

# SEPTEMBER SUDOKU CONTEST 2013

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## INSTRUCTION BOOKLET

1. MAGIC PUZZLES	26 pt
2. SKYSCRAPERS SUDOKU	27 pt
3. SUDOKU WITH STARS	62 pt
4. SUDOKU WITH NAMES	48 pt
5. OFFSET SUDOKU	16 pt
6. SUMDOKU	48 pt
7. PALINDROME SUDOKU	18 pt
8. SNAKES SUDOKU	33 pt
9. TURN-SUDOKU	27 pt
10. LOGO SUDOKU	28 pt
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TOTAL	333 pt

### TIME

120 minutes

### BONUS

3 points per each saved minute if all the puzzles are solved correctly

### ANSWER KEY

For all sudokus is two rows (left-to-right), indicated by an arrows.

When submitting the answer key, ignore outside clues.

Use "S" for cell with star and plus sign in Puzzles 3, 6.

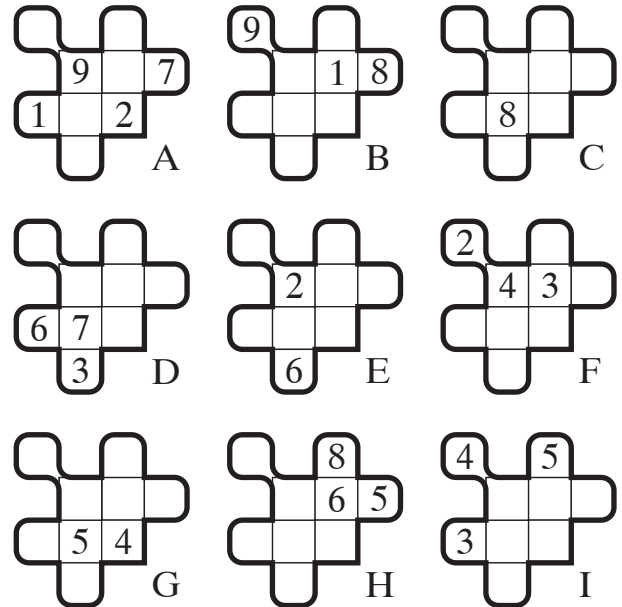
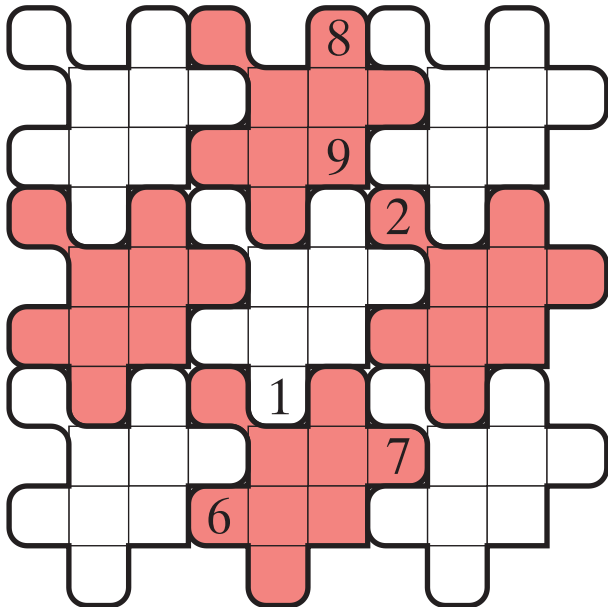
Thanks to Andrey Bogdanov, Salih Alan and LMI

All of the following Sudoku types was invented by me and included in IPST'2005-09

### 1. MAGIC PUZZLES

26 pt

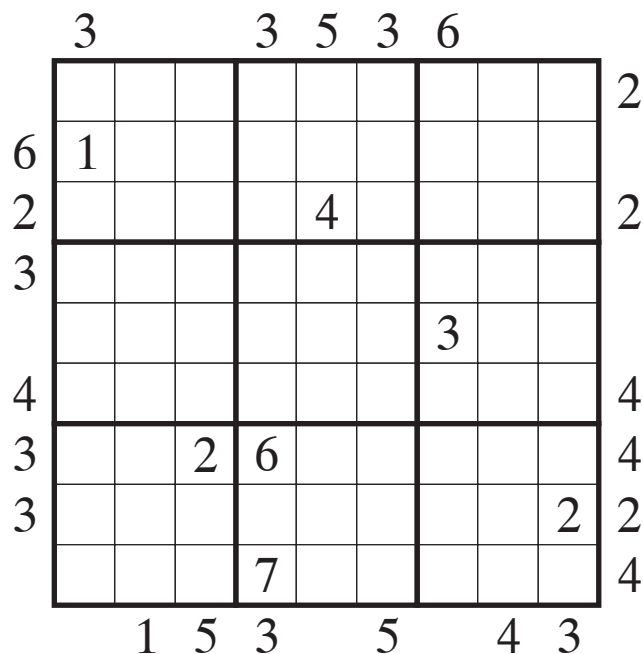
Every figure must be contain digits from 1 to 9. Place these figures into the grid and fill the grid with digits from 1 to 9, so that all digits in every row and column will different.



### 2. SKYSCRAPERS SUDOKU

27 pt

Fill the grid with digits from 1 to 9, so that each digit occurs exactly once in every row, column and outlined area. Consider each number inside the grid to be the height of a building. The numbers outside the grid indicate how many buildings can be seen when looking in the corresponding direction. A building is visible from outside the grid if and only if all buildings between it and the viewing point are lower in height.



### 3. SUDOKU WITH STARS

62 pt

Fill the grid with digits from 1 to 9, which cannot repeat in rows, columns and outlined areas. Every row, column and outlined area must contain exactly 1 star (in the cells not occupied by digits). Stars cannot touch each other even diagonally.

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

### 4. SUDOKU WITH NAMES

48 pt

Write one of the given letters to each empty cell so that every row, columns and outlined area contain each letter exactly once. Letters of puzzlers names written outside the grid should be read in corresponding line in the same order.

A				D			
R				M	A		
T				Y	R	T	A
Y	T			R	T	A	M
O	I			O	R	I	R
M	M			Y	O	E	O

AITOR									
RADE									
RIAD									
DMITRY									
EMIR									
MARIE			Y						

A, D, E, I, M, O, R, T, Y



### 7. PALINDROME SUDOKU

18 pt

Fill the grid with digits from 0 to 9. Each row, column and outlined area contains every digit exactly once. Digits in first row go in revers order with last row. Second row with ninth, third with eighth, fourth with seventh and fifth with sixth. This rule also works for columns.

								0
		1						
			2					
				3				
						4		5
				6				
							7	
	8							
					9			

### 8. SNAKES SUDOKU

33 pt

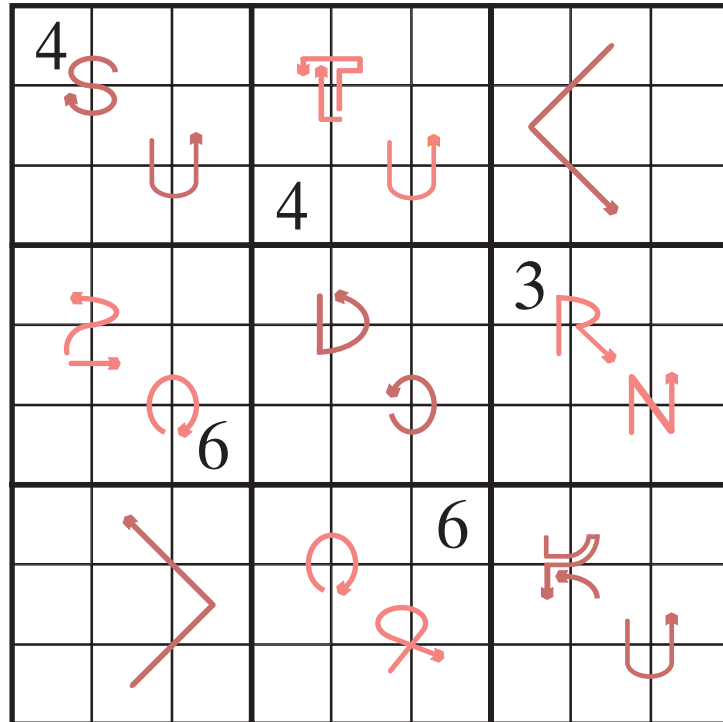
Fill the grid with digits 1 to 9. Each row, column and outlined area should contain different digits. Connect two equal digits N in pink cells with a snake of length (N + 2) without touching itself (cannot form 2 x 2 squares). Snakes cannot overlap each other. Each snake contains only different digits between head and tail.

			5				
		7		6			2
	3						
		5					
						6	
							7
						1	

### 9. TURN-SUDOKU

27 pt

Fill the grid with digits from 1 to 9. Each row, column and outlined area contains every digit exactly once. Digits along curved arrows should increase.



Next Sudoku type is a new

### 10. LOGO SUDOKU

28 pt

No text, only example.

# SOLUTIONS

## MAGIC PUZZLES

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

## SKYSCRAPERS SUDOKU

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

## SUDOKU WITH STARS

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

## SUDOKU WITH NAMES

	A			D					
	R			M	A				
	T			Y	R	T	A		
	Y	T		O	R	T	A		
	O	I		R	O	I	R		
	M	M		Y	O	R	O		
AITOR	A	Y	D	I	T	E	O	M	R
RADE	R	T	M	O	A	D	Y	I	E
	E	I	O	Y	R	M	D	T	A
RIAD	T	R	I	E	O	Y	A	D	M
DMITRY	D	M	E	A	I	T	R	Y	O
	Y	O	A	D	M	R	T	E	I
	I	D	R	T	E	O	M	A	Y
EMIR	O	E	T	M	Y	A	I	R	D
MARIE	M	A	Y	R	D	I	E	O	T

## OFFSET SUDOKU

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

## SUMDUKU

2	3	1	+	6	5	+	4	=300
1	4	+	3	+	6	2	5	=642
+	6	5	2	3	4	1	+	
5	1	4	6	2	+	3	+	
6	2	+	5	1	+	4	3	
+	5	3	4	+	1	6	2	
3	+	6	+	4	2	5	1	=4260
4	+	2	1	5	3	+	6	=2163

||  
417

## PALINDROME SUDOKU

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

## SNAKES SUDOKU

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

## TURN-SUDOKU

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