# 18th MOCK TEST
# - puzzles from Serbian Sudoku Championship -

**March 28th 2010**

**Relay**

1. DIAGONAL (38)
2. KILLER (43)
3. IRREGULAR (47)
4. CLASSIC (53)
5. XV (58)
6. ANTI-KNIGHT (66)

**Sudoku Mix**

7. ALPHABET (54)
8. ODD (61)
9. CLASSIC (41)
10. KILLER (89)
11. NEIGHBOURS +N (91)
12. NONCONSECUTIVE (69)
13. CLASSIC (53)
14. BIG BANDS (71)
15. IRREGULAR-DISJOINT REGION (79)
16. WINDOKU (87)

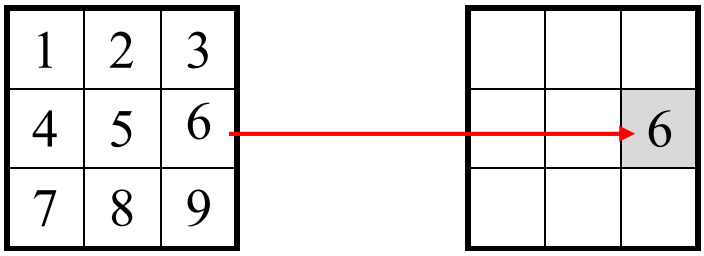
1000 points - 120 minutes

Times bonus (for solving all the puzzles)
5 points per each minute saved

Puzzles selection: Branko Ćeranić

## Relay 1-6

Tasks 1-6 are connected. Some cells from first task transfer to second, some cells from second to third and so on. Cells in which you need to transfer numbers are gray. You need to find cell in the same position in previous task and to transfer number from that cell into the grey cell.




Puzzles in the relay are:

### 1. DIAGONAL

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, bolded 3x3 box and two main diagonals.

### 2. KILLER

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and bolded 3x3 box. The sum of the digits within each sub-region is equal to the specified number. Digits in a sub-region are different from each other.

### 3. IRREGULAR

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and bolded region.

### 4. CLASSIC

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and bolded 3x3 box.

### 5. „XV“

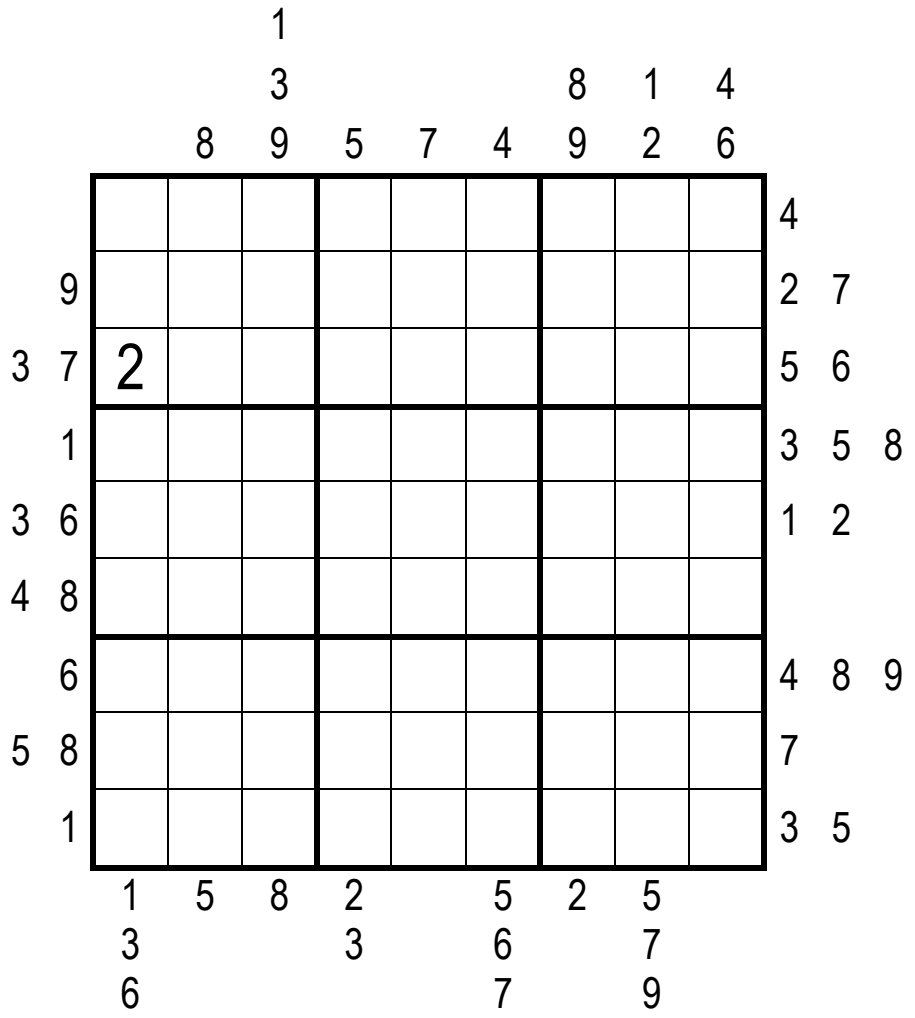
Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and the nine outlined 3x3 regions.
All horizontally and vertically neighbouring digits with the sum 10 are marked with X, all horizontally and vertically neighbouring digits with the sum 5 are marked with V.

### 6. ANTI-KNIGHT

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and the nine outlined 3x3 regions. There are no cells that are a knight-step away one from another, that contain the same digit.

RELAY EXAMPLE:
Here is relay example with some different puzzle types

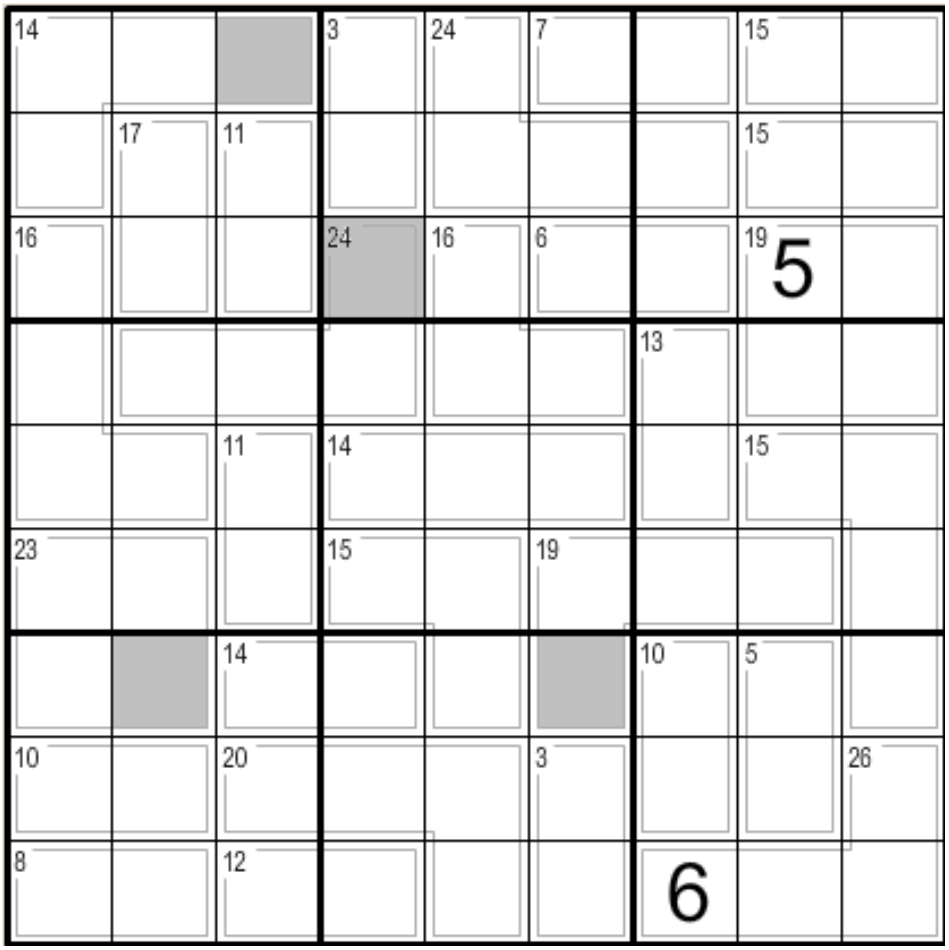
OUTSIDE SUDOKU
Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and bolded 3x3 box. Any number given outside the grid indicates that, that number must appear somewhere in the three closest cells in the row/column that the clue appears in.



KILLER

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and bolded 3x3 box. The sum of the digits within each sub-region is equal to the specified number. Digits in a sub-region are different from each other.

**Transfer numbers into grey cells from previous grid.**



DIAGONAL

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, bolded 3x3 box and two main diagonals.

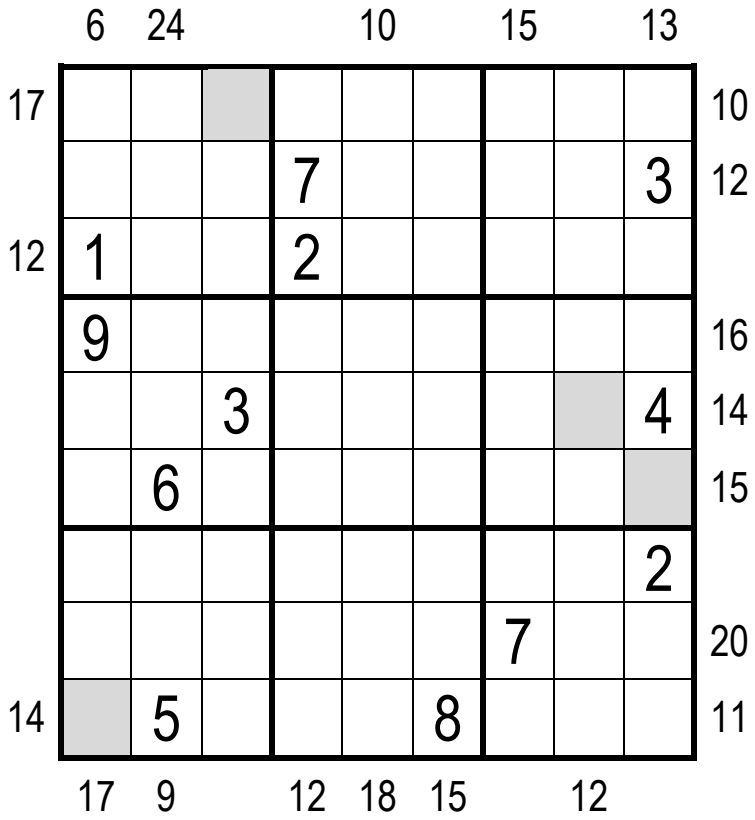
**Transfer numbers into grey cells from previous grid**

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

OUTSIDE SUMS

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and bolded 3x3 box. Digits in the outside frame equal the sum of the three numbers of the corresponding row or colum in the contiguos box.

**Transfer numbers into grey cells from previous grid.**



IRREGULAR

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and bolded region.

**Transfer numbers into grey cells from previous grid.**

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

NONCONSECUTIVE

Fill in the grid so that every row, column, and 3x3 box contains the digits 1 through 9. Numbers in horizontally or vertically adjacent cells CANNOT be consecutive numbers.

**Transfer numbers into grey cells from previous grid.**

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

## 7. ALPHABET

Write a single letter in each cell such that in every row, column, and bolded 3x3 box appear letters from word KATAMARAN.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | K | A | A | M |
| | | | | | | | A | |
| | N | | | | | T | | |
| | | | | | M | | | K |
| N | | | A | | A | A | A | |
| | K | A | A | A | | | | T |
| A | | A | M | | | | A | |
| | | | K | | | | | |
| A | | | | | A | | | |

## 8. ODD

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and bolded 3x3 box. In gray cells are **ODD** numbers (**EVEN** numbers in the example)

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

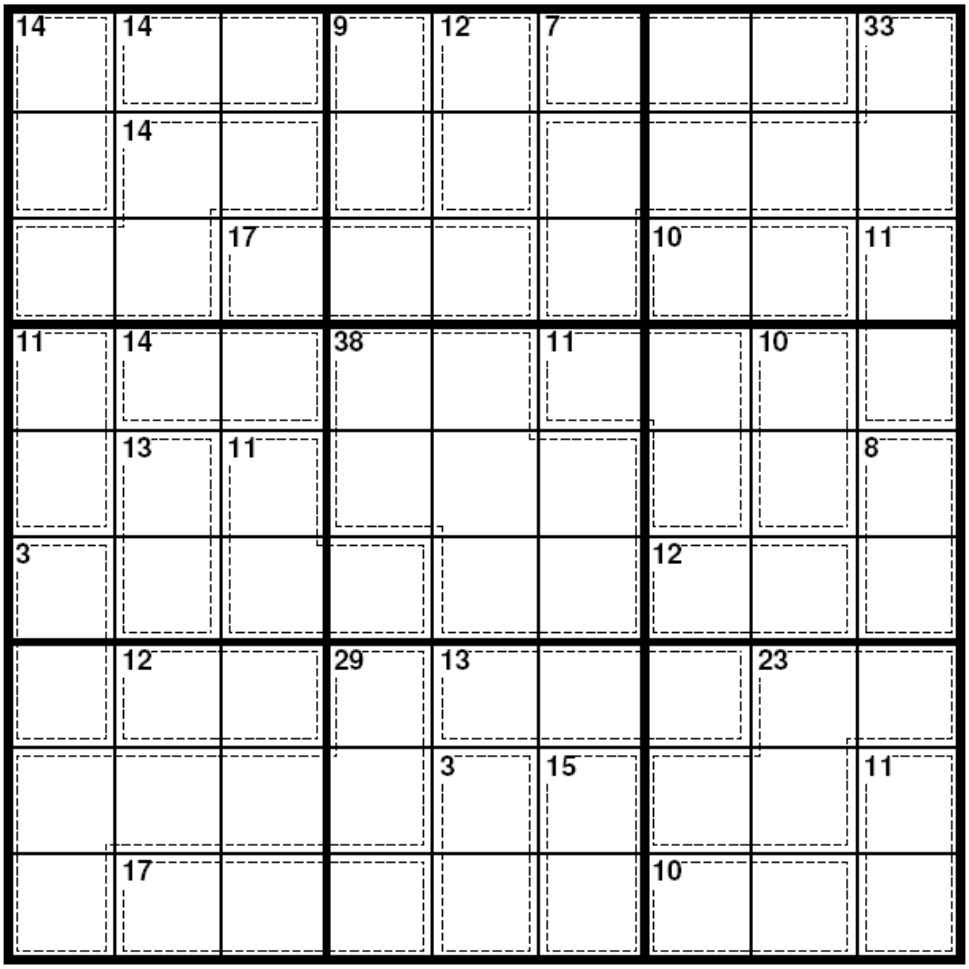
## 9. CLASSIC

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and bolded 3x3 box.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 4 | 8 | | 1 | 3 | |
| | | | | | | | 2 | 5 |
| | | | 5 | 3 | | 4 | 7 | |
| 4 | | | | | | 9 | | |
| 3 | | | 7 | 1 | 5 | | | 4 |
| | | 5 | | | | | | 1 |
| | 3 | 8 | | 2 | 4 | | | |
| 2 | 1 | | | | | | | |
| | 5 | 4 | | 9 | 3 | | | |

## 10. KILLER

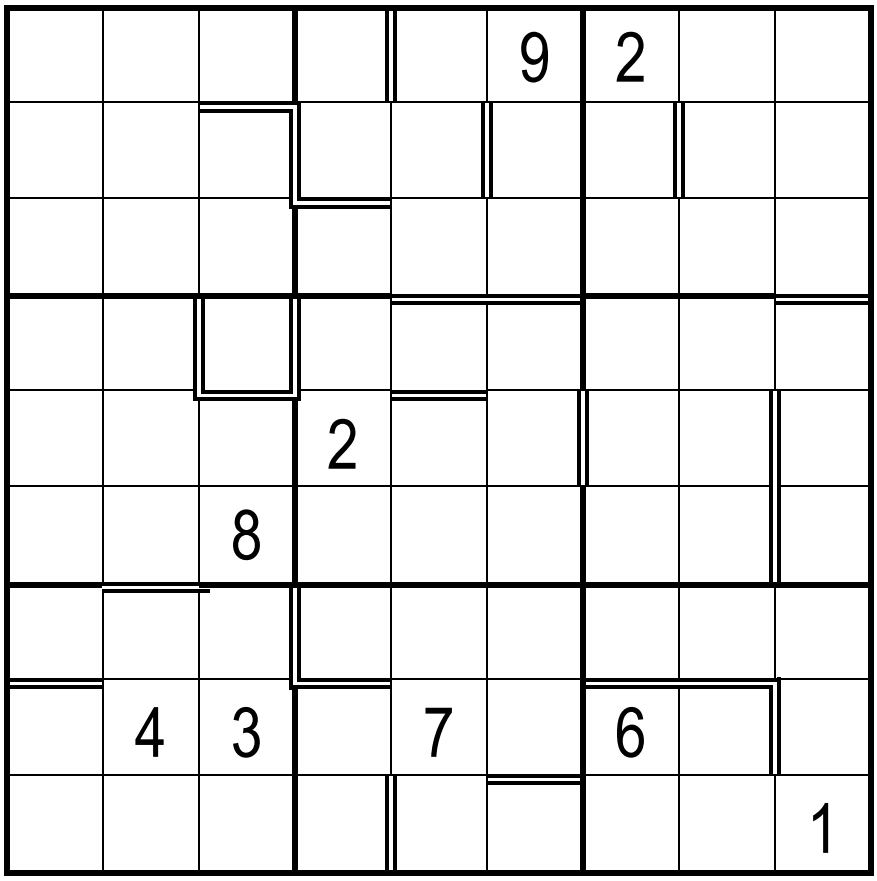
Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and bolded 3x3 box. The sum of the digits within each sub-region is equal to the specified number. Digits in a sub-region are different from each other.



## 11. NEIGHBOURS +N

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and the nine outlined 3x3 regions. In each and every case where vertically or horizontally adjacent cells contain digits that differ by **3** (such as 2 and 5), a double line is drawn on the edge between those cells.

N = 3



## 12. NONCONSECUTIVE

Fill in the grid so that every row, column, and 3x3 box contains the digits 1 through 9. Numbers in horizontally or vertically adjacent cells CANNOT be consecutive numbers.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 3 | | | | 2 | | | | 1 |
| | 2 | | 9 | | 1 | | 8 | |
| | | 9 | | | | 7 | | |
| | 1 | | 8 | | 7 | | 6 | |
| 9 | | | | 1 | | | | 7 |
| | 3 | | 2 | | 9 | | 1 | |
| | | 3 | | | | 1 | | |
| | 9 | | 1 | | 8 | | 7 | |
| 8 | | | | 7 | | | | 5 |

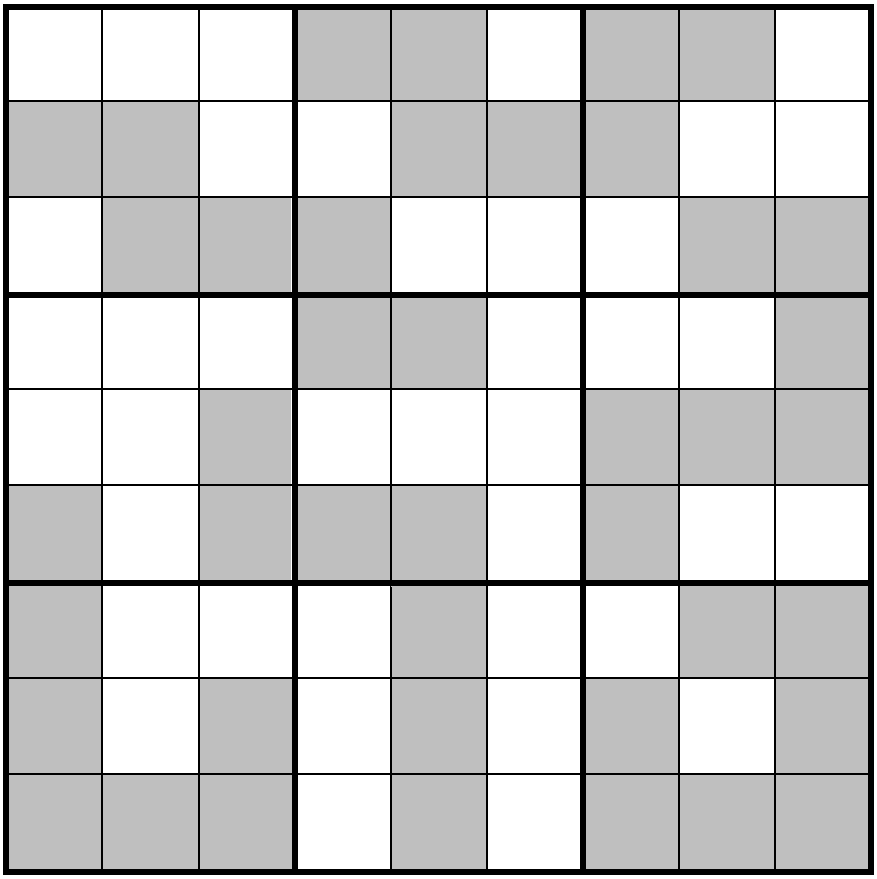
## 13. STANDARDNI SUDOKU (CLASSIC)

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and bolded 3x3 box.

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

## 14. BIG BANDS

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and the nine outlined 3x3 regions.
There are six grey twisty bands 7 cells long in the sudoku grid and 7 digits long numbers. Put the numbers in the respective bands and all others digits in the grid.



**1614821**

**8561263**

**9258674**

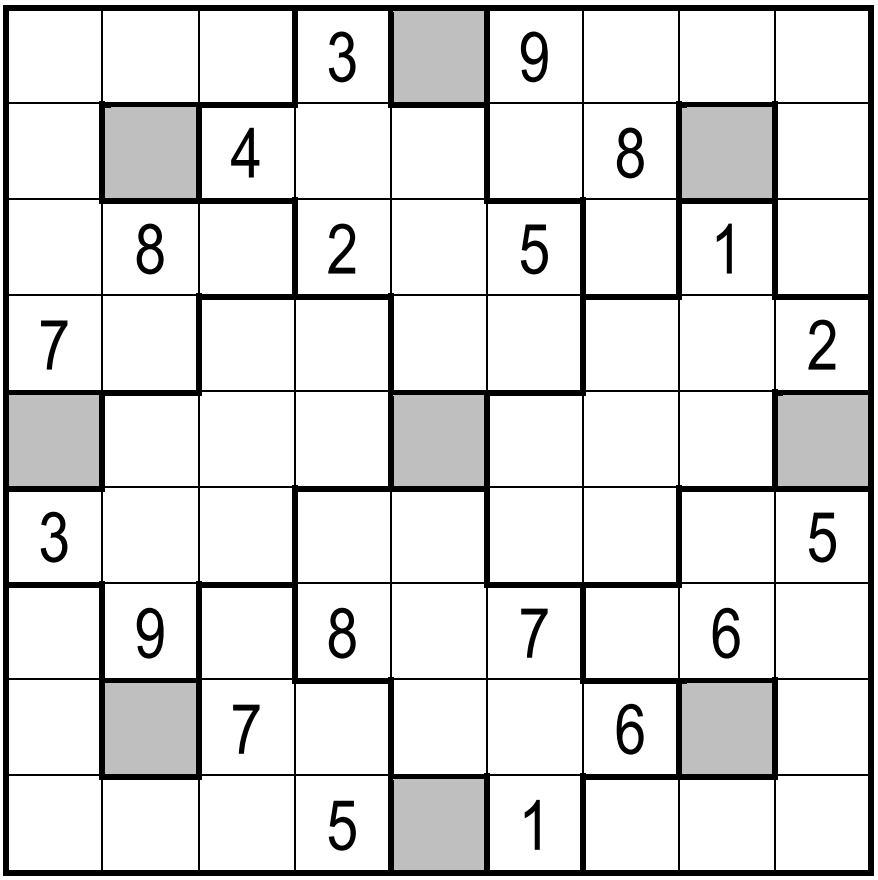
**7468249**

**7675837**

**4619238**

## 15. IRREGULAR-DISJOINT REGION

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, bolded region and nine grey cells.



## 16. WINDOKU

Write a single number from 1 to 9 in each cell such that each number appears exactly once in every row, column, and the nine outlined 3x3 regions. The 4 grey extra-regions must also contain each of the digits 1 to 9 exactly once.

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