LMI AUGUST SUDOKU TEST
6-7. 8. 2011.

WELCOME TO

SUDOKU CITY
By Nikola Živanović
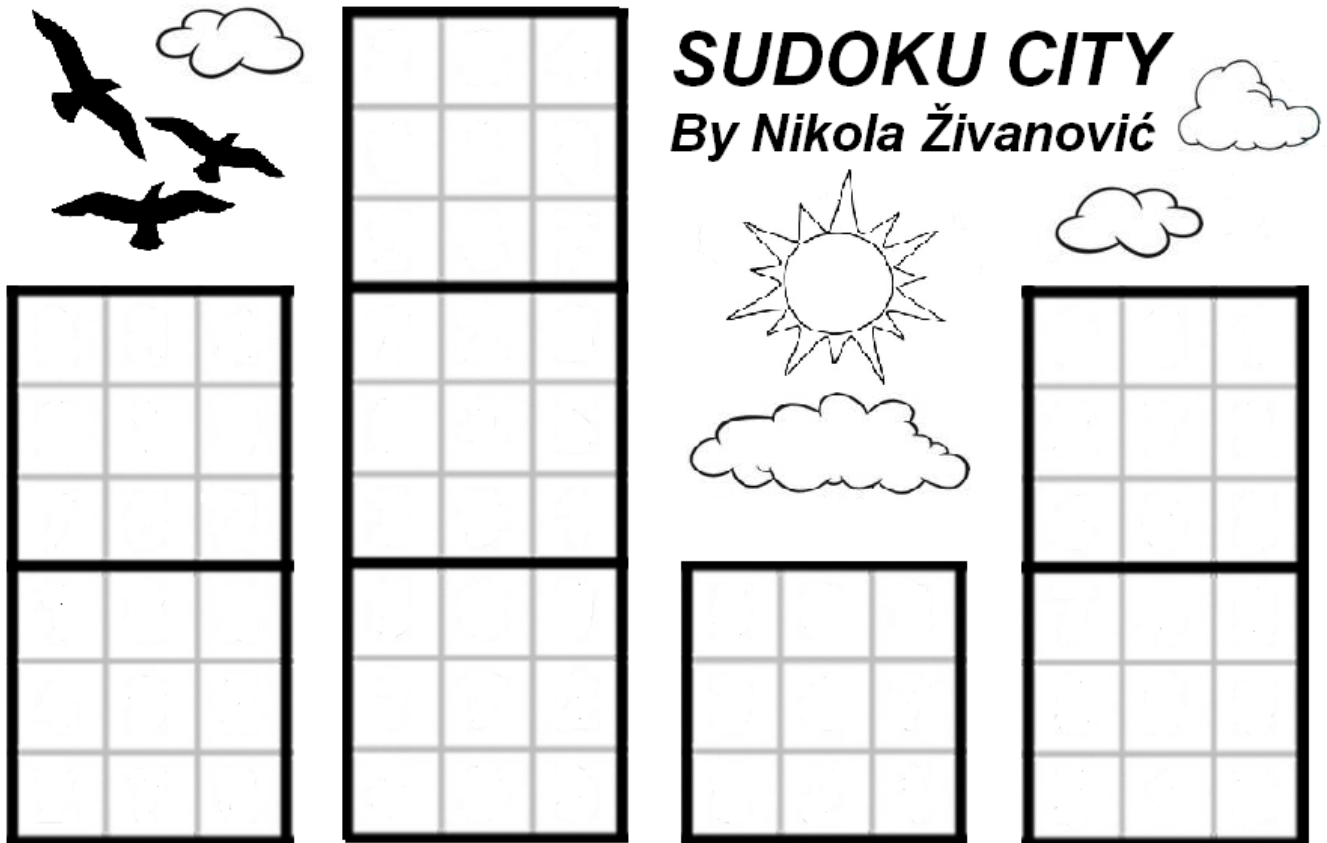
INSTRUCTION BOOKLET

GENERAL RULES

In this contest it will appear variants of the Sudoku Skyscraper puzzle, including classic ones. Some of them will have an additional rule.

For all puzzles the following rule is right:

Place numbers in the grid such that each row, column and 3x3 box (excluding jigsaw sudoku) contain the numbers 1 to 9. Each number represents the height of the skyscraper in each cell.

IMPORTANT POINTS FOR THE TEST

- Test duration is for 100 minutes.
- All grids are 9x9 with numbers 1 to 9, all examples are 6x6 with numbers 1 to 6.
- The Answer key will be either 2 rows or 2 columns or a combination of row and column.
- The Puzzle Booklet will be available for Download 2 days before the test.
- While the test is on for the 2 days, kindly refrain from discussing puzzle specific questions and topics in the forum.

POINTS TABLE

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Total:	100 points

BONUS POINTS

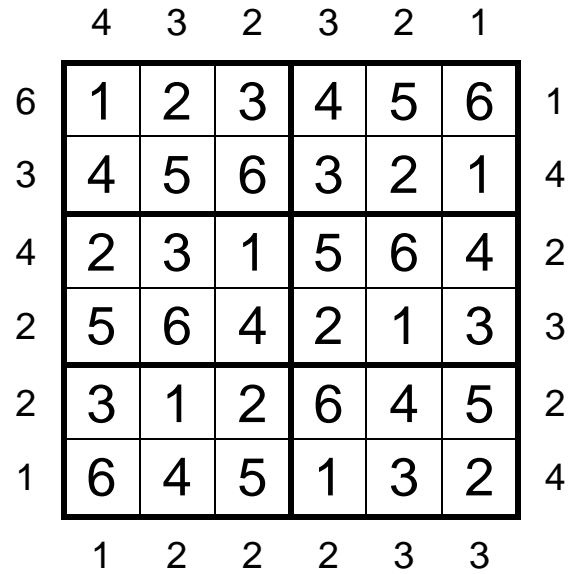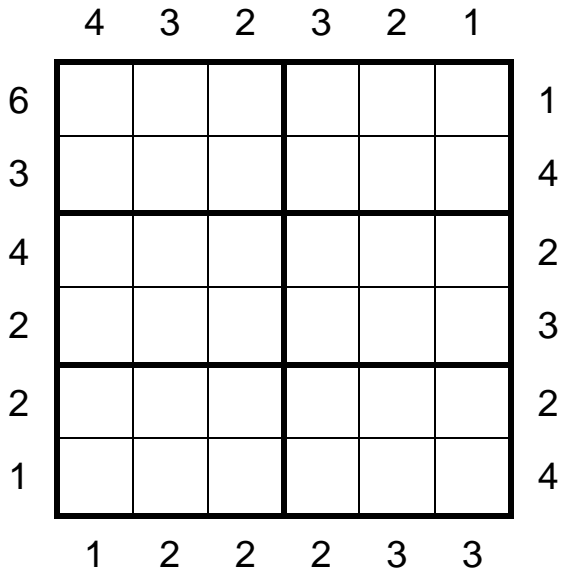|	
12 solved tasks	1 points per 1 minute
11 solved tasks	1 points per 2 minute

SPECIAL THANKS

- To Rishi Puri and Zoltan Horvath, the first citizens of Sudoku City, who pretested the puzzles,
- To Deb Mohanty and LMI for hosting the contest.
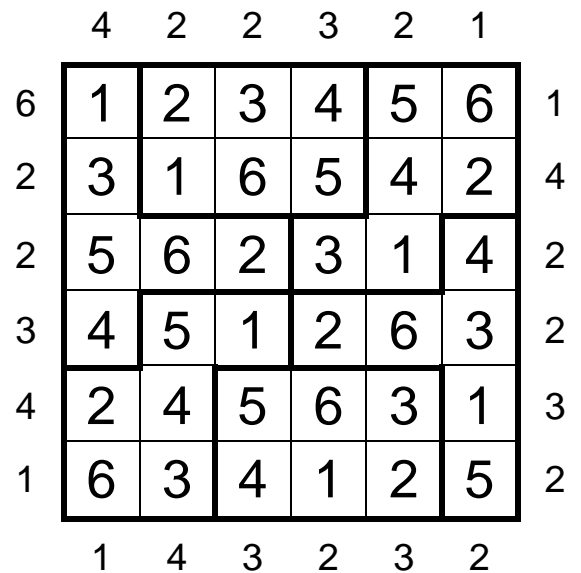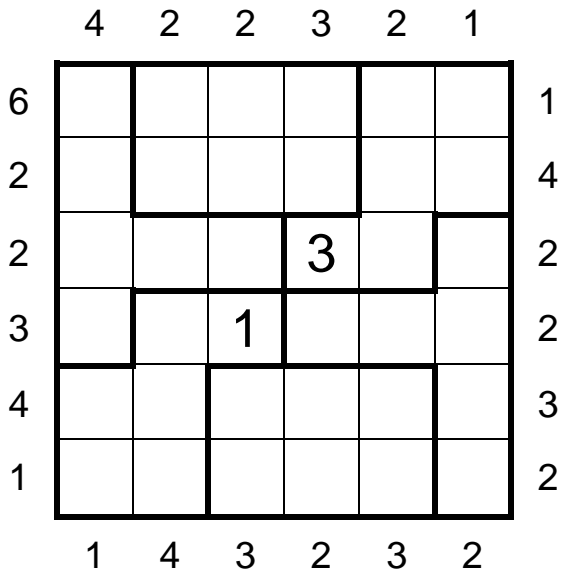
INSTRUCTIONS AND EXAMPLES

CLASSIC

The digits outside the grid indicate the number of skyscrapers seen from the corresponding direction.

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

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

JIGSAW

Place numbers in the grid such that each row, column and outlined region contain the numbers 1 to 9 (1 to 6 in the example). The digits outside the grid indicate the number of skyscrapers seen from the corresponding direction.

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

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

FALSE CLUE

The digits outside the grid indicate the number of skyscrapers seen from the corresponding direction, but all given numbers are wrong. The correct number is either 1 higher or 1 lower.

Left grid (empty):

	3	2	3	2	3	2	
7							2
4							5
5							3
1							2
1							3
2							3
	2	1	1	3	2	2	

Right grid (solved):

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

SUM

The digits outside the grid indicate the sum of the skyscrapers seen from the corresponding direction.

Left grid (empty):

	16	13	9	15	11	6	
21							6
15							12
16							10
11							13
9							11
6							16
	6	10	11	7	13	13	

Right grid (solved):

|	16	13	9	15	11	6	
21	1	2	3	4	5	6	6
15	4	5	6	3	2	1	12
16	2	3	1	5	6	4	10
11	5	6	4	2	1	3	13
9	3	1	2	6	4	5	11
6	6	4	5	1	3	2	16
	6	10	11	7	13	13	

PRODUCT

The digits outside the grid indicate the product of the skyscrapers seen from the corresponding direction.

	120	60	18	120	30	6	
720							6
120							36
180							24
30							72
18							30
6							180
	6	24	30	6	72	60	

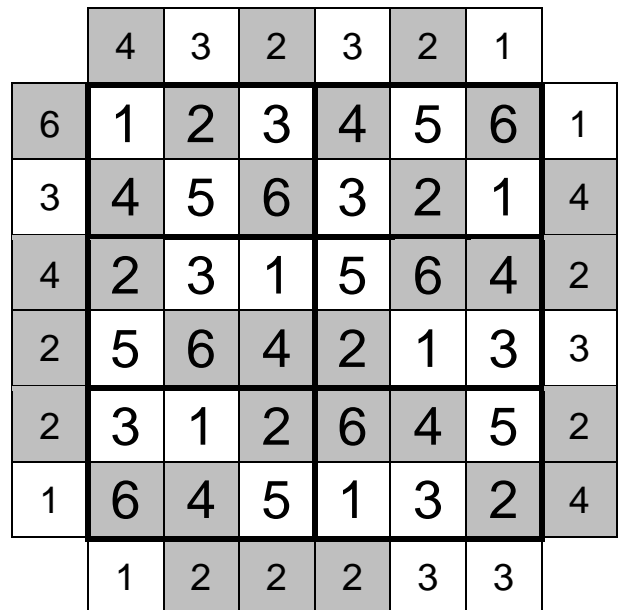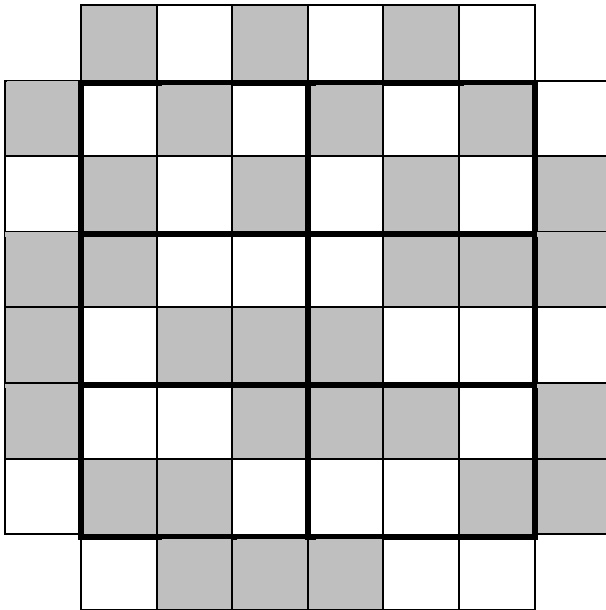|	120	60	18	120	30	6	
720	1	2	3	4	5	6	6
120	4	5	6	3	2	1	36
180	2	3	1	5	6	4	24
30	5	6	4	2	1	3	72
18	3	1	2	6	4	5	30
6	6	4	5	1	3	2	180
	6	24	30	6	72	60	
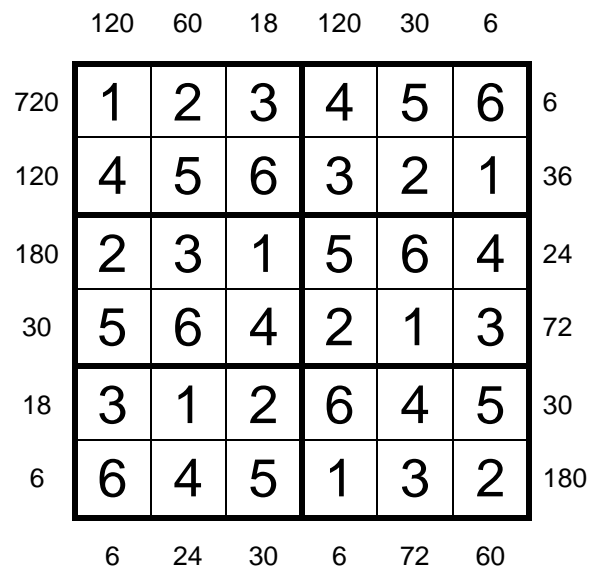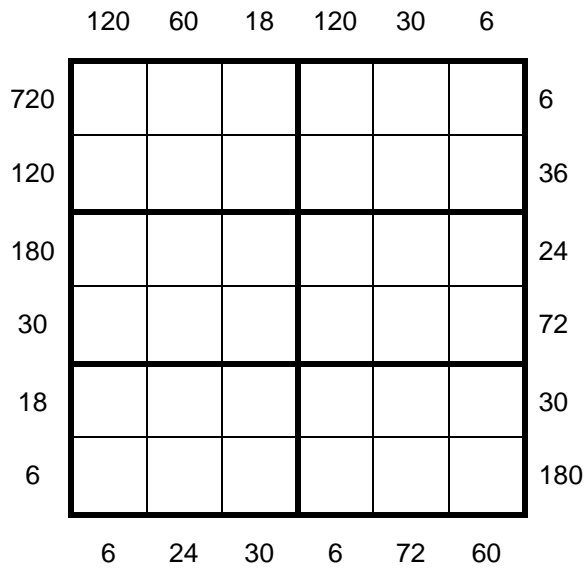
INSIDE

The digits **inside** the grid indicate the number of the skyscrapers seen from the corresponding direction. All such digits are represented by an arrow.

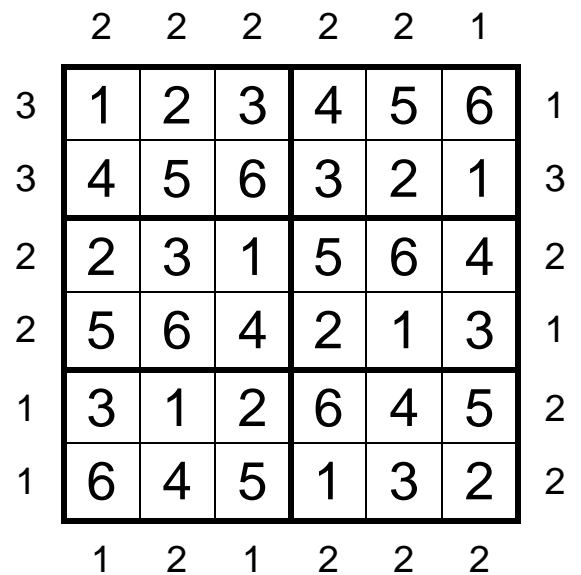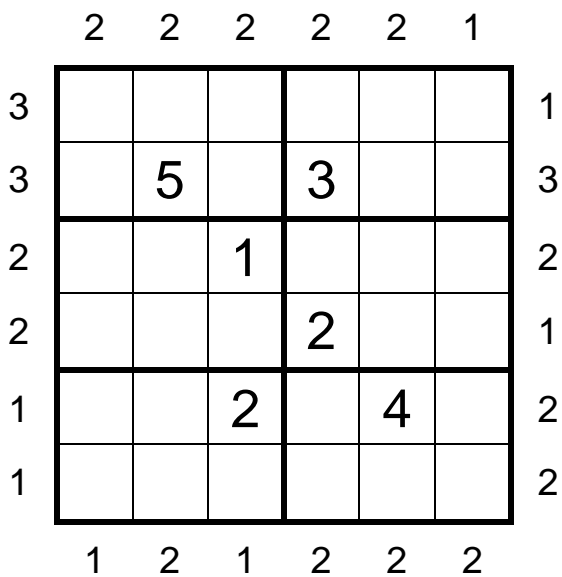| 1	2	3	4	5	6
4	5	6	3	2	1
2	3	1	5	6	4
5	6	4	2	1	3
3	1	2	6	4	5
6	4	5	1	3	2
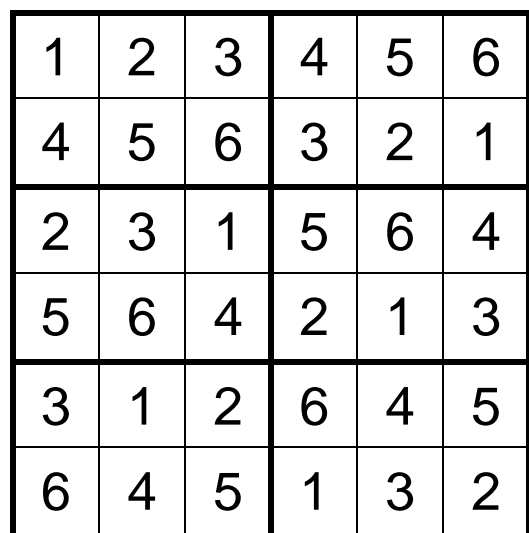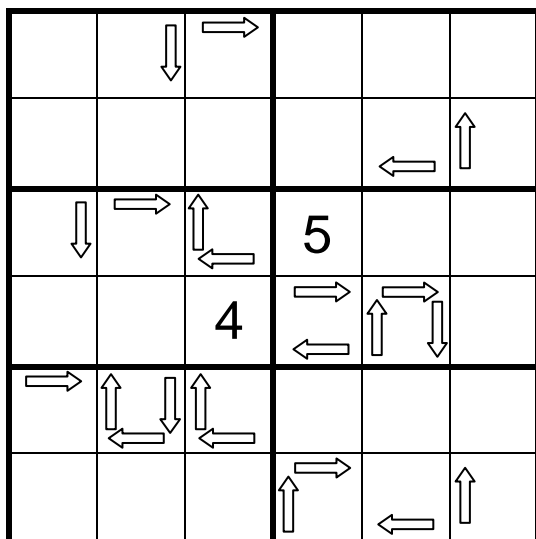
ODD/EVEN

The digits outside the grid indicate the number of the skyscrapers seen from the corresponding direction.
All gray squares contain even digits and all white squares contain odd digits.
<u>Note:</u> In answer form write only 9 numbers inside the grid.

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

FIRST 3

The digits outside the grid indicate the number of skyscrapers seen from the corresponding direction in the first 3 cells only.

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

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

TOTAL

The digits in shaded cells indicate the number of skyscrapers seen in all the 4 possible directions. All such cells are shaded.

					6
	5			2	
2		1			
			2		3
	1			4	
6					

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

NONCONSECUTIVE

The digits outside the grid indicate the number of the skyscrapers seen from the corresponding direction. Adjacent cells cannot contain consecutive numbers.

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

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

SURPRISE

This Sudoku is instruction-less puzzle. An additional rule will be given in the picture next to the grid.