

About this Episode

Apart from Classic Sudokus of different sizes, this episode has the following six variants

- 2-5 / 2-5-8 Outside Sudoku
- Skyscrapers Sudoku
- Outside Sequence Sudoku
- Thermo Sudoku
- Renban Sudoku
- Consecutive Pairs Sudoku

How to participate?

- Understand the rules of different Sudokus that will appear in this episode. This Instruction Booklet has rules for each Sudoku.
- Download the password protected Sudoku booklet (will be uploaded before the test starts). The Sudoku booklet contains the actual Sudokus to be solved. It is password protected, so you won't be able to open it.
- Any time on or after 2nd March (but on or before 5th March), login at the submission page using your LMI userid and password.
- Please check the submission page for exact timing.
- Click on "Start". At this time, password for pdf will be shown and timer will start.
- You can either solve online using flash interface or print the pdf and solve on paper.
- Each Sudoku will be marked with two arrows
- If solving on paper
 - Fill the answer form with digits along the marked arrow(s)
 - Click submit button
- If solving online
 - After solving the Sudoku, click on "Submit" button below the grid
 - Each Sudoku grid has different submit buttons

If you are participating at LMI for first time, you must check the F.A.Q. at <http://logicmastersindia.com/t/?tid=381>.

Points Table and Scoring

Points typically indicate difficulty of the Sudokus and time required to solve them. While the organizers have made best efforts to match them, your personal experience and preference may differ.

This test uses instant grading where a solver can submit any individual Sudoku and receive confirmation that the solution is correct or not. Each incorrect submission reduces the sudoku's

potential score. The first, second, third, and fourth incorrect submissions reduce the potential score to 90%, 70%, 40%, and 0% respectively.

Standard 1-6	1, 1
Standard 1-9	5, 4, 6, 6
25/258 Outside 1-6, 1-9	2, 13
Skyscrapers 1-6, 1-9	3, 11
Outside Sequence 1-6, 1-9	2, 12
Thermo 1-6, 1-9	2, 12
Renban 1-6, 1-9	1, 8
Consecutive Pairs 1-6, 1-9	1, 10

Bonus

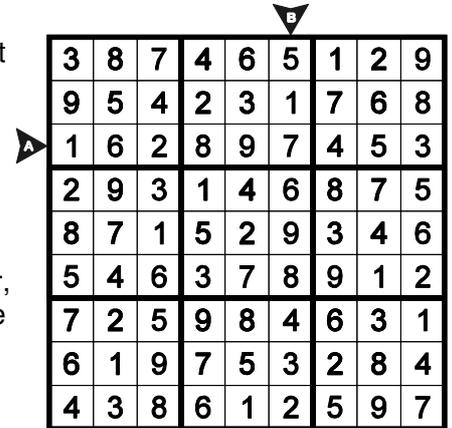
If you submitted all Sudokus correctly, you can have bonus points 1 point per minute saved, computed up to seconds.

General Rules

To make the rules less repetitive, you will see following line “Apply standard Sudoku rules” in most Sudoku rules. This means “Place a digit from 1 to N, where N is the size of the grid, in each empty cell so that each digit appears exactly once in each row, column and outlined region.”

These outlined regions could be 3X3 boxes, or other shapes.

Each Sudoku will be marked with, at max, 2 lettered arrows. If you are solving on paper, you need to submit the digits in these arrows, in order, including the givens. For example, the answer key for the Sudoku at the right is 162897453, 517698432.



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

About the Sudoku Booklet

The password protected Sudoku booklet will have about 8 pages. If you are planning to solve on paper, we advise you to have a printer accessible with enough paper.

The Sudoku booklet will look exactly like next pages in this instruction booklet. The font sizes, cell sizes, colors, borders, shading, margin will be identical. We recommend you to print few pages of this instruction booklet. You can avoid any last minute surprise during the test.

Standard Sudoku - 1

1 point

Place a digit from 1 to 6 in each empty cell so that each digit appears exactly once in each row, column and 2X3 box.

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

Standard Sudoku - 2

1 point

Place a digit from 1 to 6 in each empty cell so that each digit appears exactly once in each row, column and 2X3 box.

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

Standard Sudoku - 3

5 points

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 3X3 box.

D

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

C

Standard Sudoku - 4

4 points

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 3X3 box.

F

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

E

Standard Sudoku - 5

6 points

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 3X3 box.

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

Standard Sudoku - 6

6 points

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 3X3 box.

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

2-5 Outside Sudoku

2 points

Apply standard Sudoku rules.

The digits outside the grid must appear in the 2nd or 5th cell of the grid from the corresponding direction.

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

2-5-8 Outside Sudoku

13 points

Apply standard Sudoku rules.

The digits outside the grid must appear in the 2nd or 5th or 8th cell of the grid from the corresponding direction.

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

Skyscrapers Sudoku - 1

3 points

Apply standard Sudoku rules.

Consider each number to be the height of a building. The numbers outside the grid indicate how many buildings can be seen when looking in that direction (taller buildings conceal smaller buildings behind them).

	2	▼ F	2	1	3	3	
2							
				3			2
3	2						3
4						3	2
3			2				
▶ E							4
	1	3	3	2		2	

Skyscrapers Sudoku - 2

11 points

Apply standard Sudoku rules.

Consider each number to be the height of a building. The numbers outside the grid indicate how many buildings can be seen when looking in that direction (taller buildings conceal smaller buildings behind them).

	4	▼ H		4	5		3	1	4
5									
	6							3	
4			7	3					4
6						7			
		1	9				4	2	
▶ G				4					2
3						4	5		4
1		6							4
									3
	2	5	4		4	3			4

Outside Sequence Sudoku - 1

2 points

Apply standard Sudoku rules.

In each row and column, digits in the circled cells form arithmetic progression along with the outside digit, but not necessarily in order. A '?' outside should be replaceable by any digit from 1 to 6, but need not be uniquely determined or filled.

▼ J

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

▶ I

Outside Sequence Sudoku - 2

12 points

Apply standard Sudoku rules.

In each row and column, digits in the circled cells form arithmetic progression along with the outside digit, but not necessarily in order. A '?' outside should be replaceable by any digit from 1 to 9, but need not be uniquely determined or filled.

▼ L

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

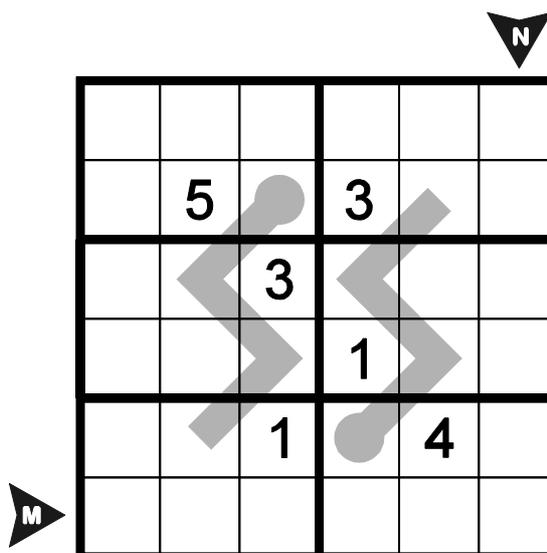
▶ K

Thermo Sudoku - 1

2 points

Apply standard Sudoku rules.

Additionally, the digits in each “thermometer” shaped region must be strictly increasing from the circular “bulb” to the other end(s).

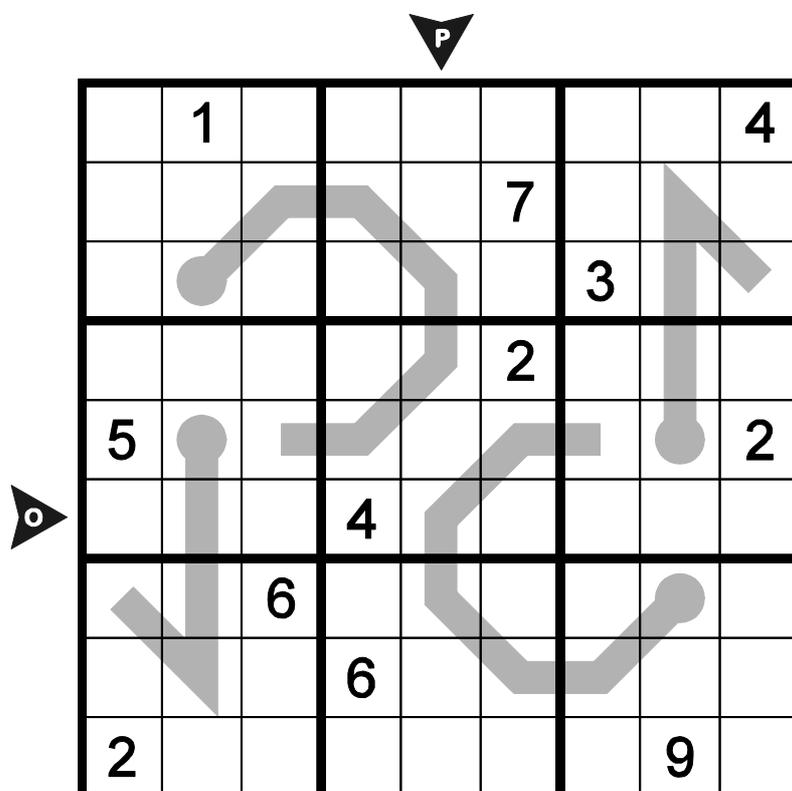


Thermo Sudoku - 2

12 points

Apply standard Sudoku rules.

Additionally, the digits in each “thermometer” shaped region must be strictly increasing from the circular “bulb” to the other end(s).



Renban Sudoku - 1

1 point

Apply standard Sudoku rules.

The set of digits on each line must be distinct consecutive digits.

				4	
				2	
2			1		
		5			3
	5				
	1				

Renban Sudoku - 2

8 points

Apply standard Sudoku rules.

The set of digits on each line must be distinct consecutive digits.

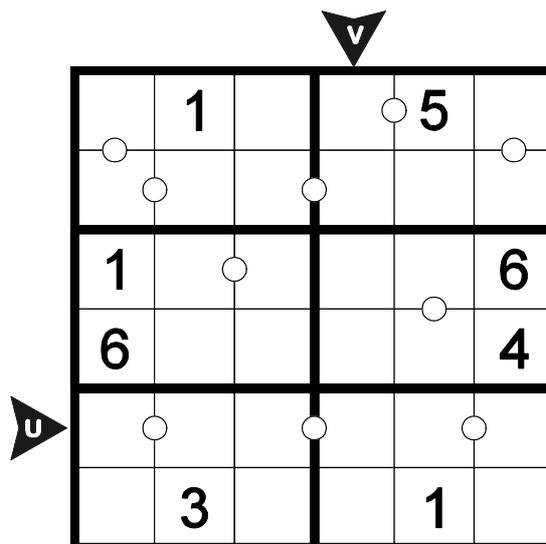
	1	2	3			4	5	
	4	5	6			3	2	
	7	8	9					
				1	2	3		
	2	3			4	5	6	
	5	4			7	8	9	

Consecutive Pairs Sudoku - 1

1 point

Apply standard Sudoku rules.

Additionally, if a dot is given between two adjacent cells, then the two numbers in those cells must be consecutive.

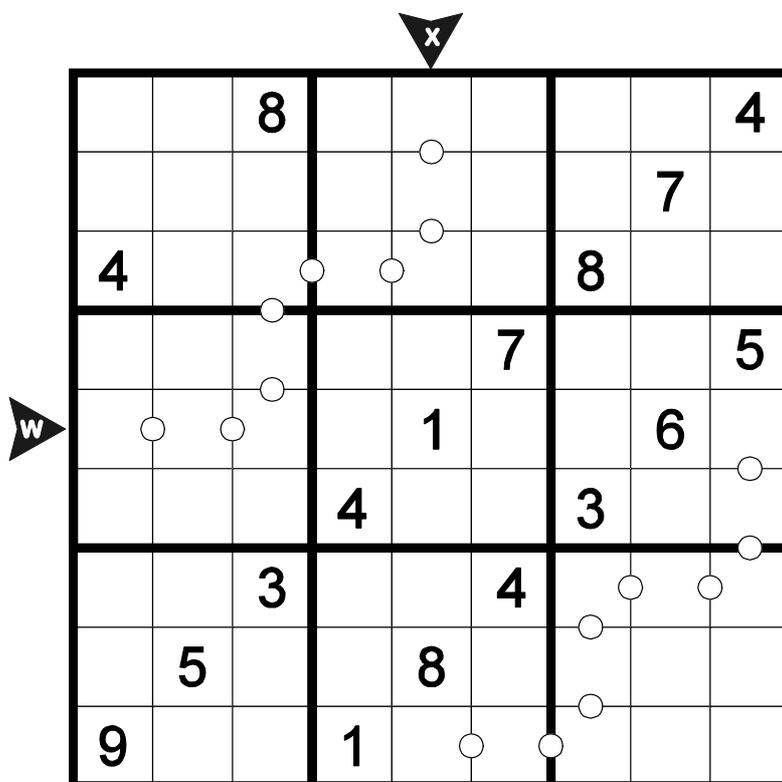


Consecutive Pairs Sudoku - 2

10 points

Apply standard Sudoku rules.

Additionally, if a dot is given between two adjacent cells, then the two numbers in those cells must be consecutive.



Standard - 1

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

Standard - 2

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

Standard - 3

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

Standard - 4

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

Standard - 5

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

Standard - 6

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

2-5 Outside

	5	3		6	1	
	2	6	▼	2	4	
3 2	1	2	4	6	3	5
2 6	5	6	3	4	2	1
▶	4	1	2	3	5	6
	3	5	6	1	4	2
3 6	2	3	1	5	6	4
1 4	6	4	5	2	1	3

Skyscrapers - 1

	2	▼	2	1	3	3	
2	5	2	3	6	4	1	
	4	6	1	3	2	5	2
3	2	3	6	1	5	4	3
4	1	4	5	2	6	3	2
3	3	5	2	4	1	6	
▶	6	1	4	5	3	2	4
	1	3	3	2		2	

2-5-8 Outside

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

Skyscrapers - 2

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

Outside Sequence - 1

				▼		
	?	?	?	?	2	1
?	5	6	2	3	4	1
6	1	3	4	6	2	5
?	2	5	1	4	6	3
?	3	4	6	1	5	2
▶	?	4	2	3	5	1
6	6	1	5	2	3	4

Outside Sequence - 2

				▼		
	4	5	6	5	?	4
4	1	5	8	3	7	2
9	4	7	6	9	5	8
6	2	9	3	4	1	6
?	9	6	4	1	8	3
▶	5	8	3	7	2	6
?	5	2	1	7	4	9
3	7	8	2	5	9	1
4	6	1	5	8	3	4
4	3	4	9	6	2	7

Thermo - 1

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

Renban - 1

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

Thermo - 2

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

Renban - 2

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

Consecutive Pairs - 1

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

Consecutive Pairs - 2

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