sudoku mahabharat

Episode – 6
21st– 23rd February

Neighbours by Rajesh Kumar

Important Links

Submission Page : http://logicmastersindia.com/SM/201502/

Discussion Thread : http://logicmastersindia.com/t/?tid=931

About Sudoku Mahabharat : http://logicmastersindia.com/SM/

F. A. Q. : http://logicmastersindia.com/t/?tid=381

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

About this Episode

Apart from classic Sudokus of different sizes, this episode has five variants emphasizing relationship between neighbouring cells, namely Inequality Sudoku, Either Or Sudoku, Quad Max Sudoku, Renban Groups Sudoku and Touchy 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 after 21st February (but before 23rd February), login at the submission page using your LMI userid and password.
- LMI uses GMT time zone. 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 arrows
    - 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.

Standard 6X6	1, 1, 1, 1
Standard 8X8	6
Standard 9X9	6, 10, 5
Inequality 6X6, 9X9	4, 12
Either Or 6X6, 9X9	2, 8
Quad Max 6X6, 9X9	2, 12
Renban Groups 6X6, 9X9	3, 7
Touchy 6X6, 9X9	5, 14

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 submission reduces the potential score to 90%, 70%, 40%, and 0% respectively.

Bonus

If you submitted all sudokus correctly, you can have bonus points 1 point per minute saved, computed upto 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.

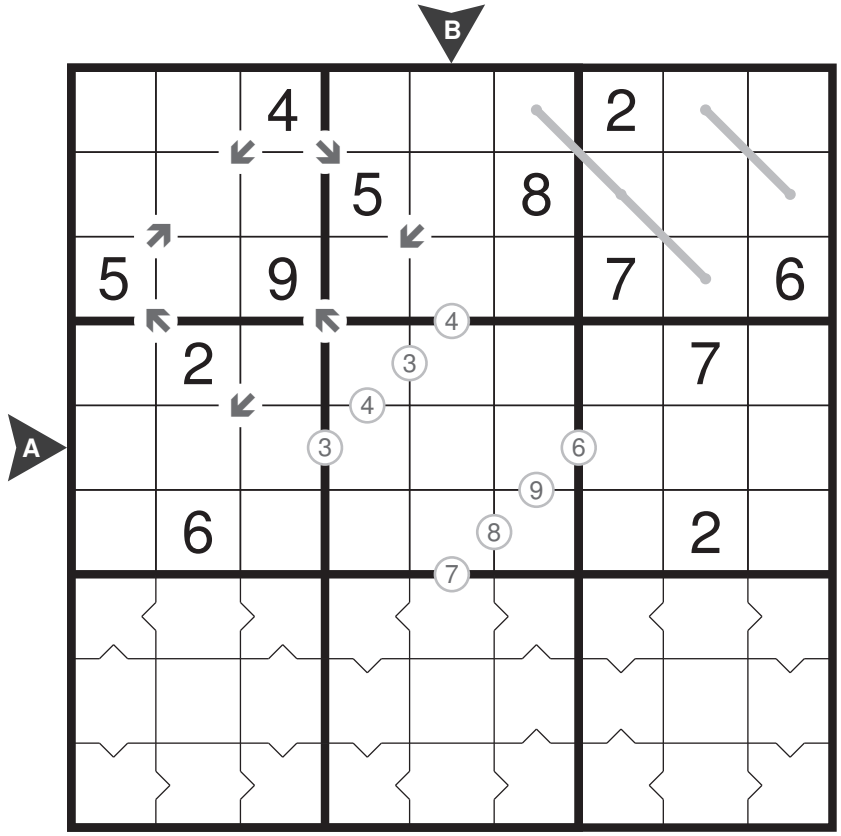
Each Sudoku will be marked with, at max, 2 lettered arrows. If you are solving on paper, you need to submit the digits in these arrows, in order, including the givens. For example, the answer key for the Sudoku at the right is 162897453, 517698432.

					B			
3	8	7	4	6	5	1	2	9
9	5	4	2	3	1	7	6	8
A 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 exactly like next 8 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.

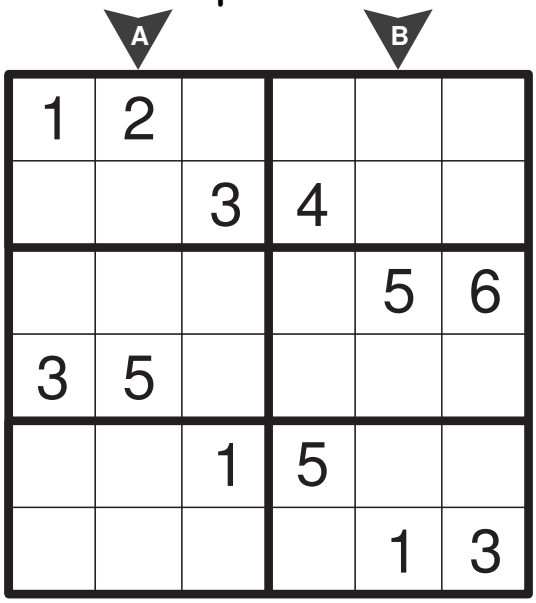


This grid is for testing how the printout looks.

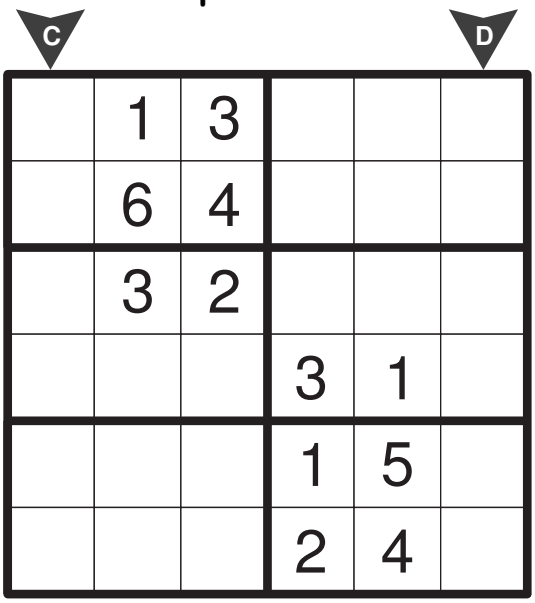
Standard Sudoku

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.

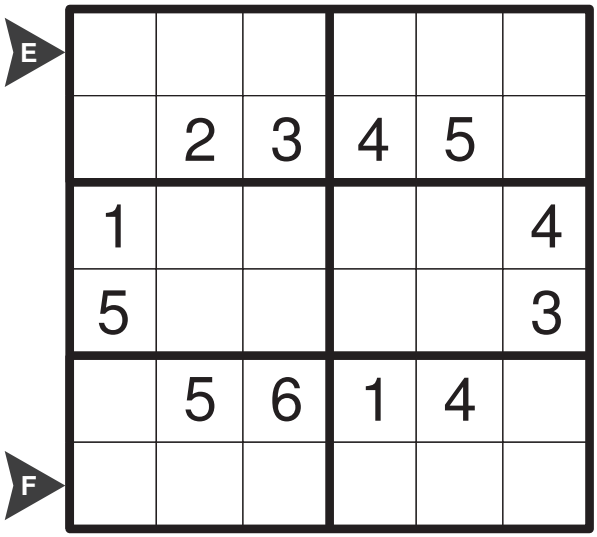
1 point



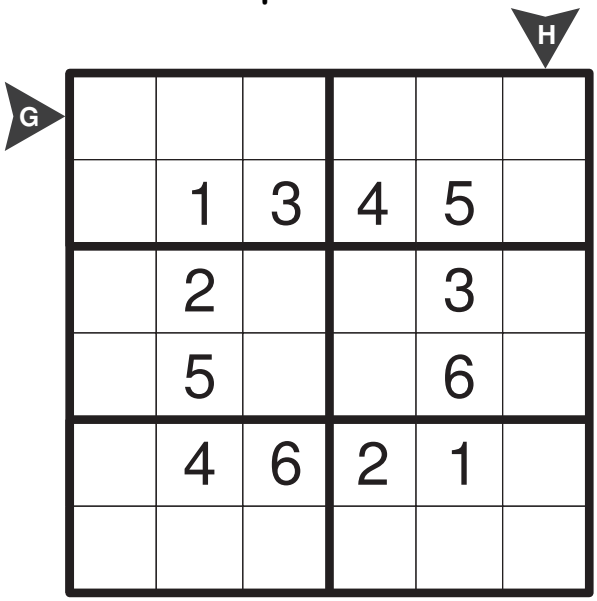
1 point



1 points



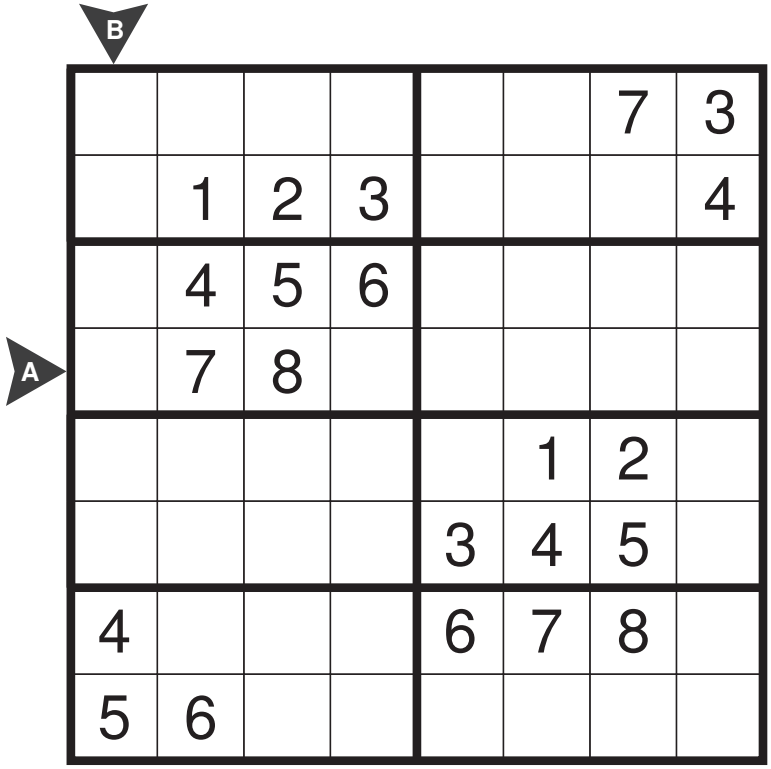
1 point



Standard Sudoku 8X8

6 points

Place a digit from 1 to 8 in each empty cell so that each digit appears exactly once in each row, column and 2X4 box.

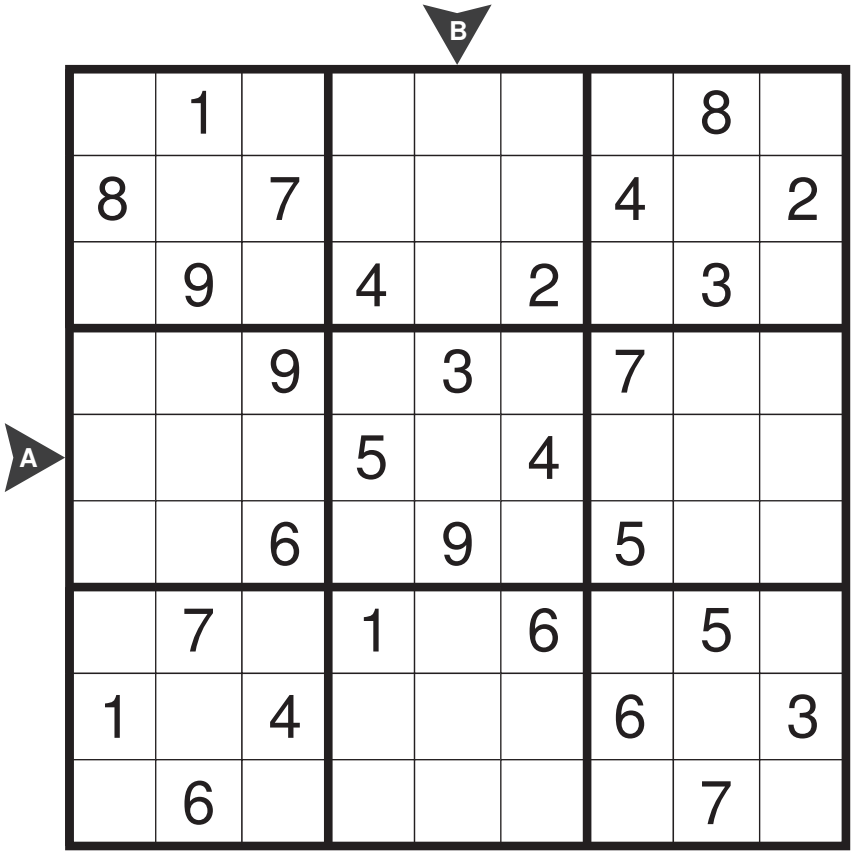


						7	3
	1	2	3				4
	4	5	6				
	7	8					
					1	2	
				3	4	5	
4				6	7	8	
5	6						

Standard Sudoku (1)

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.

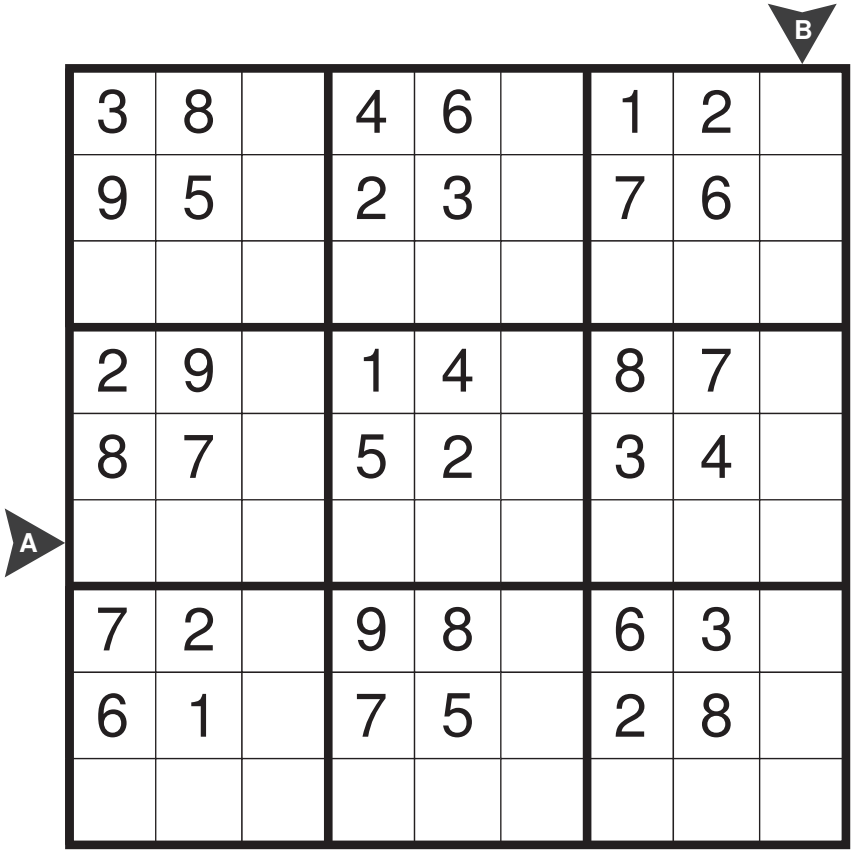


	1						8	
8		7				4		2
	9		4		2		3	
		9		3		7		
			5		4			
		6		9		5		
	7		1		6		5	
1		4				6		3
	6						7	

Standard Sudoku (2)

10 points

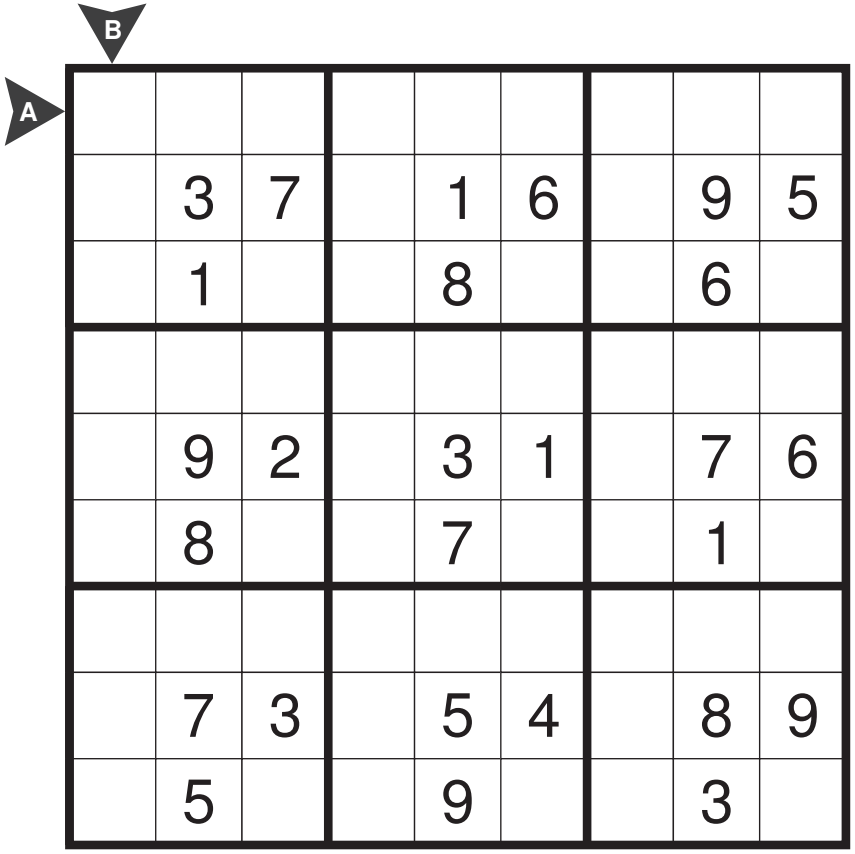
Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 3X3 box.



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.

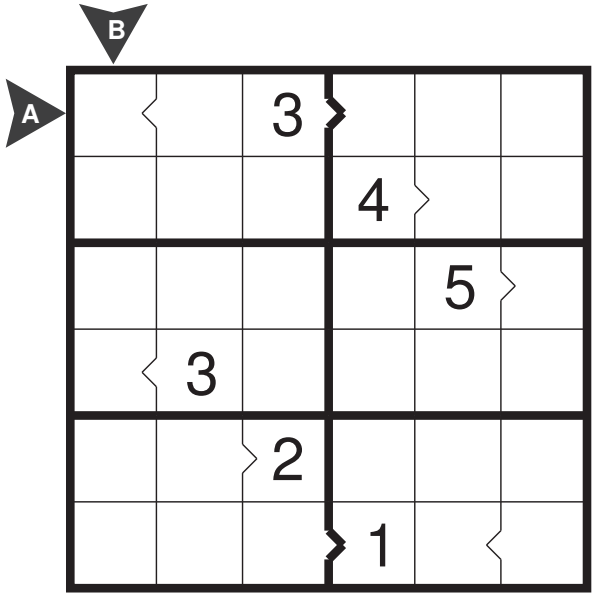


Inequality Sudoku

4 points

Apply standard Sudoku rules.

There are 'greater than' (>) and 'less than' (<) signs. The cell with the open end of the sign should be greater than the cell with the pointed end of the sign.

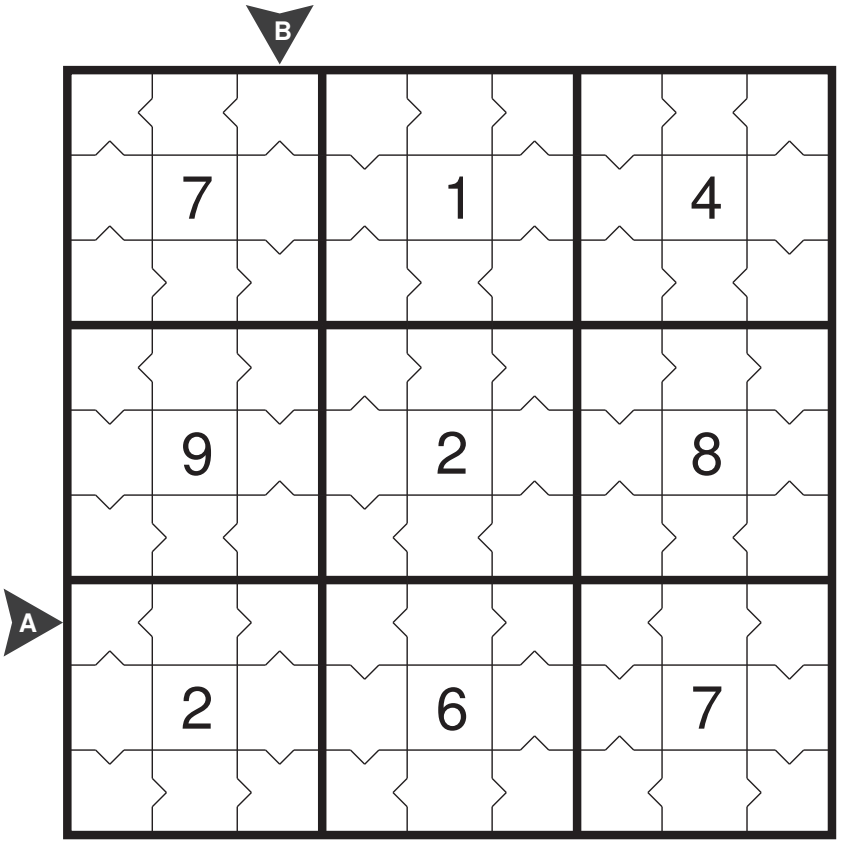


Inequality Sudoku

12 points

Apply standard Sudoku rules.

There are 'greater than' (>) and 'less than' (<) signs. The cell with the open end of the sign should be greater than the cell with the pointed end of the sign.

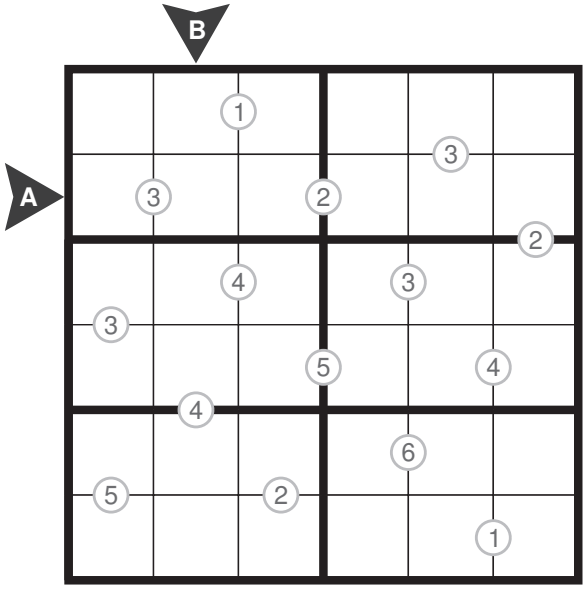


Either Or

2 points

Apply standard Sudoku rules.

A digit between two cells must appear in one of those 2 cells.

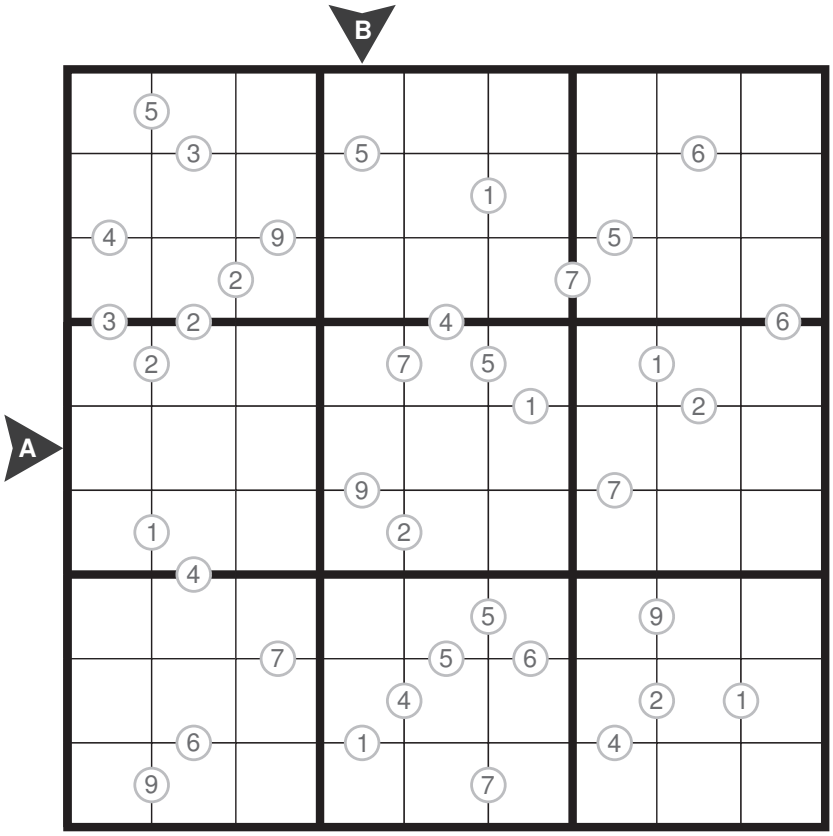


Either Or

8 points

Apply standard Sudoku rules.

A digit between two cells must appear in one of those 2 cells.

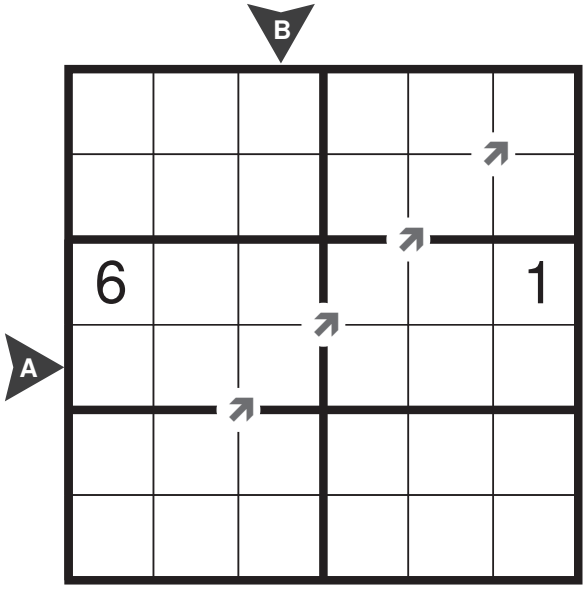


Quad Max

2 points

Apply standard Sudoku rules.

Arrows are present at some corners. The digit pointed by the arrow is larger than the other 3 digits touching that corner.

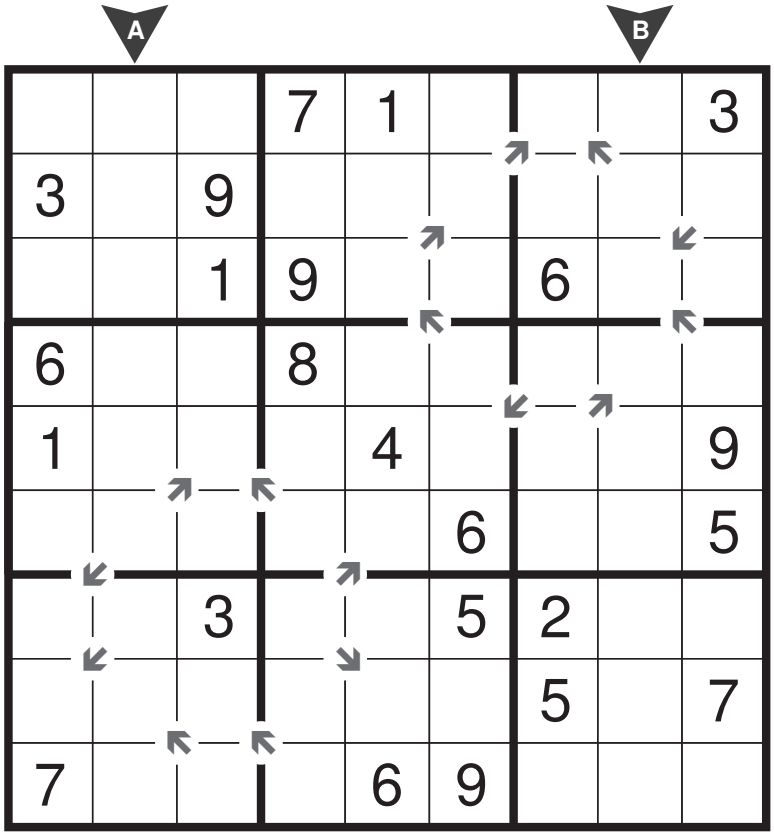


Quad Max

12 points

Apply standard Sudoku rules.

Arrows are present at some corners. The digit pointed by the arrow is larger than the other 3 digits touching that corner.



Renban Groups Sudoku

3 points

Apply standard Sudoku rules.

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

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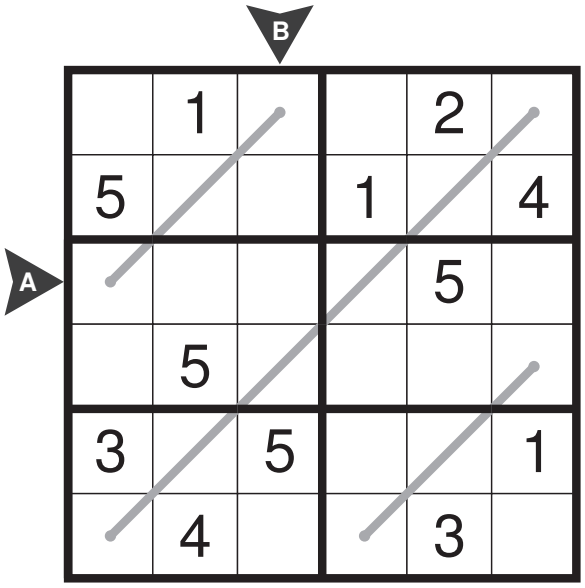

Renban Groups Sudoku

7 points

Apply standard Sudoku rules.

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

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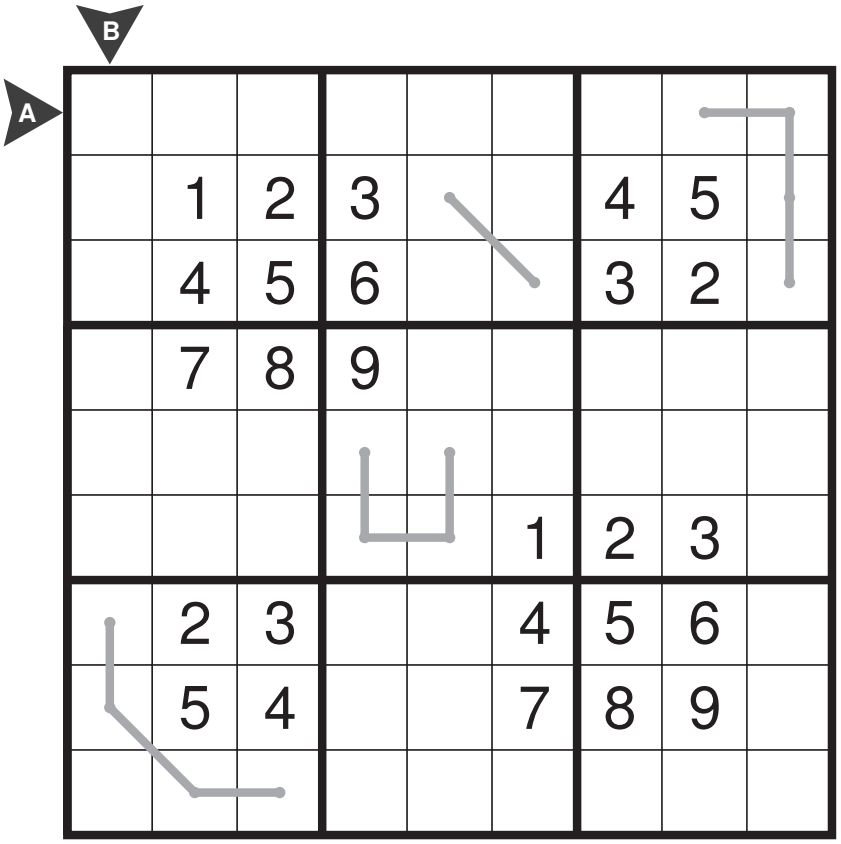
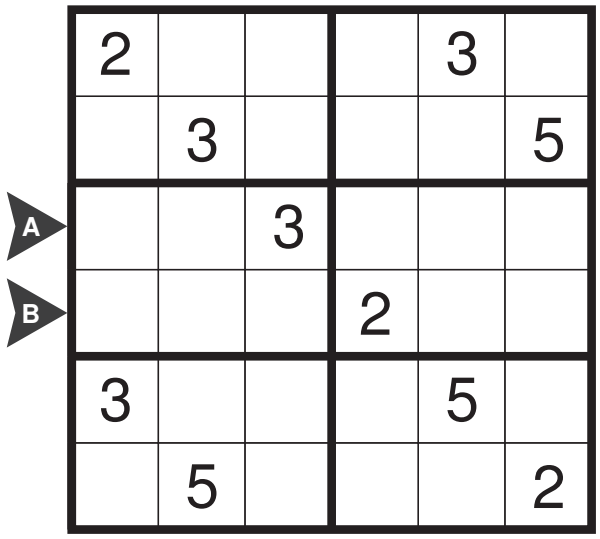


Touchy Sudoku

5 points

Apply standard Sudoku rules.

Each digit has at least one consecutive adjacent (sharing edges) neighbour.



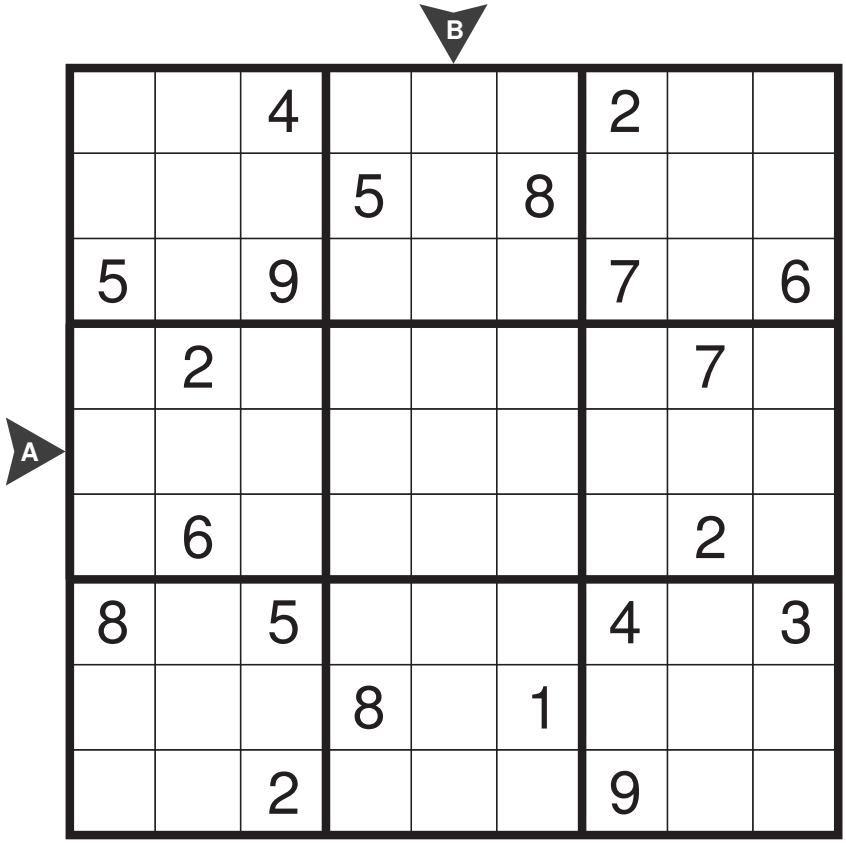
2				3	
	3				5
		3			
			2		
3				5	
	5				2

Touchy Sudoku

14 points

Apply standard Sudoku rules.

Each digit has at least one consecutive adjacent (sharing edges) neighbour.



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

Standard

A			B		
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

C					D
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

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

F

Standard

					H
G					
4	6	5	3	2	1
2	1	3	4	5	6
6	2	1	5	3	4
3	5	4	1	6	2
5	4	6	2	1	3
1	3	2	6	4	5

Standard

	B						
A							
8	5	6	4	1	2	7	3
7	1	2	3	8	5	6	4
1	4	5	6	2	8	3	7
3	7	8	2	5	6	4	1
6	3	4	5	7	1	2	8
2	8	1	7	3	4	5	6
4	2	3	1	6	7	8	5
5	6	7	8	4	3	1	2

Standard

		B						
A								
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

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

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

Inequality

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

Either Or

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

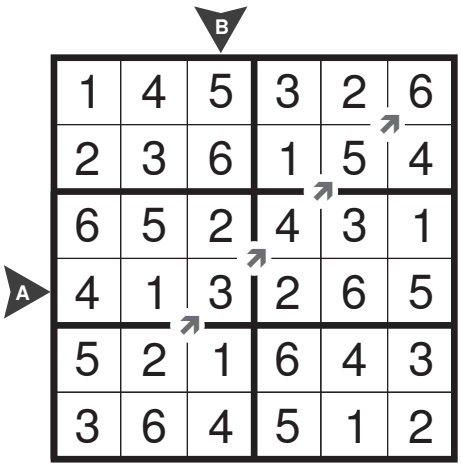
Inequality

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

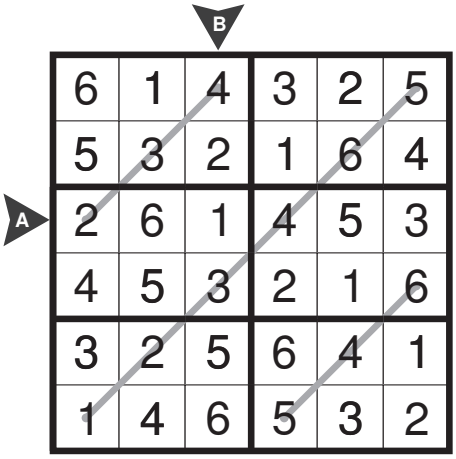
Either Or

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

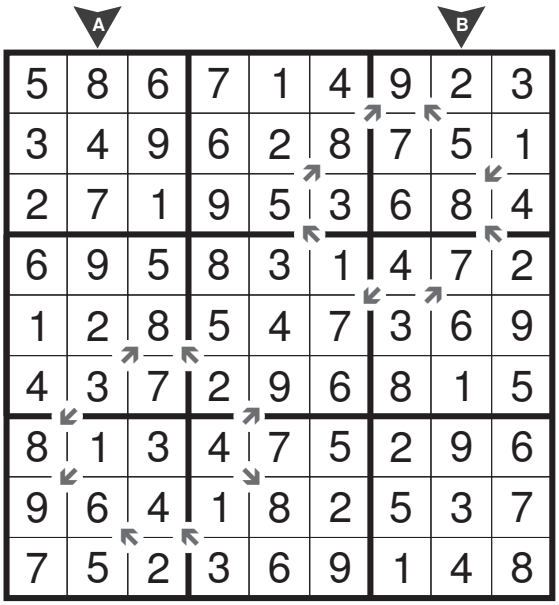
Quad Max



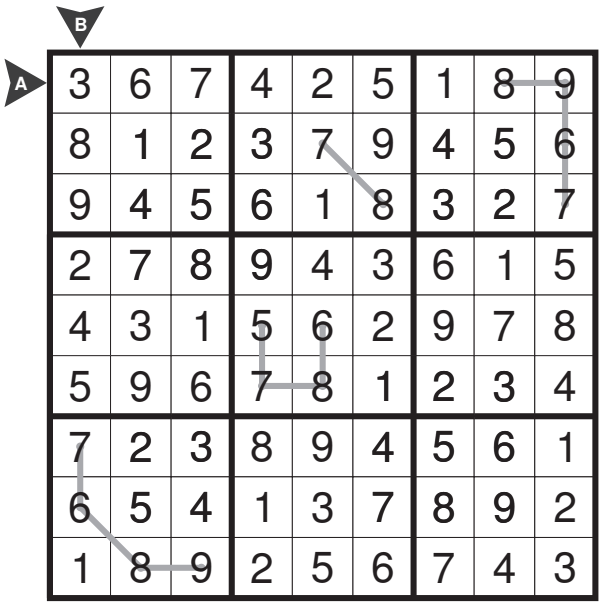
Renban Groups



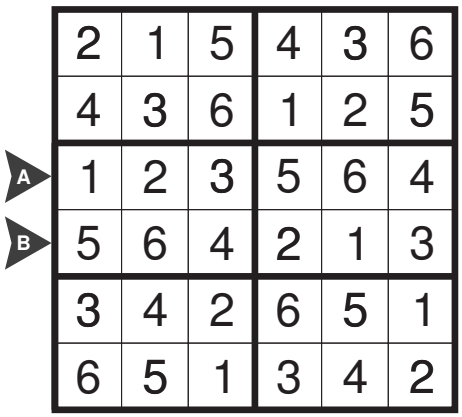
Quad Max



Renban Groups



Touchy



Touchy