

Logic Masters India

Presents



April 14 – 16, 2012

April 2012 Monthly Sudoku Test

INSTRUCTION BOOKLET

Thanks to Tawan Sunathvanichkul (tamz29) for test solving the puzzles and David Millar for designing the logo.

Submission: <http://logicmastersindia.com/M201204S/>

Important Points for the test.

- Test duration is for 120 minutes.
- All grids are 9x9 Sudokus.
- The grids are placed in order of their points.
- No kind of outside help is to be used.

Puzzle Types and Points

Puzzle Name	Points
Killer	40
Little Killer	45
consecutive Killer	50
Multiple Killer	55
Surprise Killer	60
5 is still alive	60
Anti-knight Killer	65
Twin Killer	70
Untouch Killer	80
0-8 Killer	85
Torroidal Killer	90
Greater Than Killer	100
Total	800

Bonus Points

If all grids are submitted correctly, with no errors then a solver is eligible for bonus points calculated as per the formula given below.

$$\text{Final Score} = \text{Total Points} / \text{Claim Time} * 120 \text{ minutes}$$

Killer Sudoku

35 Points

Fill the grid with the digits 1 to 9 in every row, column and 3x3 box. Number given at the top of each cage is the sum of all digits inside that cage. Numbers cannot repeat inside a cage.

11		30		4		11	26	
6		9		11				
10				29		7		
13	11	12				17	3	
		30						
5	28	16			11	25		
					7			
16				11		9	11	10
				9				

Little Killer

45 Points

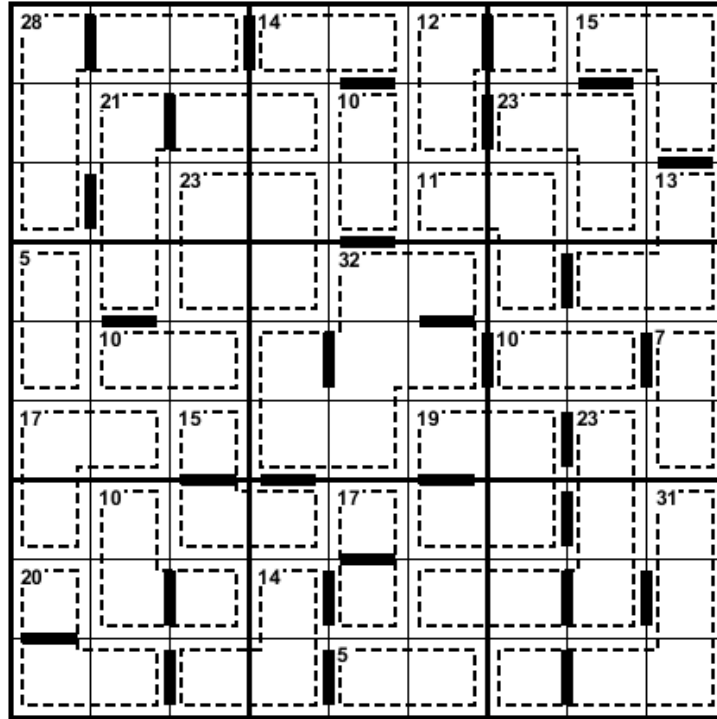
Fill the grid with digits from 1 to 9, so that each digit occurs exactly once in every row, column and outlined box. The sums of the digits in the indicated diagonals, is given on the outside of the grid; digits can repeat in these diagonals provided they don't violate other sudoku rules. The main diagonals contain digits 1 to 9.

1 16 18 13 19 30 46 44
 45
 35
 31
 21
 14
 11
 14
 9
 2
 4
 21
 30
 21
 34
 24
 44
 37 24 43 22 18 7 15 7

Consecutive Killer

50 Points

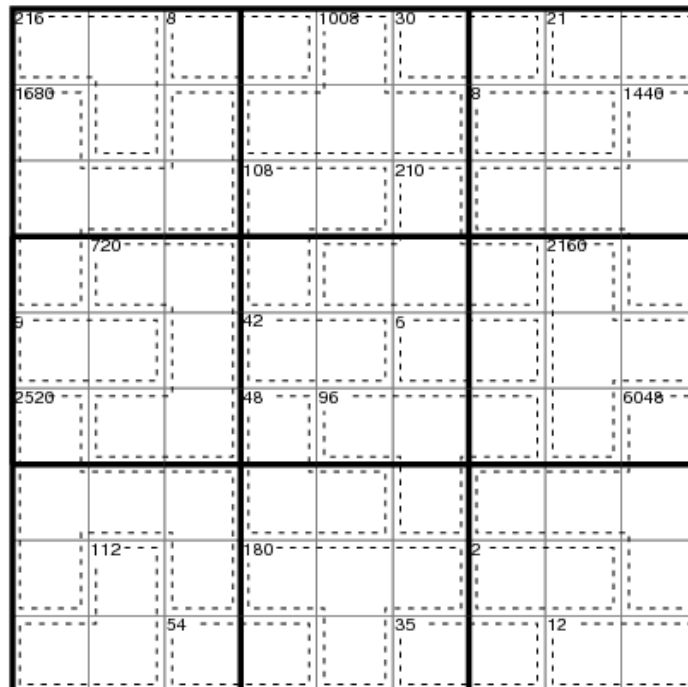
Fill the grid with digits 1 to 9 in every row, column and 3x3 box. Adjacent cells having consecutive digits are marked by a bold line always. Numbers on the top of a cage is the sum of all digits inside that cage. Numbers do not repeat in any given cage.



Multiple Killer

55 Points

Fill the grid with the digits 1 to 9 in every row, column and 3x3 box. The number given on top of the cage is the product of all the numbers in the cage. Numbers do not repeat inside any cage.



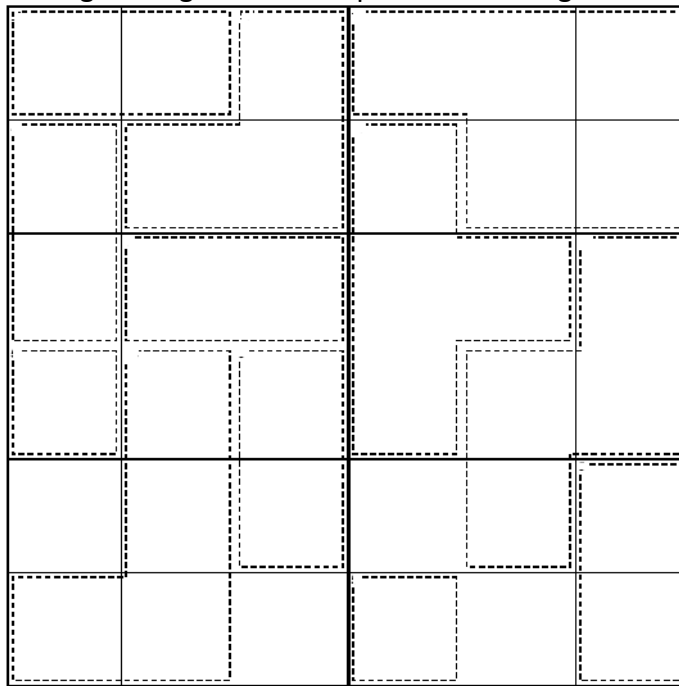
Surprise Sudoku

60 Points

5 is Still Alive

60 Points

Fill the grid with digits 1 to 9 in every row, column and 3x3 box. Every cage has a sum equal to an odd multiple of the digit 5. Digits cannot repeat inside a cage.

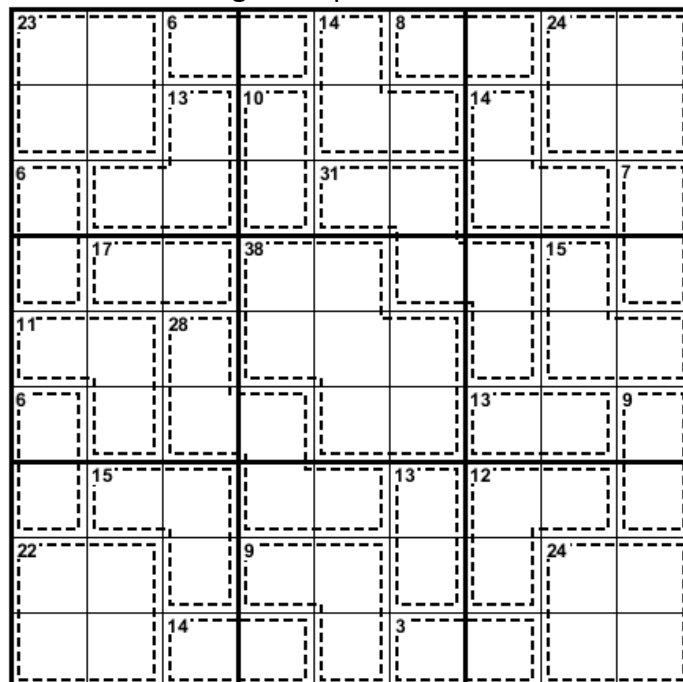


New Example for 5 is still alive. This is a 6x6 sudoku. Actual puzzle will be 9x9.

Anti-Knight Killer

65 Points

Fill the grid with the digits 1 to 9 in every row, column and 3x3 box. Number on top of a cage is the sum of all the digits inside a cage. Digits cannot repeat in a cage. Additionally, a digit cannot repeat in a cell which is at a Knights step as in chess.



Solve the two individual Killer sudokus. Both sudokus share the same solution. Individually the sudokus have non-unique solution.

22'		8		30'	8		26'	
	32'							6
7						8		
			23'		17'			21'
28'								
10'	27'		21'		27'			15'
		13'		12'		19'	19'	
	6							

22'		7		11'	8		15'	
	20'				14'	20'		
3		23'		41'				11'
						4		
11'					9	20'	14'	
10'	10'							
	19'		13'	20'		16'		29'
22'				10'				
		3						

Untouch Sudoku

80 Points

Fill the grid with digits 1 to 9 in every row, column and 3x3 box. Numbers on top of the cage is the sum of all the digits inside that cage. Digits do not repeat inside any cage. Additionally a digit cannot touch itself even diagonally.

14'		12'		11'	15'		18'	
	5		17'		24'		12'	
17'				10'				9
	9	30'				19'	21'	
				5				
13'		11'				14'	14'	
	17'			27'			3	
9		19'				20'		10'

0 – 8 Killer

85 Points

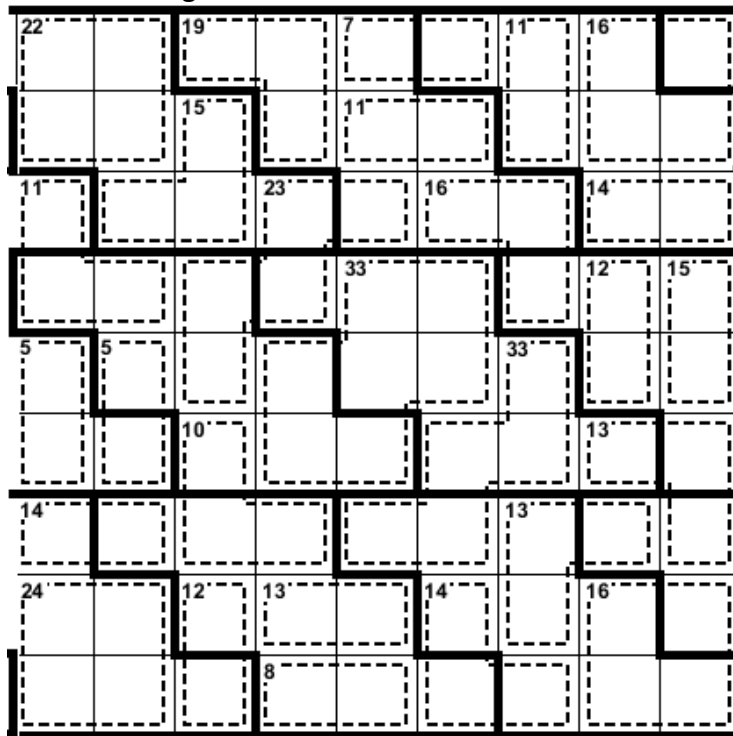
Fill the grid with digits 0 – 8 in every row, column and 3x3 box. Numbers on top of a cage is the sum of all the digits inside that cage. Numbers do not repeat inside a cage.

32'		6		3	6		15'	
					19'	9		
9		18'		16'			5	
						10'		12'
6		8		14'				
7	8					20'		11'
	9		8				25'	
7		13'		12'				
	14'							

Torroidal Killer

90 Points

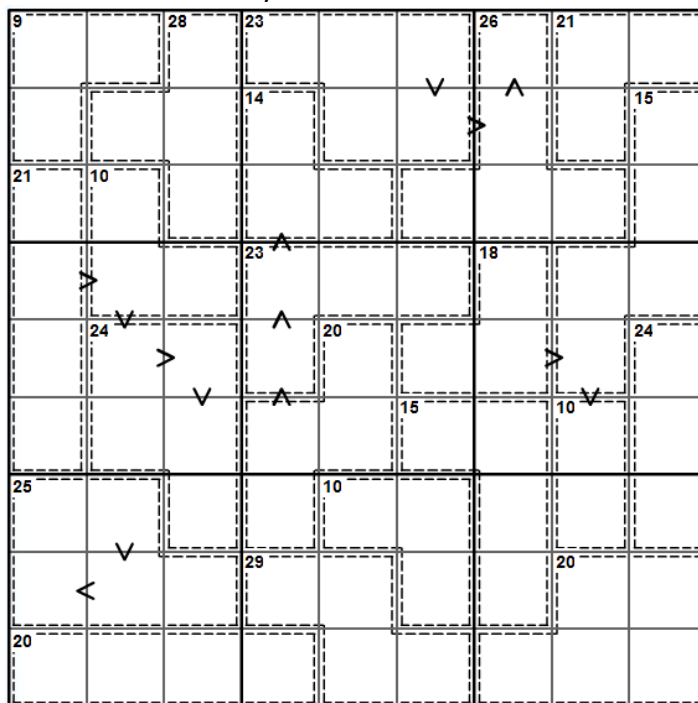
Fill the grid with digits 1 to 9 in every row, column and irregular shaped boxes. The boxes wrap around the grid. Numbers at top of the cage is the sum of all the digits inside that cage. Numbers cannot repeat inside a cage.



Greater Than Killer

100 Points

Fill the grid with digits 1 to 9 in every row, column and 3x3 box. Numbers at the top of cage denotes the sum of all digits inside the cage. Digits do not repeat inside a cage. Cell sharing a border with the greater than or less than symbol follow the related mathematical rule.



Puzzle created by Jan Novotny(KrtekHonza) for Krtek's Cup at <http://www.fed-sudoku.eu/enindex.php?co=>

Solutions

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

Killer

									1	16	18	13	19	30	46	44		
45	1	9	6	5	4	8	7	3	2									
35	7	4	2	3	9	6	5	8	1	2								
31	8	3	5	1	7	2	4	9	6	4								
21	3	2	7	9	5	1	6	4	8	21								
14	5	1	9	8	6	4	2	7	3	30								
11	4	6	8	7	2	3	9	1	5	21								
14	2	7	3	6	1	9	8	5	4	34								
9	6	5	1	4	8	7	3	2	9	24								
									9	8	4	2	3	5	1	6	7	44
									37	24	43	22	18	7	15	7		

Little Killer

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

Consecutive Killer

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

Multiple Killer

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

5 is Still Alive

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

Anti-Knight Killer

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

Twin Killer 1

28	8	7	4	3	17	2	6	19	1
9	28	7	1	4	18	28	3	2	
37	2	23	9	45	16	8	7	14	
12	4	5	6	8	9	43	1	7	
18	3	16	7	2	9	29	16	9	
19	19	9	4	3	5	12	8	6	
3	19	2	8	28	7	19	4	28	
28	7	8	5	19	4	9	2	3	
4	5	3	1	2	9	3	7	6	8

Twin Killer 2

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

Untouch Killer

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

0 - 8 Killer

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

Torroidal Killer

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

Greater Than Killer