LMI SUDOKU TEST 'BEST OF SUDOKUS 2010 – 2011'
14TH – 16TH DECEMBER 2013
BY RICHARD STOLK

This test has 20 sudokus, chosen from each of the 18 sudoku tests held by LMI in the years 2010 – 2011. It was certainly not easy to select just one sudoku out of many interesting variations in each set. I didn't pick the most solved sudoku or the highest rated one of each set, because it was also important to ensure that the final set has a good mix of different types. Since I discovered LMI's website at the end of 2011, I didn't take part in most of the tests included in 'Best of'. So it was extra fun for me to discover all the older tests to make my selection.

- The duration of the test is 120 minutes;
- The distribution of points is based on the times needed by test solvers. Therefore, you might experience differences due to your own personal skills and preferences; The difficulty of Sudokus in the IB is not representative for the difficulty of the Sudoku in the real test.
- Each Sudoku has two marked columns as solution code. For Blackuout Sum Sudoku, ignore black cells. For Odd/Even Skyscraper Sudoku, only enter the digits **inside** the grid.
- The puzzle booklet will contain 10 pages, without cover page and points table;
- This test uses ***instant grading*** where a solver can submit any individual puzzle once finished and receive confirmation that the solution is correct or not. Each incorrect submission reduces the puzzle's potential score. The first, second, third, and fourth incorrect submission reduces the potential score to 90%, 70%, 40%, and 0% respectively. (Afterwards, the puzzle's potential score remains 0%.)
- If you submitted all solutions correct you can have bonus points. Your final score is then calculated using the formula: Final Score = Total Points / Used Time * 120 minutes.

Many thanks go to all authors of the Sudoku tests for their inspiring work, to Hans Eendebak, Karin Griffioen, René Gilhuijs, Robert Beärda and Wilbert Zwart for test solving and to LMI for hosting this contest.

Good Luck and have fun!

Points Table		
1	Classic Sudoku	24
2	Sudoku XV	79
3	Palindrome Sudoku	13
4	Between Sudoku	45
5	Sampler Platter	14
6	Give me Five	77
7	Blackout Sum Sudoku	33
8	Chaos Renban Sudoku	100
9	Relay Sudoku (1)	28
10	Relay Sudoku (2)	28
11	Rhombus Sudoku	48
12	Non Consecutive Killer Sudoku	60
13	Sundoku	59
14	Scattered Sudoku	93
15	Number X is Alive	100
16	Domino Sudoku	21
17	Odd-Even-Big-Small Sudoku	37
18	Odd/Even Skyscraper Sudoku	61
19	Missing Arrow Sudoku	43
20	Greater or Lesser Sudoku	37
Total		1.000

1. Classic Sudoku (24 Points)

Taken from Mastermind Twins – LMI Sudoku Test May 2010

Apply classic sudoku rules.

2. Sudoku XV (79 Points)

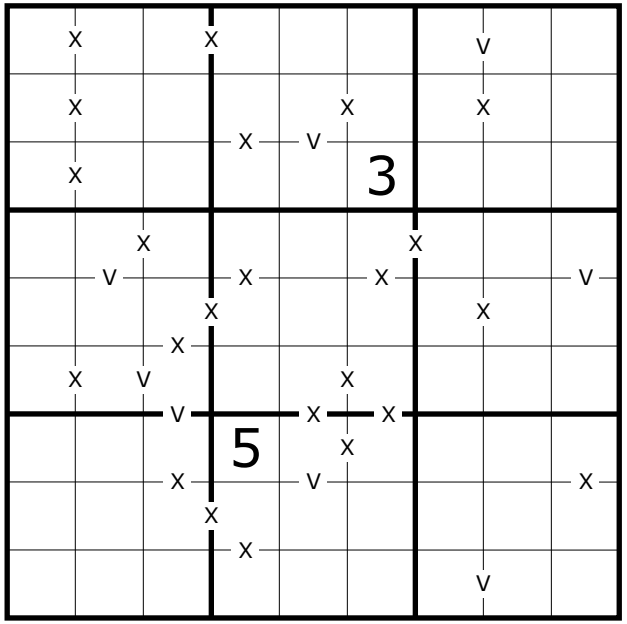
Taken from Mastermind Twins – LMI Sudoku Test May 2010

Apply classic sudoku rules. All horizontally and vertically neighboring digits with the sum 10 are marked with X, all horizontally and vertically neighboring digits with the sum 5 are marked with V.

The clues between both grids on this page represent the number of digits that are in the same cells in the corresponding row in both of the grids.

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

0
2
1
0
0
2
1
0
1



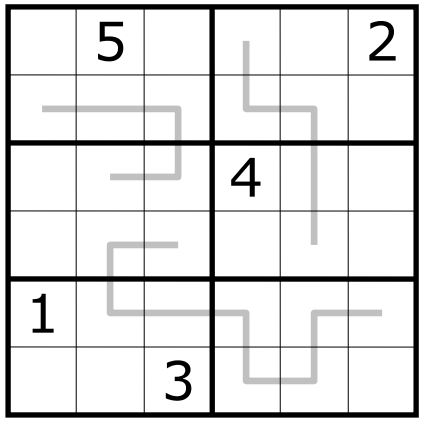
3	2	5	1	7	9	4	8	6
4	1	9	6	2	8	3	5	7
8	7	6	4	5	3	2	1	9
6	3	7	5	8	1	9	4	2
9	8	1	7	4	2	5	6	3
5	4	2	3	9	6	8	7	1
1	9	3	8	6	4	7	2	5
2	5	8	9	1	7	6	3	4
7	6	4	2	3	5	1	9	8

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

3. PALINDROME SUDOKU (13 POINTS)

TAKEN FROM SPEED SIXES – LMI SUDOKU TEST JUNE 2010

Place the digits from 1 to 6 in every row, column and 3x2-block. The digits on the grey lines form palindromes: they read the same from both directions.



	5				2
			4		
1					
		3			

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

4. BETWEEN SUDOKU (45 POINTS)

TAKEN FROM CLASSIC LOOK-ALIKES – LMI SUDOKU TEST JULY 2010

Apply classic sudoku rules. If there are one or more empty cells between two given digits in the same row or column, digits in these cells must have a value between the given digits.

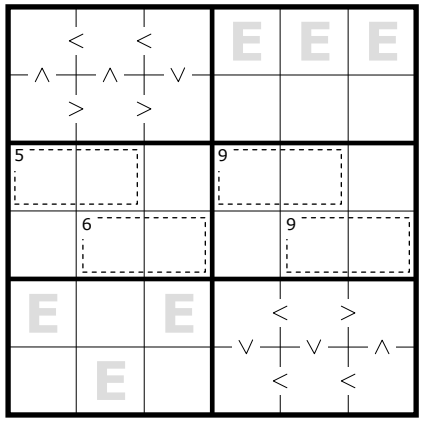
				6		2		
	3		5					
						8		3
9				1				5
6		2						
					5		1	
		7		9				

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

5. Sampler Platter (14 Points)

Taken from Sampler Platter – LMI Sudoku Test August 2010

Place the digits from 1 to 6 in every row, column and 3x2-block. Digits in cells marked with 'E' must be even. Greater and less signs must be obeyed. The sum of digits inside each cage is given at the upper left cell of the cage. Digits must not repeat within a cage.



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

6. Give me Five (77 Points)

Taken from Qixi Festival – LMI Sudoku Test August 2010

Apply classic sudoku rules. The sum of or difference between two horizontally or vertically neighboring digits must never be five.

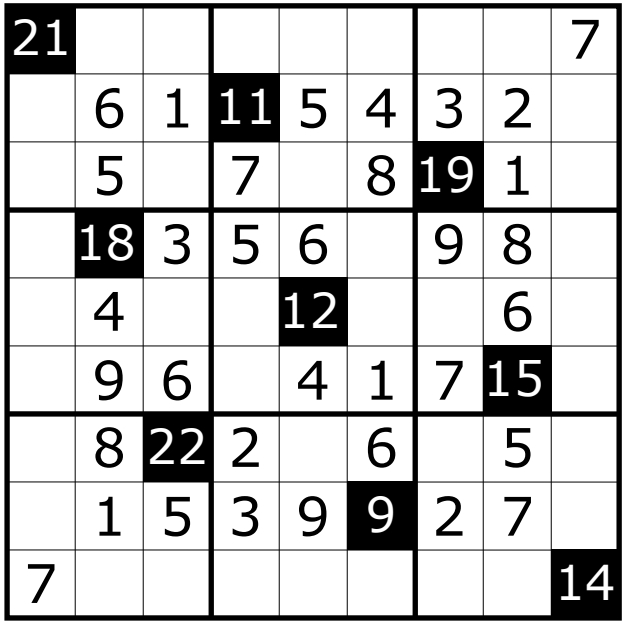
				1				
	5	1		9		4	6	
	3	5	2		6	7	9	
		2		8		6		
4		8				5		2
3		7		6		2		5
			4		2			

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

7. Blackout Sum Sudoku (33 Points)

Taken from Sudoku Hot Pot – LMI Sudoku Test September 2010

Place eight different digits from 1 to 9 in each row, column and 3x3-block. The numbers in the black cells indicate the sum of the three missing digits in the row, column and 3x3-block that the black cell is in.



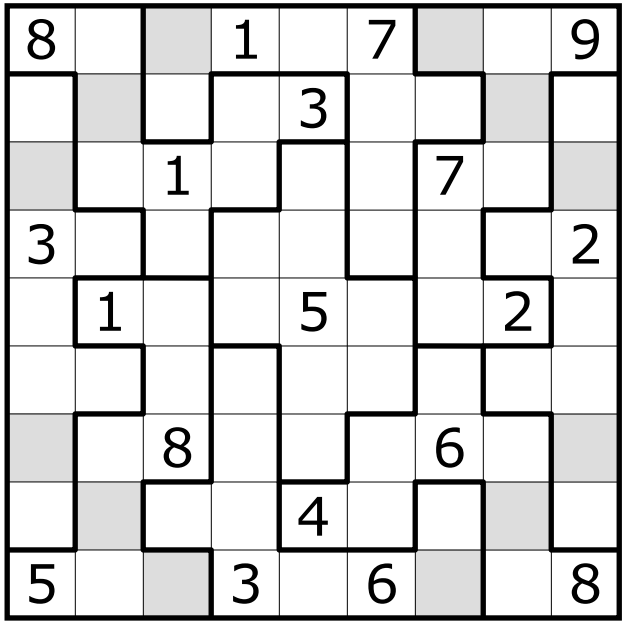
21								7
	6	1	11	5	4	3	2	
	5		7		8	19	1	
	18	3	5	6		9	8	
	4			12			6	
	9	6		4	1	7	15	
	8	22	2		6		5	
	1	5	3	9	9	2	7	
7								14

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

8. Chaos Renban Sudoku (100 Points)

Taken from Renban Grouped Sudokus – LMI Sudoku Test November 2010

Place the digits from 1 to 9 in every row, column and bold outlined area. Digits in grey areas (orthogonally or diagonally connected) form Renban groups. These groups contain consecutive digits, in any order.



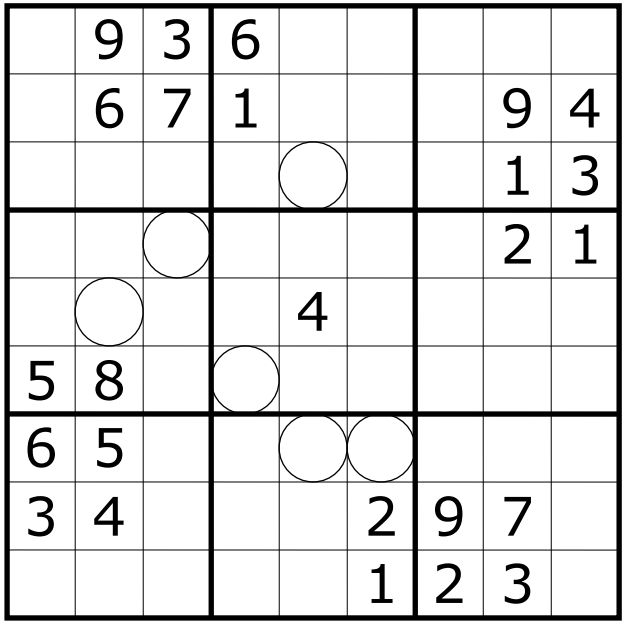
8			1		7			9
				3				
		1				7		
3								2
	1			5			2	
		8				6		
				4				
5			3		6			8

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

9. Relay Sudoku (1) (28 Points)

Taken from X'Mas Special – LMI Sudoku Test December 2010

Apply classic sudoku rules. After solving, transpose the digits in the circles to the dotted circles in the next grid, in any order.



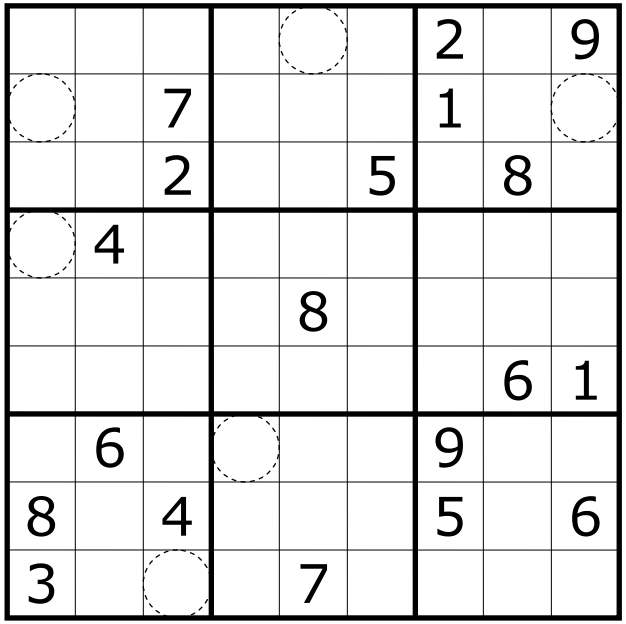
	9	3	6					
	6	7	1				9	4
							1	3
							2	1
				4				
5	8							
6	5							
3	4				2	9	7	
					1	2	3	

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

10. Relay Sudoku (2) (28 Points)

Taken from X'Mas Special – LMI Sudoku Test December 2010

Apply classic sudoku rules. The digits in the dotted circles must contain the same set of digits as in the circles in the previous grid.



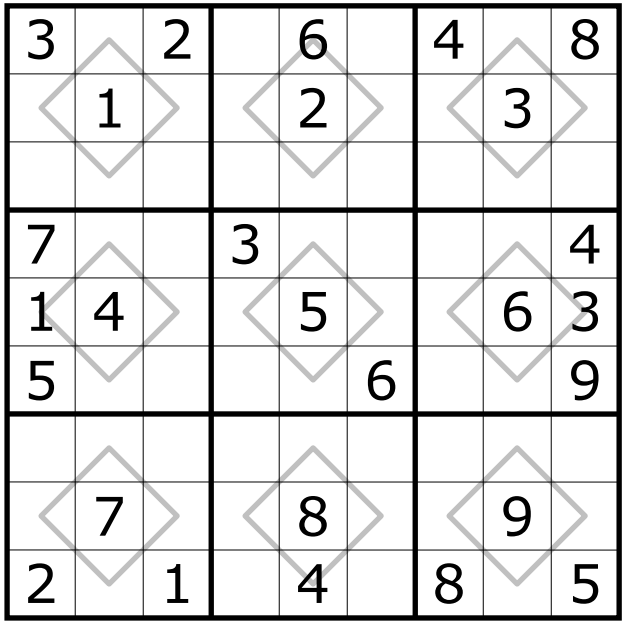
						2		9
		7				1		
		2			5		8	
	4							
				8				
							6	1
	6					9		
8		4				5		6
3				7				

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

11. Rhombus Sudoku (48 Points)

Taken from Prime Exotica – LMI Sudoku Test January 2011

Apply classic sudoku rules. There are some rhombus shaped figures in the grid. The sum of the digits on the rhombus vertices must be a multiple of the central digit (the digit inside the rhombus).

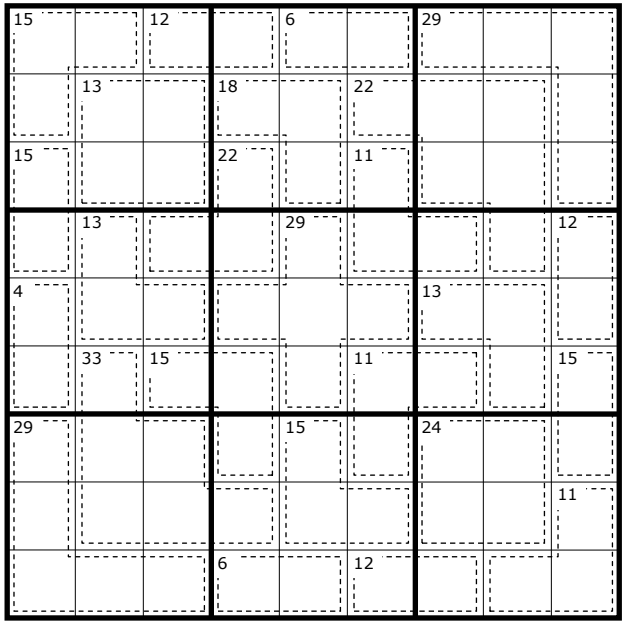


3	5	2	9	6	7	4	1	8
8	1	7	5	2	4	9	3	6
9	6	4	8	3	1	5	2	7
7	8	6	3	9	2	1	5	4
1	4	9	7	5	8	2	6	3
5	2	3	4	1	6	7	8	9
6	9	8	1	7	5	3	4	2
4	7	5	2	8	3	6	9	1
2	3	1	6	4	9	8	7	5

12. Non Consecutive Killer Sudoku (60 Points)

Taken from Double Delight – LMI Sudoku Test February 2011

Apply classic sudoku rules. The sum of digits inside each cage is given at the upper left cell of the cage. Digits can not repeat within a cage. Horizontally or vertically neighboring cells can not contain consecutive digits.

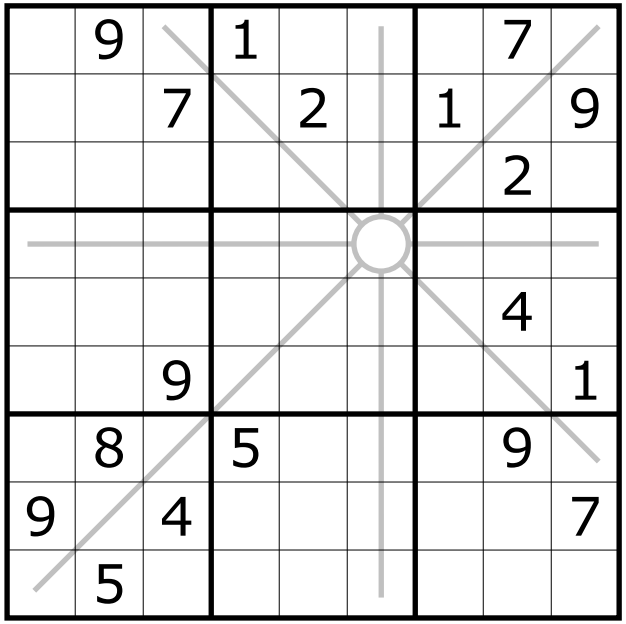


7	3	8	4	1	5	9	6	2
5	1	4	6	9	2	7	3	8
9	6	2	8	3	7	5	1	4
6	2	9	5	8	3	1	4	7
1	4	7	2	6	9	3	8	5
3	8	5	7	4	1	6	2	9
8	5	1	3	7	4	2	9	6
4	7	3	9	2	6	8	5	1
2	9	6	1	5	8	4	7	3

13. SUNDOKU (59 POINTS)

TAKEN FROM LMI SPRING SUDOKU TEST – MARCH 2011

Apply classic sudoku rules. The sun and its rays are drawn in the grid. Rays lose intensity with distance from the sun, so numbers on each ray are strictly decreasing. The central cell (the sun) is **not part of any ray**.



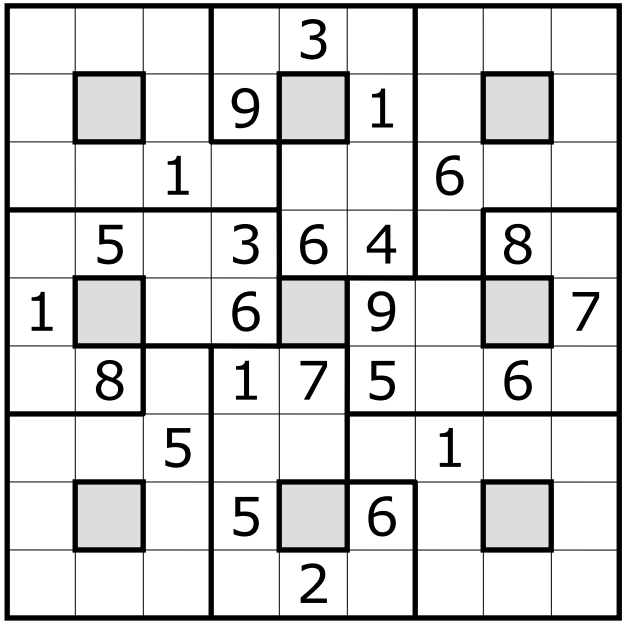
	9		1				7	
		7		2		1		9
							2	
							4	
		9						1
	8		5				9	
9		4						7
	5							

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

14. SCATTERED SUDOKU (93 POINTS)

TAKEN FROM ONLINE INDIAN SUDOKU QUALIFICATION ROUND – APRIL 2011

Place the digits from 1 to 9 in every row, column, bold outlined area and the grey cells.



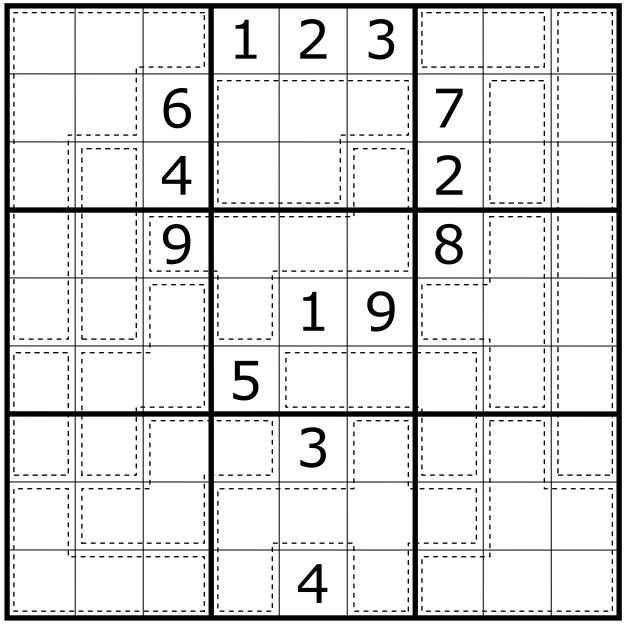
				3				
			9		1			
		1				6		
	5		3	6	4		8	
1			6		9			7
	8		1	7	5		6	
		5				1		
			5		6			
				2				

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

15. Number X is Alive (100 Points)

Taken from Something is Missing – LMI Sudoku Test May 2011

Apply classic sudoku rules. The sums of digits in all cages end with the same digit X. It is part of the puzzle to find the value of X. Digits do not repeat within cages.



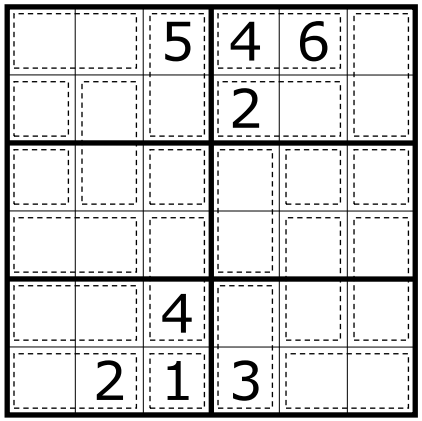
X = 4

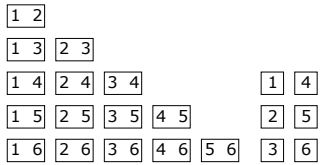
7	9	5	1	2	3	6	8	4
2	3	6	4	9	8	7	1	5
8	1	4	7	6	5	2	3	9
6	5	9	3	7	4	8	2	1
4	8	2	6	1	9	3	5	7
3	7	1	5	8	2	9	4	6
1	4	7	8	3	6	5	9	2
9	6	3	2	5	1	4	7	8
5	2	8	9	4	7	1	6	3

16. Domino Sudoku (21 Points)

Taken from Logidoku – LMI Sudoku Test June 2011

Place the digits from 1 to 6 in every row, column and 3x2-block. Also place all given domino tiles and single pieces once in the grid. The borders of the domino tiles and single pieces are already shown.



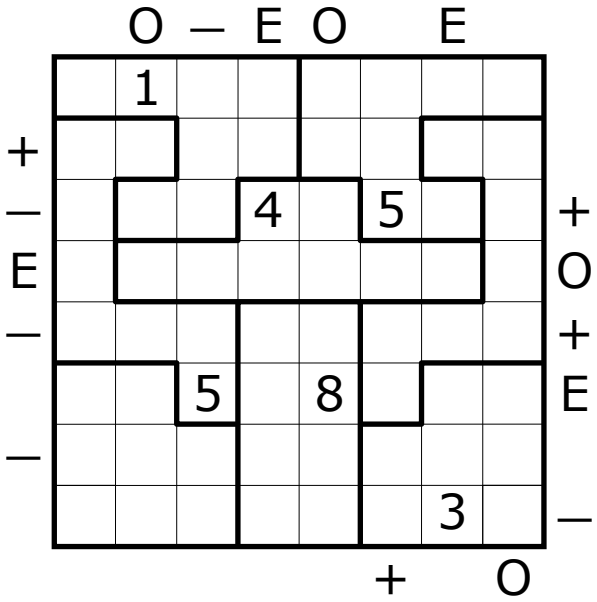


2	3	5	4	6	1
4	1	6	2	5	3
5	4	2	1	3	6
1	6	3	5	2	4
3	5	4	6	1	2
6	2	1	3	4	5

17. Odd-Even-Big-Small Sudoku (37 Points)

Taken from Fivefold Sudoku Test – LMI July 2011

Place the digits from 1 to 8 in every row, column and bold outlined area. A symbol outside the grid indicates that the first **two** numbers in that row or column are either odd (O; 1,3,5,7), even (E; 2,4,6,8), big (+; 5,6,7,8) or small (-; 1,2,3,4).

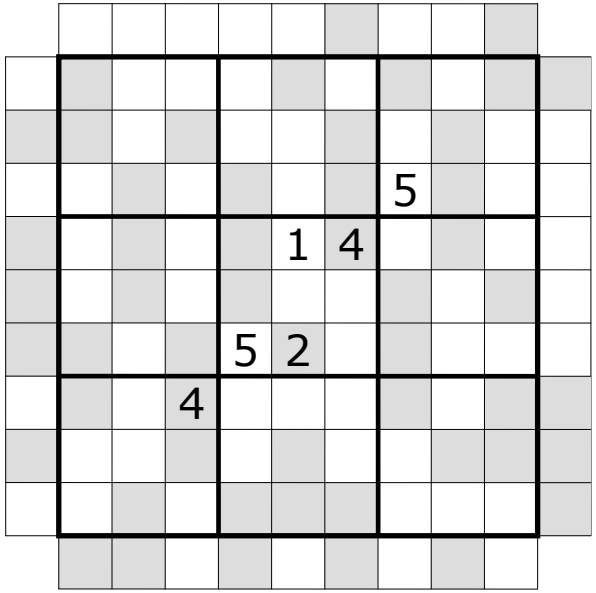


	O	–	E	O		E		
	5	1	3	6	7	2	8	4
+	6	7	4	8	1	3	2	5
–	1	2	7	4	3	5	6	8
E	4	8	6	5	2	7	1	3
–	2	3	8	1	5	4	7	6
	7	6	5	3	8	1	4	2
–	3	4	1	2	6	8	5	7
	8	5	2	7	4	6	3	1
					+		O	

18. Odd/Even Skyscraper Sudoku (61 Points)

Taken from Sudoku City – LMI Sudoku Test August 2011

Apply classic sudoku rules. Digits outside the grid represent the number of skyscrapers that is visible from that view point. Higher skyscrapers hide lower skyscrapers. All grey cells contain even digits and all white cells contain odd digits.

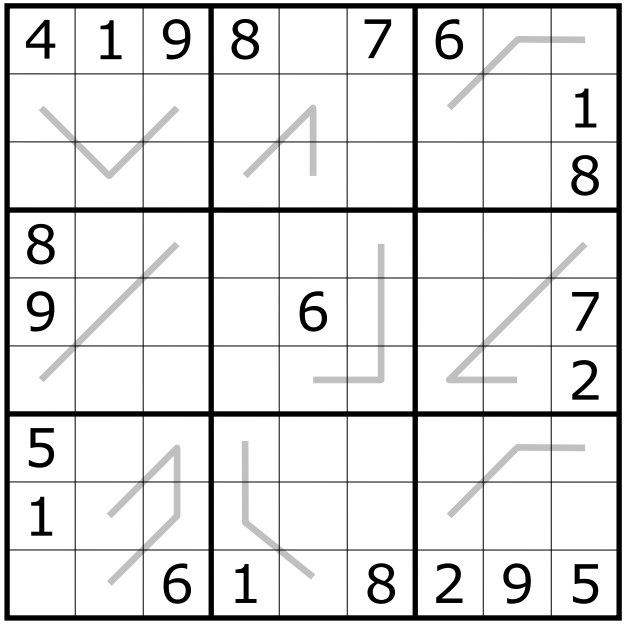


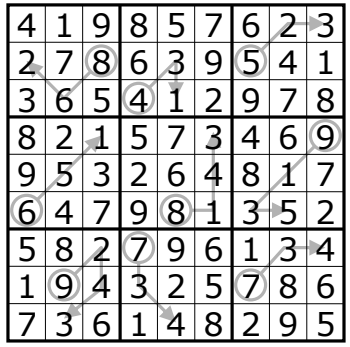
	3	3	3	1	3	4	3	5	2	
3	6	5	7	9	4	1	2	3	8	2
2	8	3	2	7	5	6	1	4	9	1
1	9	4	1	2	3	8	5	6	7	3
2	7	2	3	6	1	4	9	8	5	3
4	1	6	5	8	9	3	4	7	2	3
2	4	9	8	5	2	7	6	1	3	5
5	2	1	4	3	7	5	8	9	6	2
4	5	7	6	1	8	9	3	2	4	2
3	3	8	9	4	6	2	7	5	1	4
	4	2	1	4	3	2	3	2	5	

19. Missing Arrow Sudoku (43 Points)

Taken from Crazy Arrows – LMI Sudoku Test September 2011

Apply classic sudoku rules. The grey lines in the grid are incomplete arrows. The digit on one end of the line is the sum of the other digits on the same line.





20. Greater or Lesser Sudoku (37 Points)

Taken from Sudoku A or B – LMI Sudoku Test October 2011

Apply classic sudoku rules. Determine which one of the rules is true:
1. Each digit clue must be the greater of the two neighboring digits or
2. Each digit clue must be the lesser of the two neighboring digits