

About this Episode

This episode has the following Sudokus

- Mini Classic Sudoku (4)
- Classic Sudoku (4)
- Irregular Sudoku (2)
- Scattered Sudoku (2)
- Arrow Thermo Sudoku (2)
- Outside Frame Sudoku (2)
- Odd Fortress Sudoku (2)

How to participate?

- Understand the rules of different Sudokus that will appear in this episode. This Instruction Booklet has rules and examples 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 19th April (but on or before 23rd April), 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.

Mini Classic 1-6	1, 1, 1, 1
Classic 1-9	5, 7, 4, 5
Irregular 1-6, 1-9	1, 12
Scattered 1-6, 1-9	3, 16
Arrow Thermo 1-6, 1-9	3, 12
Outside Frame 1-6, 1-9	3, 11
Odd Fortress 1-6, 1-9	3, 11

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

1-4 Mini Classic Sudoku

1+1+1+1 points

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

5-8 Classic Sudoku

5+7+4+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.

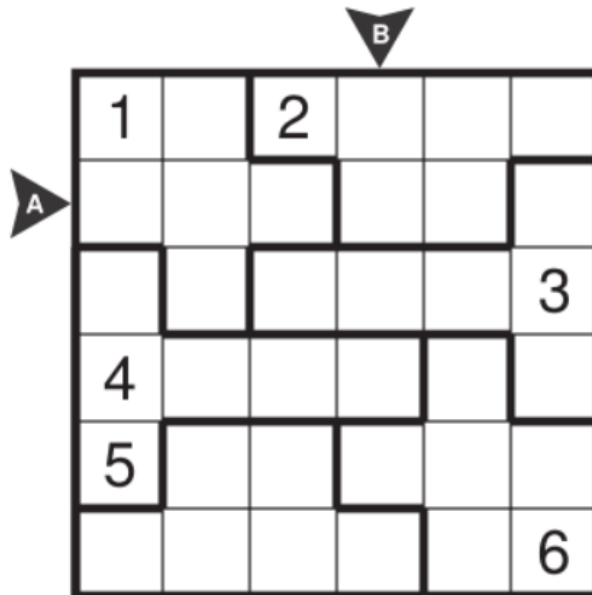
	1						8	
8		7				4		2
	9		4		2		3	
		9		3		7		
			5		4			
		6		9		5		
	7		1		6		5	
1		4				6		3
	6						7	

Irregular 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 outlined region.

Each outlined region is marked by thick borders.

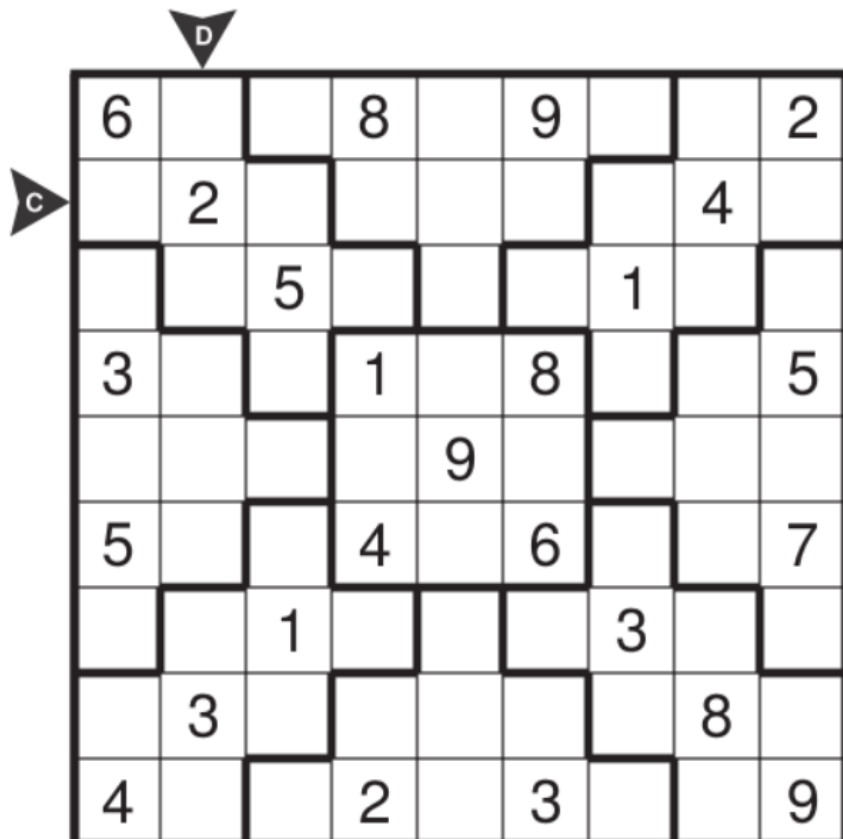


Irregular Sudoku - 2

12 points

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

Each outlined region is marked by thick borders.

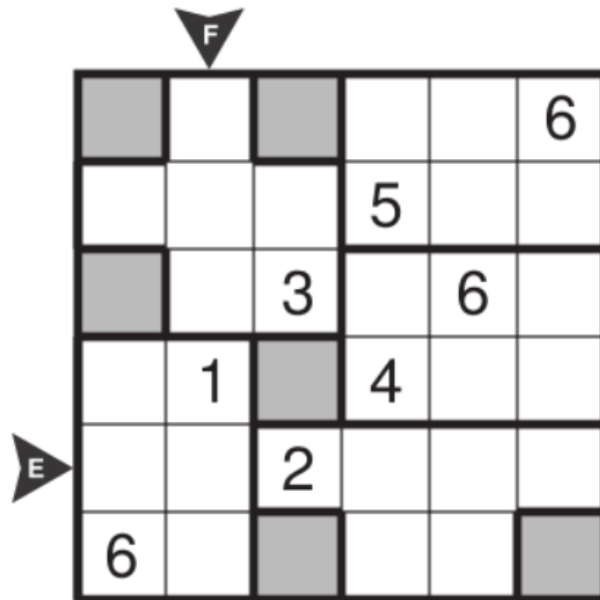


Scattered Sudoku - 1

3 points

Place a digit from 1 to 6 in each empty cell so that each digit appears exactly once in each row, column, outlined region and the six grey cells.

Grey cells are not part of any regions.

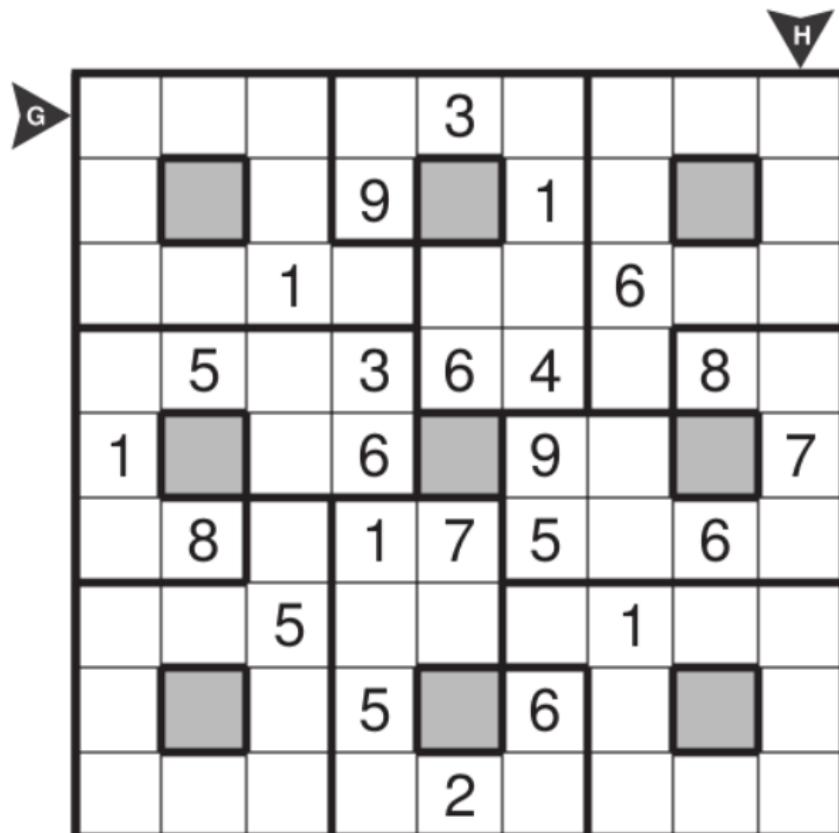


Scattered Sudoku - 2

16 points

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column, outlined region and the nine grey cells.

Grey cells are not part of any regions.



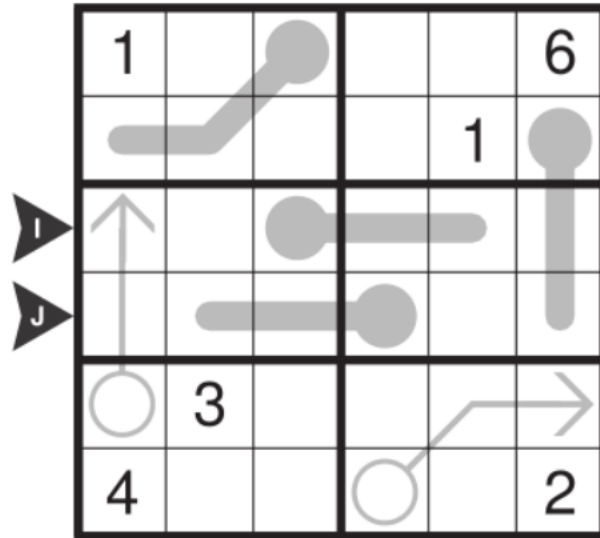
Arrow Thermo Sudoku - 1

3 points

Apply mini classic Sudoku rules.

Arrow rules: Some arrow shapes are in the grid; the sum of the digits along the path of each arrow must equal the digit in the circled cell. Digits can repeat within an arrow shape.

Thermo rules: Some thermometer shapes are in the grid; digits must be strictly increasing from the round bulb to the flat end.



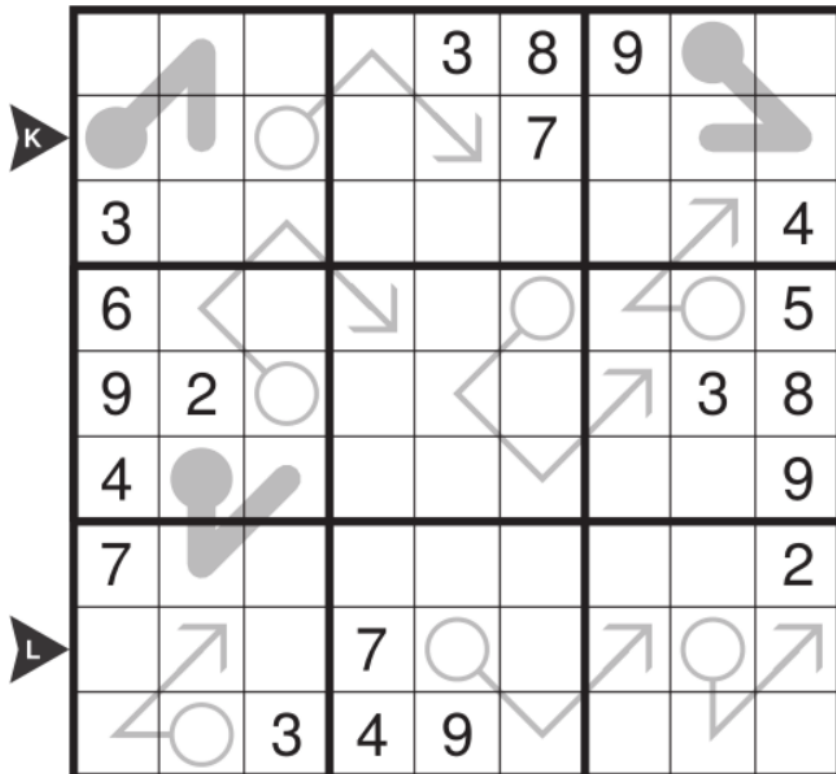
Arrow Thermo Sudoku - 2

12 points

Apply classic Sudoku rules.

Arrow rules: Some arrow shapes are in the grid; the sum of the digits along the path of each arrow must equal the digit in the circled cell. Digits can repeat within an arrow shape.

Thermo rules: Some thermometer shapes are in the grid; digits must be strictly increasing from the round bulb to the flat end.



Outside Frame Sudoku - 1

3 points

Apply mini classic Sudoku rules.

Clues at the left and top are Outside clues, and clues at the right and bottom are Frame clues.

Outside rules: The digits outside the grid must appear in one of the cells in the first box (till the next bold line) seen from that edge of the grid.

Frame rules: The number outside the grid indicates the sum of the numbers in the first box (till the next bold line) seen from that edge of the grid.

Top clues: 1 2 3 4 1 6

Left clues: M, N, 4, 5, 6

Right clues: 6, 8

Bottom clues: 9 4 7 3

Outside Frame Sudoku - 2

11 points

Apply classic Sudoku rules.

Clues at the left and top are Outside clues, and clues at the right and bottom are Frame clues.

Outside rules: The digits outside the grid must appear in one of the cells in the first box (till the next bold line) seen from that edge of the grid.

Frame rules: The number outside the grid indicates the sum of the numbers in the first box (till the next bold line) seen from that edge of the grid.

			9		6			
		7				2		
		8				6		
			8		5			

Top clues: 9 7 1 2 4 8 7 1 3

Left clues: 5, 9, 3, 6, 2, 4, 7, 5, 3

Right clues: 16, 13, 11, 22, 11, 20

Bottom clues: 16 14 19 10 12 10

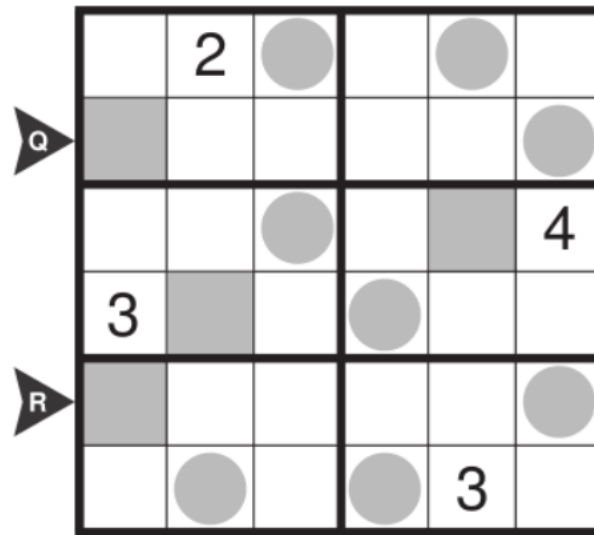
Odd Fortress Sudoku - 1

3 points

Apply mini classic Sudoku rules.

Odd rules: If a cell has a shaded circle, it must contain an odd digit.

Fortress rules: If a cell is completely shaded, the digit in the cell must be greater than all its orthogonal neighbours (except completely shaded cells).



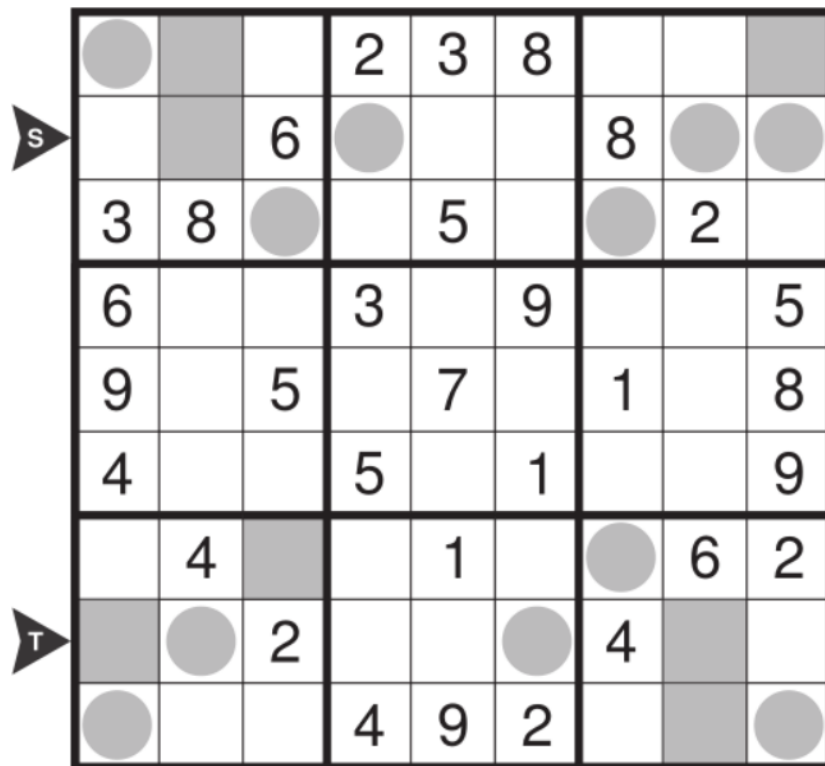
Odd Fortress Sudoku - 2

11 points

Apply classic Sudoku rules.

Odd rules: If a cell has a shaded circle, it must contain an odd digit.

Fortress rules: If a cell is completely shaded, the digit in the cell must be greater than all its orthogonal neighbours (except completely shaded cells).



Mini Classic

				B		
	1	2	4	6	3	5
	5	6	3	4	2	1
A	4	1	2	3	5	6
	3	5	6	1	4	2
	2	3	1	5	6	4
	6	4	5	2	1	3

Classic

				D					
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	
C	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	

Irregular - 1

				B		
	1	3	2	4	6	5
A	6	2	5	1	3	4
	2	4	6	5	1	3
	4	1	3	6	5	2
	5	6	4	3	2	1
	3	5	1	2	4	6

Scattered - 1

				F		
	3	2	5	1	4	6
	1	6	4	5	2	3
	4	5	3	2	6	1
	2	1	6	4	3	5
E	5	3	2	6	1	4
	6	4	1	3	5	2

Irregular - 2

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

Scattered - 2

								H	
G	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

Arrow Thermo- 1

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

Outside Frame - 1

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

Arrow Thermo - 2

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

Outside Frame - 2

		9	7	1	2	4	8	7	1	3	
5	5	7	4	2	3	8	9	1	6	16	
9	9	2	6	1	4	7	8	5	3		
3	3	8	1	9	5	6	7	2	4	13	
6	6	1	7	3	8	9	2	4	5	11	
2	2	9	5	6	7	4	1	3	8		
4	4	3	8	5	2	1	6	7	9	22	
7	7	4	9	8	1	5	3	6	2	11	
5	8	5	2	7	6	3	4	9	1		
3	1	6	3	4	9	2	5	8	7	20	
	16		14	19		10	12		10		

Odd Fortress - 1

	1	2	3	4	5	6
Q	6	4	5	2	1	3
	2	5	1	3	6	4
	3	6	4	1	2	5
R	5	3	2	6	4	1
	4	1	6	5	3	2

Odd Fortress - 2

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