LMI Monthly Test – May 2010
Instruction Booklet

Start Time 22-May-2010 20:00 IST End Time 23-May-2010 20:00 IST

Total Time : 120 minutes

Points Table

Twin	Sudoku Type	Points
T1 (110)	No Touch	60
	Kropki	50
T2 (120)	Classic	65
	XV	55
T3 (130)	No Knight Step	60
	Trio	70
T4 (140)	Consecutive	75
	Touchy	65
T5 (155)	Quadro	75
	Symmetric Unequal	80
T6 (165)	Small Neighbours	80
	Odd Even	85
	30 Points per twin solved	180
	Total	1000
+ Time Bonus (10 points per minutes saved)		

Rules and Regulations

- Answers will be accepted using the website http://www.logicmastersindia.com/M201005. Please familiarize yourself with solving and submitting the examples.
- Before the test starts, a password protected pdf file will be available to download. This will contain the test puzzles.
- After you start the test, the password will be shown to you. You can either solve online OR print the pdf and enter the answer keys.
- After you start the test, submission is allowed upto 120 minutes. A Timer will be available for you on the test page. Don't refresh/reload the test page before submitting.
- You may submit as many times as you want. Only your last submission will be considered for scoring.
- You don't need to enter full grid. Click on "Show Cells to Fill". Enter the marked cells. "Show cells to Fill" will be activated 45 minutes after you start the test.

Scoring

- Time bonus will be awarded only if all Sudokus are solved correctly.
- 30 points bonus will be awared if both puzzles of a twin is submitted correctly.
- Grids might have multiple solutions when solved independently (i.e. not respecting the twin constraint). Points will be awarded only if your answer can satisfy the twin constraint.

Notes

- Points are generally indicative of the difficulty of the Sudoku and time required to solve it. However, your personal experience and preference might differ.
- Examples don't reflect the difficulty of the Sudokus in the test.

Sudokus by Deb Mohanty – Tested by Amit Sowani

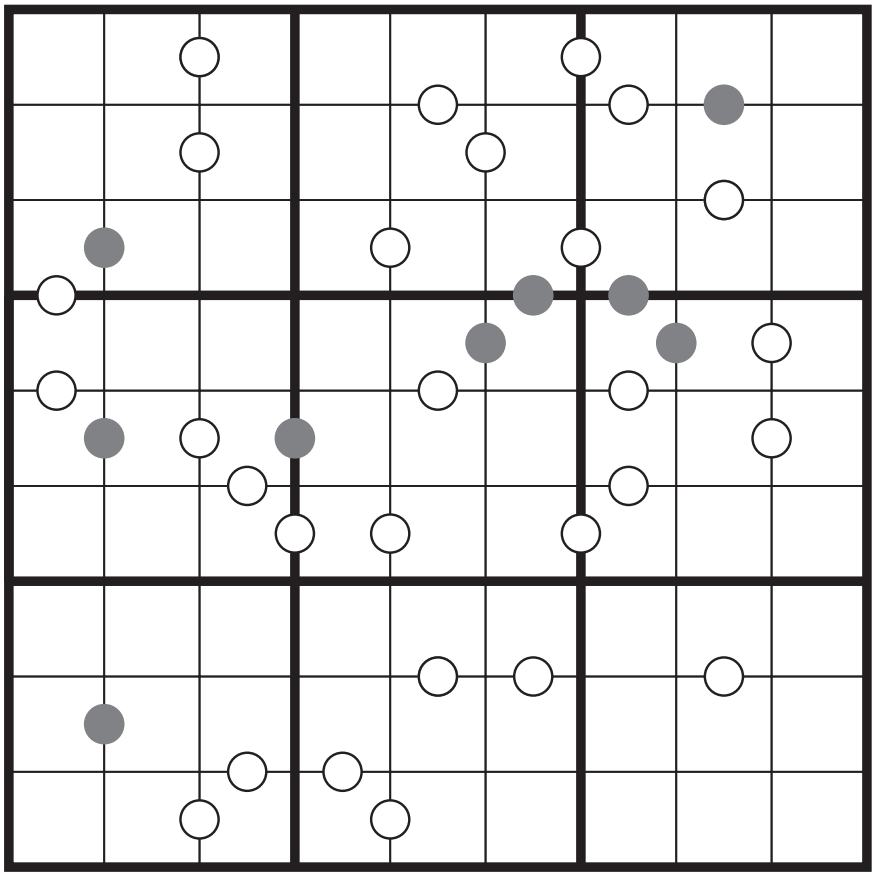
No Touch (60)

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

Apply Classic Sudoku rules. Same digits do not touch each other diagonally.

Kropki (50)

1
1
7
1
1
0
1
0
0



Apply Classic Sudoku rules. If the absolute difference between two digits in neighboring cells equals 1, then they're separated by a white dot. If the digit in a cell is half of the digit in a neighboring cell, then they're separated by a black dot. The dot between '1' and '2' can be of any color.

The numbers between the grids represent the number of digits which are at same cells in the corresponding row in both the grids.

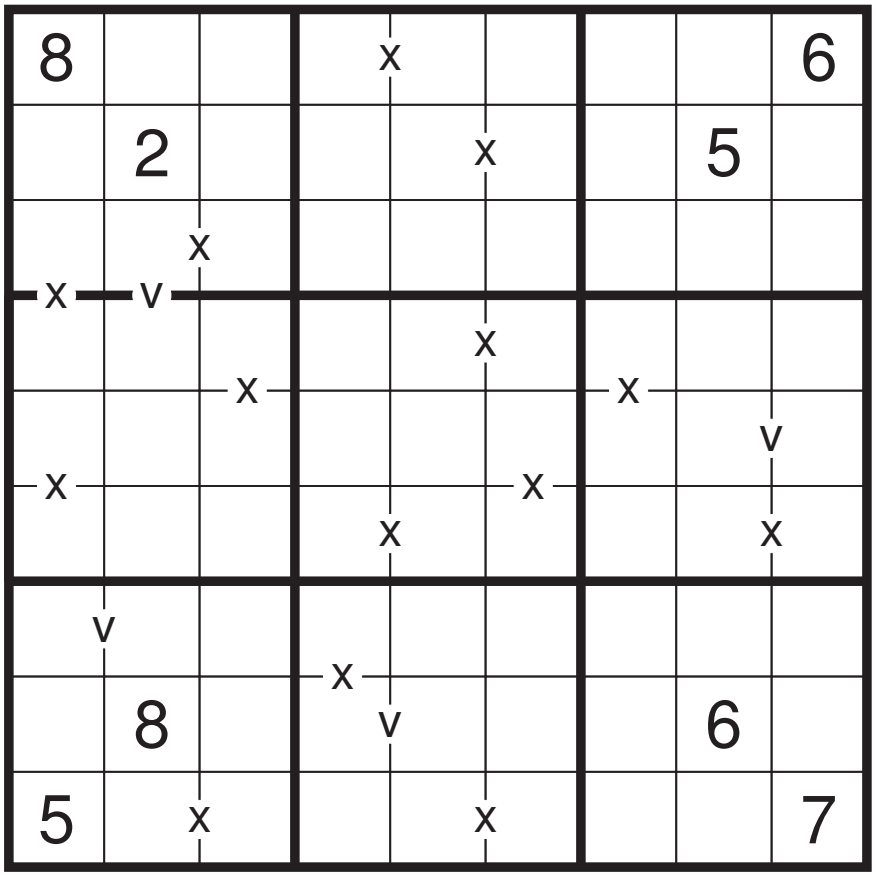
Classic (65)

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

Fill in the grid from 1 through 9 so that every row, every column and every outlined region contains distinct digits.

1	
3	
0	
1	
1	
0	
1	
0	
0	

Sudoku XV (55)



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.

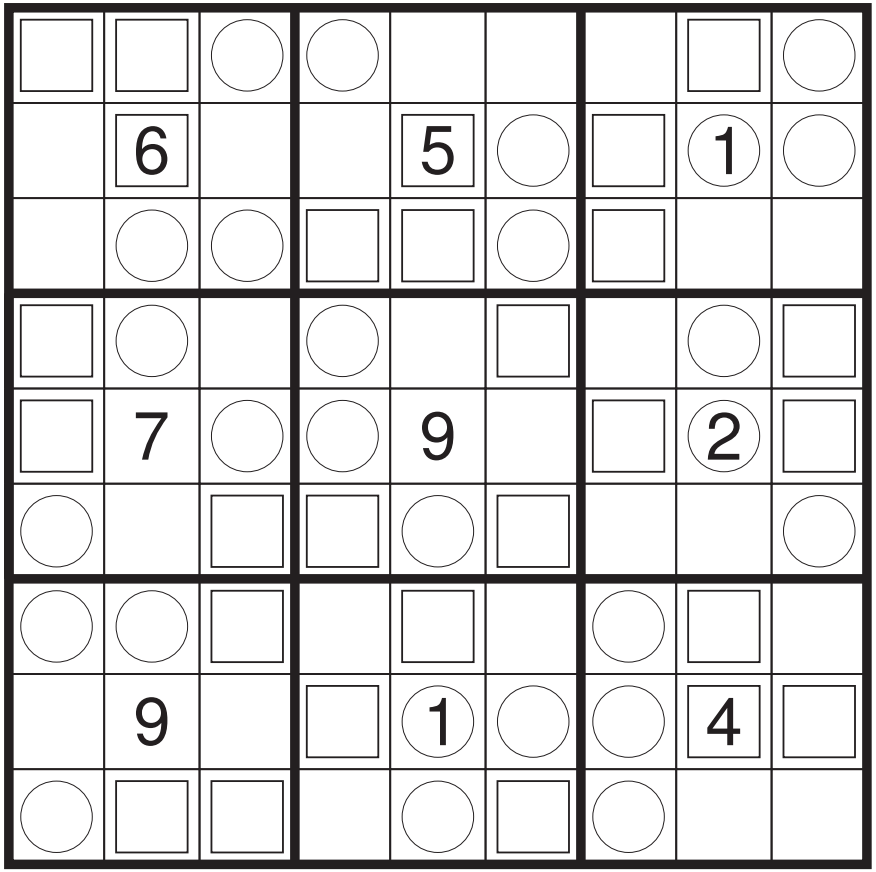
The numbers between the grids represent the number of digits which are at same cells in the corresponding row in both the grids.

No Knight Step (60)

4				8				2
	8		9		4		3	
		9				4		
	4						9	
5								4
	9						7	
		4				7		
	3		7		9		4	
9				4	5			8

Apply Classic Sudoku rules. There are no cells that are a knight-step away one from another, that contain the same digit.

Trio (70)

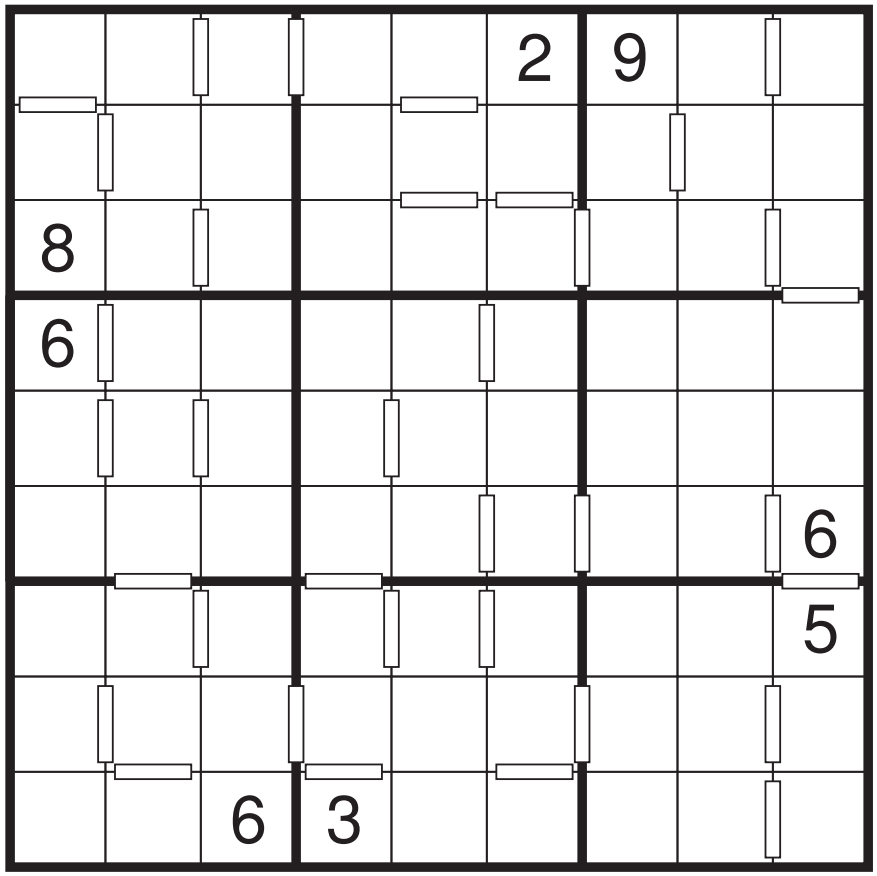


Apply Classic Sudoku rules. Cells with circles can have 1,2,3. Cells with squares can have 4,5,6. Blank cells can have 7,8,9.

7	
2	
3	
2	
7	
0	
1	
5	
1	

The numbers between the grids represent the number of digits which are at same cells in the corresponding row in both the grids.

Consecutive (75)



Apply Classic Sudoku rules. Neighboring cells which contain consecutive numbers are separated by bars. If there is NO bar between two cells then the two numbers CANNOT be consecutive.

Touchy (65)

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

Apply Classic Sudoku rules. Each digit touches, vertically or horizontally, at least one consecutive digit. E.g, every 3 touches at least a cell containing 2 or 4.

The numbers between the grids represent the number of digits which are at same cells in the corresponding row in both the grids.

Marked Quadro (75)

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

Apply Classic Sudoku rules. All the 2X2 squares having all odd or all even digits are shaded. Repetitions allowed in 2X2 squares, subject to Classic Sudoku rules.

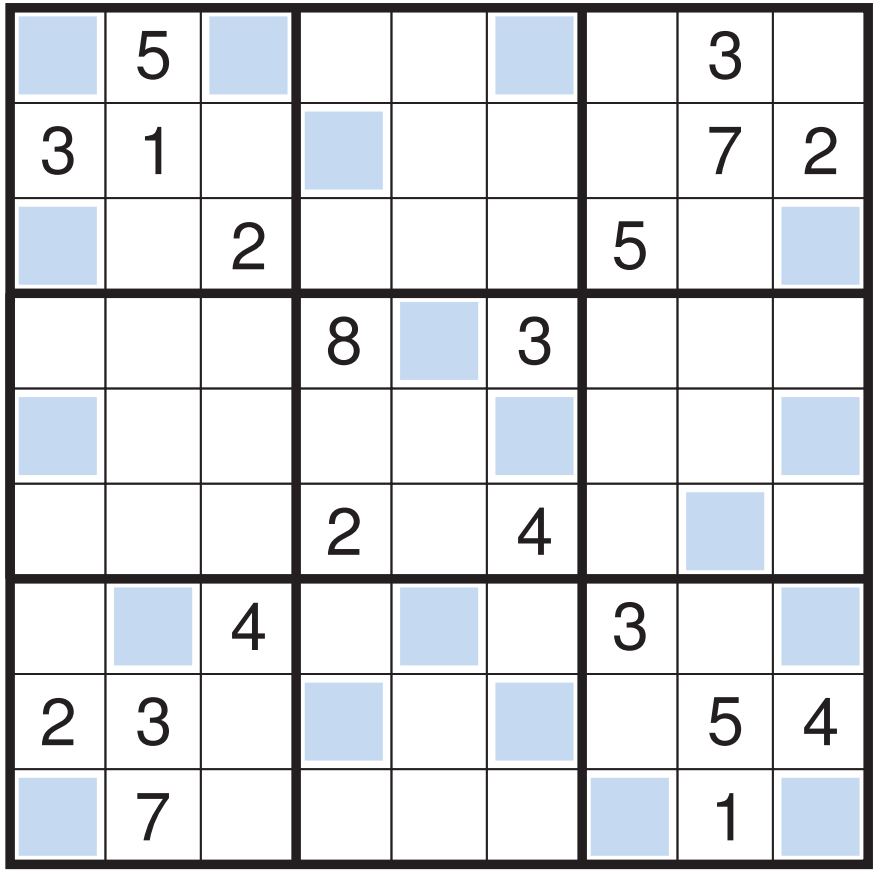
Symmetric Unequal (80)

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

Apply Classic Sudoku rules. Cells that are 180^0 symmetric to each other can't have same digits. [e.g. when rotated 180^0 C3 becomes G7, F1 becomes D9]

The numbers between the grids represent the number of digits which are at same cells in the corresponding row in both the grids.

Small Neighbours (80)



Apply Classic Sudoku rules. All cells where digits are bigger than all the orthogonal (i.e. sharing an edge) neighbors' digits have been shaded.

Odd Even (85)

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

Apply Classic Sudoku rules. Shaded cells can have even digits only. White cells can have odd digits only.

The numbers between the grids represent the number of digits which are at same cells in the corresponding row in both the grids.

SOLUTIONS

No Touch (60)

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

Kropki (50)

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

Classic (65)

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

Sudoku XV (55)

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

No Knight Step (60)

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

Trio (70)

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

Consecutive (75)

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

Touchy (65)

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

Marked Quadro (75)

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

Symmetric Unequal (80)

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

Small Neighbours (80)

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

Odd Even (85)

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

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