

Round 4 – Part 1: Twisted Classics

Duration: 60 Minutes

Date: 22nd to 25th November

This round will contain 2 9x9 Classics, and then some variants which do not have added rules, but they twist the regional boundaries or use the Classics in an uncommon way. The points distribution for the actual round is given below. Other than that, this is just a sample booklet to give an idea of the variants and give some practice to newcomers. The points given along with the Sudokus are just to give an idea of things, and not final in any way.

Sudoku	Points
Classic 9x9 1, 2	27,25
Overlapping Sudoku (6x6 & 9x9)	11,23
Linked Sudoku (6x6 & 9x9)	10,37
Irregular Sudoku (6x6 & 9x9)	9,38
Surplus Sudoku (6x6)	14
Deficit Sudoku (7x7)	6
Total	200

The test can be started any time between 15:01 PM on 22nd November and 11:59 PM on 25th November.

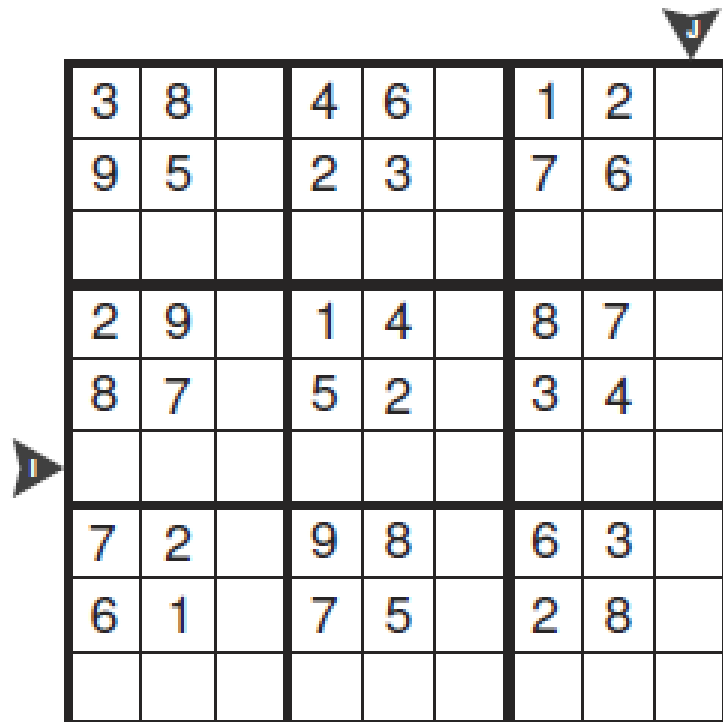
There will be instant grading, i.e., when you submit the answers, you will know if they are right or wrong. You can resubmit solutions for incorrect submissions. However, note that, for 1 incorrect submission 90% points will be awarded for the subsequent correction, and similarly 70% for 2 incorrect, 40% for 3 incorrect and 0% for 4 incorrect submissions respectively.

The Sudokus can be solved in any sequence, and you can attempt in paper or online mode. It is not necessary to enter answers in both modes. You can even enter some in paper mode and some in online mode. It is enough to enter the marked rows/columns correctly in both modes. For any other queries, please mail before taking the contest.

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.



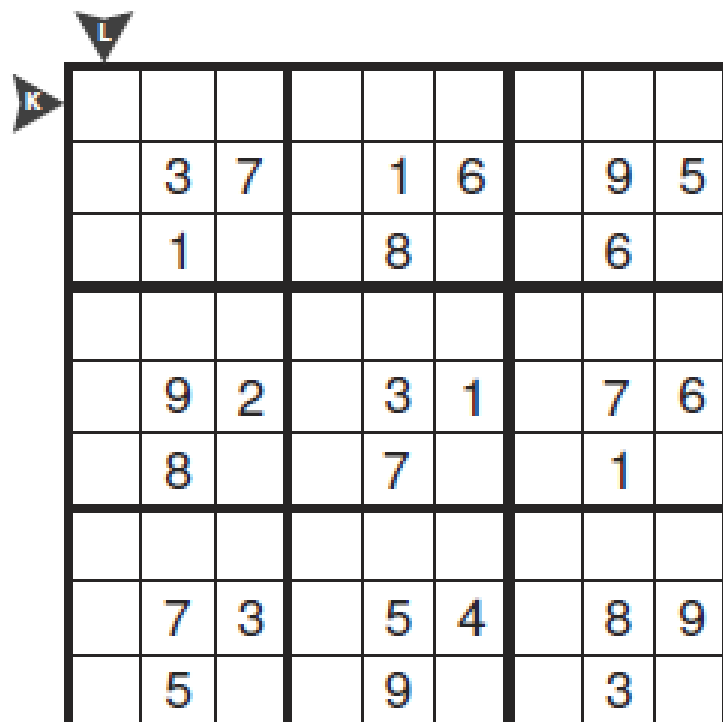
A 9x9 Sudoku grid with 3x3 subgrids. The grid is partially filled with numbers. The numbers are: Row 1: (1,1)=3, (1,2)=8, (1,4)=4, (1,5)=6, (1,7)=1, (1,8)=2; Row 2: (2,1)=9, (2,2)=5, (2,4)=2, (2,5)=3, (2,7)=7, (2,8)=6; Row 4: (4,1)=2, (4,2)=9, (4,4)=1, (4,5)=4, (4,7)=8, (4,8)=7; Row 5: (5,1)=8, (5,2)=7, (5,4)=5, (5,5)=2, (5,7)=3, (5,8)=4; Row 6: (6,1)=7, (6,2)=2, (6,4)=9, (6,5)=8, (6,7)=6, (6,8)=3; Row 7: (7,1)=6, (7,2)=1, (7,4)=7, (7,5)=5, (7,7)=2, (7,8)=8. All other cells are empty. A grey arrow labeled 'J' points to the top-right corner of the grid.

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	

Standard Sudoku

7 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.



A 9x9 Sudoku grid with 3x3 subgrids. The grid is partially filled with numbers. The numbers are: Row 2: (2,2)=3, (2,3)=7, (2,5)=1, (2,6)=6, (2,8)=9, (2,9)=5; Row 3: (3,2)=1, (3,5)=8, (3,8)=6; Row 5: (5,2)=9, (5,3)=2, (5,5)=3, (5,6)=1, (5,8)=7, (5,9)=6; Row 6: (6,2)=8, (6,5)=7, (6,8)=1; Row 8: (8,2)=7, (8,3)=3, (8,5)=5, (8,6)=4, (8,8)=8, (8,9)=9; Row 9: (9,2)=5, (9,5)=9, (9,8)=3. All other cells are empty. A grey arrow labeled 'L' points to the top-right corner of the grid, and a grey arrow labeled 'K' points to the left side of the grid.

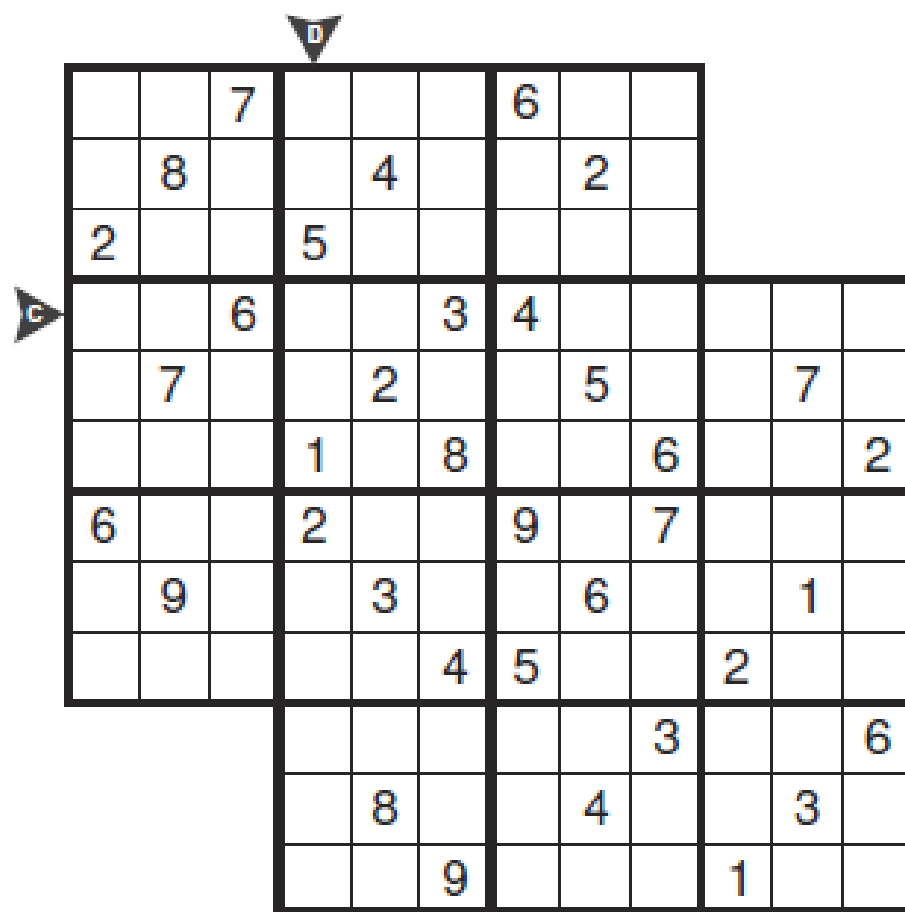
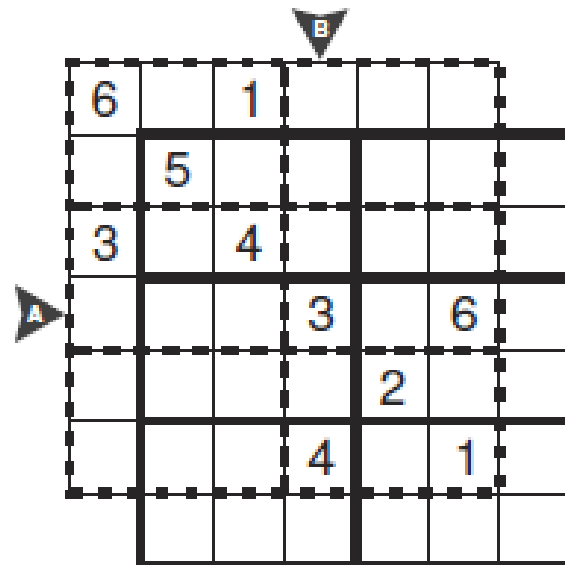
	3	7		1	6		9	5
	1			8			6	
	9	2		3	1		7	6
	8			7			1	
	7	3		5	4		8	9
	5			9			3	

Overlapping Sudoku

3 points
16 points

Apply standard
Sudoku rules to
each of the grids.

Two grids are
overlapping.



Linked Sudoku

5 points

Apply standard
Sudoku rules to
each of the grids.

Two grids are linked
to each other. The
shaded cells must
contain same digit
in both the grids.

E

4					
2	1		5		
			1		
			3		5

F

					1
				3	
6			4		
	4				
		4			
			3		

Linked Sudoku

16 points

Apply standard
Sudoku rules to
each of the grids.

Two grids are linked
to each other. The
shaded cells must
contain same digit
in both the grids.

G

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

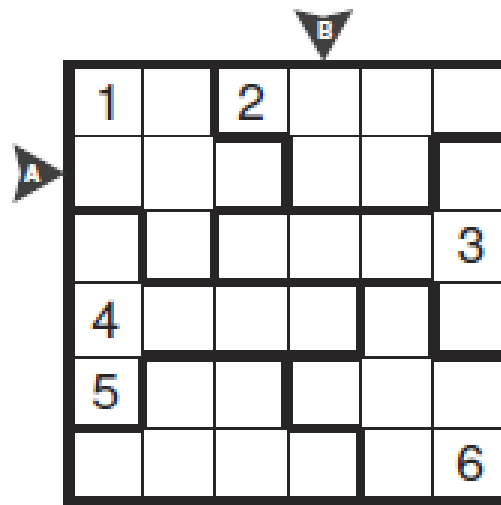
H

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

Irregular Sudoku

2 points

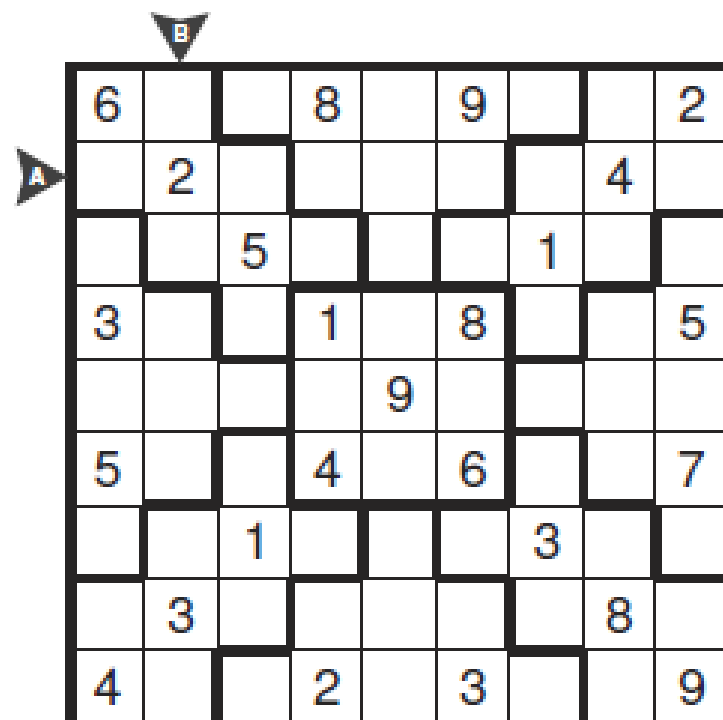
Place a digit from 1 to 6 in each empty cell so that each digit appears exactly once in each row, column and outlined region. Each outlined region is marked by thick borders.



Irregular Sudoku

11 points

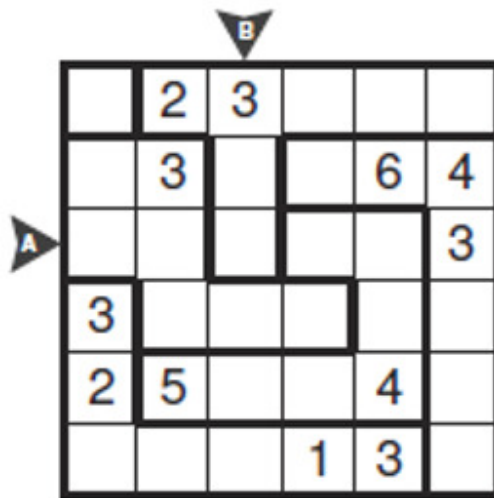
Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and outlined region. Each outlined region is marked by thick borders.



Surplus Sudoku

3 points

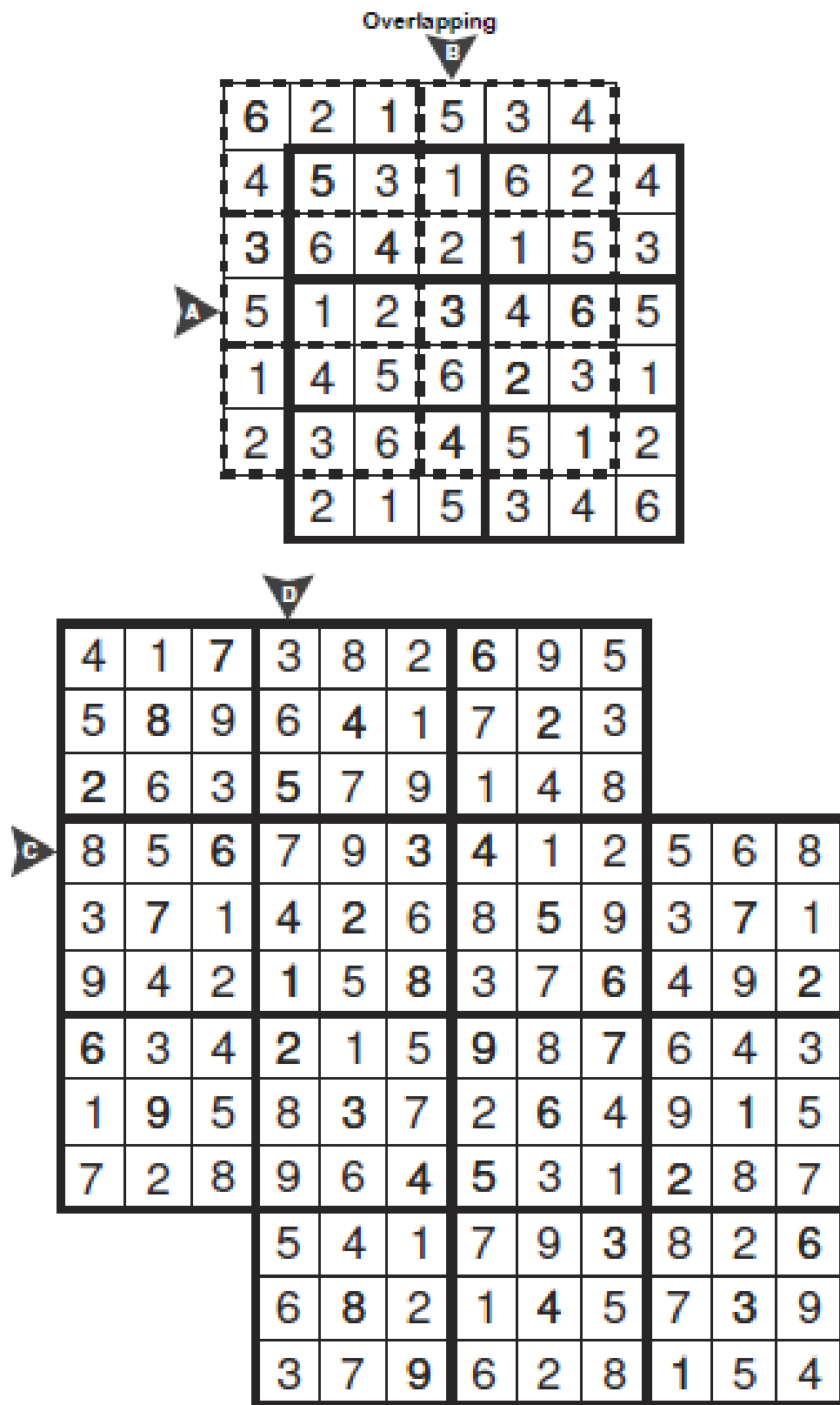
Place a digit from 1 to 6 in each empty cell so that each digit appears exactly once in each row and column. Digits 1 to 6 must appear at least once in each of the outlined regions with seven cells.



Deficit Sudoku

Place a digit from 1 to 7 in each empty cell so that each digit appears exactly once in each row and column. Digits from 1 to 7 may appear at most once in regions of 6 cells.

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



Linked Sudoku

The diagram shows two 6x6 grids. The left grid has an arrow labeled 'E' pointing to the 4th row. The right grid has an arrow labeled 'F' pointing to the 1st row. Both grids contain numbers 1-6 in a specific pattern.

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

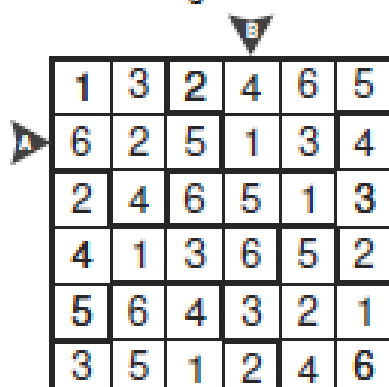
4	3	2	5	6	1
5	6	1	2	3	4
6	1	3	4	5	2
2	4	5	6	1	3
3	5	4	1	2	6
1	2	6	3	4	5

Figure 1 displays two 9x9 grids illustrating the effect of a 90-degree clockwise rotation. The left grid shows the original arrangement, and the right grid shows the result of the rotation. A 90-degree rotation arrow is shown above the right grid.

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

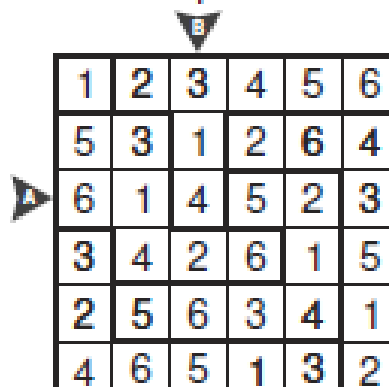
1	7	6	5	4	9	8	2	3
5	2	8	6	1	3	9	7	4
9	4	3	7	2	8	1	5	6
6	8	7	4	9	1	5	3	2
3	9	4	8	5	2	6	1	7
2	1	5	3	7	6	4	9	8
8	6	9	2	3	5	7	4	1
7	3	1	9	6	4	2	8	5
4	5	2	1	8	7	3	6	9

Irregular



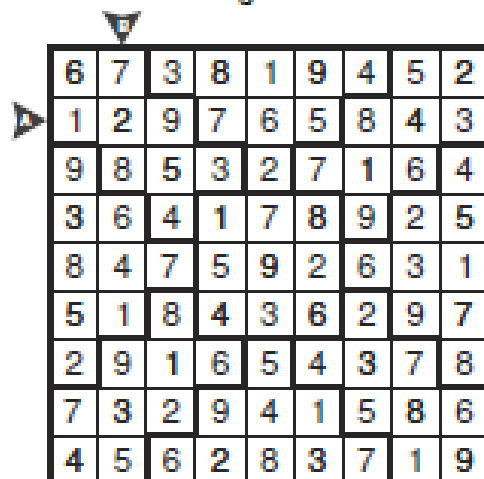
1	3	2	4	6	5
6	2	5	1	3	4
2	4	6	5	1	3
4	1	3	6	5	2
5	6	4	3	2	1
3	5	1	2	4	6

Surplus



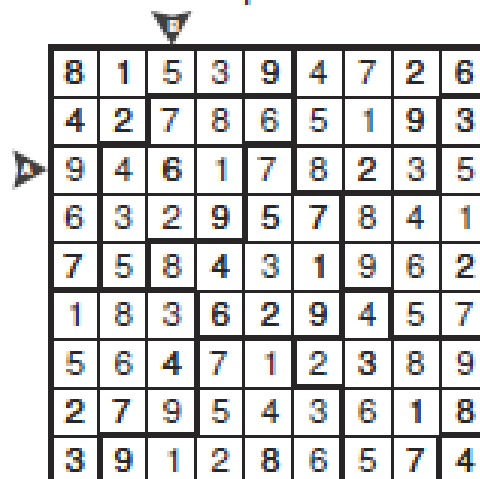
1	2	3	4	5	6
5	3	1	2	6	4
6	1	4	5	2	3
3	4	2	6	1	5
2	5	6	3	4	1
4	6	5	1	3	2

Irregular



6	7	3	8	1	9	4	5	2
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

Surplus



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

Deficit

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