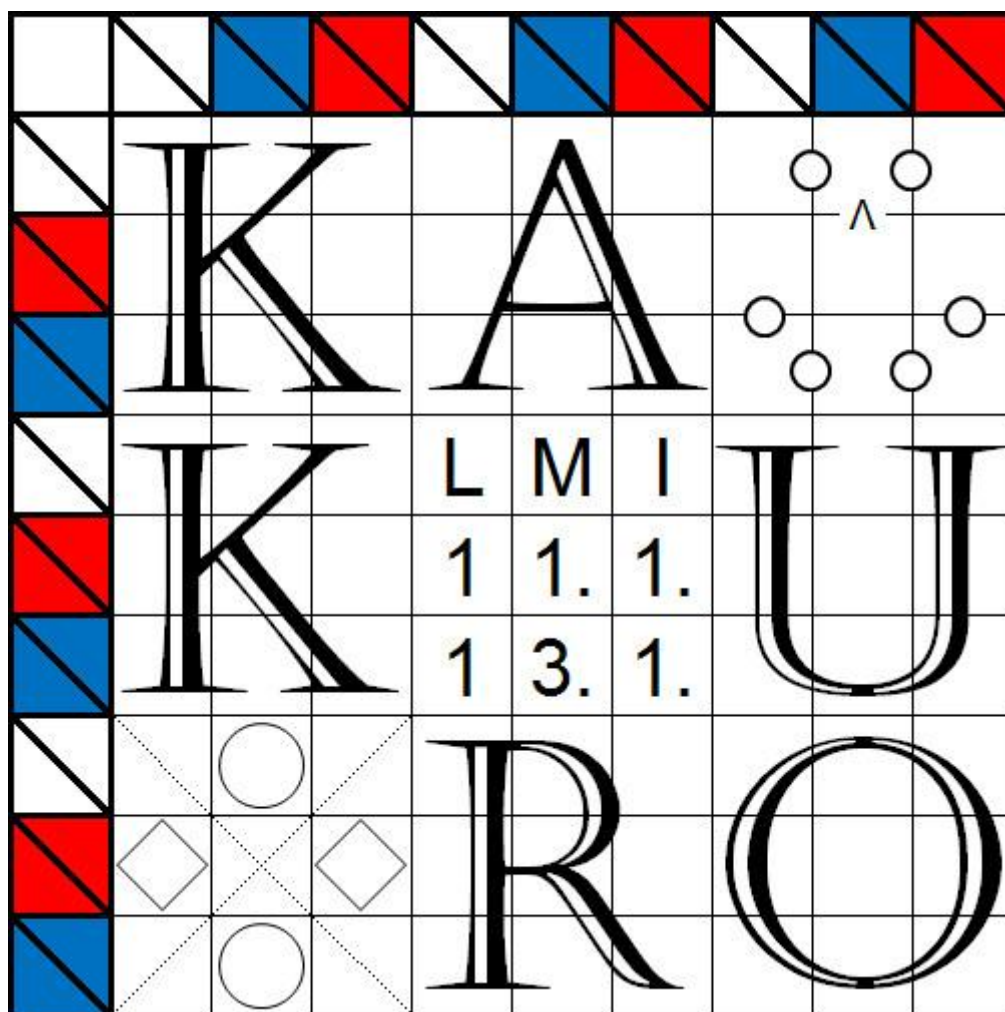


INSTRUCTION BOOKLET



LMI PUZZLE TEST

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AUTHORS

Matúš DEMIGER (SVK) & Jakub ONDROUŠEK (CZE)

PRE-SOLVERS

Štefan GAŠPÁR (SVK), Jan NOVOTNÝ (CZE), Matej UHER (SVK)

INSTRUCTION BOOKLET

DURATION	120 minutes
POINTS	1000 points
BONUSES	Bonuses will be announced later.
PUZZLE BOOKLET	The puzzle booklet will contain 8 pages, each of them will contain two puzzles of the same type (8x8 and 10x10). This will not include front page, points table nor examples. The grids are large enough to be printed also as two pages per sheet.
ANSWER KEYS	Each puzzle will have two marked rows, or two columns, or one row and one column. Your task is to rewrite the digits from marked direction (from left to right or from top to bottom). When submitting ignore the grey cells containing given sums.
ONLINE SOLVING	Online solving will be enabled. But please, notice that competition puzzles will be much harder than the practice puzzles, so the players who are not accustomed to LMI online interface will be in disadvantage. This test was planned to be paper only and this is just a compromise for players without printer.
INSTANT GRADING	Instant grading will be enabled. As soon as you submit a puzzle, it will be marked as "correct" or "wrong". Please note that if a red warning is displayed while submitting, the submission can never be correct. Each wrong submission will reduce the puzzle's potential score by 20% (80%, 60%, 40%, 20%, 0%).
SPECIAL REQUEST	Solving Kakuro puzzles require math skills more than solving other puzzle types. So please, forbear using your mobile phones, calculators, sum tables and other devices on the purpose of getting unfair advantage.
PRACTISE MATERIAL	Whereas the competition puzzles are definitely harder than these practise ones, we will provide some bigger extra puzzles for practising.
SPECIAL THANKS	Special thank belongs to LMI and Deb Mohanty for hosting the contest and to Štefan Gašpár, Jan Novotný and Matej Uher for presolving the competition puzzles.

A) Classic kakuro

Fill in the white cells of the grid with numbers 1-9. Numbers in grey cells indicate the sum of digits in corresponding direction. Digits may not repeat within a sum.

	10	30		21	17
6			16		
			18		
35					
	23				
	16				12
19					
14			11		

	10	30		21	17
6	4	2	16	7	9
			18		
35	6	9	7	5	8
	23				
	16	8	9	6	12
19	7	6	2	1	3
14	9	5	11	2	9

B) Diagonal kakuro

Fill in the white cells of the grid with numbers 1-9. Numbers in grey cells indicate the sum of digits in corresponding direction. Digits may not repeat within a sum. **Digits may not repeat within two main diagonals.**

	14	35		28	3
17			4		
			12		
21					
	24				
	4				7
18					
11			8		

	14	35		28	3
17	8	9	4	3	1
			12		
21	6	5	1	7	2
	24				
	4	7	9	8	7
18	1	6	2	4	5
11	3	8	8	6	2

C) Odd-Even kakuro

Fill in the white cells of the grid with numbers 1-9. Numbers in grey cells indicate the sum of digits in corresponding direction. Digits may not repeat within a sum. **There should be only odd digits in cells with circle and only even digits in cells with square.**

	8	34		28	16
6	◊	◊	10		
35	◊	◊			
	11				
	8				6
18				○	○
14			14	○	○

	8	34		28	16
6	◊ ₂	◊ ₄	10	3	7
35	◊ ₆	◊ ₈	5	7	9
	11	6	1	4	
	8				6
18	3	7	2	○ ₅	○ ₁
14	5	9	14	○ ₉	○ ₅

D) Consecutive kakuro

Fill in the white cells of the grid with numbers 1-9. Numbers in grey cells indicate the sum of digits in corresponding direction. Digits may not repeat within a sum. **Each pair of neighbouring consecutive digits is marked with a dot.**

	6	21		29	9
5			6		
27		○	○		
	24	○	○		
	14	○	○		10
33			○	○	
9			○		

	6	21		29	9
5	1	4	6	5	1
27	5	○	6	○	7
	24	○	7	○	8
	14	○	7	○	8
33	6	3	9	○	8
9	8	1	9	○	7

E) Untouch kakuro

Fill in the white cells of the grid with numbers 1-9. Numbers in grey cells indicate the sum of digits in corresponding direction. Digits may not repeat within a sum. **The same numbers should not touch diagonally.**

	14	31		35	5
6			10 20		
32					
	20 5				8
34					
9			7		

	14	31		35	5
6	5	1	10 20	7	3
32	9	7	8	6	2
	20 5	6	5	9	8
34	4	9	7	8	6
9	1	8	7	5	2

F) GT kakuro

Fill in the white cells of the grid with numbers 1-9. Numbers in grey cells indicate the sum of digits in corresponding direction. Digits may not repeat within a sum. **Numbers must be placed according to greater (>) and less (<) signs.**

	11	33		21	9
12			13 12		
25		Λ		V	
	11 10	Λ		V	10
26		Λ		V	
12		Λ	7	V	

	11	33		21	9
12	8	4	13 12	8	5
25	3	5	6	7	4
	11 10	7	1	3	10
26	7	8	5	2	4
12	3	9	7	1	6

G) Antiknight kakuro

Fill in the white cells of the grid with numbers 1-9. Numbers in grey cells indicate the sum of digits in corresponding direction. Digits may not repeat within a sum. **No two cells that are knight-step away can contain the same digit.**

	15	31		31	17
13			16		
			24		
35					
	22				
	4				11
26					
7			14		

	15	31		31	17
13	9	4	16	7	9
			24		
35	6	5	7	9	8
	22	7	9	6	
	4				11
26	3	9	8	4	2
7	1	6	14	5	9

H) Quadruple kakuro

Fill in the white cells of the grid with numbers 1-9. Numbers in grey cells indicate the sum of digits in corresponding direction. Digits may not repeat within a sum. **Each set of four small numbers in the intersection of two lines indicate the numbers that are in the four adjacent cells.**

	4	24		33	7
7			8		
			8		
20			11	13	
	11	35	79		
	9	13	34		6
26		48	67		
10			9		

	4	24		33	7
7	1	6	8	3	5
			8		
20	3	5	11	13	9
	11	35	79		
	9	13	34		6
26	3	8	48	67	
10	6	4	9		