Instruction Booklet

All puzzles in this contest are quite classic or the combination of classic ones. The common trick here are the "**XI**-areas" - the shaded outlined areas which should contain numbers that add up to **11**. These areas should have every cell filled by a number.

Duration of the contest is 120 minutes + 10 minutes extra time. There will be a penalty for the submission during extra time: 0.3 points per second (18 points per minute).

1. Sudoku	80 (30 + 50) points
2. Slitherlink	105 (50 + 55) points
3. Fillomino	45 (15 + 30) points
4. 2D Magic	45 points
5. Arrows	75 points
6. Domino Hunt	55 points
7. Domino Castle	60 points
8. Snake	70 (30 + 40) points
9. Japanese Sums Hitori Style	140 points
10. Kropkuro	145 (40 + 105) points
11. Pyramid	180 (80 + 100) points
Total	1000 points

1. Sudoku - 80 (30 + 50) points

Fill in the grid with the numbers 1 through 8/9 (6 in the example). Numbers should appear in each row, column and outlined area exactly once.

2					
		6	2		
				3	
	6				
		1	4		
					3

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

Answer key: the content of marked rows (A:254361; B:163542).

2. Slitherlink - 105 (50 + 55) points

Draw a single continuous loop going along the grid lines. The numbers indicate how many of the edges around it are used by the loop. The loop cannot touch or cross itself.

3	2		3	1
1				1
1		2		1

3	2		3	1
1	2	3	2	1
	1	2	1	
1		2		1

Answer key: number of consecutive cells inside the loop in marked rows (A:21; B:1)

3. Fillomino - 45 (15 + 30) points

Divide the grid into regions along the grid lines. No two regions of the same size can touch each other by a side. Numbers in the grid indicate that this cell is part of a region of that size.

			5
3	4		3

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

Answer key: the content of marked rows (A:1555; B:3443).

4. 2D Magic - 45 points

Fill in the grid with the **different** two-digit numbers (first digit must be always bigger). Digits used in these numbers cannot repeat in rows, columns and main diagonals.

A	5						
							7
			0				
B							
		0	6				

A	9	5	7	2	4	1	3	0	8	6
	6	0	8	4	3	2	5	1	9	7
	8	3	6	1	7	0	9	4	5	2
B	7	1	9	3	8	5	6	2	4	0
	4	2	5	0	9	6	8	7	3	1

Answer key: the content of marked rows (A:9572413086; B:7193856240).

5. Arrows - 75 points

Put the arrows in the empty squares. All arrows point towards the grid (in one of the eight compass directions), and the numbers in the grid indicate the number of arrows facing them.

5		5	
2	3	3	
2	1	7	2

	↘	↘	↓	↓	
↘	2	4	4	2	←
→	5	1	5	3	↙
↗	2	3	3	6	←
→	2	1	7	2	↘
	↑	↗	↑	↖	

Answer key: the positions of straight (non-diagonal) arrows, first in two horizontal rows, counting from left to right, then in two vertical columns, counting from top to bottom (Horizontal: 34,13; Vertical: 24, 13)

6. Domino Hunt - 55 points

Given domino set is placed in the grid, but the borders are erased. Draw the borders and find the original arrangement of the tiles.

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

A (row 2), B (row 4)

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

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

Answer key: content of horizontally oriented tiles in marked rows (A:55; B:44).

7. Domino Castle - 60 points

The figure shows a castle that was built up of the given set of dominoes. Half-dominoes that share an edge have to contain the same number. Numbers around the figure reveal what numbers exist on the domino halves in the given row or column. Find out the original arrangement.
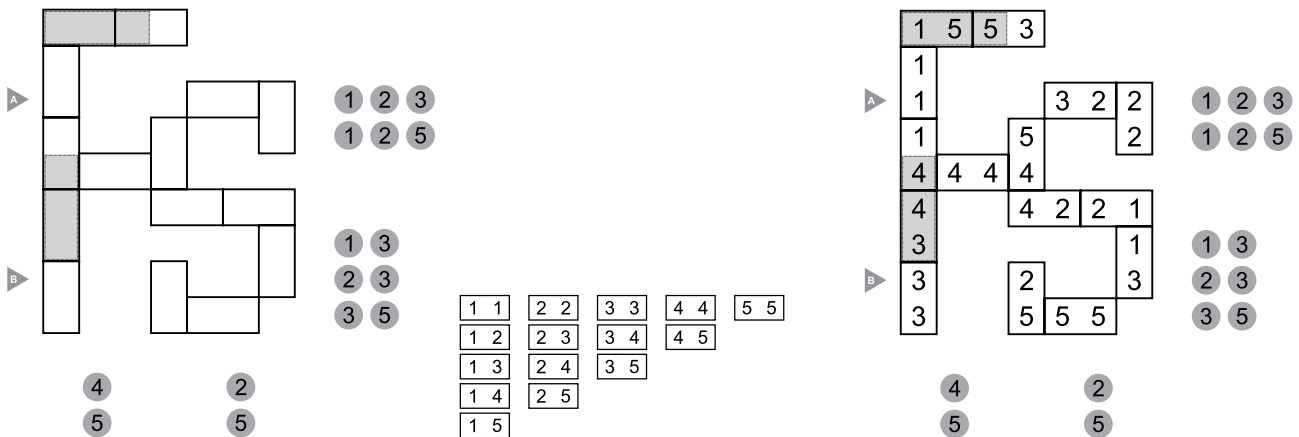
Answer key: the content of marked rows (A:1322; B:333).

8. Snake - 70 (30 + 40) points

Draw a 31/45 cells long (31 cells in the example) and 1 cell wide snake. The snake should not touch itself even diagonally. The numbers outside show the number of cells occupied by the snake in the corresponding rows/columns. Head (H), center (C) and tail (T) of the snake are given.
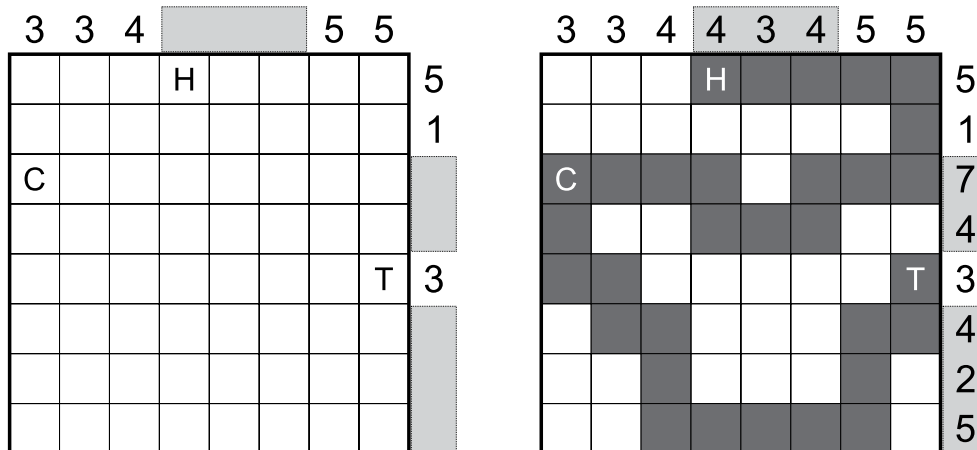
Answer key: the missing numbers, starting from left and going right and down (43474425).

9. Japanese Sums Hitori Style - 140 points

Place the digits 1 to 9 (1 to 7 in the example) in some cells, so that no digit is repeated in any row or column. Numbers on the outside indicate the sums of consecutive digits in that row or column. Each sum is separated by at least one empty square. Empty squares follow Hitori rules: they cannot touch by sides and they don't prevent the filled cells from forming the single continuous area.

Answer key: the content of marked rows, "-" for empty cells (A:3417-265-; B:1-5347-62).

10. Kropkuro - 145 (40 + 105) points

Fill in the grid with numbers 1 to 9 so that each number adds up to the given sum for that row or column. No number may repeat within a single sum. A white dot is given when the two neighbouring cells contain consecutive digits. A black dot separates two numbers where one is twice the other. 1 and 2 may be separated by any coloured dot. All dots are given.
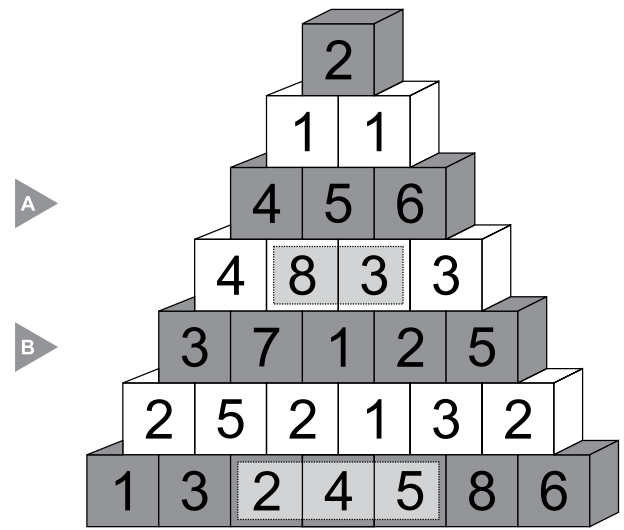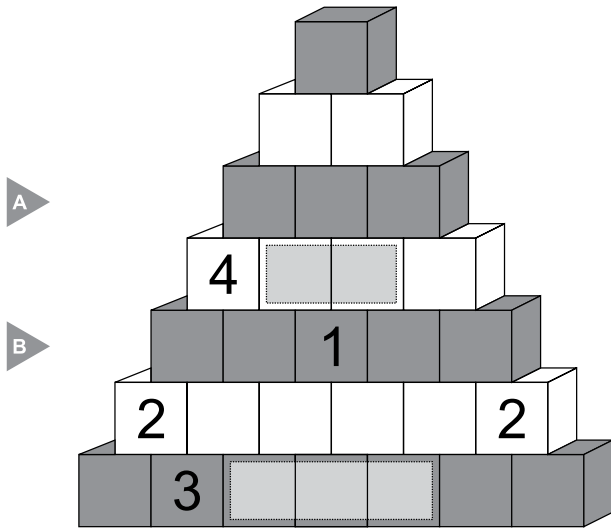
Answer key: the content of marked rows, ignoring non-digit cells (A:26478; B:1432).

11. Pyramid - 180 (80 + 100) points

Enter digits from 1 to 9 into the pyramid cells so that every cell contains either the sum or the difference of the content of the two cells below. Rows that are marked in grey may not contain duplicate digits. Rows that are marked in white must contain at least one duplicate digit.

Answer key: the content of marked rows (A:456; B:37125).