

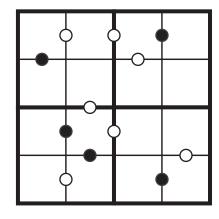


3	1	4	2
<b>4</b> •	2	1	3
4	1	3	2
2	3	1	4

Kropki (Regions but no Rows)
Follow the rules for classic Kropki, but with the following two changes:

Each outlined region must contain every number exactly once.

There are no constraints on how many times a number can appear in each row.



2	3	2	4
4	1	3	1
1	Ž	1	3
3	4	4	• Ž



#### PUZZLES BY Wei-Hwa Huang (USA)

# Classic Not-Quite-Sudoku

Put a digit from 1 to N (N is the number of cells in each row) into each cell, so that **at least two** of the following statements are true:

- \* Each row contains every digit once.
- \* Each column contains every digit once.
- \* Each thick outlined region contains every digit once.

Due to the nature of this puzzle, two example puzzles are provided for the first puzzle type.

1		2	
		3	
	2		
		4	1

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

1	3		2
		3	
	2		
3		4	1

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

#### 22<sup>ND</sup> 24 HOURS PUZZLE CHAMPIONSHIP 29–30 SEPTEMBER 2025 EGER



#### PUZZLES BY Wei-Hwa Huang (USA)

# XV Not-Quite-Sudoku

Follow the rules for Classic Not-Quite-Sudoku. In addition:

All orthogonally adjacent cell pairs that have a sum of 5 are marked with a V, all pairs that have a sum of 10 are marked with an X, and all other sums are not marked.

	V			)	<sup>6</sup>
_x_	2				
_X_		V	V		
		_v_	_v_	2	
		v_		)	<b>(</b>
)	(			<b>v</b>	2

5	3	1	2	4 >	<sup>6</sup>
4	2	6	1	3	5
4 - <u>x</u> 6 -x	1	2	4	5	3
<b>4</b>	5	3,	1	2	6
3	1	2	5	4 >	۴6
4	۲6	5	3	1	2



# Odd/Even Not-Quite-Sudoku

Follow the rules for Classic Not-Quite-Sudoku. In addition: All cells with a circle should contain an odd digit. All cells with a square should contain an even digit.

2		
	3	
		4

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

# Diagonal Not-Quite-Sudoku Follow the rules for Classic Not-Quite-Sudoku. In addition:

All digits on each of the two main diagonals are different.

7			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		0000000	2
	,3		
*******	4		

\ <u>A</u> _	2	3	,4
3	4		2
1	,3	2	4
,2	4	1	3



# Anti-Knight Not-Quite-Sudoku Follow the rules for Classic Not-Quite-Sudoku. In addition:

Follow the rules for Classic Not-Quite-Sudoku. In addition: Cells that are a knight's move apart cannot contain the same digit.

3		
		2
		1

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

# Non-Consecutive Not-Quite-Sudoku

Follow the rules for Classic Not-Quite-Sudoku. In addition: Cells that share an edge cannot contain digits that differ by 1 (but they may differ by 0).

		4	
2			
		1	
5			
		6	
4			

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

# Instructions Booklet



# **22<sup>nd</sup>** 24 Hours Puzzle Championship

29-30<sup>th</sup> September 2025 Hotel Eger and Park Eger, Hungary

Puzzles by:

## Tawan Sunathvanichkul

<ol> <li>Twins</li> <li>Pentomino in the Box</li> <li>2D Mastermind Sudoku</li> <li>Minesweepers</li> <li>Irregular Minesweepers</li> <li>Tumbleweed Loop</li> <li>Isometric Sudoku</li> <li>3D Scrabble</li> <li>Pentominous</li> <li>Pentominous XL</li> <li>Spy Battleships</li> <li>Tasquare</li> <li>Monopoly Sudoku</li> </ol>	45* points 85 points 100 points 40 points 50 points 50 + 60 points 35 points 100 points 10 points 25 + 40 points 40 points 10 + 15 points 60 points
•	•

\*Partial Scoring available

Total: 1000 points

**Puzzle ideas** were obtained as follows: Hiroshi Kato (2D Mastermind Sudoku), Seren (Tumbleweed Loop), Riad Khanmagomedov (Spy Battleships, Star Battle Kakuro), Nikoli (Tasquare), Nikola Zivanovic (Monopoly Sudoku), Serkan Yurekli (Sigma Snake)

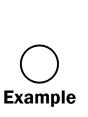
Special thanks to Joseph Howard, Walker Anderson and Pal Madarassy for test solving.

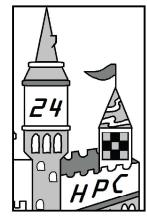
### Puzzle 1: Twins (45)\*

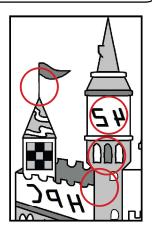
Locate 8 differences between the two pictures while ignoring reflection. Differences are reasonably visible and will not be due to pixelation. Do not use a circle larger than the given example when indicating the differences.

#### \*Partial Scoring:

5 points for each difference found. 45 points for all difference found.



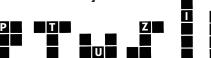


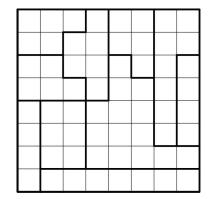


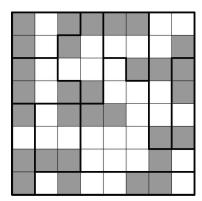
#### Puzzle 2: Pentomino in the Box (85)

Place the given pentominoes in the grid so they don't touch each other, not even diagonally. Pentominoes can be rotated and reflected. Each bolded region must contain three cells that belong to two different pentominoes.

[Example by Bram de Laat]



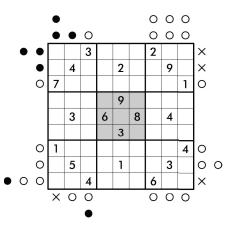


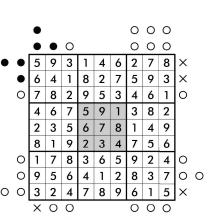


#### Puzzle 3: 2D Mastermind Sudoku (100)

Fill in the grid with numbers 1-9 so that each number appears once in each row, column and bolded 3x3 region. The central 3x3 region represents the answer of a Mastermind puzzle while the four corner 3x3 regions represent guesses. A black circle is given when a correct number is in the correct cell in that row or column. A white circle is given when a correct number is in the wrong cell in that row or column. A cross means there are no digits in that row or column that appear in the correct answer.

[Example by Takeya Saikachi]



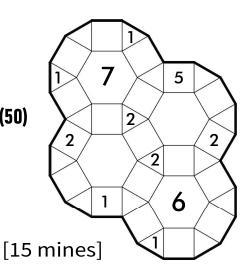


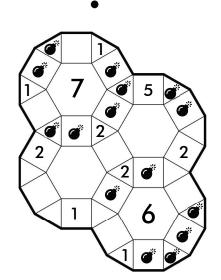
## Puzzle 4: Minesweepers (40)

Normal Minesweepers rules apply.

## Puzzle 5: Irregular Minesweepers (50)

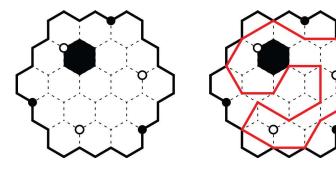
Normal Minesweepers rules apply. The grid is irregular.





### Puzzle 6: Tumbleweed Loop (50 + 60)

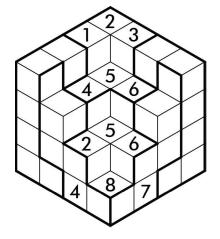
Draw a non-intersecting loop consisting of line segments in each hexagon. Each segment connects two of the hexagon's vertices and does not lie on the dotted edge. The loop must turn at every vertex. White circles must be inside the loop and black circles are outside the loop. Shaded hexagons do not contain line segments. [Example by David Altizio]

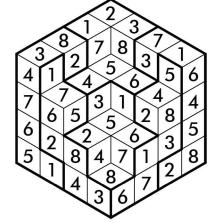


### Puzzle 7: Isometric Sudoku (35)

Fill in the grid with numbers 1-8 so that each number appears exactly once in each "row" and bolded region. Rows in Isometric Sudoku pass through opposite parallel sides of each quadrilateral. Rows may bend across the surface of the cube to travel in a "straight" line.

[Example by Sinchai Jaturangkhajit]



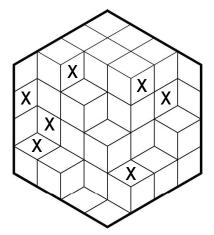


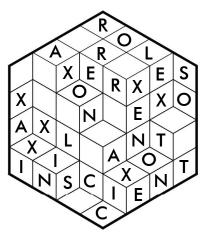
### Puzzle 8: 3D Scrabble (100)

Place the listed words (ignoring hyphens and spaces) into the grid so they read from left-right or top-bottom in one of three isometric "rows". Rows pass through opposite parallel sides of each quadrilateral. Rows may bend across the surface of the cube to travel in a "straight" line. No unlisted words of 2 or more letters may be formed, and all the words must be connected.

All instances of "X" are given.

ANT	ROLEX
AXE	S0
AXL	TOXIC
AXON	X AXIS
EXO	XENON
INSCIENT	XERXES
LIN	XXI
OREO	



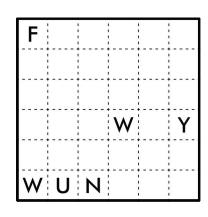


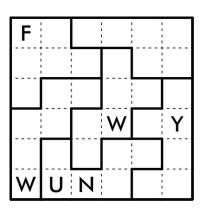
## Puzzle 9: Pentominous (10)

Normal Pentominous rules apply.

## Puzzle 10: Pentominous XL (25 + 40)

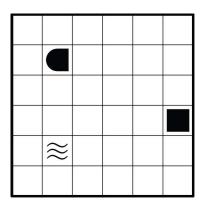
Divide the grid into hexominoes (six-cell regions) so that no two hexominoes of the same shape (including rotations/reflections) share an edge. A cell with a letter indicates the pentomino that can fit into that region.

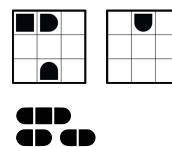


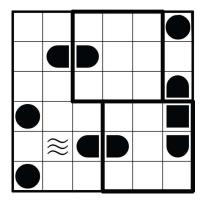


### Puzzle 11: Spy Battleships (40)

Locate the given fleet of battleships in the grid. No ships can touch each other, not even diagonally. You are given satellite photos of the completed grid. Photos can be rotated but not reflected. Photos do not overlap. You do not have to show where each photo is. Ships may not occupy cells with waves.

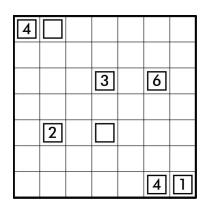


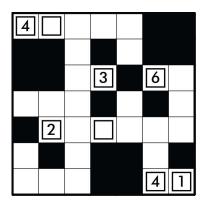




### **Puzzle 12: Tasquare (10 + 15)**

Shade some squares, of sizes nxn, into the blank cells so no two squares touch each other orthogonally. The remaining unshaded cells must form one connected area. Clued cells represent the total size of the squares that share an edge with the clue. If a clue has no number, marked as empty squares, it must share an edge with at least one shaded square. [Example by Nikoli]





### Puzzle 13: Monopoly Sudoku (60)

Fill in the grid with numbers 1-9 so that each number appears once in each row, column and bolded 3x3 region. The grid represents the Monopoly boardgame. On each side of the board are six properties, shaded in grey. For each side, the values of the properties must increase along the clockwise direction. [Example by Nikola Zivanovic]

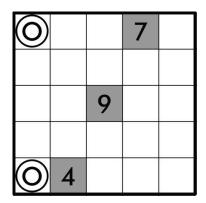
							~
			ð				<b>O</b>
	1	2		7	9		
	2		6		8		
MD		4		9			
	4		7		6		
	9	7		5	1		
↑ <sup>C</sup> O						<u> </u>	El S

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

#### Puzzle 14: Sigma Snake (20 + 35 + 30)

Locate a lettered-snake in the grid. The snake does not touch itself, not even diagonally. The letters on the snake reads from head to tail as a consecutive string of words. The snake cannot pass through numbered cells which represent the sum of all worded numbers surrounding that cell. The head and tail of the snake is given as circles (you have to determine the head and the tail). Words cannot be repeated. [Example by Serkan Yurekli]

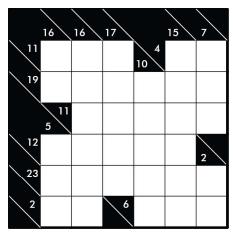
1: ONE, 2: TWO, 3: THREE, 4: FOUR, 5: FIVE



0	W	Т	7	
		Е	<b>V</b>	I
		9		F
Ν	Е	T		E
0	4	Н	R	Е

### Puzzle 15: Star Battle Kakuro (100)

Fill in numbers 1-9 so that the sum of each horizontal group equals the digit on the left, and the sum of each vertical group equals the digit on the top. Numbers may not repeat in any same sum. In addition, there are two stars (one in the example) in each row and column. Cells containing a star cannot touch each other, not even diagonally.



	16	16	17		15	7
11	7	4	*	10 4	3	1
19	9	3	1	2	*	4
	5 11	*	3	1	5	2
12	2	1	5	*	4	2
23	3	6	8	4	2	*
2	*	2	6	3	1	2

## Puzzle 16: DIY Word Search (50)\*

Use the given cubes to fill in the missing spaces in the 3D grid, without any rotation or reflection. Some cubes' letters may be obscured by other blocks. Then find the listed board games in the grid. Words are hidden in any one of six possible straight directions. A "straight" line passes through opposite parallel sides of each quadrilateral. Lines may bend across the surface of the cube.

#### \*Partial Scoring:

50 points for every word found minus 10 points for every word not found. Lowest score is zero.

