



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

INSTRUCTION BOOKLET ROUND 7 - ROUND 14

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ROUND12 MATEJ UHER

ROUND13 PRASANNA SESHADRI

ROUND14 IVAN KOSWARA (CHAOTIC_IAK), AMMAR FATHIN SABILI, CRAIG KASPER, DAVID ALTIZIO, DOHZ, DPAD, INVALIDD, JKITTYKITKAT, KAGAMI AME, KUSANE HEXAKU, LOVEMATHBOY, STEFAN LIEW, YOSH

29–30 SEPTEMBER 2025 EGER



PUZZLES BY **Team China**

Theme notes: In this round there are five categories (Numbers/Symbols, Shading/Objects, Loops/Paths, Division, and Wildcards), each with five puzzles, one from each of the five authors.

Glossary notes:

- "Connected" and "adjacent" always means connectivity via edges, while "diagonally connected" and "touching" are used to refer to connectivity via vertices.
- Fully black cells are not part of the board (i.e. treated as holes), and are different from shaded cells (in a shading puzzle) and cells with a cross (which are treated as empty cells).

#01	Scrabble [Classic]	See Classic IB for example
30 pts	See Classic IB for rules.	
#02	Sudoku (Thermo) [Classic]	See Classic IB for example
90 pts	See Classic IB for rules.	
#03	Sudoku (Search Closest 9)	Example from SGP 2025 R8
65 pts	Apply classic Sudoku rules (see Classic IB). Each arrow must point to at	t least one cell containing the digit 9,

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

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

#04 | Tontonbeya

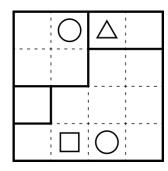
digit 9, in cells.

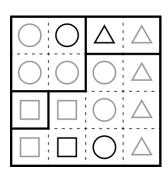
Example from puzz.link

65pts

Place a circle, triangle, or square into each empty cell. Within each region, all cells with the same symbol must form one connected group (called a "cluster"). All clusters in the same region must have the same size, and each cluster must be adjacent to exactly one other cluster with the same symbol in a different region.

and the digit in the cell with the arrow must be equal to the distance from this cell to the first cell with a





29–30 SEPTEMBER 2025 EGER



PUZZLES BY **Team China**

#05

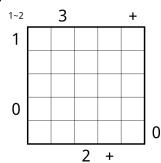
Doppelblock (Plus)

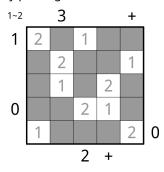
Example by Yao Yuan

65_{pts}

Place a number from the indicated list into some empty cells so that each number in the list appears exactly once in each row and column. Numbers outside the grid indicate the sum of all numbers between the <u>first two</u> empty cells in the row or column from the respective direction. Some numbers may be already placed in the grid. Cells marked with a cross cannot contain a number.

Some positive numbers outside the grid are replaced by plus signs.





#06

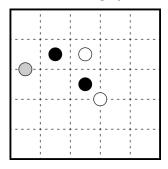
Yin-Yang (Stained Glass)

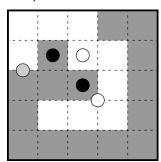
Example adapted from PGP 2023 R8

15_{pts}

Shade some cells so that all shaded cells form one connected group and so do all unshaded cells. No 2×2 group of cells is entirely shaded or entirely unshaded.

The colors of dots indicate the relative number of shaded and unshaded cells among all those that touch the dot: white dots mean that there are more unshaded cells, black dots mean that there are there are more shaded cells, and grey dots mean that there are an equal number of shaded and unshaded cells.





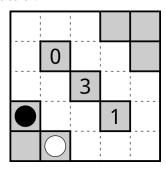
#07

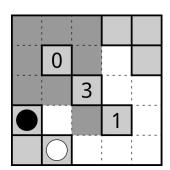
Intermingle

Example by Qiu Suzhe

60pts

Shade some cells so that the shaded cells form one diagonally connected group and so do all unshaded cells. No 2×2 group of cells is entirely shaded or entirely unshaded. The number of shaded cells and unshaded cells in the grid must be equal. Grey cells are neither shaded nor unshaded; a number in a grey cell indicates either the number of shaded cells or the number of unshaded cells among those that touch the cell, and a black or white circle indicates that a majority (but not all) of the cells that touch the cell are of that color.





29-30 SEPTEMBER 2025 EGER



PUZZLES BY **Team China**

#08

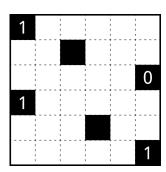
Akari (Anti-Knight)

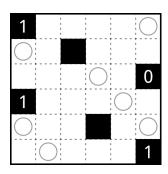
Example by Xu Chenhao

20pts

Apply classic Akari rules (see Classic IB).

In addition, two light bulbs may not be placed in cells that are a knight's move apart. (A knight moves two cells in an orthogonal direction and one cell in a perpendicular direction.)





#09

Star Battle (Incomplete)

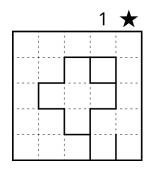
Example by Yao Yuan

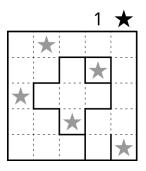
35_{pts}

Place a star in some cells so that the number of stars within each row and each column is equal to the given number outside the grid. No two stars can be placed in touching cells.

In addition, it must be possible to divide the grid into regions along dashed gridlines such that no given border is extraneous, and the number of stars within each regions is also equal to the given number outside the grid.

The region division might not be uniquely determined, and is not necessary for the solution.





#10

Minesweeper (Sudoku)

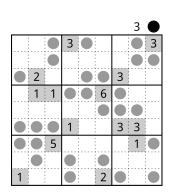
Example from PGP 2024 R8

20pts

Apply classic Minesweeper rules (see Classic IB).

In addition, the number of mines within each row, each column, and each region is equal to the given number outside the grid.

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



29–30 SEPTEMBER 2025 EGER



PUZZLES BY **Team China**

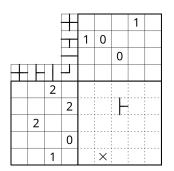
#11

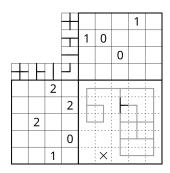
U-Bahn

Example adapted from PGP 2023 R8

80pts

Draw orthogonal lines connecting some pairs of centers of adjacent cells in the main grid to form one connected network. No cell can be connected to exactly one adjacent cell (i.e. no dead ends), but some may have no connections. Numbers outside the grid indicate the number of cells in the row or column that have the corresponding type of connections (crossing, T-junction, straight, or turn), regardless of orientation. The contents of some cell may be given; cells marked with a cross must be left empty.





#12

Slitherlink [Classic]

See Classic IB for example

25pts

See Classic IB for rules.

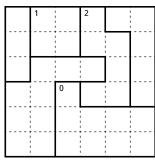
#13

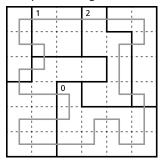
Inequality

Example by Xu Chenhao

25pts

Draw a non-intersecting loop that passes orthogonally through centers of some cells. The loop must visit each region at least twice. Any two visits to the same region must visit a <u>different</u> number of cells. Numbers indicate the number of cells <u>not</u> visited by the loop in the region.





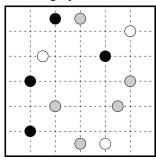
#14

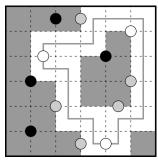
Kurarin

Example from puzz.link

30pts

Draw a non-intersecting loop that passes orthogonally through centers of some cells. The colors of dots indicate the proportion of cells touching the dot that are visited by the loop: white dots mean more than half are visited, grey dots mean exactly half are visited, and black dots mean less than half are visited.





29–30 SEPTEMBER 2025 EGER



PUZZLES BY **Team China**

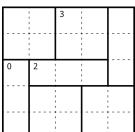
#15

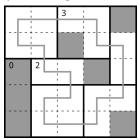
Country Road (Partial)

Example adapted from puzz.link

10pts

Draw a non-intersecting loop that passes orthogonally through centers of some cells. The loop must visit each region <u>at most</u> once. No two cells that are adjacent across a region border can both be unvisited. Numbers indicate the number of cells visited by the loop in the region.





#16

Instructionless

No example puzzle

50pts

Deduce the rules for this puzzle from the given example puzzle and its unique solution (marked with a circle), then solve the puzzle using the deduced rules. The rules must make both the example puzzle and the actual puzzle uniquely solvable. Additional incorrect solutions to the example puzzle may be given and marked with a cross, possibly with additional markings to indicate where the rules are violated.

It is not necessary to state the correct rules; the solution alone is sufficient for full credit.

#17

Araf [Classic]

See Classic IB for example

35_{pts}

See Classic IB for rules.

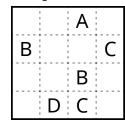
#18

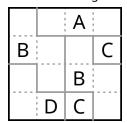
NIKOJI

Example from puzz.link

25pts

Divide the grid into regions along dashed gridlines so that each region contains exactly one letter. Regions containing the same letter must be <u>translationally</u> congruent, including the relative positions of the letters in those regions. Regions containing different letters must not be congruent in any way.





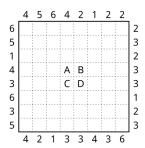
#19

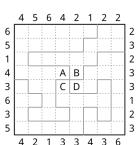
Countries

Example from PGP 2023 R1

90pts

Divide the grid into regions along dashed gridlines so that each region contains exactly one letter. Numbers outside the grid indicate the number of cells in the row or column that are in the same region as the closest cell to the number, including the cell itself.





29-30 SEPTEMBER 2025 EGER



PUZZLES BY **Team China**

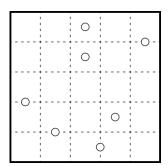
#20

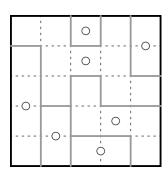
Spiral Galaxies

Example from PGP 2023 R1

10pts

Divide the grid into regions along dashed gridlines so that each region contains exactly one dot. No dot may be on the boundary of a region. All regions must have 180° rotational symmetry, where a dot must be at the point of symmetry of its region.





#21

Count the Shapes (Jigsaw)

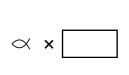
Example by Yao Yuan

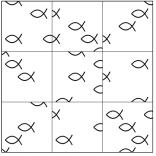
50*_{pts}

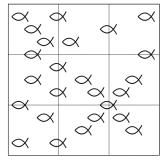
Count the number of copies of the given shape that appear inside the grid. Each copy is completely contained inside the grid, without rotations, reflections, or dilations.

However, the grid has been divided into pieces and rearranged arbitrarily. The pieces are not rotated or reflected.

It is not necessary to recover the original grid. If you submit an integer that is X away from the correct answer, you will max(50-15X, 0) points (otherwise 0 points).









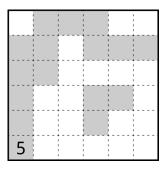
#22

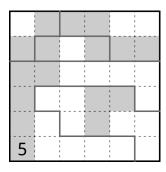
Triple Choco

Example by Qiu Suzhe

20pts

Divide the grid into regions along dashed gridlines so that each region contains exactly <u>three</u> connected group of cells, each group with the same color, and the three groups are all congruent to each other. (If two of the three groups are adjacent, then they must not have the same color.) Numbers indicate the area of one such connected group in the region that it belongs to (that is, it is equal to one third of the area of the entire region).





29–30 SEPTEMBER 2025 EGER



PUZZLES BY **Team China**

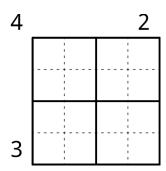
#23

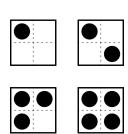
Halfdomino

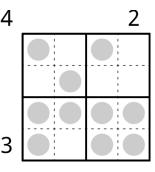
Example by Yao Yuan

15_{pts}

Put all the given pieces into the grid, one tile per region, and without rotation and reflection. Numbers indicate the number of dots that appear in its row, column, or long diagonal.







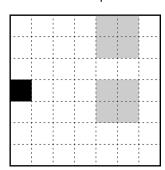
#24

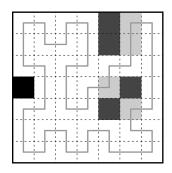
Simple Loop (Hazy)

Example by Du Yuhao

40pts

Shade some of the cells in light grey, so that there is a unique way to draw a non-intersecting loop that passes orthogonally through the centers of all unshaded cells exactly once (and no other cells). Also, draw the aforementioned loop.





#25

Easy as (Curve Data)

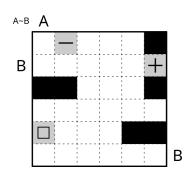
Example by Yao Yuan

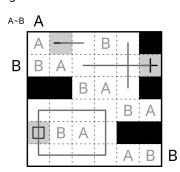
30pts

Place a character from the indicated list into some empty cells so that each character in the list appears exactly once in each row and column. Characters outside the grid indicate the first character in the row or column from the respective direction. Some characters may be already placed in the grid. Cells marked with a cross cannot contain a character.

In addition, draw lines that passes orthogonally through centers of some remaining empty cells so that each connected figure overlaps with exactly one shape clue in a light grey cell, and all remaining empty cells are used by a figure. For each shape clue, the figure that connect to that clue must match the shape, except that the lengths of straight lines do not have to match (but cannot be zero).

Black cells cannot contain a character or part of any figure.





NAME:	COUNTRY:	POINTS:



29–30 SEPTEMBER 2025 EGER

PUZZLES BY:

PUZZLE DUEL

Authors: Alexey Oleshov, Andrey Bogdanov, Anuraag Sahay, Gadjikurban Kurbanov, Ivan Zatrov, Markus Roth, Vladimir Portugalov

POINT A STAR 45 POINTS (20 + 25) 40 POINTS (20 + 20) MINESWEEPER 60 POINTS (20 + 20 + 20) MAXI LOOP 140 POINTS (70 + 70) SUDOKU MINUS ONE LOOK AIR 60 POINTS (30 + 30) 40 POINTS (10 + 30) CLOUDS CONTEXT 40 POINTS (10 + 30) KUROMASU 30 POINTS

KUROMASU KNAPP DANEBEN 60 POINTS (25 + 35)

MASYU FULL 65 POINTS

SLITHERLINK 80 POINTS (30 + 50) SUGURU 120 POINTS (60 + 60)

TREDOKU 65 POINTS

KUROSHIRO 45 POINTS (20 + 25) EASY AS ABC 35 POINTS (15 + 20)

ARITHMETIC SQUARE 80 POINTS (20 + 20 + 20 + 20)

TOTAL 1000 POINTS

https://www.puzzleduel.club/ is an online platform for competitive puzzle solving. It offers a variety of logic puzzles, including both classic and unique types, with a strong focus on daily challenges and contests.

-30 SEPTEMBER 2025 EGER

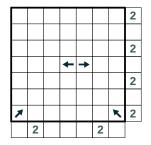


PUZZLES BY PUZZLE DUEL

POINT A STAR

20 + 25 POINTS

Place stars into some empty cells so that cells with the stars do not touch each other even at a point. Each arrow should point to exactly one star. Numbers outside the grid show the number of stars in the corresponding row or column.



	\star				\star		2
*				*			2
		*	+	→		\star	
*				*			2
×	*				\star	×	2
	2				2		

MINESWEEPER

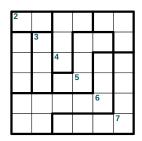
20 + 20 POINTS

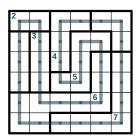
Classic puzzle.

MAXI LOOP

20 + 20 + 20 POINTS

Draw a single closed loop that only travels orthogonally and goes through every cell exactly once. A number given in an outlined region indicates the longest (uninterrupted) length of the loop in that region (counted by number of cells).





SUDOKU MINUS ONE

70 + 70 POINTS

Fill in the white cells with digits from 0 to N, where N is the size of the grid, putting one digit per a cell. Each row, column, outlined area and both main diagonals should contain distinct digits.

0.			
		3	4
			0
	1		

0	3 2 4	2	.1
1	2	. 3	4
3	4	1,	0
2	1	4	3

${\scriptstyle 22^{\text{ND}}}\, {\color{red}{24}}\, \text{hours puzzle championship}$

29–30 SEPTEMBER 2025 EGER

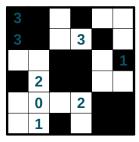


PUZZLES BY PUZZLE DUEL

LOOK-AIR 30 + 30 POINTS

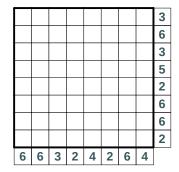
Shade some cells on the board so that every group of shaded cells forms a filled square. Clues represent how many of the five cells (for neighbors and the cell with the clue including itself) are shaded. Two filled squares of the same size may not have a vertical or horizontal line of unshaded cells between them, unless obstructed by another square.

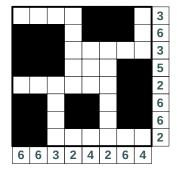
3			
3		3	
			1
	2		
	0	2	
	1		



CLOUDS 10 + 30 POINTS

Shade some rectangular areas in the grid. Each rectangle should have sides at least 2 cell long. Different rectangles cannot touch each other even at a point. Numbers outside show the number of cells occupied by the rectangles in the corresponding row or column.

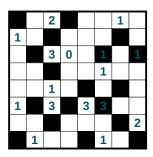




CONTEXT 10 + 30 POINTS

Shade some cells in the grid so that all unshaded cells form an orthogonally connected area. Two shaded cells may not share an edge, though may touch by a corner. An unshaded clue shows the amount of orthogonally adjacent shaded cells. A shaded clue shows the amount of diagonally adjacent shaded cells.

		2				1	
1							
		3	0		1		1
					1		
		1					
1		3		3	3		
							2
	1				1		





PUZZLES BY **PUZZLE DUEL**

KUROMASU 30 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.

		6			7		
						6	
3				3			5
					2		
		12					
2			7				2
	7						
		9			4		

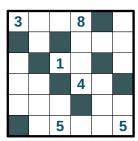
		6			7		
						6	
3				3			5
					2		
		12					
2			7				2
	7						
		9			4		

KUROMASU KNAPP DANEBEN

25 + 35 POINTS

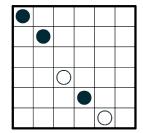
Shade some cells so that all remaining cells are connected orthogonally and no two shaded cells share an edge. Each numbered cell indicates the total count of unshaded cells connected in line vertically and horizontally to the numbered cell including the cell itself. All numbers are wrong and differ from the correct value by 1 (bigger or smaller).

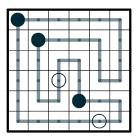
3		8	
	1		
		4	
	5		5



MASYU FULL 65 POINTS

Classic Masyu puzzle rules apply. Additionally the loop must go through all cells.





29–30 SEPTEMBER 2025 EGER



PUZZLES BY PUZZLE DUEL

SLITHERLINK

30 + 50 POINTS

Classic puzzle.

Suguru 60 + 60 Points

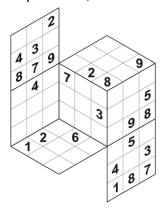
Place a number into each cell so that each bold region contains the numbers from 1 to N, where N is the number of cells in the region. Cells containing the same number must not touch along an edge or a corner. Some numbers may already be given.

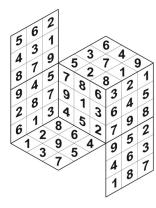
1					
			2		
					3
		4			
				5	

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

TREDOKU 65 POINTS

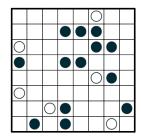
Fill in the cells with digits from 1 to 9, putting one digit per cell. Digits should appear only once in every 3×3 box and 9-square line, which can be straight or bent.

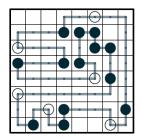




KUROSHIRO 20 + 25 POINTS

Draw a single continuous loop in the grid using horizontal and vertical line segments so that the loop visits every cells with circles, other cells may remain unvisited. It should not cross or overlap itself. The loop must not turn between two consecutively visited circles of the same color. The loop must turn exactly once between two consecutively visited circles of different colors.







PUZZLES BY **PUZZLE DUEL**

EASY AS ABC

15 + 20 POINTS

Classic puzzle.

ARITHMETIC SQUARE

$$20 + 20 + 20 + 20$$
 POINTS

Place the numbers from 1 to 9 into the cells (a different single number in each cell) so that the indicated equations/relations are correct. Evaluate from left-to-right and top-to-bottom (ignore the usual precedence of the operators).

$$\begin{array}{c|cccc}
 & + & + & + & + & > 23 \\
 & + & - & + & + & = 8 \\
 & \times & \times & - & = 8 \\
 & \times & \times & - & = 11 \\
 & = & = & = & = \\
 & 75 & 8 & 9
\end{array}$$

NAME:	COUNTRY:	POINTS:



29–30 SEPTEMBER 2025 EGER

PUZZLES BY:

DERYA HIZARCIOĞLU, EMİN ERZURUMLUOĞLU, FUNDA KARTALOĞLU, JALE TURHAN, ŞABAN ERDOĞAN, YUNUS EMRE BÜYÜKKALE, SERKAN YÜREKLİ

Classic Sudoku 50 POINTS (15 + 35)

Star Battle 70 POINTS (25 + 45)

Tapa 25 POINTS (10 + 15)

Hungarian Tapa 70 POINTS (30 + 40)

Thermo-Skyscrapers 65 POINTS (15 + 50)

Araf 100 POINTS (25 + 75)

Balance Loop 70 POINTS (35 + 35) Pentominous 55 POINTS (25 + 30)

O'utcast 80 POINTS

Scrabble (First Letter) 60 POINTS

TomTom 30 POINTS (10 + 20)

Agre 100 POINTS (45 +55)

Cipher Snake 170 POINTS (60 + 110) Arrow Sudoku 55 POINTS (25 + 30)

TOTAL 1000 POINTS



PUZZLES BY

DERYA HIZARCIOĞLU, EMİN ERZURUMLUOĞLU, FUNDA KARTALOĞLU, JALE TURHAN, ŞABAN ERDOĞAN, YUNUS EMRE BÜYÜKKALE, SERKAN YÜREKLİ

1-2. Classic Sudoku (15 + 35 Points)

Example by GMPuzzles

Insert a number from 1 to 9 into each white cell so that no number repeats in any row, column, or bold region.

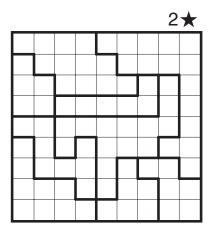
				1	2	3	
1	2	3		8		4	
8		4		7	6	5	
7	6	5					
					1	2	3
	1	2	3		8		4
	8		3		7	6	5
	7	6	5				

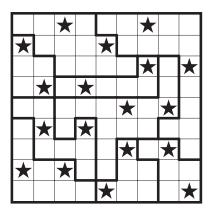
_		_	_		_	_		_
6	5	7	9	4	1	2	3	8
1	2	3	6	5	8	9	4	7
8	9	4	2	3	7	6	5	1
7	6	5	1	2	3	4	8	9
2	3	1	8	9	4	5	7	6
9	4	8	7	6	5	1	2	3
5	1	2	3	7	6	8	9	4
3	8	9	4	1	2	7	6	5
4	7	6	5	8	9	3	1	2

3-4.Star Battle (25 + 45 Points)

Example by GMPuzzles

Fill some cells with stars so that each row, column, and bold region contains two stars. Stars cannot be placed in adjacent cells that share an edge or corner.

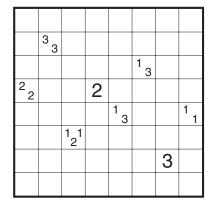


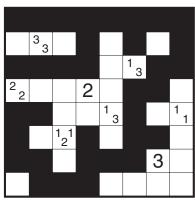


5-6.Tapa (10 + 15 Points)

Example by GMPuzzles

Shade some empty cells black to create a single connected wall. Numbers in a cell indicate the length of consecutive shaded blocks in the neighboring cells. If there is more than one number in a cell, then there must be at least one white (unshaded) cell between the black cell groups. Cells with numbers cannot be shaded, and the shaded cells cannot form a 2×2 square anywhere in the grid.







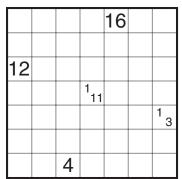
PUZZLES BY

DERYA HIZARCIOĞLU, EMİN ERZURUMLUOĞLU, FUNDA KARTALOĞLU, JALE TURHAN, ŞABAN ERDOĞAN, YUNUS EMRE BÜYÜKKALE, SERKAN YÜREKLİ

7-8. Hungarian Tapa (30 + 40 Points)

Example by GMPuzzles

Variation of Tapa. Shade some empty cells black to create a single connected wall. Cells with numbers cannot be shaded, and the shaded cells cannot form a 2×2 square anywhere in the grid. Each row and column must contain five shaded cells (four for the example). Place a number from 1 to 5 (1-4 for the example) into each shaded cell so that each number appears once in each row and column.

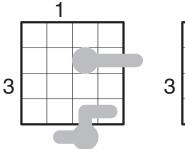


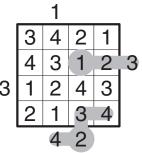
	2	1	3	16	4	
	1		4	3	2	
12	4		1		3	2
4	3	2	1			1
1		3	2	4		1 3
2		4		1		3
3		4		2	1	4

9-10.Thermo-Skyscrapers (15 + 50 Points)

Example by GMPuzzles

Insert a number from 1 to N into each cell in the N by N grid so that no number repeats in any row or column. Also, each number in the grid represents the height of a building and the clues on the outside of the grid indicate how many buildings can be "seen" when looking from that direction. Taller buildings block the view of smaller buildings. Also, digits must be strictly increasing in all thermometer shapes from round bulb to flat end.





11-12.Araf (25 + 75 Points)

Example by GMPuzzles

Divide the grid into some regions formed of edge-adjacent squares. Each cell is part of one region, and each region should contain exactly two given numbers. Each region must have an area that is strictly between those numbers. (This means, for two number clues A and B with A < B, the area C fulfills A < C < B.)

	5	4	3
	4	5	
	6		2
97		(3)(1)
15		5	
	14	3	
13	(5)	18	

	(5)	4	3
	4	(5)	
	6		2
9	7		31
15		5	
 <u>-</u>	14	3	
13	5	18	



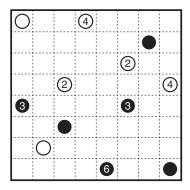
PUZZLES BY

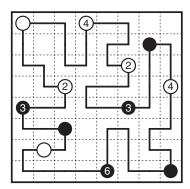
DERYA HIZARCIOĞLU, EMİN ERZURUMLUOĞLU, FUNDA KARTALOĞLU, JALE TURHAN, ŞABAN ERDOĞAN, YUNUS EMRE BÜYÜKKALE, SERKAN YÜREKLİ

13-14.Balance Loop (35 + 35 Points)

Example by GMPuzzles

Draw a single, non-intersecting loop that passes through all cells with circles; the loop may either go straight through or turn at each circle. All white circles must have loop segments of equal length extending from both sides of the circle before turning. All black circles must have loop segments of unequal length extending from both sides of the circle before turning. Numbers, where given, indicate the sum of the loop segment lengths on both sides of the circle. (Note that the total counts are not affected by other circles being crossed before turning.)

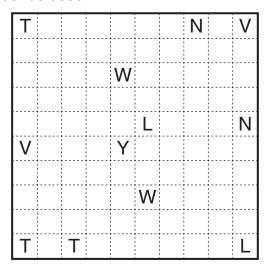




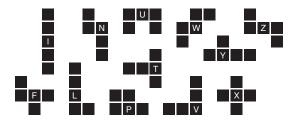
15-16.Pentominous (25 + 30 Points)

Example by GMPuzzles

Divide the grid into pentominoes (five-cell regions) so that no two pentominoes of the same shape (including rotations/reflections) share an edge. A cell with a letter in it must be part of the pentomino shape normally associated with that letter. An inventory of pentominoes is given below the puzzle but not all shapes must be used.



Т	Υ	Υ	Υ	Υ	N	N	Ν	Z	٧
Т	Τ	Т	Υ	N	Ν	Z	Z	Z	٧
Т	Z	Ν	Ν	W	W	Z	٧	٧	V
V									
٧	Τ	Т	Т	Υ	L	W	Р	Р	Ν
٧	Ν	Т	N	Υ	L	L	L	L	Ν
N	Ν	Τ	N	Υ	Υ	W	W	N	Ν
N	Т	N	Ν	Υ	W	W	U	Ν	U
Ν	Τ	N	Р	Р	W	L	U	U	U
T									





PUZZLES BY

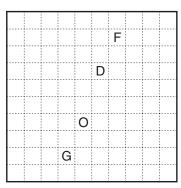
DERYA HIZARCIOĞLU, EMİN ERZURUMLUOĞLU, FUNDA KARTALOĞLU, JALE TURHAN, ŞABAN ERDOĞAN, YUNUS EMRE BÜYÜKKALE, SERKAN YÜREKLİ

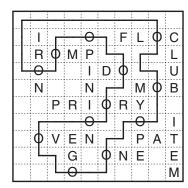
17.0'utcast (80 Points)

Example by GMPuzzles

Place each of the given words into the grid, reading across or down; all words should interconnect, and all words formed in the grid must be from the list. Each given letter must be used by at least one word. Additionally, draw a Masyu loop: a single closed loop passing through each of the "O"s and otherwise using only unused squares. When passing through an "O", the loop must go straight through and must make a 90 degree turn in at least one of the adjacent squares.

EGO CLUB MYOPE
IDO FLOC PRIORY
MOB IRON OPINION
ONE ITEM
PAT OVEN
ROMP



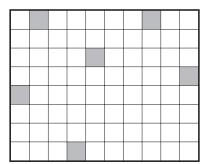


18.Scrabble (First Letter) (60 Points)

Example by GMPuzzles

Place each of the given words into the grid, one letter per cell, reading from left to right or top to bottom. All words must be connected, and no words other than the given words can appear in the grid. The highlighted cells must contain the first letters of each of the words.

ANTALYA
EGER
KIRCHHEIM
KRAKOW
LONDON
SOFIA
TORONTO

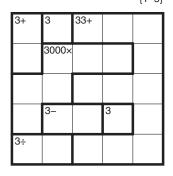


	K		R	С	Н	Н	Ε		M
	R						G		
	Α			L			Е		
	K			0			R		S
Т	0	R	0	Ν	Т	0			0
Г	W			D					F
				0					Ι
			Α	Ν	Т	Α	L	Υ	Α

19-20.TomTom (10 + 20 Points)

Example by GMPuzzles

Insert a number from 1 to N into each cell in the N by N grid so that no number repeats in any row or column. Also, the number in the upper-left corner of each bold cage indicates the value of a mathematical operation (addition, subtraction, multiplication, division) applied successively to all numbers in the cage, starting with the largest number for subtraction and division (e.g. 1,2,4 with subtraction is a 1- clue as 4-2-1 = 1). The operation may or may not be given in the cage, but at least one of the four operations must apply. Numbers can repeat within a cage.



³⁺ 2	³ 3	³³⁺ 5	4	1
1	3000× 2	3	5	4
4	5	2	1	3
5	³ -	1	³ 3	2
3÷ 3	1	4	2	5



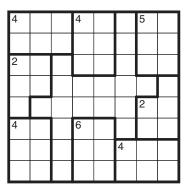
PUZZLES BY

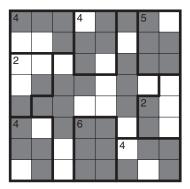
DERYA HIZARCIOĞLU, EMİN ERZURUMLUOĞLU, FUNDA KARTALOĞLU, JALE TURHAN, ŞABAN ERDOĞAN, YUNUS EMRE BÜYÜKKALE, SERKAN YÜREKLİ

21-22.Aqre (45 + 55 Points)

Example by GMPuzzles

Shade some cells so that all shaded cells form one connected group. Regions with numbers must contain the indicated count of shaded cells, and it is allowed to shade over the numbered cells. There may not exist a run of four or more consecutive shaded or unshaded cells horizontally or vertically anywhere in the grid.

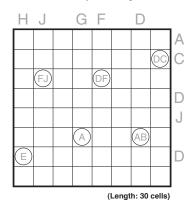




23-24. Cipher Snake (60 + 110 Points)

Example by GMPuzzles

Locate a numbered snake (a 1-cell wide path) that starts with 1 and goes to N (47 for the first puzzle, 45 for the second). The snake cannot touch itself, not even diagonally. All numbers are encrypted with letters and each letter represent a different digit from 0 to 9. Digits outside the grid indicate how many cells in that row or column are occupied by the snake. Some snake segments are already given.



6	4		7	1		2		_
	16	17	18					3
	15		19		23	24)	25	5
13	14)		20	21)	22		26	
12							27	2
11		1	2				28	4
10			3			30	29	
9			4					2
8	7	6	(5)					

25-26.Arrow Sudoku (25 + 30 Points)

Example by GMPuzzles

Standard Sudoku rules (insert a number in the indicated range into each cell so that no number repeats in any row, column, or bold region). Some arrow shapes are in the grid; the sum of the numbers along the path of each arrow must equal the number in the circled cell. Numbers can repeat within an arrow shape.

7	\wedge			4			\wedge	3
		7		Q				7
	\bigcirc	9	7			8	\bigcirc	
			6	\wedge	2	7		
	<				7		\bigcirc	
			7	\bigcirc	9			
	\wedge	5			$ \angle $	7	\wedge	
		7		\bigcirc		<		7
1	O			3			\bigcirc	2

7	2	8	9	4	5	6	1	3
3	5	4	8	7	6	2	9	7
4	6	9	₹	2	3	8	7	5
9	8	3	6	1	2	4	5	7
6	1	7	3	5	4	9	2	8
5	4	Ø	7	8	9	7	3	6
8	3	5	2	6	4	7	A	9
2	7	4	5	9	8	3	6	Ħ
1	9	6	4	3	7	5	8	2

BOOKLET



22nd 24 HOURS PUZZLE CHAMPIONSHIP

29–30 SEPTEMBER 2025 EGER

PUZZLES BY: SINIŠA HRGA

DOMINO 35 POINTS (20 + 15)

SUDOKU MINESWEEPER 50 POINTS (20 + 30)

BIG BANDS SUDOKU 45 POINTS

GP FINALISTS 110 POINTS

KAKURO 45 POINTS

BARRIERS 50 POINTS (15 + 35)

HONEY-COMB ISLANDS 55 POINTS

ISLANDS 45 POINTS

MAGNETS 40 POINTS

TENTS 20 POINTS

GALAXIES 60 POINTS (25 + 35)

ABC GAMES 90 POINTS (15 + 35 + 40)

DIAGONAL IREGULAR SUDOKU 110 POINTS

ARROWS 60 POINTS (5 + 55)

POKER 40 POINTS

ZIG ZAG 60 POINTS (30 + 30)

TRACTORS 85 POINTS

TOTAL 1000 POINTS

22st **24** Hours puzzle Championship 29. - 30. SEPTEMBER 2025. EGER



PUZZLES BY

SINIŠA HRGA

1. DOMINO (20 + 15 points)

We have placed complete domino double 6-set in the grid. However, the sides of the dominoes have been removed and the spots have been replaced by numbers. Can you draw the sides in the diagram so that it becomes clear exactly how the dominoes are positioned?

0	1	0	0	0-0	L
0	2	2	1	0-1 1-1	
2	1	1	2	0-2 1-2 2-2	

2. SUDOKU MINESWEEPER (20 + 30 points)

Place some mines in the grid so that each of the rows, columns and the nine outlined 3x3 regions contain exactly 3 mines. Numbers indicate how many mines are located in 8 neighbouring cells. There are no mines in cells with numbers.

I	3					2					3	•				2		•	
I			3				3		2		•	•	3			•	3		2
ı	2				4						2			•	4		•		•
I			4		3		2						4	•	3	•	2		•
ı						3			2		•	•	•			3			2
ı		5		3				3				5		3	•		•	3	
I				4		3			2		•		•	4		3		•	2
ı	1						4			ı	1		•	•		•	4		
I		1		3					1			1		3	•		•	•	1

3. BIG BANDS SUDOKU (45 points)

Place a digit from 1 to 9 into each of the empty squares so that each digit appears exactly once in each of the rows, columns and the nine outlined 3x3 regions. There are six grey twisty bands 7 cells long in the sudoku grid and 7 digits long numbers. Put the numbers in the respective bands and all other digits in the grid.

_	_			_			
		4					l,
N							Į
							ľ
							إ
			9			2	ן ו
				4			
	2	2		2	2	9	

_	_	_		_	_	_		-
3	8	6	4	5	9	2	1	7
5	2	9	1	3	7	8	6	4
4	7	1	8	2	6	9	3	5
1	9	2	5	7	3	4	8	6
7	4	8	6	Ø	1	3	15	Ω
6	3	5	Ω	4	8	7	9	1
8	5	7	თ	6	2	1	4	9
o)	6	3	7	1	4	5	N	ø
α	1	4	ග	8	5	6	7	З

4. GP WSC/WPC FINALISTS (110 points)

Write names next to each row and below each column from the given word bank of first names and surnames of previous GP WSC/WPC FINALISTS, so that all rows and columns contain all the letters of the respective name. Each row and column contains one first name, surname or both and no name can be reused at multiple rows/columns. Not all first names and surnames might be used. All letters in the grid belong to either its row or its column, but not both.

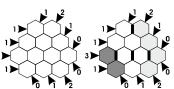
Е	D	Ν	L		UK	CZ	Е	D	Ν	L	Z	L
Z	Е	C	Ρ		NL	JP	Z	Е	С	Ρ	C	Z
В	Г	כ	Ρ		DE	PL	В	Г	С	Р	Р	L
_	Τ	Κ	٦		BE	IT	_	Т	Κ	7	1	Т
							В	D	U	J		
							Е	Е	K	Р		

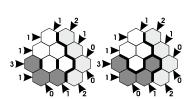
5. KAKURO (CLASSIC) (45 points)

6. BARRIERS (15 + 35 points)

Divide the given shape into six different pentaminoes. The numbers define the number of barriers in the corresponding direction. $_{\mbox{\scriptsize 3}}$

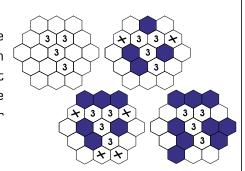
example: With three different tetramino.





7. HONEY-COMBISLANDS (55 points)

Draw in nine different pentaminoes (islands) in the given shape. The islands are surrounded with the water, and they don't touch each other, and every water area is interconnected. Every water cell that touches three or four other water cells is marked by number. The given shape doesn't appear anywhere in the water area. The colored field is a part of pentamino.



22^{st} **24** Hours puzzle championship 29. - 30. SEPTEMBER 2025. EGER



PUZZLES BY

SINIŠA HRGA

8. ISLANDS (45 points)

Fill the square with different pentominoes (islands) which are surround by the rivers. All rivers are connected but water area never come in the 2x2 squares. Each number is part of the river. Every water cell that touches three or four other water cells is marked by number. The islands can not touch each other not even diagonally.

9. MAGNETS (40 points)

The grid is made up of magnetic and non-magnetic plates. Each magnetic plate has two halves: one positive (+) and one negative (-). Halves with the same symbol cannot be connected horizontally or vertically. The numbers outside the grid indicate the number of magnetic halves in that particular row or column.

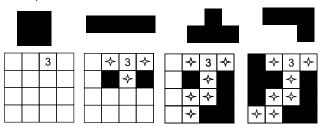
10. TENTS (20 points)

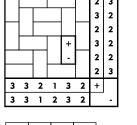
Locate tents in the grid so that they don't touch, not even diagonally. Each tree has to be connected to exactly one tent in one of its four (horizontally and vertically) neighbouring cells.

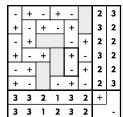
11. GALAXIES (25 + 35 points)

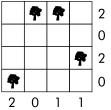
Divide the grid along the grid lines into regions, so that each region contains exactly one grey dot. Each region must have rotational symmetry, and the grey dot must be located in the center of rotation.

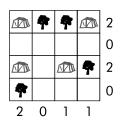
example: Fill with two different islands















12. A B C GAME

Put the letters A, B, C, D, E in the diagram so that each letter appears exactly once in every row, column and a both diagonal. Two squares in each row, column and both diagonal remain empty.

FIRST LETTER SEEN (15 points)

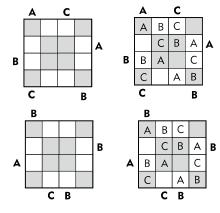
The letters around the diagram indicate the **first letter** that can be found by reading the appropriate row or column, beginning at the outside letter.

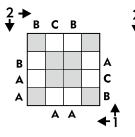
SECOND LETTER SEEN (35 points)

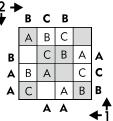
The letters around the diagram indicate the **second letter** that can be found by reading the appropriate row or column, beginning at the outside letter.

FIRST / SECOND LETTER SEEN (40 points)

The letters **left and above** outside the diagram indicate the **second** letter that can be found by reading the appropriate row or column, beginning at the outside letter. The letters **right and below** outside the diagram indicate the **first** letter that can be found by reading the appropriate row or column, beginning at the outside letter.









PUZZLES BY

SINIŠA HRGA

13. DIAGONAL IRREGULAR SUDOKU (110 points)

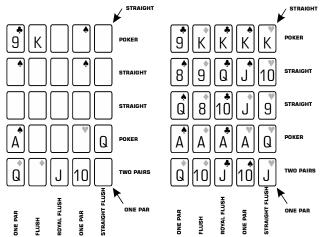
Place a digit from 1 to 9 into each of the empty squares so that each digit appears exactly once in each of the rows, columns, two main diagonals and the nine outlined regions.

14. ARROWS (5 + 55 points)

Draw arrows in the squares around the large square. Each square has one arrow and each arrow points at least to one number. The numbers show how many arrows point to them.

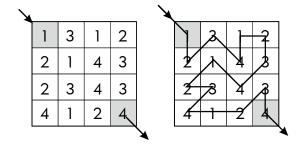
15. **POKER** (40 points)

Place 25 cards of the deck of 28 cards into the figure so that all the rows, columns and diagonals of the figure contain exactly the indicated combinations. A few color or value already given.



16. ZIGZAG (30 + 30 points)

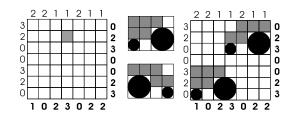
Find a way between the two gray coloured squares with a continuous zigzag line! The small parts of the zigzag connect the middle points of the neighbouring squares. The line can go horizontally, vertically and diagonally. The line can't touch or cross itself. The numbers following the lines should come in 1-2-3-4-1-2-3-4-1-2-3-4-... order. The zigzag must pass through all squares.



17. TRACTORS (85 points)

Draw the given tractors in the grid three times. Tractors can only be mirrored (left - right). The numbers on the left and the top of the grid indicate the number of pentamino parts in the corresponding row/column and the numbers on the right and the bottom indicate the number parts of the wheels in the corresponding row/column. The tractors can not touch each other, not even diagonally. Each square which contain any part of tractor can not touch neither square which contain any part of other tractor, not even diagonally.

example:Draw the given tractors in the grid one time.



NAME:	COUNTRY:	POINTS:



29-30 SEPTEMBER 2025 **EGER**

INSTRUCTION BOOKLET

PUZZLES BY:

Fatih Kamer Anda İnci Hüma Alemdar **Nehir Boz** Yusuf Yücel

Arithmetic Square 15 POINTS (10+ 5)

> Easy as ABC 15 POINTS (5 + 10)

Battleships 50 POINTS (15 + 35)

Context 40 POINTS (20 + 20)

Futoshiki 65 POINTS (20 + 45)

Koburin 30 POINTS (10 + 20)

110 POINTS (50 + 60) **Product Latin Square**

> Tango 15 POINTS (5 + 10)

Scrabble **85 POINTS**

Slitherlink 55 POINTS (25 + 30)

Spiral Galaxies 55 POINTS (15 + 10+ 30)

> Star Battle 70 POINTS (30 +40)

> > 75 POINTS (5 + 70) Tapa

Thermo-Skyscrapers 95 POINTS (55 + 40)

> TomTom 95 POINTS (60 + 35)

55 POINTS (15 + 40) Yaiilin

Sudoku 75 POINTS

TOTAL 1000 POINTS

22^{ND} 24 hours puzzle championship 29-30 september 2025 eger



PUZZLES BY Fatih Kamer Anda, İnci Hüma Alemdar, Nehir Boz, Yusuf Yücel

1-2. Arithmetic Square (10+5 Points)

Place the numbers from 1 to 9 into the cells (a different single number in each cell) so that the indicated equations/relations are correct. Evaluate from left-to-right and top-to-bottom (ignore the usual precedence of the operators).

3-4. Easy As ABC [Classic] (5+10 Points)

Classic Easy as ABC rules.

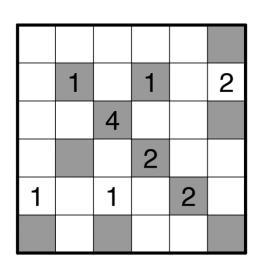
5-6. Battleships [Classic] (15 + 35 Points)

Classic Battleships rules.

7-8. Context (20 + 20 Points)

Shade some cells so that all other cells are connected orthogonally and no two shaded cells share an edge. If a numbered cell is shaded, then that number must equal the number of other shaded cells that share a corner with the numbered cell. If a numbered cell is not shaded, then that number must equal the number of shaded cells that share an edge with the numbered cell.

	1		1		2
		4			
			2		
1		1		2	





PUZZLES BY Fatih Kamer Anda, İnci Hüma Alemdar, Nehir Boz, Yusuf Yücel

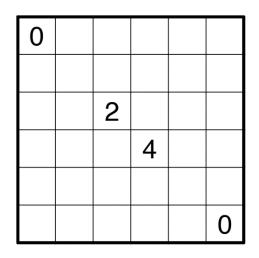
9-10. Futoshiki (20 + 45 Points)

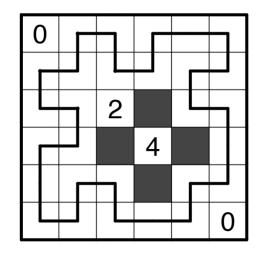
Place a number from 1 to X (integers only) into each cell so that each number appears exactly once in each row and column. (X is the number of cells in each row.) Some inequality relations are given between adjacent cells; they must apply to the numbers in those cells.

	5 3 4 2 1
	1 < 2 3 4 < 5
	4 1 2 5 3
, , , , , , , , , , , , , , , , , , ,	2 5 1 3 < 4
	3 < 4 5 1 < 2

11-12. Koburin (10 + 20 Points)

Draw a single closed loop that passes orthogonally through centers of some cells in the grid. The loop connects centers of orthogonally adjacent cells, makes only right-angle turns or goes straight, and does not intersect or cross itself. Some cells will remain empty; such cells are "unused" and cannot share an edge with each other. The loop does not go through cells with number. A number indicates the number of unused cells that share an edge with that cell.



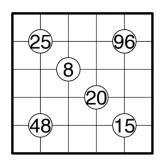


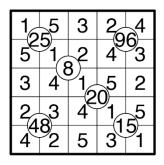


PUZZLES BY Fatih Kamer Anda, İnci Hüma Alemdar, Nehir Boz, Yusuf Yücel

13-14. Product Latin Square (50+ 60 Points)

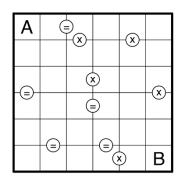
Place a number from 1 to X (integers only) into each cell so that each number appears exactly once in each row and column. (X is the number of cells in each row.) Clues show the product of four neighboring digits.

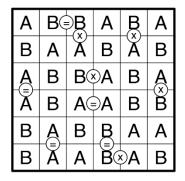




15-16. Tango (5 + 10 Points)

Fill the grid so that each row and column contains an equal number of A's and B's. No more than two A or B may be next to each other, either vertically or horizontally. Cells separated by an "=" sign must contain the same letter. Cells separated by an "x" sign must be of the opposite letter.





17.Scrabble (85 Points)

Put at most one letter into each cell so that the given words can be read either across (left-to-right) or down (top-to-bottom) in consecutive cells in the grid. Every word must appear in the grid exactly once, and no other words may appear in the grid (that is, if two cells are filled and are adjacent orthogonally, then there must be a word that uses both of them). Every word must have either a blank cell or the edge of the grid before and after it. All letters must be orthogonally connected in a single group. Some letters may be already supplied in the grid. For any such letter, all instances of that letter are given.

			TWENTY
			FOUR
Р			PUZZLE

	F				٦	TWENTY
	0				W	FOUR
Р	U	Z	Z	L	Ε	PUZZLE
	R				N	
					Т	
					Υ	



PUZZLES BY Fatih Kamer Anda, İnci Hüma Alemdar, Nehir Boz, Yusuf Yücel

18-19. Slitherlink [Classic] (25 + 30 Points)

Classic Slitherlink rules.

20-21-22. Spiral Galaxies [Classic] (15 + 10 + 30 Points)

Classic Spiral Galaxies rules.

23-24. Star Battle [Classic] (30 + 40 Points)

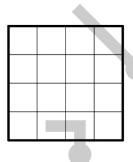
Classic Star Battle rules.

25-26. Tapa [Classic] (5 + 70 Points)

Classic Tapa rules.

27-28. Thermo-Skyscrapers (55 + 40 Points)

Standard Skyscrapers rules. Also, as in Thermo-Sudoku, digits must be strictly increasing in all thermometer shapes from round bulb to flat end.



		3		_
4	3	1	2	
3	1	2	4	1
1	2	4	3	
2	4	3	1	
		2		•

29-30. TomTom (60 + 35 Points)

Place a number from 1 to X into each cell so that each number appears exactly once in each row and column. (X is the number of cells in each row.) Numbers may repeat within an outlined region. The number in the upper-left corner of each region indicates the value of one of the four basic operations applied to all numbers in the region, starting with the largest number for subtraction and division (e.g., 1, 2, 4 with division has a clue of $2 \div as 4 \div 2 \div 1 = 2$). The operation may or may not be given in the region, but at least one of the four operations must apply.

	20	15		
		48		1
0				
	13		1/	

2	²⁰ 4	¹⁵	5	3
5	1	482	3	¹4
ο3	2	4	1	5
1	¹ 5	3	1/4	2
4	3	5	2	1

31-32. Yajilin [Classic] (15 + 40 ponits)

Classic Yajilin rules.

33. Sudoku [Classic] (75 Points]

Classic Sudoku rules.

NAME:	COUNTRY:	POINTS:



29–30 SEPTEMBER 2025 EGER

PUZZLES BY:

Matej Uher

Guided arrow 20 POINTS

Cave 20 POINTS

Tapa 25 POINTS

Kuromasu 20 POINTS

Shading COMBO 100 POINTS (40 + 30 + 20 + 10)

Line of sight 40 POINTS Slitherlink 25 POINTS

Firefly [Loop] 40 POINTS

Myopia 35 POINTS

Loop COMBO 150 POINTS (60 + 45 + 30 + 15)

Five cells 75 POINTS Square jam 20 POINTS

Fillomino 15 POINTS Shikaku 20 POINTS

Region COMBO 100 POINTS (40 + 30 + 20 + 10)

Doppelblock 25 POINTS Skyscrapers 35 POINTS Fuzuli 35 POINTS

Fuzuli 35 POINTS Kropki 50 POINTS

Latin COMBO 150 POINTS (60 + 45 + 30 + 15)

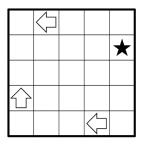
TOTAL 1000 POINTS

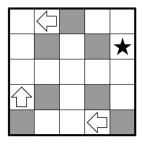


PUZZLES BY Matej Uher

Guided arrow 20 points

Shade some cells so that all remaining cells are connected orthogonally, and no two shaded cells share an edge. Unshaded cells cannot form a loop. This includes 2x2 squares. Cells with a clue cannot be shaded. An arrow indicates the only direction in which one could begin a path to the star without going through a shaded cell or backtracking.





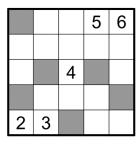
Cave 20 points [Classic]

Tapa 25 points [Classic]

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. Cells with circles must not be shaded.

			5	6
		4		
2	3			





PUZZLES BY Matej Uher

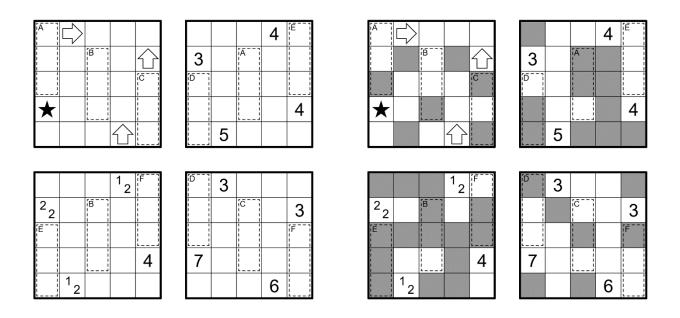
Shading COMBO 100 points (40 + 30 + 20 + 10)

This puzzle contains 4 individual grids, that share common rule "shade some cells", which are interconnected with additional rule. Individual puzzle can have multiple solutions, but when you take into account all 4 grids with addition of additional rule, there is a unique solution. Rules for individual grids and additional rule can be found in following paragraph.

Used puzzles: Guided arrow, Cave, Tapa, Kuromasu

Additional rule: **WINDOWS** – There are pairs of windows in the grid. Within each pair, if one cell of the window is shaded, the corresponding cell of the other window must be unshaded, and vice versa. Different pairs of windows are marked with letters.

Partial bonus: You receive points based on correctly solved individual grids. For one grid, you will get 40% of points, for 2 grids 70%, for 3 grids 90% and for 4 grids 100%.





PUZZLES BY Matej Uher

Line of sight 40 points

Draw a single, non-intersecting loop that only consists of orthogonal line segments between the dots. A number represents the length of the first straight line segment seen in the indicated direction.

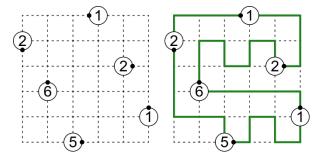
7	21	↓3	
	1		
21	31	4↓	

1	21	3↓	
	1		
21	3↓	4↓	

Slitherlink 25 points [Classic]

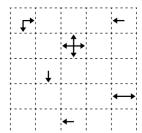
Firefly [Loop] 40 points

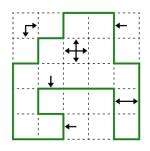
Draw a single, non-intersecting loop that only consists of orthogonal line segments between the dots. Loop must visit every cell with circle (firefly). A black dot indicates where each firefly's path must start. A path cannot connect directly between two black dots. A number indicates how many turns the firefly's path makes before reaching another firefly. Lines starting from empty circles can make any number of turns.



Myopia 35 points

Draw a single, non-intersecting loop that only consists of orthogonal line segments between the dots. Arrows in a cell indicate all closest loop edges to that cell along the four orthogonal directions (if there are multiple loop edges of the same closest distance to the cell, there will be multiple arrows).







PUZZLES BY Matej Uher

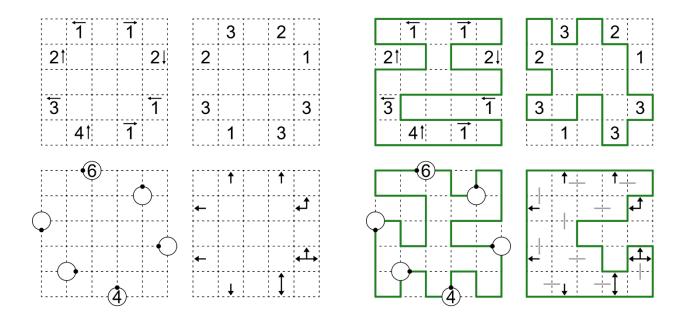
Loop COMBO 150 points (60 + 45 + 30 + 15)

This puzzle contains 4 individual grids, that share common rule "draw a loop", which are interconnected with additional rule. Individual puzzle can have multiple solutions, but when you take into account all 4 grids with addition of additional rule, there is a unique solution. Rules for individual grids and additional rule can be found in following paragraph.

Used puzzles: Myopia, Slitherlink, Firefly [Loop], Line of sight Additional rule: **MATCHMAKER** – Every grid uses one extra rule, which are provided below.

- All Every gridpoint need to be visited.
- Unequal Two consecutive lines of loop (from one turnpoint to another one) cannot have equal size.
- Short Length of every line is at most 2.
- Domino Consider all cells inside the loop. You need to be able to cover them using nonoverlapping dominoes. This dissection does not need to be unique.

Partial bonus: You receive points based on correctly solved individual grids. For one grid, you will get 40% of points, for 2 grids 70%, for 3 grids 90% and for 4 grids 100%.





PUZZLES BY Matej Uher

Five cells 75 points

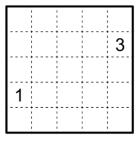
Divide the grid into pentominoes (contiguous regions of five cells) such that every cell is part of exactly one pentomino. A number in a cell indicates how many edges of that cell are part of a pentomino border. (It is possible for some pentomino shapes to never appear in the grid, or more than once.)

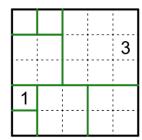
		! !	
2	2	2	
1		2	
 1	3	3	

2	2	2	
1		2	
1	3	3	

Square jam 20 points

Divide the grid into square regions along the dashed grid lines such that each cell is in exactly one square region. There must not be any locations in the grid where four square regions touch. Each given number in the grid must be inside a square region with a side length equal to that number. (It is possible for a square region to not contain any given numbers, or a square region to contain multiple numbers.)

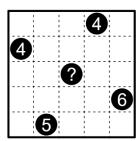


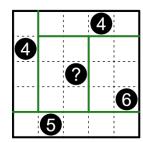


Fillomino 15 points [Classic]

Shikaku 20 points

Divide the grid into rectangles along the grid lines such that each cell is in exactly one rectangle and each rectangle contains exactly one given number. The number must equal the area of the rectangle (in cells). Cells marked with "?" mark represent rectangle with unknown area.







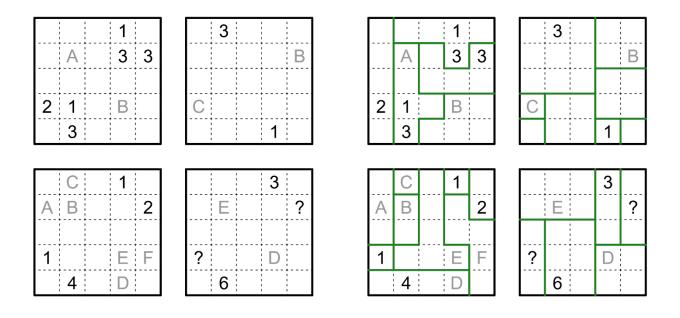
PUZZLES BY Matej Uher

Region COMBO 100 points (40 + 30 + 20 + 10)

This puzzle contains 4 individual grids, that share common rule "divide the grid", which are interconnected with additional rule. Individual puzzle can have multiple solutions, but when you take into account all 4 grids with addition of additional rule, there is a unique solution. Rules for individual grids and additional rule can be found in following paragraph.

Used puzzles: Five cells, Square jam, Fillomino, Shikaku Additional rule: **CODED** – Some numbers were replaced by letters. Same letters represent same numbers, different letters represent different numbers.

Partial bonus: You receive points based on correctly solved individual grids. For one grid, you will get 40% of points, for 2 grids 70%, for 3 grids 90% and for 4 grids 100%.



22ND 24 HOURS PUZZLE CHAMPIONSHIP 29–30 SEPTEMBER 2025 EGER



PUZZLES BY Matej Uher

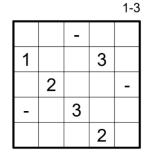
Doppelblock 25 points [Classic]

Skyscrapers 35 points [Classic]

Fuzuli 35 points

Place numbers of the specified list into some cells, no more than one number per cell, so that each number appears exactly once in each row and column. No 2×2 group of cells can be entirely filled with numbers. Cells marked with "-" represent empty cells.

Kropki 50 points [Classic]



				1-3
2	3	-		1
1		2	3	
3	2		1	-
-	1	3		2
	·	1	2	3

22ND 24 HOURS PUZZLE CHAMPIONSHIP 29–30 SEPTEMBER 2025 EGER



PUZZLES BY Matej Uher

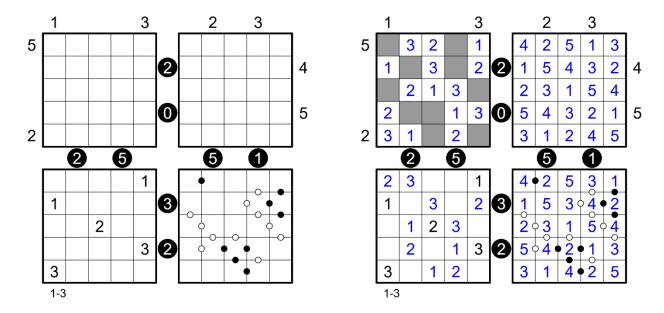
Latin COMBO 150 points (60 + 45 + 30 + 15)

This puzzle contains 4 individual grids, that share common rule "place numbers with no repeat in rows and columns", which are interconnected with additional rule. Individual puzzle can have multiple solutions, but when you take into account all 4 grids with addition of additional rule, there is a unique solution. Rules for individual grids and additional rule can be found in following paragraph.

Used puzzles: Doppelblock, Skyscrapers, Fuzuli, Kropki

Additional rule: **MASTERMIND** – The numbers between the grids represent the number of same-positioned cells in that row or column that are either empty or contain same number. If no number is given, you are not told how many cells are same in given grid.

Partial bonus: You receive points based on correctly solved individual grids. For one grid, you will get 40% of points, for 2 grids 70%, for 3 grids 90% and for 4 grids 100%.



22ND 24 HOURS PUZZLE CHAMPIONSHIP 28–30 SEPTEMBER 2025 HOTEL EGER PARK,

EGER



PUZZLES BY

PRASANNA SESHADRI



22ND 24 HOURS PUZZLE CHAMPIONSHIP

28–30 SEPTEMBER 2025 HOTEL EGER PARK EGER

PUZZLES BY: PRASANNA SESHADRI

KURARIN 25 POINTS

MIDLOOP 20 POINTS

KURARIN & MIDLOOP 35 POINTS

PENTA TOUCH 40 POINTS

STATUE PARK 45 POINTS

HEAVY DOTS 40 + 40 POINTS

BORDER BLOCK 35 POINTS

BORDER BLOCK [HEX] 45 POINTS

VOXAS 20 POINTS

VOXAS [CUBE] 15 POINTS

NO THREE 35 POINTS

NO THREE [TRIANGLE] 65 POINTS

KROPKI PAIRS 65 POINTS

CONSECUTIVE QUADS 90 POINTS

KROPKI PAIRS & CONSECUTIVE QUADS 75 POINTS

SPIRAL GALAXIES 25 POINTS

SPIRAL GALAXIES [PARTIAL DOUBLE] 40 POINTS

TAPA DOTS 20 + 15 POINTS

LETTER PAIRS 15 + 20 + 35 POINTS

LOOP POOL 140 POINTS (PARTIAL POINTS: 35/GRID)

TOTAL 1000 POINTS

22ND 24 HOURS PUZZLE CHAMPIONSHIP 28-30 SEPTEMBER 2025

HOTEL EGER PARK, **EGER**

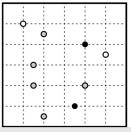


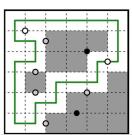
PUZZLES BY

PRASANNA SESHADRI

Puzzle 1: Kurarin 25 Points

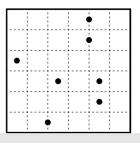
Shade some cells and draw a non-intersecting loop through the centers of all the remaining empty cells. Dots indicate the behaviors of the 1, 2 or 4 cells they belong to in the following way: For a black dot, the majority of the cells must be shaded. For a white dot, the majority of the cells must be unshaded. For a grey dot, half the cells must be shaded.

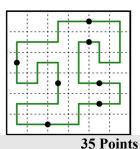




Puzzle 2: Midloop 20 Points

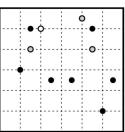
Draw a non-intersecting loop through the centres of some cells that passes through every circle. Each circle marks the centre of the straight-line segment it lies on.

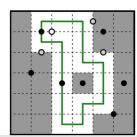




Puzzle 3: Kurarin & Midloop

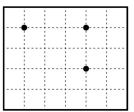
Follow Kurarin rules with the exception that some black dots that are present in a single cell or between two cells may be Midloop clues instead. It is part of solving to determine the clues that are Midloop and not Kurarin.

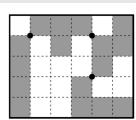




Puzzle 4: Penta Touch **40 Points**

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.





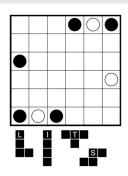
The Example uses a LITS bank like the Statue Park below Pentomino bank:

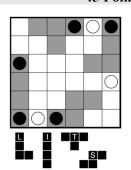
Place each pentomino from the bank given outside the grid into the grid so that no two pentominoes share an edge and all unused cells form one orthogonally connected area. Rotating and reflecting pentominoes is allowed. Cells with black circles must be used by a pentomino, and cells with white circles must not be used by a pentomino.

Pentomino bank: Same as above.

Puzzle 5: Statue Park

45 Points





22ND 24 HOURS PUZZLE CHAMPIONSHIP 28-30 SEPTEMBER 2025

HOTEL EGER PARK, **EGER**

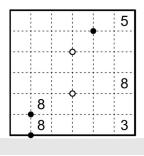


PUZZLES BY

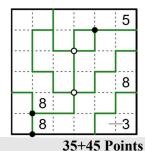
PRASANNA SESHADRI

Puzzle 6 & 7: Heavy Dots

Divide the grid into regions of orthogonally connected cells, none of which may contain an entire 2x2 area. A number gives the number of cells in the region it is a part of. Black dots must have exactly three region borders or grid borders extending from them, while white dots must have exactly four. There may not be a dotless grid-point orthogonally adjacent to a black or white dot which has more than two borders extending from it.



40+40 Points

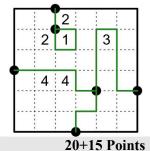


Puzzle 8: Border Block & Puzzle 9: Border Block [Hex]

Divide the grid into regions of orthogonally connected cells such that each region contains exactly one type of clue, and all instances of it. Every grid point (including on the edges) from which three or more region borders or grid borders extend is marked with a dot.

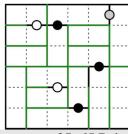
The second puzzle will be on a Hex grid.

3 4:4



Puzzle 10: Voxas & Puzzle 11: Voxas [Cube]

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



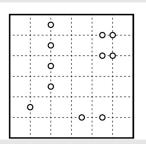
The second puzzle will be on a Cubic grid.

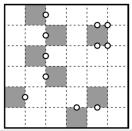
Puzzle 12: No Three & Puzzle 13: No Three [Triangle]

Shade some cells so that no two shaded cells are orthogonally adjacent and the remaining unshaded cells form one orthogonally connected area. Each circle must touch exactly one shaded cell. Three consecutive shaded cells within the same row or column may not be evenly spaced.

The second puzzle will be on a Triangular grid.



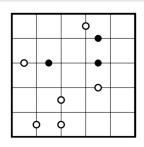




65 Points

Puzzle 14: Kropki Pairs

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. Pairs of orthogonally adjacent cells marked with a black dot must contain numbers with a 1:2 ratio. Pairs of orthogonally adjacent cells marked with a white dot must contain consecutive numbers. There is no restriction on pairs of orthogonally adjacent cells without a dot.



3	5	20	1	4
40	1	3	2	5
) <mark>55</mark>	2	1	40	3
1	4	5	3	2
20	30	4	5	1

22ND 24 HOURS PUZZLE CHAMPIONSHIP 28–30 SEPTEMBER 2025

28–30 SEPTEMBER 2025 HOTEL EGER PARK, EGER

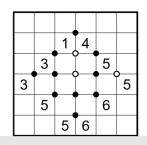


PUZZLES BY

PRASANNA SESHADRI

Puzzle 15: Consecutive Quads

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 white dot indicates that exactly one pair of the cells it touches contains consecutive numbers. A black dot indicates that at least two pairs of the cells it touches contain consecutive numbers.



90 Points

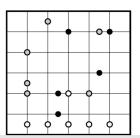
4	6	3	5	1	2
5	2	1	4	3	6
6	3	4	2	5	1
3	4	6	1	2	5
1	5	2	3	6	4
2	1	5	6	4	3

Puzzle 16: Kropki Pairs & Consecutive Quads

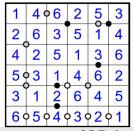
Apply Kropki Pairs rules and Consecutive Quads rules. There is a new grey dot added.

For Kropki Pairs, the grey dot indicates that the pair of cells are neither consecutive nor in a 2:1 ratio.

For Consecutive Quads, the grey dot indicates that there are no pairs of digits that are consecutive.

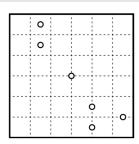


75 Points

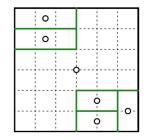


Puzzle 17: Spiral Galaxies

Divide the grid into regions of orthogonally connected cells. Each region must contain exactly one circle and have 180° rotational symmetry around it.

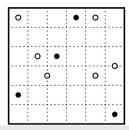


25 Points

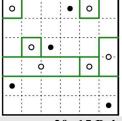


Puzzle 18: Spiral Galaxies [Double]

Divide the grid into regions of orthogonally connected cells. Each region must contain either one white circle and no black circles or two black circles and no white circles. A region with a white circle must have 180° rotational symmetry around it. A region with two black circles must have 180° rotational symmetry around the point exactly between them.

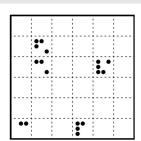


40 Points

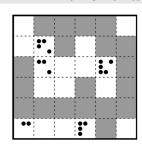


Puzzle 19 & 20: Tapa Dots

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 exact configuration of shaded cells in the (up to) eight cells surrounding the clue. The configuration may be rotated around the clue but not reflected.



20+15 Points



22ND 24 HOURS PUZZLE CHAMPIONSHIP 28–30 SEPTEMBER 2025 HOTEL EGER PARK, EGER



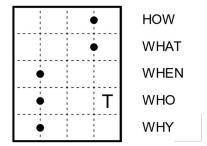
PUZZLES BY

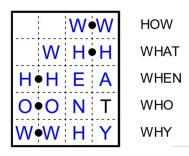
PRASANNA SESHADRI

Puzzle 21 & 22 & 23: Letter Pairs

15+20+35 Points

Place the listed words into the grid so that they read from top-bottom or left-right without crossing or overlapping each other. A dot between two cells indicates that both cells contain the same letter. All possible dots are marked.





Puzzle 24: Loop Pool

140 Points (Partial points: 35/grid)

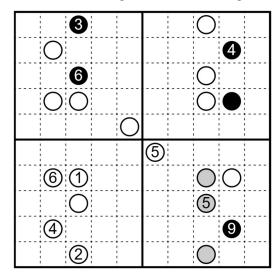
Overall rules: Draw a non-intersecting loop through the centres of some cells that passes through every circle. The circle behaviour is different for each grid as follows.

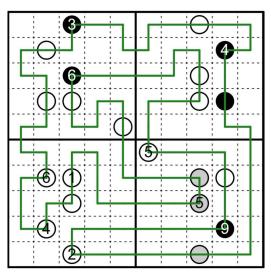
Top Left: Shingoki: The loop must turn on black circles and go straight through white circles. A clue in a circle represents the sum of the lengths of the two line segments coming out of it.

Top Right: Balance Loop: The straight line segments coming out of a white circle must have equal length, while the straight line segments coming out of a black circle must have different lengths. A clue in a circle represents the sum of the lengths of these two line segments coming out of it.

Bottom Left: Bhai Bahan: If two circles are orthogonally adjacent, the loop must have opposite 'behaviours', i.e., turn on one and go straight on the other. A number in a circle gives the series of cells that follow the same behaviour before changing it on both sides, including the cell itself in the count.

Bottom Right: Kropki Loop: The straight line segments coming out of a white circle must have lengths that are consecutive to each other. The straight line segments coming out of a black circle must have one of the lengths as double the other. The straight line segments coming out of a grey circle cannot fulfil the conditions of either of the other colours. A clue in a circle represents the sum of the lengths of the two line segments coming out of it.





NAME:	COUNTRY:	POINTS:



22ND 24 HOURS PUZZLE CHAMPIONSHIP

29–30 SEPTEMBER 2025 EGER

$\Box \land \Box$	INSTRUCTIONS BOOKLET	1
	PUZZLES BY: PUZZLERS CLUB	L

Main organizer: Ivan Koswara (chaotic_iak) • Writers: Ammar Fathin Sabili, Craig Kasper, David Altizio, dohz, dpad, InvalidD, jkittykitkat, Kagami Ame, Kusane Hexaku, Iovemathboy, Stefan Liew, yosh • Additional testsolving: boboquack • All puzzle images generated by Penpa+

Doppelblock (Classic)	15 points
Look-Air	20 points
TomTom	40 points
TomTom	40 points
Math Path	30 points
Square Jam	10 points
Square Jam [Voxas]	40 points
Tasquare	15 points
Notasquare	35 points
Heyawake [Square Blocks]	25 points
Yajilin [Square Blocks]	25 points
Shakashaka [Square Areas]	50 points
Evolmino	30 points

Isowatari	35 points
Circles and Squares	50 points
Circles and Two Squares	40 points
Nurikabe [Square Islands]	30 points
FiveCells	60 points
Overlapping Squares	30 points
Diamonds	60 points
Bunnyhop	50 points
Icebarn	70 points
Battleships (Classic)	70 points
Skyscrapers [Square Cages]	70 points
Pass Squares [Masyu]	60 points
TOTAL 1000 points	

FOREWORD

Greetings from Puzzlers Club! We are once again writing for 24HPC. In case you don't know about us, we are a community of friends brought together by a common interest of puzzling. We have been writing for 24HPC since 2018.

This year, we are writing only one round. The year 2025 is a square number, and so the theme of our round is **squares**. You will find 25 puzzles themed after squares in various ways. Some genres already naturally feature squares; other genres can take up square-related variants. Some puzzles feature the square theme aesthetically. "Square" doesn't only mean the geometric object; there are also square numbers involved. Several puzzles even do multiple of these at once! And some puzzles elect for an anti-theme, explicitly dispensing with squares.

In addition, as always with our sets, we feature genres from a variety of sources. Some genres are well-known enough that they are part of the Classics booklet, although they often appear here with some twist. Some other genres, you might have never heard of before this set. Many of these genres are from Nikoli, but there are plenty from new authors.

Text in blue, both in this Instruction Booklet and the Puzzle Booklet, gives a brief anecdote. It is not relevant to the rules and can be safely ignored. (Our hope is that it will print out rather faintly, so that you can ignore it during the competition.)

I (Ivan/chaotic_iak) will post some additional thoughts and backstory about the set on my website: https://chaoticiak.github.io/logic.html. Check later after the contest!

NOTE: For some of the most common genres, their rules can be found in the Classics booklet. The last page of this booklet has a concise version of the rules as a quick reference. The puzzle booklet will include solved examples.

TERMINOLOGY

A "cell" means that, a cell of the grid. We exclusively use "square" to mean a square-shaped area, possibly composed of multiple cells. A square may be 1×1, i.e. made of 1 cell. Squares are generally grid-aligned, although in two exceptions (Shakashaka puzzle 12, and Diamonds puzzle 20), they may be slanted 45°.

Cells are "orthogonally adjacent" if they share an edge. Cells are "touching" if they share an edge or a vertex. An "edge" always means a unit segment unless otherwise stated.

This set makes heavy use of the concept of <u>masses</u> of cells. A <u>mass</u> of cells consists of cells that are connected side by side. A <u>mass</u> always refers to a maximal set of cells; i.e. a subset of a <u>mass</u> does not itself form a <u>mass</u>. It also follows two <u>masses</u> of the same kind may not be orthogonally adjacent. To emphasize this concept, all mentions of <u>masses</u> are underlined.

1. Doppelblock

15 points

CLASSIC

by Ammar Fathin Sabili

Check the Classics booklet for the rules.

Follow the rules of Doppelblock (Classics booklet). As usual, the number range is 1 to N-2, where N is the side length of the grid.

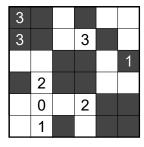
The theme will appear in the puzzle.

2. Look-Air 20 points

by dpad

Shade black some <u>masses</u> of cells. Each <u>mass</u> of black cells must form a square. For any two <u>masses</u> of the same size, if some part of each lies in the same row/column, there must be another <u>mass</u> that is between them in that row/column. (i.e. No two <u>masses</u> of the same size have a "line of sight" between them, using the same concept as in Cave and Kurodoko.)

3			
3		3	
			1
	2		
	0	2	
	1		

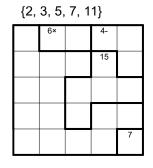


Each number indicates how many black cells are in the 5-cell cross centered at the number. (A number may be shaded black or not, but the number must still have the correct count regardless of whether it is shaded.)

Example from pzpr. Look-Air is a Nikoli genre. It already naturally features square masses.

3. TomTom by Kagami Ame 4. TomTom by Kagami Ame 40 points 40 points

Place a number in each white cell. Each row and each column must contain exactly the given bank of numbers. (If a number appears multiple times in the bank, it must appear exactly that many times in the row/column.)



{2, 3, 5, 7, 11}						
7	2	3	1⁴1	5		
5	11	7	3	2		
11	7	5	2	3		
3	5	2	7	11		
2	3	11	5	7		

There are some regions on the grid, and some regions have a clue at the top of the region, in the form of a value and optionally one of the four basic operations $(+, -, \times, /)$. The value indicates the result of applying that mathematical operation to all numbers in the region; in case of subtraction (-) and division (/), start from the largest number.

If the operation is missing, then at least one of the four operations must apply, but it is up to you to figure out which one. (The operation might not be unique, e.g. a 2-cell region clued 3 might contain 1 and 3, where it is unknown whether the operation is × or /.) As a special case, if a 1-cell region contains a clue, then it simply indicates the number in that cell.

Clarification: The bank does not contain the number 0, so there is no concern about dividing by zero.

Example by Craig Kasper, since we need an example with a custom number bank. The theme will appear in the puzzles.

5. Math Path 30 points by dohz

Place a number in each white cell. The numbers range from 1 to N, where N is the number of white cells, and each number appears exactly once. If two numbers differ by 1, they must be in touching cells. (i.e. The numbers form a path from 1 to N, going to touching squares, although the path possibly intersects itself.)

There are some clues. These clues behave the same way as in TomTom (puzzles 3–4).

1-9 7+ 5 6 1 2 1/ 3 9 8 3

Solving notes: It is also acceptable to draw the path for full credit. The direction of the path is not necessary. If you draw the path, it must visit all cells, there cannot be implied connections using consecutive numbers. i.e. Fill in numbers or draw the path, do not mix the two. If you provide both a full path and a complete numbering, only the numbers will count.

10 points

Example by Ammar Fathin Sabili; we were not satisfied with existing examples and decided to write our own. The theme will appear in the puzzle.

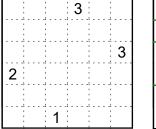
6. Square Jam

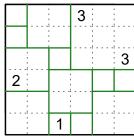
by Ivan Koswara

Divide the grid into regions by drawing along the gridlines. Each region must be the shape of a square. **No four regions may meet at a corner.**

Each number indicates the side length of the square containing it.

Example from pzpr. Square Jam was invented by Eric Fox. It already naturally features square masses.





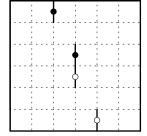
7. Square Jam [Voxas]

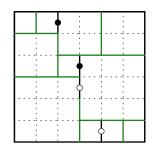
40 points

by David Altizio

Follow the rules for Square Jam (puzzle 6).

There are some dots on the border between two cells. Each dot lies on a region boundary, i.e. no region may fully enclose a dot. A white dot indicates the two regions touching it have the same size. A black dot indicates the two regions touching it have different sizes.





Example by lovemathboy. We actually had this puzzle first, before deciding the base genre should also be included as it might also be obscure.

8. Tasquare

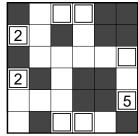
15 points

by David Altizio

Shade black some masses of cells. Each mass of black cells must form a square. The remaining cells must form a single contiguous area.

There are some clues in the form of white boxes on the grid. Cells containing clues may not be blackened. If a clue contains a number, it must be equal to the sum of areas of black masses that are orthogonally adjacent to the clue. If a clue contains no

2 2 5



number, the sum is for you to determine, but the sum cannot be zero. Example by lovemathboy; the clues in rows 2-5 spell out 2 (0) 2 5. Tasquare is a Nikoli genre. It already naturally features square masses.

9. Notasquare

35 points

by David Altizio

Follow the rules for Tasquare (puzzle 8). However, each black mass must instead form a non-square rectangle.

Example by InvalidD. This variant is an anti-theme, written explicitly to form a contrasting pair with the previous puzzle.

		7			
6		۰	5		
	7				
			9		
		3			
	_		_	_	$\overline{}$



10. Heyawake [Square Blocks] by dpad

25 points

Follow the rules for Heyawake (Classics booklet). However, black cells may be orthogonally adjacent. Instead, black cells form masses of black cells. Each black mass must form a square (possibly 1×1). Black masses may span across many region borders.

Heyawake clues count the number of black cells (not black masses) in its region.

Clarification: All regions will be rectangular.

2	3		2	
2				



Example by InvalidD. We simply relax the condition in Heyawake so black cells can form squares of any size, not just 1×1 squares.

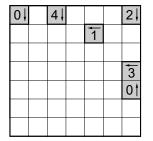
11. Yajilin [Square Blocks]

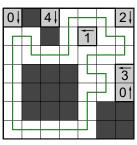
25 points

by Craig Kasper

Follow the rules for Yajilin (Classics booklet). However, black cells may be orthogonally adjacent. Instead, black cells form masses of black cells. Each black mass must form a square (possibly 1×1).

Yajilin clues count the number of black cells (not black masses) in the given direction.

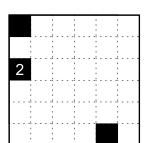


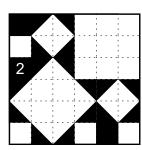


Example by Craig Kasper. We simply relax the condition in Yajilin so black cells can form squares of any size, not just 1×1 squares.

12. Shakashaka [Square Areas] 50 points by InvalidD

Draw a black triangle in some white cells. The triangle occupies exactly half of its cell, and is formed by two adjacent sides along with a diagonal of the cell. Each white cell contains at most one triangle. Removing the black portion of the grid (from triangles and given black cells), the remaining white portion of the grid is divided into masses. **Each white mass must form a square** (not just a rectangle).





Each number (in a black cell) indicates how many cells orthogonally adjacent to it contain black triangles.

Solving notes: It is enough to draw the diagonals for full credit. Painstakingly shading the triangles is not necessary.

Example by InvalidD. Shakashaka is a Nikoli genre. We simply restrict the white masses so they must form squares instead of just rectangles.

13. Evolmino

30 points

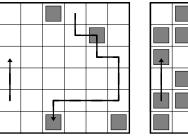
by Kusane Hexaku

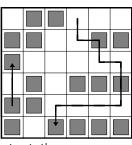
Place a box on some white cells; some boxes are already given. Cells with boxes form <u>masses</u>. (Masses may be of size 1, even if the example doesn't show it.) Each <u>mass</u> must have exactly one box that is part of some arrow.

Each arrow must intersect at least two masses. Starting from the tail

of each arrow and going to the tip, each successive <u>mass</u> must be exactly the previous <u>mass</u> (without rotation or reflection) plus one block.

Example by Ivan Koswara; we were not satisfied with existing examples and decided to write our own. Evolmino is a Nikoli genre. Arguably the boxes are squares, but the actual theme will appear in the puzzle.





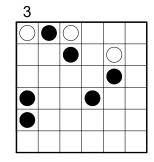
14. Isowatari

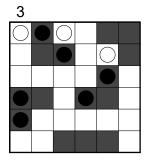
35 points

by jkittykitkat

Shade black some <u>masses</u> of cells. Each <u>mass</u> must have the indicated area (on the top-left of the grid). The remaining white cells must be connected side to side forming a single contiguous area, but **no 2×2 area may remain fully white.**

Black circles must be shaded black. White circles must be left unshaded.





Example from pzpr. Isowatari was invented by Jeffrey Bardon (IHNN); I personally really like its elegance as a combination of Statue Park and Nurikabelike walls. The theme will appear in the puzzle.

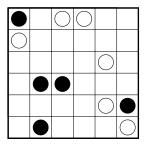
15. Circles and Squares

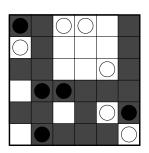
50 points

by Ammar Fathin Sabili

Shade black some cells. The black cells must be connected side to side forming a single contiguous area, but no 2×2 area may be fully shaded black. The remaining white cells form <u>masses</u> of cells. Each <u>mass</u> of white cells must form a square.

Black circles must be shaded black. White circles must be left unshaded.





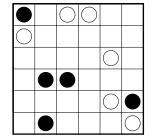
Example by Ammar Fathin Sabili. Circles and Squares was invented by Anonymus25; I personally really like its elegance and how it can arise naturally in other settings (see puzzle 17). It already naturally features square masses, so it's one of the earliest genres that is locked in.

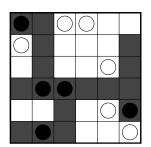
16. Circles and Two Squares 40 points

by Ammar Fathin Sabili

Follow the rules for Circles and Squares (puzzle 15). However, **each** white <u>mass</u> must form a shape consisting of exactly two non-overlapping squares.

Example by Ammar Fathin Sabili. Yes, that's the exact same grid as the previous one. This variant is an anti-theme, written explicitly to form a contrasting pair with the previous puzzle.



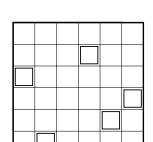


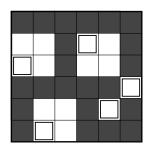
17. Nurikabe [Square Islands] 30 points

by Kusane Hexaku

Follow the rules for Nurikabe (Classics booklet). However, clues are in the form of white boxes. Each <u>mass</u> of white cells must form a square and must contain exactly one white box. (The area of the <u>mass</u> is for you to determine.)

Example by InvalidD. We simply restrict the white islands in Nurikabe so they must form squares. That allows us to eschew numbers completely.





18. FiveCells

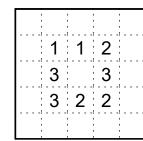
60 points

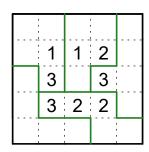
by Stefan Liew

Divide the grid into regions by drawing along the gridlines. Each region must contain exactly 5 cells.

Each number indicates how many sides of its cell are region boundaries. (The border of the grid counts as region boundaries.)

Example by Stefan Liew; there was an example on pzpr, but we preferred to have one without any missing cells. The theme will appear in the puzzle.



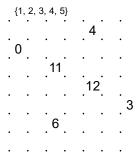


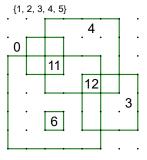
19. Overlapping Squares

30 points

by dohz

Draw some axis-aligned squares whose corners are on the dots. The side lengths of the squares must be exactly the given bank of numbers. (If a number appears multiple times in the bank, there must be exactly that many squares of that side length.) Squares may intersect each other in the interior of their sides, but may not share any part of their sides or share corners.





Each number (in the grid) indicates the sum of side lengths of all squares containing that number.

Example from WPF Puzzle GP. It already naturally features squares, and more importantly, it's one of the few where the squares are not square "masses".

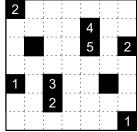
20. Diamonds

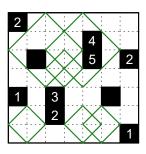
60 points

by David Altizio

Draw some 45°-slanted squares using diagonals on white cells, so that their corners are on cell corners. Squares may intersect each other in the interior of their sides, but may not share any part of their sides or share corners. Diagonals may not be drawn on black cells.

Each number (in a black cell) indicates the sum of side lengths of all squares that touch the black cell, counting each diagonal as one unit long.





Example by David Altizio. It already naturally features squares, and like the previous puzzle, not square masses. (Hey, tilted squares are still squares.)

This genre has unclear origins! This genre is the one in this entire set that I personally have never heard of; the others I have vague recollection of them, but this one is new. David himself doesn't know either; he simply saw this genre on Eric Fox's puzzle rules document (https://tinyurl.com/PuzzleRules) and went to create a puzzle. Eric Fox himself forgot where this genre came from.

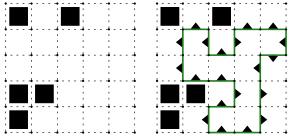
21. Bunnyhop

50 points

by yosh

Draw a loop traveling orthogonally along the gridlines. The loop may not touch or intersect itself.

Each unit segment of the loop "leans" to one of the two cells next to it. (This is indicated by an arrow tip in the example.) The segment may not lean outside the grid. Every white cell without black box must have



exactly one segment leaning into it. Every cell with black box must not have any segment leaning into it.

Solving notes: It is enough to draw the loop for full credit. The leaning direction is not necessary.

Example by Ivan Koswara; this was the same example used in 24HPC last year. Bunnyhop was invented by Arvi Teikari (Hempuli, of the famed *Baba Is* You). Arguably the boxes are squares, but the actual theme will appear in the puzzle.

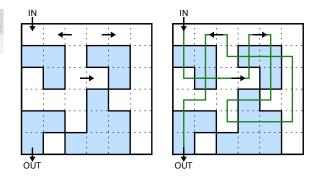
22. Icebarn

70 points

by lovemathboy

Draw a path traveling orthogonally connecting cell centers, starting from IN and ending at OUT. The path may intersect itself in the way described below, but may not otherwise touch or overlap itself.

On a white cell, the path may make a turn, but may not intersect itself. On an ice cell (shaded light), the path must go straight, but may intersect itself. For each patch of ice (outlined by thick border), at least one of its cells must be visited by the path. (No such restriction exists for non-ice white cells.)



There are some arrows on the grid. The path must go through each arrow, in the indicated direction.

Example by lovemathboy. Icebarn is a Nikoli genre. The theme will appear in the puzzle.

23. Battleships

70 points

CLASSIC

by InvalidD

Check the Classics booklet for the rules.

{1, 2, 3, 4, 5}

2

2 1 3 4 5

5

1

3 5 2

2

4 1 3

5

3

1 4

Follow the rules of Battleships (Classics booklet).

The fleet is non-standard. Each ship may be rotated and/or reflected.

The theme will appear in the puzzle.

24. Skyscrapers [Square Cages] 70 points by Craig Kasper

Follow the rules of Skyscrapers (Classics booklet). **The number bank is explicitly given.** Each row and each column must contain exactly the given bank of digits.

There are some cages (shaded light) on the grid, in the form of a rectangle with width or height 1. Each cage, reading left-to-right or top-

to-bottom, must spell out a square number. If a cage involves cells outside the grid, then it refers to the Skyscrapers clues that would be there.

Clarification: All digits in the bank are single digits in the range 1-9, so there is no question about leading zeroes. The grid is at most 9×9 , so the outside numbers are also single digits. Cages will not overlap.

Solving notes: It is enough to fill in the grid for full credit. The outside digits are not necessary, not even if they are part of cages.

Example by Craig Kasper. This is the one variant in the entire set that explicitly calls out square numbers.

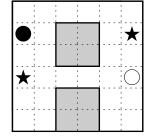
25. Pass Squares [Masyu]

60 points

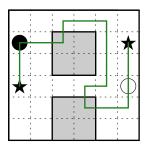
by David Altizio

Draw a path traveling orthogonally connecting cell centers, whose endpoints are the two stars (*). The path may not touch or intersect itself.

There are some 2×2 marked gray squares on the grid. For each such square, the path must visit exactly one of its cells.



{1, 2, 3, 4, 5}



There are some black and white circles on the grid. These behave the same way as Masyu circles (see Classics booklet).

Clarification: Masyu circles will not appear orthogonally adjacent to stars, to avoid questions about whether a star is a straight or a turn.

Example by Ammar Fathin Sabili. Pass Squares is an existing genre, dating back to WPC 2002 and usually appearing in Siniša Hrga's rounds. Although, it itself is a special case of a genre called Block Maze. This latter genre has unclear origins, although there is a Toketa book wholly devoted to it (https://toketa.booth.pm/items/3754080).

QUICK REFERENCE

This page contains concise rules for the genres. These are meant to be a quick refresher, and assume some general notions of puzzle genres (e.g. a loop generally does not touch or intersect itself). Read the full rules if you need any clarifications.

- 1. Doppelblock. Classic.
- **2. Look-Air.** Shade square-shaped masses of black cells. Same-size masses can't see each other. Number gives how many black cells are in the 5-cell cross centered on it.
- **3. TomTom.** Latin square, but the number bank is non-standard. Cage gives the result of applying a basic mathematical operation to all numbers in it, starting from the largest number.
- 4. TomTom. See above.
- **5. Math Path.** Put numbers 1-N so that consecutive numbers are in touching squares. Cages are as in TomTom.
- **6. Square Jam.** Divide into square-shaped regions. No four regions meet at a corner. Number gives the side length of the region.
- 7. Square Jam [Voxas]. See above. White dots separate regions of the same size, black dots different size.
- **8. Tasquare.** Shade square-shaped masses of black cells. Do not shade clues. Clue gives the sum of areas adjacent to it. Blank clue must be at least 1.
- 9. Notasquare. See above, but masses must be non-square rectangles.
- 10. Heyawake [Square Blocks]. Heyawake (Classic), but black cells form square-shaped masses. Clues count black cells.
- 11. Yajilin [Square Blocks]. Yajilin (Classic), but black cells form square-shaped masses. Clues count black cells.
- **12. Shakashaka [All Squares].** Draw half-cell triangles. White areas must form squares (not just rectangles). Number gives how many triangles are orthogonally adjacent to it.
- **13. Evolmino.** Draw masses of boxes. Each mass has exactly one box on an arrow. Each arrow goes through at least two masses; each subsequent mass is exactly the previous (no rotation/reflection) plus one box.
- 14. Isowatari. Shade masses of black cells of the indicated size. White cells are connected but have no 2×2 white.
- **15. Circles and Squares.** Shade a Nurikabe wall (connected but have no 2×2). Remaining masses of white cells are square-shaped.
- 16. Circles and Two Squares. See above, but each mass of white cells is two non-overlapping squares.
- 17. Nurikabe [Square Islands]. Nurikabe (Classic), but clues indicate the island is square-shaped.
- 18. FiveCells. Divide into 5-cell regions. Number gives how many sides are region boundaries.
- **19. Overlapping Squares.** Draw axis-aligned squares, the side lengths are the given list. Squares may intersect, but may not otherwise touch/overlap. Number gives the sum of side lengths of squares containing it.
- **20. Diamonds.** Draw 45°-slanted squares with diagonals, cannot go through black cells. Squares may intersect, but may not otherwise touch/overlap. Number gives the sum of side lengths of squares touching the cell (diagonal is 1 unit long).
- 21. Bunnyhop. Draw loop along edges. Each segment of the loop leans toward a white cell. Use each white cell once.
- **22. Icebarn.** Draw path from IN to OUT. Path may turn on non-ice only, path may cross itself on ice only. Each ice patch is used. The path goes through all arrows in the correct direction.
- 23. Battleships. Classic, but the fleet is non-standard.
- **24. Skyscrapers [Square Cages].** Classic, but the number bank is non-standard. Cage spells a square number, reading left-to-right or top-to-bottom.
- **25. Pass Squares [Masyu].** Draw path with two stars as endpoints. Each marked 2×2 square has exactly one cell used. Masyu circles are classic.