sudoku mahabharat

Episode – 3
15th– 17th November

Odd Even Variations by Deb Mohanty

Important Links

Submission Page : http://logicmastersindia.com/SM/201411

Discussion Thread : http://logicmastersindia.com/t/?tid=891

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 based on Odd (1,3,5,7,9) and Even (2,4,6,8) digits, namely Even Sudoku, Odd Sum Pair Sudoku, No Even Neighbours Sudoku, Quadro Sudoku and Odd Even Count 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 15th November (but before 17th November), 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

Standard 6X6	1, 1, 2, 1
Standard 8X8	3
Standard 9X9	5, 6, 5
Even 6X6, 9X9	3, 8
Odd Sum Pair 6X6, 9X9	5, 11
No Even Neighbours 6X6, 9X9	1, 10
Quadro 6X6, 9X9	5, 13
Odd Even Count 6X6, 9X9	5, 15

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 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.

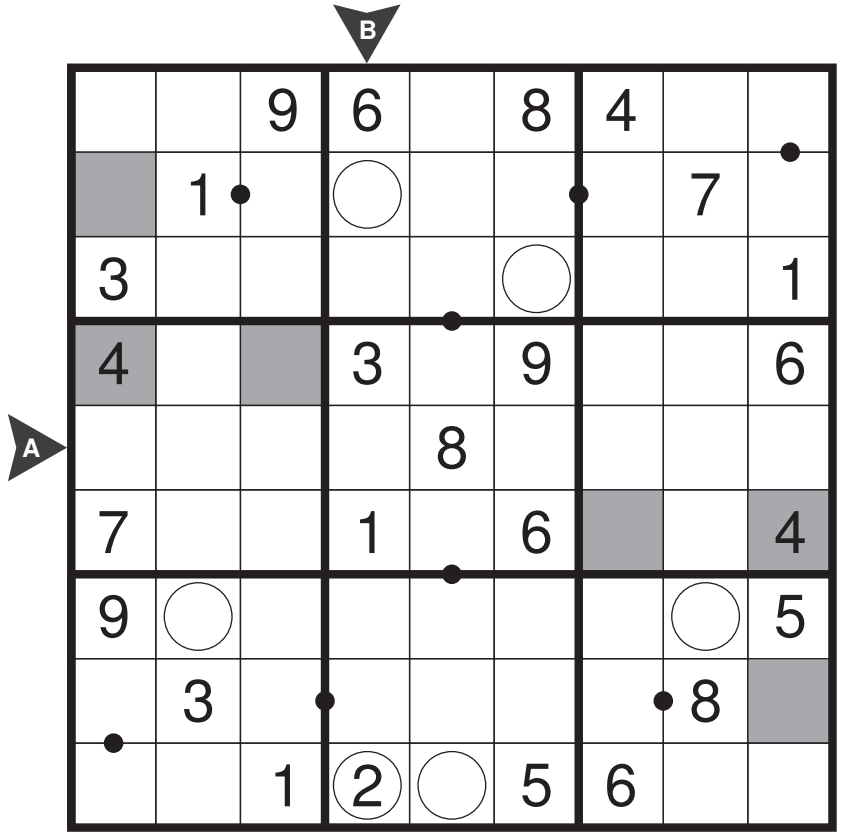
Each Sudoku will be marked with, at max, 2 lettered arrows. If you are solving on paper, you need to submit the digits in these arrows, in order, including the givens. For example, the answer key for the Sudoku at the right is 162897453, 517698432.

			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.

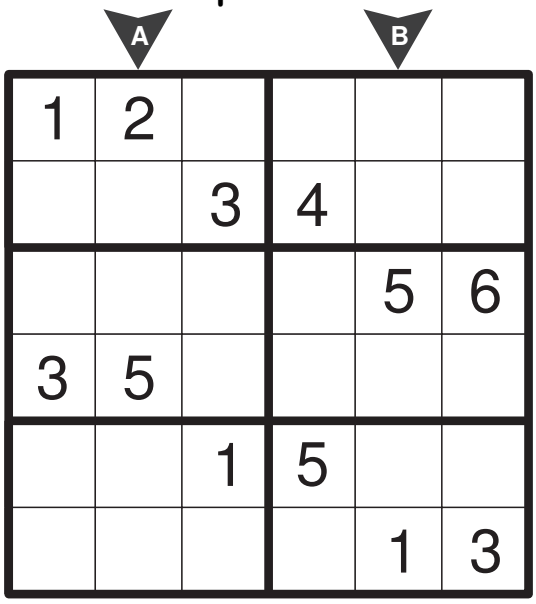


This grid is for testing how the printout looks.

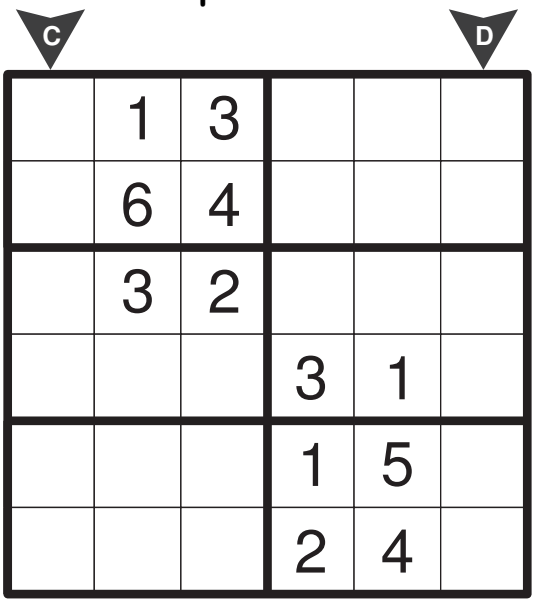
Standard Sudoku

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.

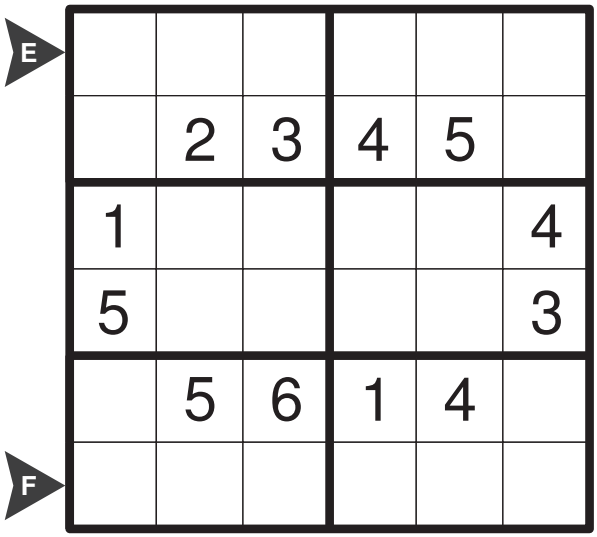
1 point



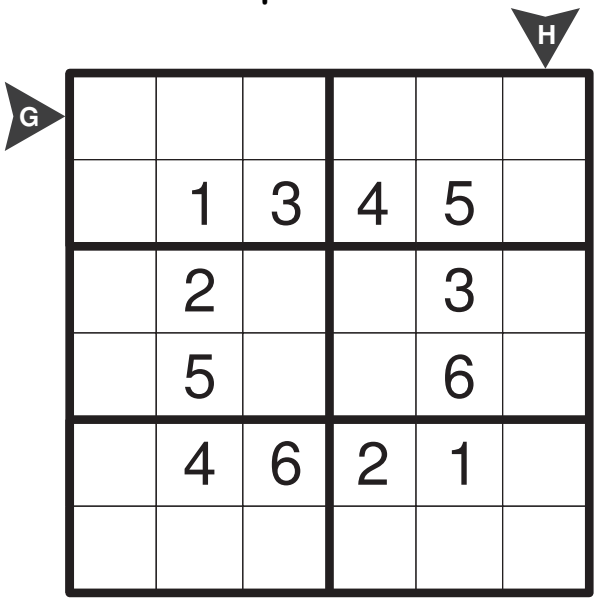
1 point



2 points



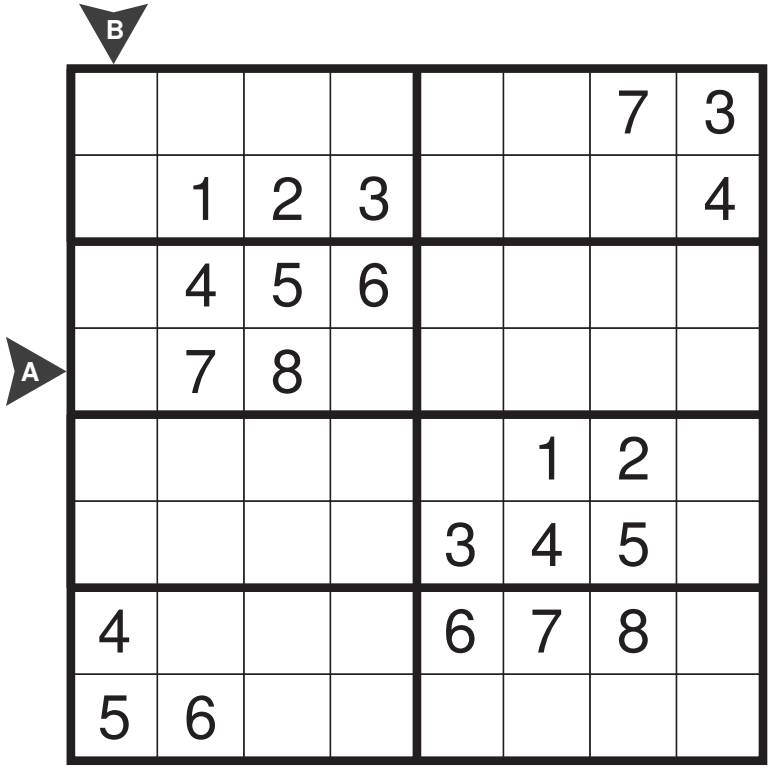
1 point



Standard Sudoku

3 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.

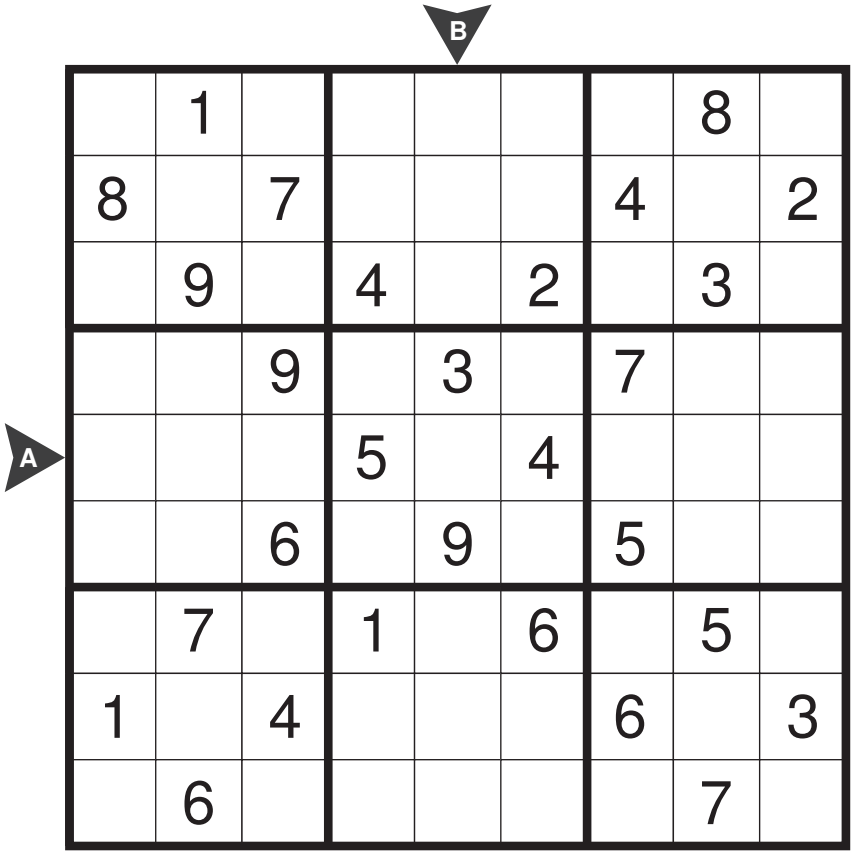


						7	3
	1	2	3				4
	4	5	6				
	7	8					
					1	2	
				3	4	5	
4				6	7	8	
5	6						

Standard Sudoku

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.

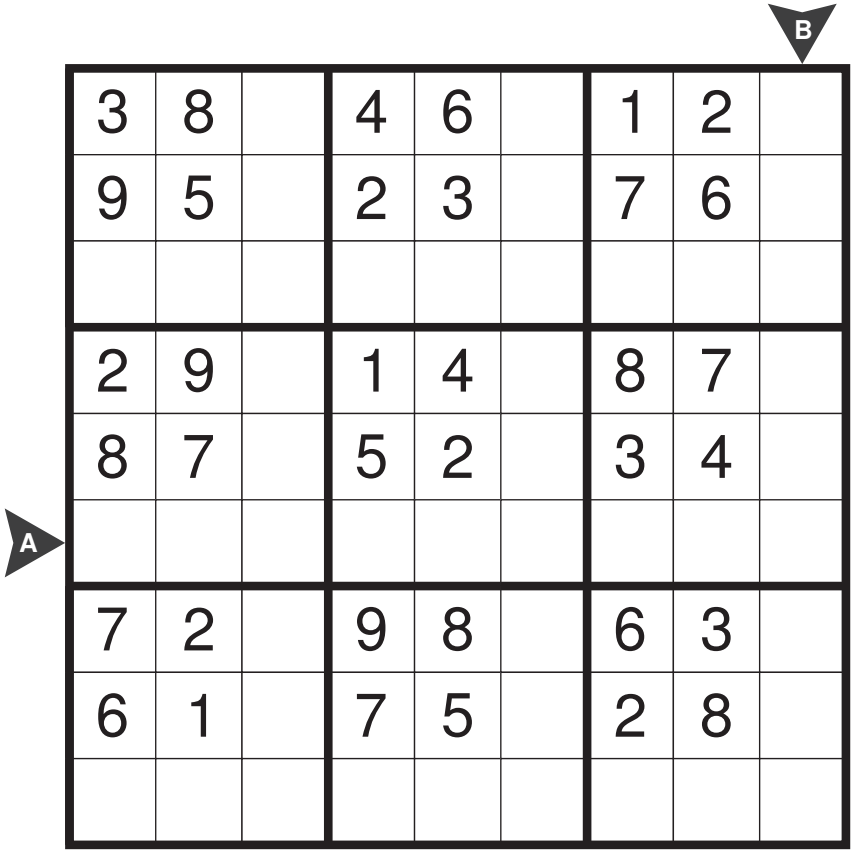


	1						8	
8		7				4		2
	9		4		2		3	
		9		3		7		
			5		4			
		6		9		5		
	7		1		6		5	
1		4				6		3
	6						7	

Standard Sudoku

6 points

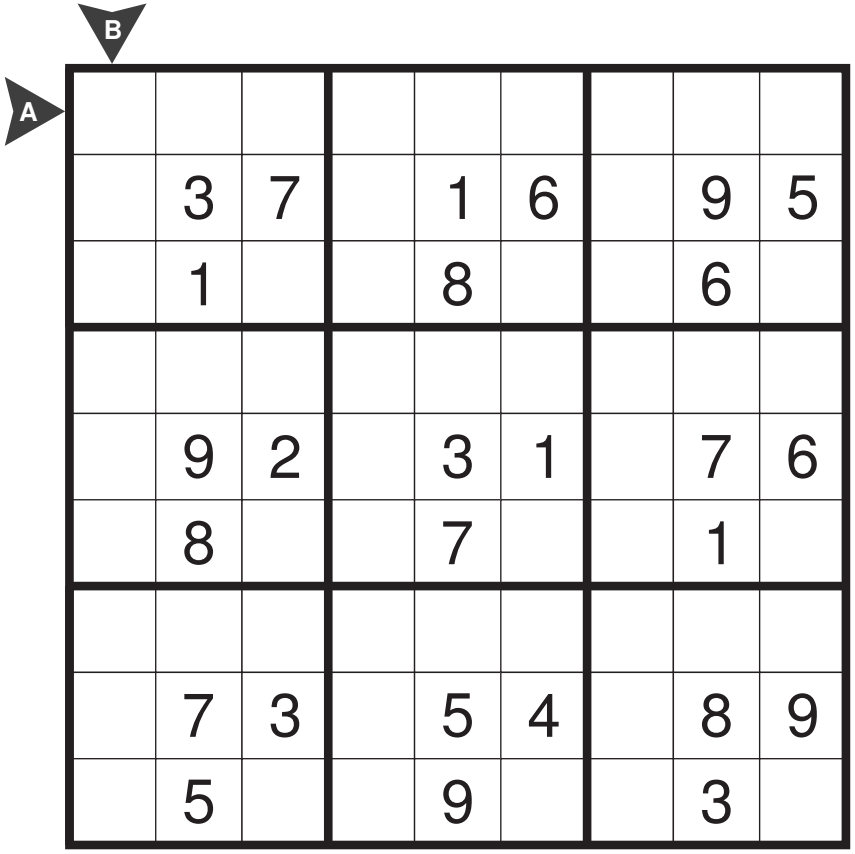
Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 3X3 box.



Standard Sudoku

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.

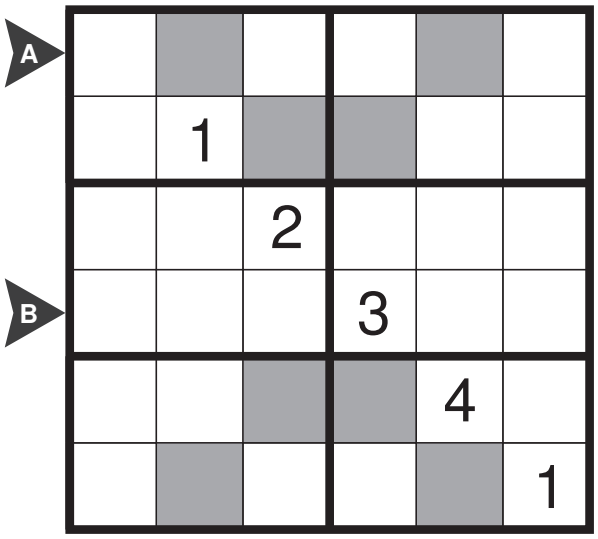


Even Sudoku

3 points

Apply standard Sudoku rules.

Shaded cells must contain even digits.

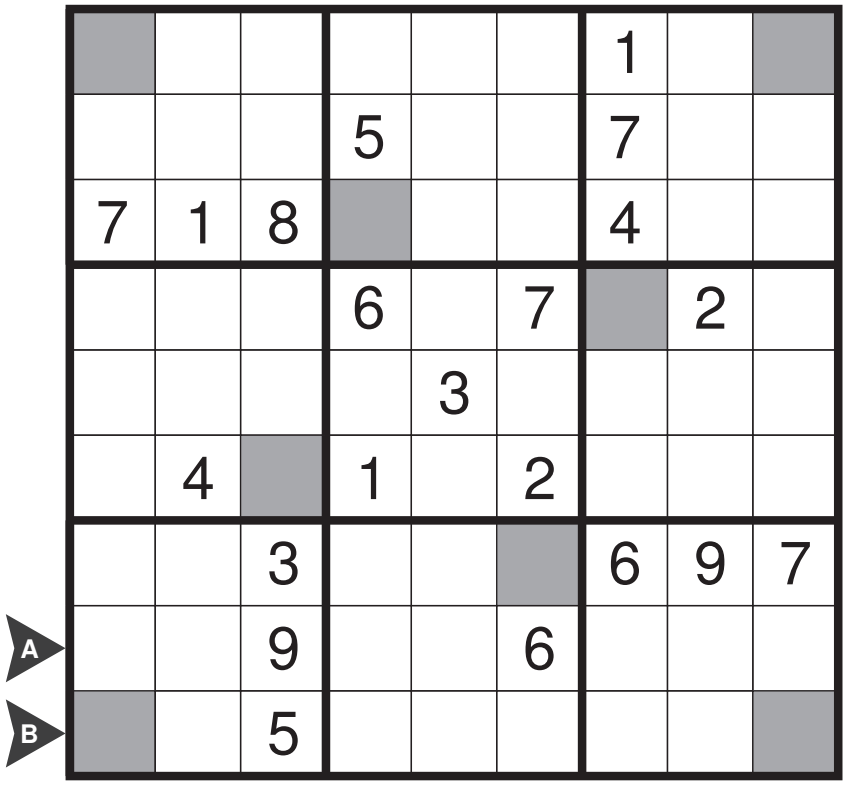


Even Sudoku

8 points

Apply standard Sudoku rules.

Shaded cells must contain even digits.

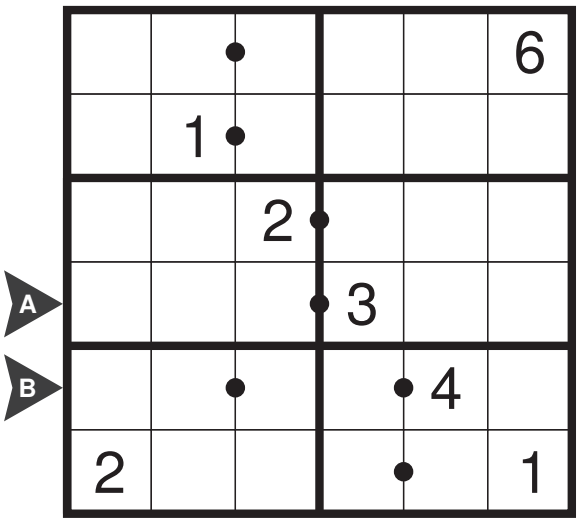


Odd Sum Pair

5 points

Apply standard Sudoku rules.

A dot between two cells implies the sum of digits in those 2 cells is odd.

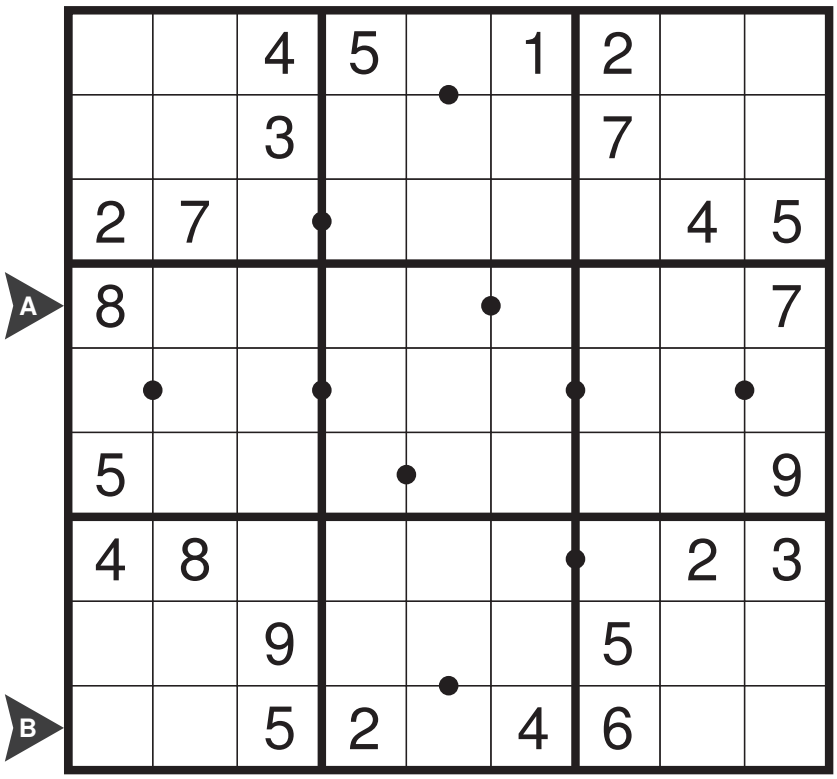


Odd Sum Pair

11 points

Apply standard Sudoku rules.

A dot between two cells implies the sum of digits in those 2 cells is odd.

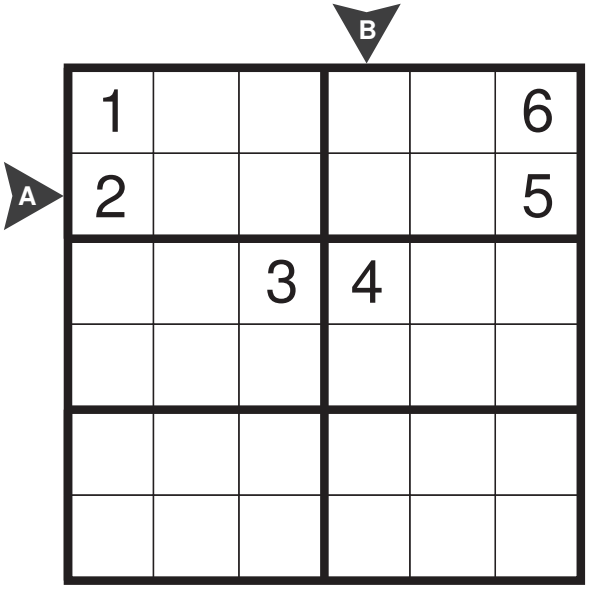


No Even Neigbours

1 points

Apply standard Sudoku rules.

No two cells containing even digits can share an edge.

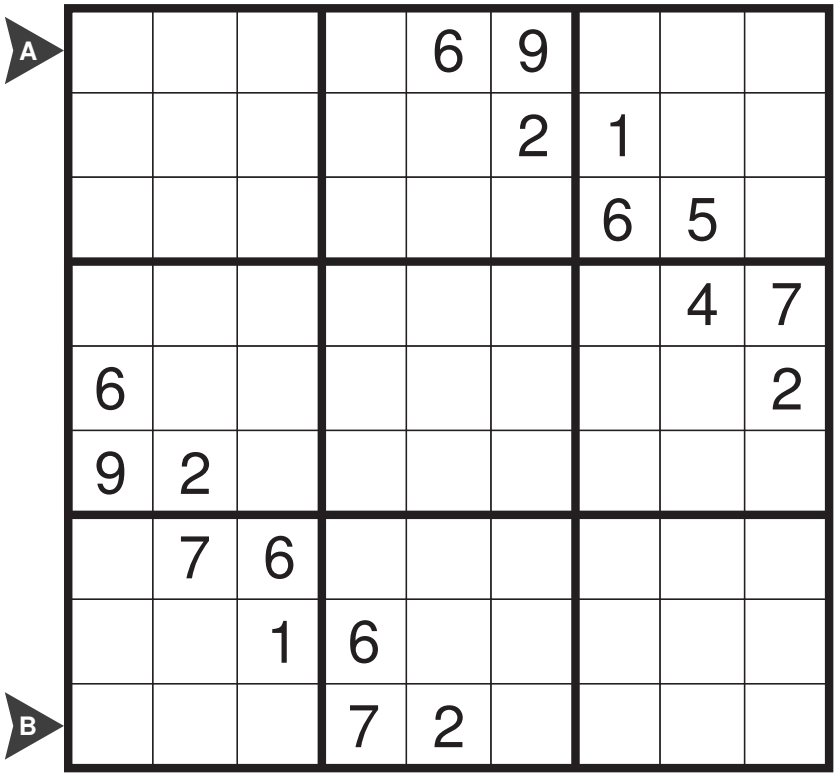


No Even Neigbours

10 points

Apply standard Sudoku rules.

No two cells containing even digits can share an edge.

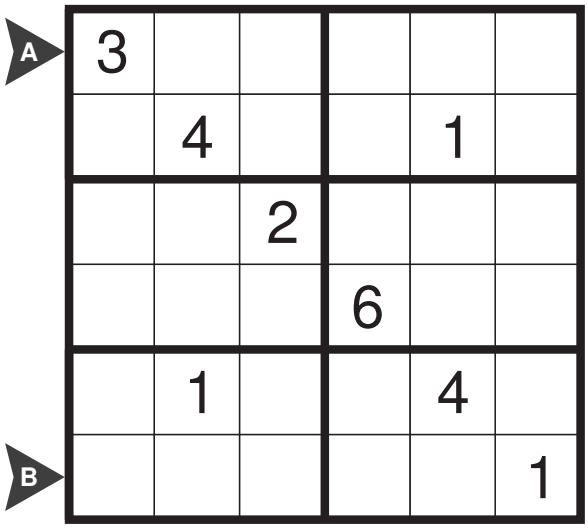


Quadro Sudoku

5 points

Apply standard Sudoku rules.

No 2x2 square can contain only odd or only even numbers.



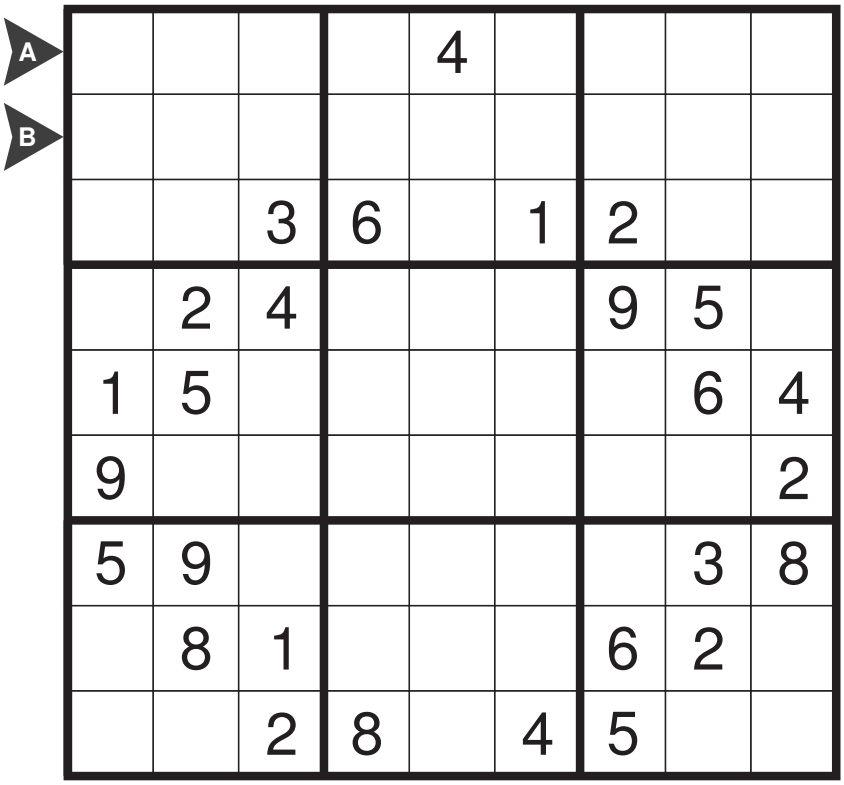
3					
	4			1	
		2			
			6		
	1			4	
					1

Quadro Sudoku

13 points

Apply standard Sudoku rules.

No 2x2 square can contain only odd or only even numbers.



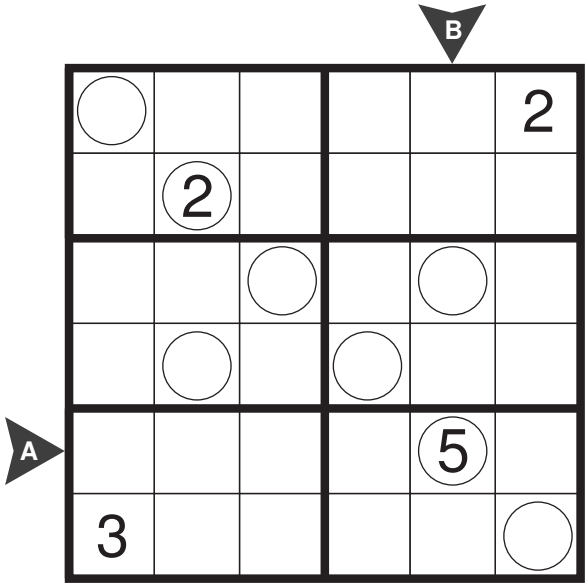
				4				
		3	6		1	2		
	2	4				9	5	
1	5						6	4
9								2
5	9						3	8
	8	1				6	2	
		2	8		4	5		

Odd Even Count

5 points

Apply standard Sudoku rules.

An even digit inside a circle represents the number of cells with even digits in the surrounding 8 cells.
An odd digit inside a circle represents the number of cells with odd digits in surrounding 8 cells.

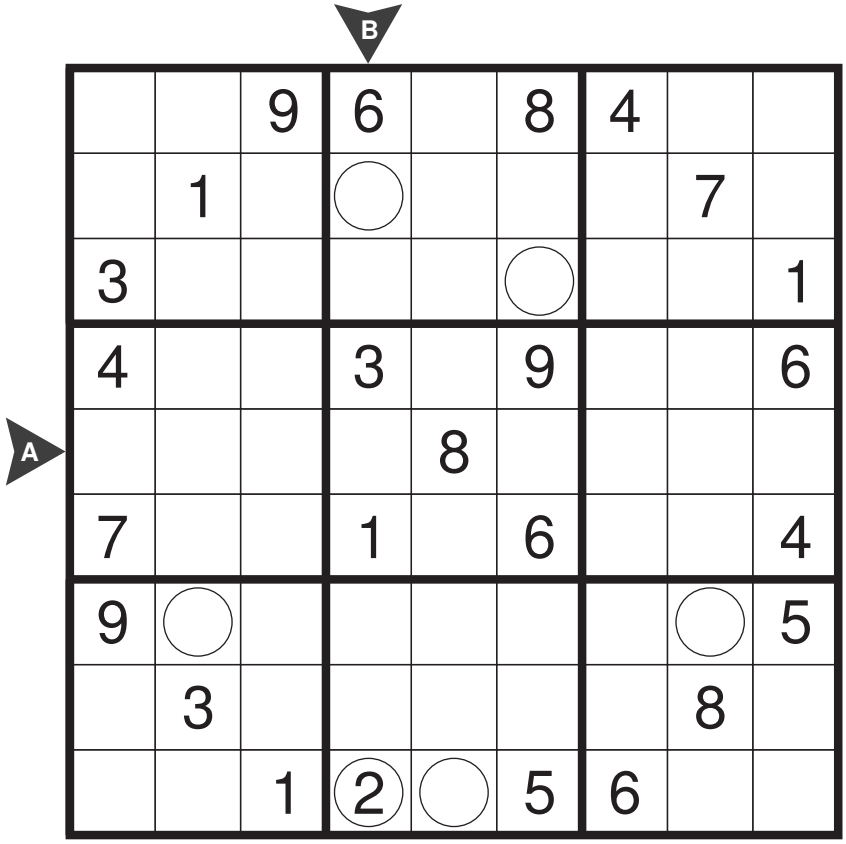


Odd Even Count

15 points

Apply standard Sudoku rules.

An even digit inside a circle represents the number of cells with even digits in the surrounding 8 cells.
An odd digit inside a circle represents the number of cells with odd digits in surrounding 8 cells.



Additional Examples

Additional examples for practice can be found at following blogs / sites.

Even Sudoku

LMI: Beginners Sudoku Contest May 2014 – http://logicmastersindia.com/BeginnersSudoku/?test=B201405
LMI: Mock 20 – http://logicmastersindia.com/lmitests/?test=mock20
WPF GP 2013 – Serbian Round – http://logicmastersindia.com/lmitests/?test=M201304S

Odd Sum Pair Sudoku

LMI: Classics vs Innovatives – http://logicmastersindia.com/lmitests/?test=M201208S
Puzzle Mix – http://www.puzzlemix.com/Odd%20Pair%20Sudoku

No Even Neighbours Sudoku

Rohan Rao's old blog – http://rohanrao.blogspot.in/search/label/No%20Even%20Neighbours%20Sudoku
Bastien Vial-Jaime's old blog – http://ile-logique.blogspot.in/search/label/even%20in%20hell
Slovak Sudoku – http://www.slovaksudoku.com/en/blog/2014/10/no-even-neighbours-sudoku.html
Swaroop Guggilam's blog – http://swaroopg92.blogspot.in/search/label/No%20even%20Neighbor%20Sudoku

Quadro Sudoku

LMI: Classic Look-Alikes – http://logicmastersindia.com/lmitests/?test=M201007S
Bastien Vial-Jaime's old blog – http://ile-logique.blogspot.in/search/label/quadro%20sudoku
Slovak Sudoku – http://www.slovaksudoku.com/en/blog/2014/10/quadro-sudoku.html

Odd Even Count Sudoku

LMI: ISC2011 Round 2 – http://logicmastersindia.com/lmitests/?test=isc2011
Prasanna Seshadri's blog – http://prasannaseshadri.wordpress.com/2014/09/12/puzzle-no-497-odd-even-count-sudoku-daily-league/

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
F	2	4	1	6	3	5

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

Even Sudoku

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

Odd Sum Pair

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

Even Sudoku

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

Odd Sum Pair

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

No Even Neighbours

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

B

A

Quadro Sudoku

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

A

B

No Even Neighbours

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

A

B

Quadro Sudoku

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

A

B

Odd Even Count

(1)	3	5	6	4	2
4	(2)	6	1	3	5
5	1	(3)	4	(2)	6
6	(4)	2	(5)	1	3
2	6	1	3	(5)	4
3	5	4	2	6	(1)

B

A

Odd Even Count

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

B

A