

WELCOME 2021

10th January 2021

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40 minutes, 100 points

Test Window: 6:30 PM to 8:30 PM

Important Links

Submission Page : <https://logicmastersindia.com/live/?contest=W2021>

Discussion Thread : <http://logicmastersindia.com/t/?tid=2774>

F. A. Q. : <http://logicmastersindia.com/t/?tid=2773>

Registration, if required : <http://logicmastersindia.com/register.asp>

About this test

- This will be the first test of 2021 without Adobe Flash interface and will be open only for a two hour window.
- Participants can start the test during this participation window.
- This test will not be rated.
- The test duration is 40 minutes.

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.
- Login at the submission page on 10th January between 6:30 PM IST and 8:30 PM IST 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.
- There shall be no online solving interface. You can print the pdf and solve on paper.
- Each Sudoku will be marked with two arrows. Fill the answer form with digits along the marked arrow(s) and click on submit button

If you are participating at LMI for first time, you must check the F.A.Q. at <http://logicmastersindia.com/t/?tid=2773>.

Points Table and Scoring

Classic 1-9	8,9,12,14
Diagonal 1-9	8
Arrow 1-9	11
Thermo 1-9	13
Odd Even 1-9	25

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.

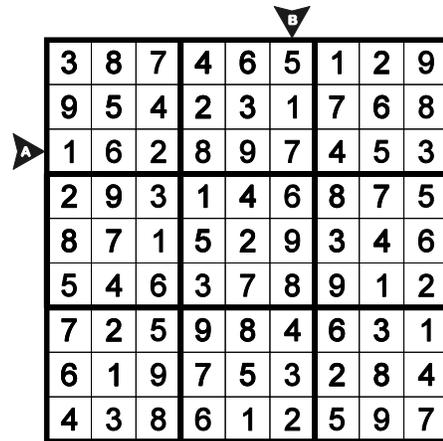
Bonus

If you submitted all Sudokus correctly, you can have bonus points 2.5 points 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.



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 4 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 Classic Sudoku

8+9+5+12 points

Classic Sudoku

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.

B

	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	

A

Diagonal Sudoku

8 points

Apply classic Sudoku rules.

Additionally, each main diagonal (marked by dotted lines) must contain digits from 1-9.

J

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

I

Arrow Sudoku

11 points

Apply classic Sudoku rules.

Additionally, 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.

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

Thermo Sudoku

13 points

Apply classic Sudoku rules.

Additionally, the digits in each "thermometer" shaped region must be strictly increasing from the circular "bulb" to the other end.

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

Odd Even Sudoku

25 points

Apply classic
Sudoku rules.

Additionally, shaded
squares should
contain even digits
(2,4,6,8) while
shaded circles
should contain odd
digits (1,3,5,7,9).

A cell which is not
shaded can contain
digit of any parity.

			6	1	5			
		1	■	■	■	5		
	4	●				■	2	
4	●			5			●	7
1	●		●	2	●		●	6
2	●			3			●	5
	3	■				●	4	
		7	■	■	■	1		
			3	8	7			

Classic Sudoku

B

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

A

Diagonal

J

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

I

Arrow

L

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

K

Thermo

N

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

M

Odd Even

P

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

O