France/Belgium WPC Test 2011 **Part 1**	Name

Part 1 – Warmup – 45 minutes

1.	**Minesweeper**	8+8
2.	**Differences**	8
3.	**Different neighbours**	10
4.	**1-2-3 Loop**	8
5.	**ABCD Connection**	8
6.	**Balancing**	20
7.	**Hitori (All alone)**	10
8.	**Str8ts**	25
9.	**Skyscrapers**	15
10.	**Tents**	10
11.	**Easy as 1-2-3**	20
12.	**Fences**	20
13.	**Waltz**	25
14.	**ABCD Dissection**	45

Total: 240 points + time bonus (5 pts/minute)

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Part 1

1. Minesweeper (8+8 points)

There are 25 mines hidden in the diagram, at most one in a given square. The numbers inside the diagram indicate the number of mines that can be found in the squares immediately adjacent to that square (horizontally, vertically, or diagonally). Squares with a number do not contain mines. Find the mines.

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

1	3							
	4			3	2	3		3
		3	4					
2						0		2
		0		2		2		
	4							
					6		3	
	4	5		4				
1			1			2		

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2. Differences (8 points)

This round contains two pairs of puzzles for which the clues are almost identical. There are 2 differences between the grids in each pair: 2 clues have been moved from one place to another, or deleted. Find the puzzles and the differences.

Pair 1:

- Puzzles:
- Values of the clues moved or deleted:

Pair 2:

- Puzzles:
- Values of the clues moved or deleted:

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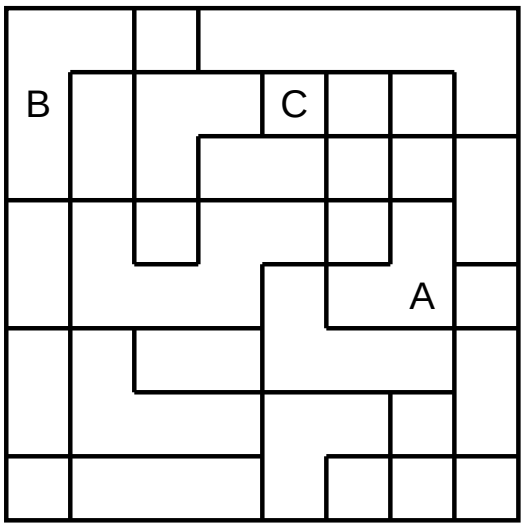
3. Different neighbours (10 points)

Fill the grid with letters A, B, C, D (one in each area) so that areas with the same letters do not touch each other, not even diagonally.



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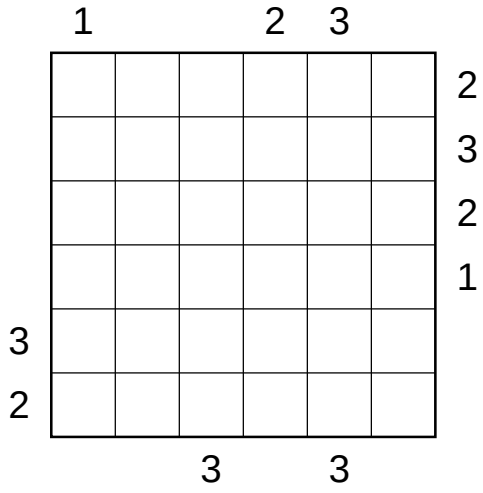
4. 1-2-3 Loop (8 points)

Draw a closed loop, made of horizontal and vertical line segments connecting the centers of adjacent squares. The loop cannot touch itself, not even diagonally. Consecutive cells of the loop are numbered 1,2,3,1,2,3,... The clues around the grid indicate the first digit visible in that row or column.



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5. ABCD Connection (8 points)

Connect each pair of identical letters with an unbroken line. The lines do not intersect or overlap, and pass through the centers of (horizontally or vertically) consecutive squares. Every square of the grid must be used.

B							F		
								C	
			A						
G				B	E				
				G					
		C							
				D				F	
		E				A			D

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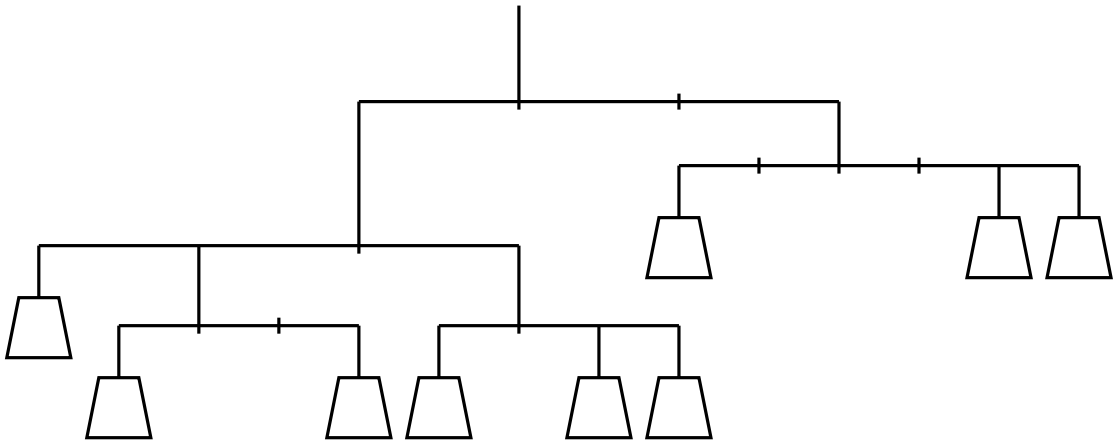
6. Balancing (20 points)

Assign the values 1 to 9 to the weights in the diagram so that everything balances as shown. (The beams have negligible weight). Each value will be used exactly once.



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7. Hitori (All alone) (10 points)

Black out some of the numbers in the grid so that each row and each column contains only different digits. Black squares must not touch horizontally or vertically, and the remaining squares must all be connected to each other.

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

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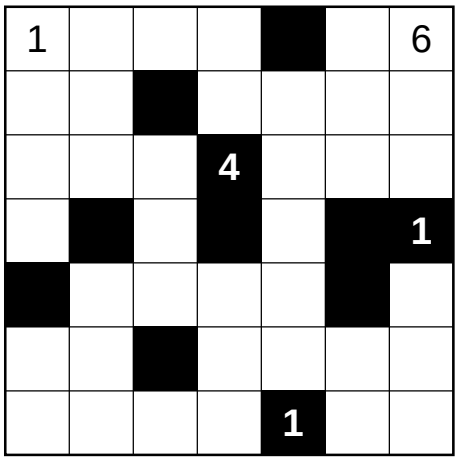
8. Str8ts (25 points)

The rows and columns are divided into blocks of white cells. Complete the white cells using the digits from 1 to 7 (exactly one per cell), so that each block of white cells forms a straight. A straight is a set of consecutive digits, written in any order. A same digit cannot appear more than once in a given row or column. If a black cell contains a digit, then this digit cannot appear in the white cells of the corresponding row and column.



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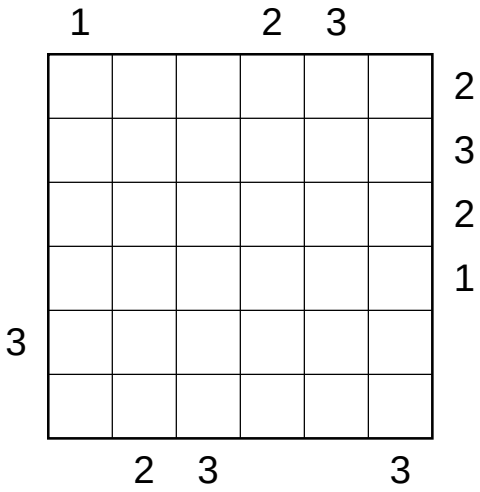
9. Skyscrapers (15 points)

The grid represents a group of skyscrapers. Each row and column contains skyscrapers of different heights (from 1 to 6). The numbers outside the grid indicate how many skyscrapers are visible from that direction (a building located behind a taller one in the same row is completely hidden). Fill in the grid with the heights of the skyscrapers.



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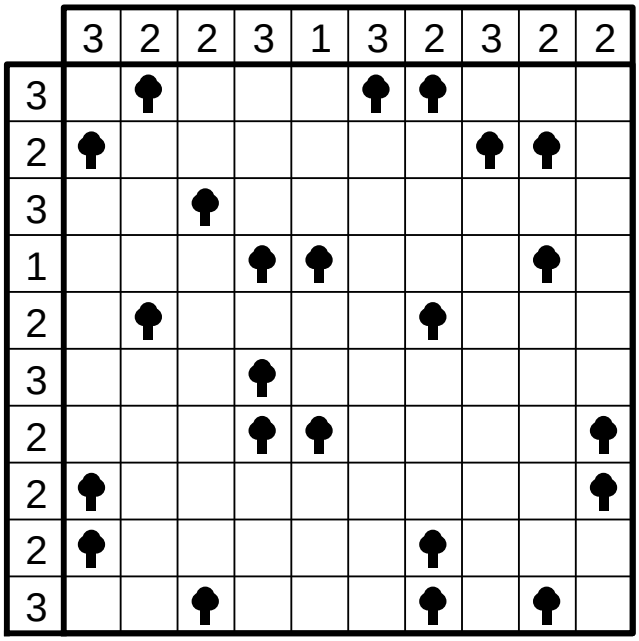
10. Tents (10 points)

Locate the tents in the grid. Each tree is connected to exactly one tent, found in a horizontally or vertically adjacent square. Tents do not touch each other, not even diagonally. The numbers outside the grid reveal the total number of tents in the corresponding row or column.



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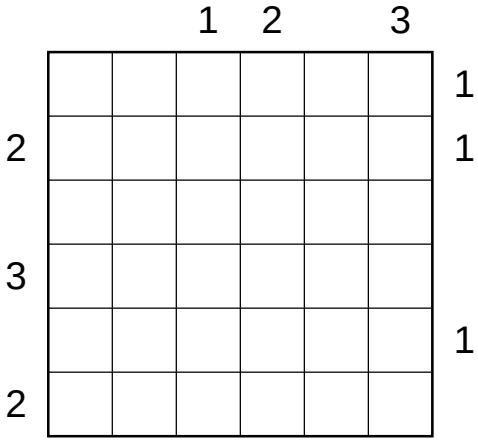
11. Easy as 1-2-3 (20 points)

Place the digits 1, 2, 3 into the diagram, so that each digit occurs exactly once in each row and column. The clues outside the diagram indicate the first digit seen from that direction.



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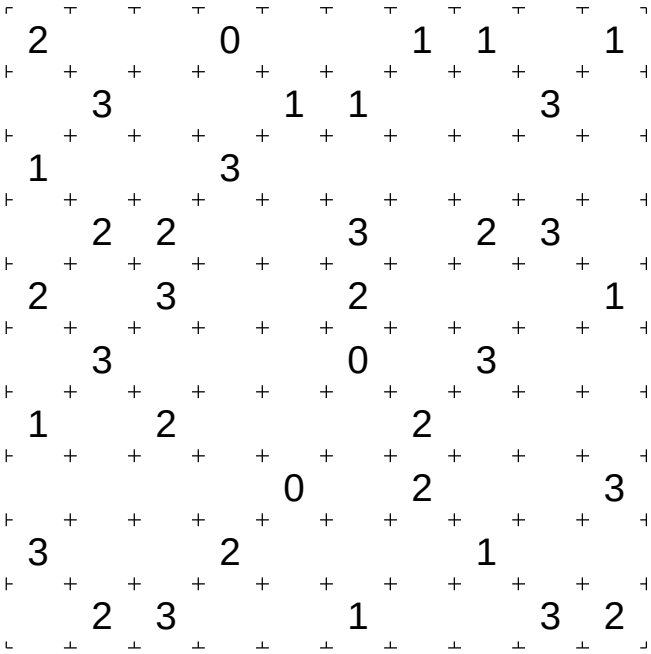
12. Fences (20 points)

Draw a continuous closed loop by connecting neighboring dots horizontally or vertically (but not diagonally). A numbered square indicates exactly how many of its four edges are used by the loop.



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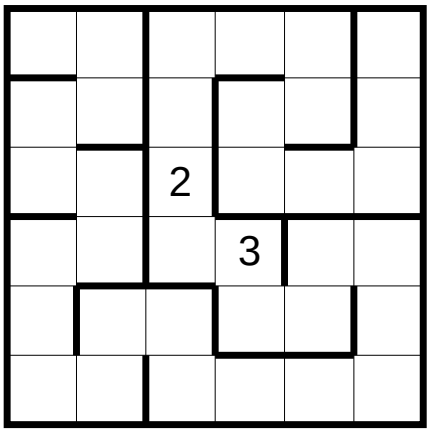
13. Waltz (25 points)

Place digits from 1 to 3 into the grid, at most one per cell, so that when travelling along the path delimited by the bold lines (starting from the upper-left corner) the digits encountered are in the order 1-2-3-1-2-3-...-1-2-3. Each digit appears exactly once in each row and column.



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14. ABCD Dissection (45 points)

Cut the figure along the grid lines into two regions with the same shape and size (identical up to rotation and/or reflection), in such a way that each region contains each letter exactly once. Additionally, the regions do not contain any 2x2 square.