

5. PRVENSTVO SRBIJE U REŠAVANJU SUDOKUA

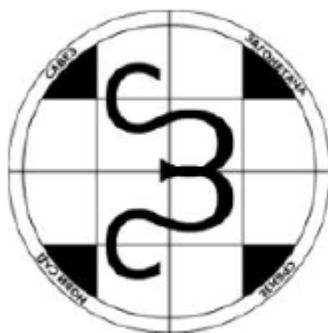
- pripremno takmičenje -

03. JANUAR 2009.

5th SERBIAN SUDOKU CHAMPIONSHIP

- preliminary contest -

January 3rd 2009.



STANDARDNI SUDOKU (CLASSIC) (40)

STANDARDNI SUDOKU (CLASSIC) (40)

STANDARDNI SUDOKU (CLASSIC) (50)

STANDARDNI SUDOKU (CLASSIC) (60)

Štafeta (Relay)

SPOLJNI SUDOKU (OUTSIDE) (60)

SUDOKU „UBICA“ (KILLER) (70)

DIJAGONALNI SUDOKU (DIAGONAL) (70)

SPOLJNI ZBIROVI (OUTSIDE SUM) (75)

NEPRAVILNI SUDOKU (IRREGULAR) (75)

NESUSEDI (NONCONSECUTIVE) (95)

PARNI SUDOKU (EVEN) (70)

MEŠOVITI SUDOKU (DIAGONAL-EVEN) (95)

Set nosi ukupno 800 bodova. Vreme za rešavanje je 90 minuta.

800 points - 90 minutes

Za svaki zadatak rešenje unositi u sledećem obliku:

prvired,drugired

gde su *prvired* i *drugired* redovi na koje pokazuju strelice u datom zadatku (treći red odozgo i odozdo u svakom zadatku).

Rešenja poslati na brankoceranic@gmail.com

U konkurenciji će biti i sva rešenja poslata u prvih 5 minuta nakon isteka vremena i biće sankcionisana sa -0.5 poena po sekundi zakašnjenja. Odgovori koji stignu sa 5-30 minuta zakašnjenja će biti obrađeni i objavljeni, ali van konkurencije.

Poruka treba da bude u sledećem obliku:

Prezime Ime

Grad, Država

Rešenja zadataka

For every task solution code must be in the following format:

firstline,secondline

where *firstline* and *secondline* are rows marked by arrows in every task (third row from top and bottom).

Send answers to brankoceranic@gmail.com

For answers received in first 5 minutes after initial 90 minutes will be -0.5 points penalty for each additional second. Answers received in 5-30 minutes after initial period will also be processed, but in separate list.

Message should have following form:

LastName FirstName

City, Country

Solution codes

Štafeta (Relay) 5-10

Narednih 6 zadataka su povezani. Neka polja prvog zadatka se prenose u drugi, zatim neka polja drugog u treći i tako do kraja. Polja u koja se prenosi su obeležena sivom bojom. Potrebno je pronaći broj koji se nalazi u polju na istoj poziciji u prethodnom zadatku i preneti ga u sivo polje.

Tasks 5-10 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.

1	2	3
4	5	6
7	8	9

		6

1-4. STANDARDNI SUDOKU (CLASSIC)

Ispunite mrežu brojevima od 1 do 9 tako da se u svakom redu, koloni i posebno označenom kvadratu 3x3 ne ponovi isti broj.

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

→ →

5. SPOLJNI SUDOKU (OUTSIDE)

Ispunite mrežu brojevima od 1 do 9 tako da se u svakom redu, koloni i posebno označenom kvadratu 3×3 ne ponovi isti broj. Brojevi sa svih strana mreže, ukazuju na brojeve koji se pojavljuju u mreži u prva tri polja sa te strane. Redosled brojeva van mreže ne mora biti identičan redosledu brojeva unutar mreže.

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

The grid is a 9x9 Sudoku puzzle. It features several pre-filled numbers and some numbers placed outside the grid to indicate where specific digits must appear. Two large black arrows point to specific rows: one arrow points to the second row from the top, and another points to the eighth row from the top. The grid includes bolded 3×3 boxes to define regions. The following table summarizes the key values provided for solving:

Row	Clue / Value	Column
1	1	1
2	3	2
3	6	4
4	3	6
5	5	2
6	7	7
7	5	8
8	8	7
9	7	9
10	2	1
11	9	6
12	1	4
13	4	9
14	2	5
15	5	6
16	6	8
17	8	2
18	9	1
19	1	4
20	4	9

6. SUDOKU „UBICA“ (KILLER)

Ispunite mrežu brojevima od 1 do 9 tako da se u svakom redu, koloni i posebno označenom kvadratu 3×3 ne ponovi isti broj. U „kućicama“ oivičenim isprekidanom linijom zbir brojeva mora biti jednak upisanom broju. Unutar jedne kućice brojevi se ne smeju ponavljati.

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

The grid contains the following killer cage sums:

- Row 1: 14 (top-left), 14 (top-middle), 9 (top-right), 12 (middle-left), 7 (middle-middle), 33 (middle-right)
- Row 2: 14 (left), 17 (middle), 10 (right), 11 (far-right)
- Row 3: 11 (left), 14 (middle), 38 (middle-right), 11 (far-right)
- Row 4: 13 (left), 11 (middle), 8 (right), 8 (far-right)
- Row 5: 3 (left), 12 (middle), 12 (right), 12 (far-right)
- Row 6: 12 (left), 29 (middle), 13 (middle-right), 23 (far-right)
- Row 7: 3 (left), 15 (middle), 11 (right), 11 (far-right)
- Row 8: 17 (left), 17 (middle), 10 (middle-right), 10 (far-right)

7. DIJAGONALNI SUDOKU (DIAGONAL)

Ispunite mrežu brojevima od 1 do 9 tako da se u svakom redu, koloni i posebno označenom kvadratu 3x3 ne ponovi isti broj. Posebno, na obe glavne dijagonale se ne sme ponoviti isti broj.

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.



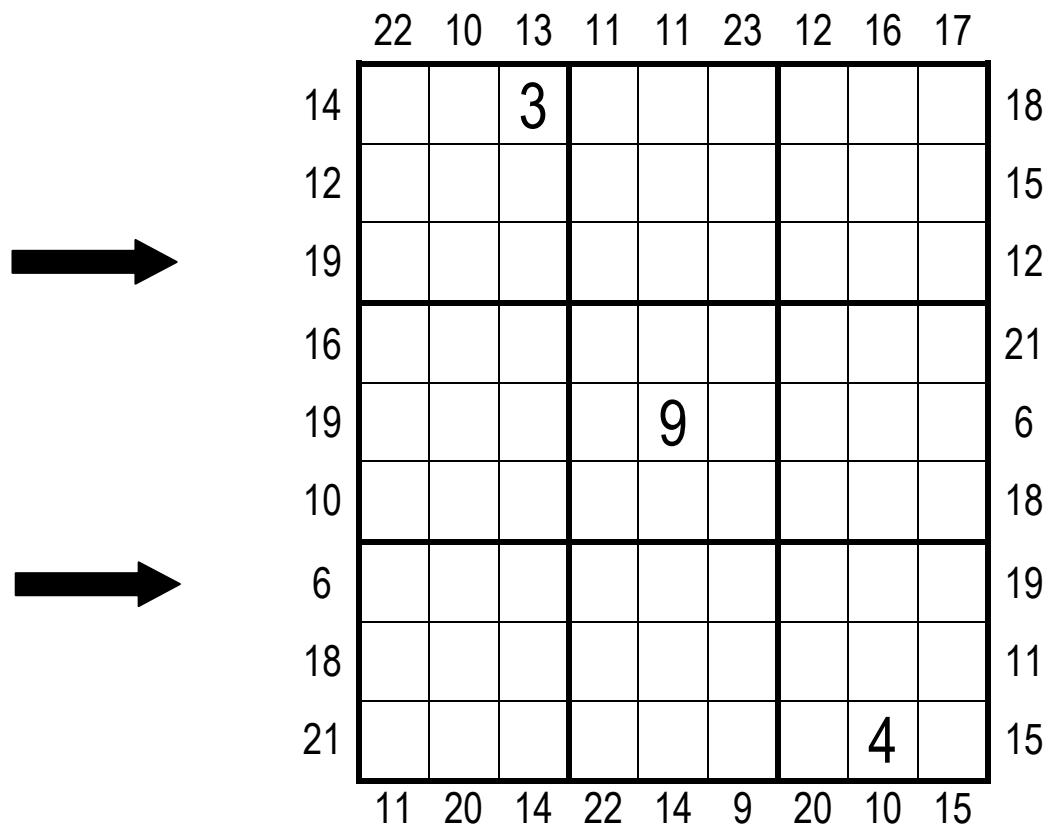
	7	6						
			4			3		5
	8			7	5			2
		8		4			5	
		4	2		9	7		
	9			1		6		
8			7	5			2	
1		5			4			
						5	3	



8. SPOLJNI ZBIROVI (OUTSIDE SUMS)

Ispunite mrežu brojevima od 1 do 9 tako da se u svakom redu, koloni i posebno označenom kvadratu 3×3 ne ponovi isti broj. Brojevi uz mrežu pokazuju sumu prva tri broja u datom redu ili koloni (posmatrano sa tih pozicija).

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



9. NEPRAVILNI SUDOKU (IRREGULAR)

Ispunite mrežu brojevima od 1 do 9, tako da se u svakom redu, koloni i posebno oivičenom liku ne ponovi isti broj.

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.

The grid consists of 81 cells arranged in a 9x9 pattern. It features several irregularly shaped bolded regions (cages) defined by thick black lines, which serve as the primary constraints for placing the digits 1 through 9. Two arrows point to specific regions: one arrow points to the 3x3 cage in the second row, second column, containing the digits 8, 9, and 2; another arrow points to the 3x3 cage in the fifth row, third column, containing the digits 4, 1, 9, 5, 3, and 8.

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

10. NESUSEDI (NONCONSECUTIVE)

Ispunite mrežu brojevima od 1 do 9 tako da se u svakom redu, koloni i posebno označenom kvadratu 3x3 ne ponovi isti broj. Posebno, dva uzastopna broja ne mogu biti u poljima koja se dodiruju (stranicom).

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

11. PARNI SUDOKU (EVEN)

Ispunite mrežu brojevima od 1 do 9 tako da se u svakom redu, koloni i posebno označenom kvadratu 3x3 ne ponovi isti broj. U sivim poljima se mogu nalaziti samo **parni** brojevi.

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 **even** numbers.

The grid shows a partially filled 9x9 Sudoku puzzle. Shaded cells contain the following even numbers:

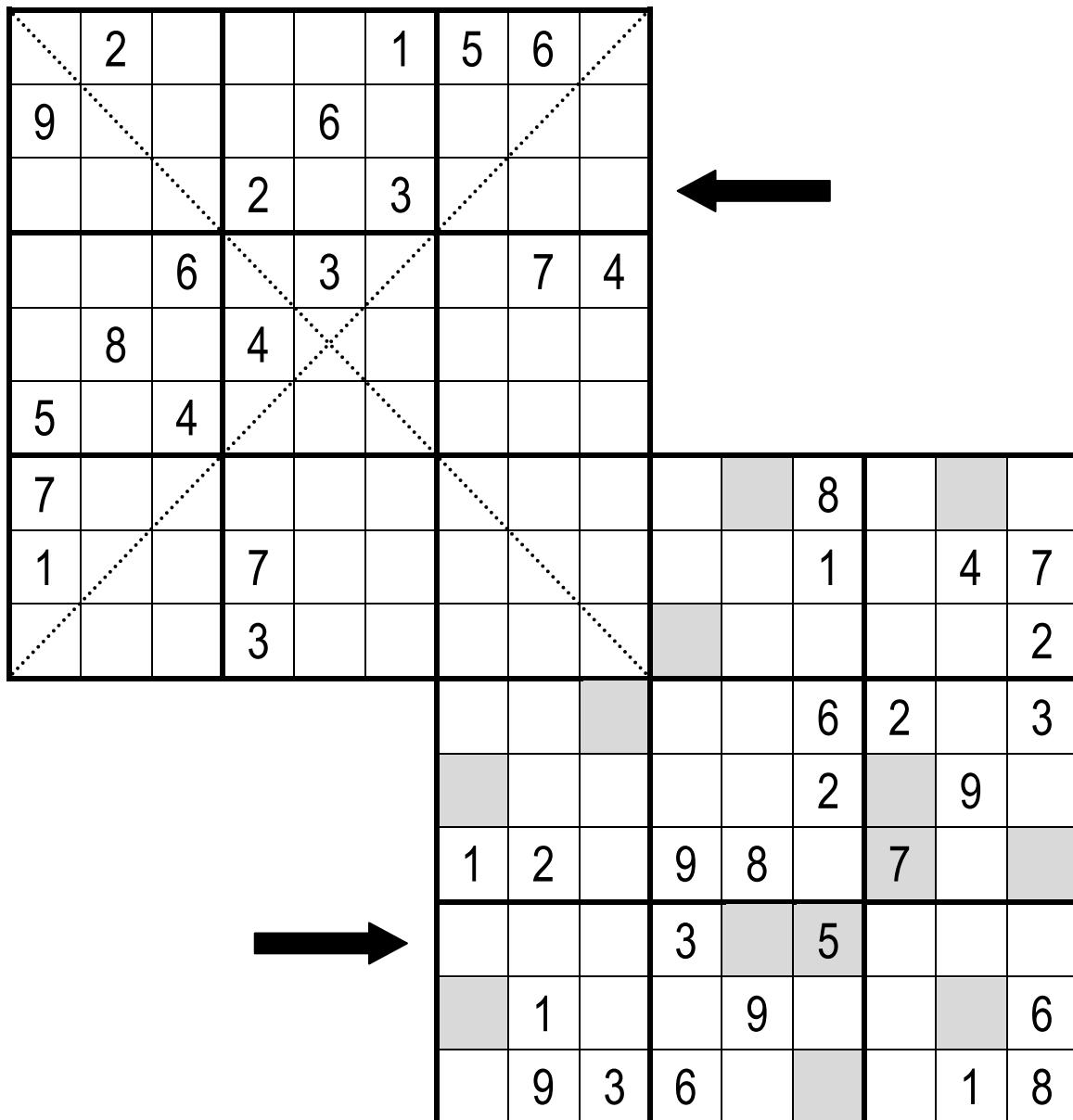
- Row 1: Cell (1,3) contains 6.
- Row 2: Cell (2,1) contains 3, Cell (2,2) contains 1.
- Row 3: Cell (3,5) contains 2, Cell (3,6) contains 6.
- Row 4: Cell (4,1) contains 6.
- Row 5: Cell (5,1) contains 7.
- Row 6: Cell (6,1) contains 8.
- Row 7: Cell (7,4) contains 8, Cell (7,5) contains 5.
- Row 8: Cell (8,1) contains 1, Cell (8,2) contains 9.
- Row 9: Cell (9,3) contains 2.

Two black arrows point to the second and third columns from the left, indicating they are the focus for solving the puzzle.

12. MEŠOVITI SUDOKU (DIAGONAL-EVEN)

Ispunite svaku od dve mreže 9x9 brojevima od 1 do 9 tako da se u svakom redu, koloni i kvadratima 3x3 ne ponovi isti broj (u okviru jedne mreže). Posebno, u okviru gornje mreže na glavnim dijagonalama se ne može ponoviti isti broj, a u okviru donje mreže u sivim poljima se mogu nalaziti samo parni (u primeru neparni) brojevi.

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 the top grid each number appears exactly once in two main diagonals. In the bottom grid gray cells are **even** numbers (odd in the example).



Primer kako se šalje rešenje/Example for e-mail with solution

Ćeranić Branko

Pančevo, Serbia

1. 925831476,684129753
5. 572389416,789145263
6. 723684915,239857164
7. 483975162,839751426
8. 874356129,132974856
9. 897536421,276951348
10. 159483726,273695148
11. 749236581,637815924
12. 865243917,876315429