

MIT Sudoku Competition 2023

Variants Round II

Name: _____

Division (circle one): Beginner Experienced

Normal 9x9 Rules: Place the digits 1-9 in the empty squares in the grid, such that every row, column, and marked 3x3 square contains each of the digits exactly once.

Beginner Points:

Prime Sums	9
Ratio	8
Arrow	18
Killer	18
Antiknights	13
Extra Regions	13
Little Killer	10
Palindrome	11
Total	100

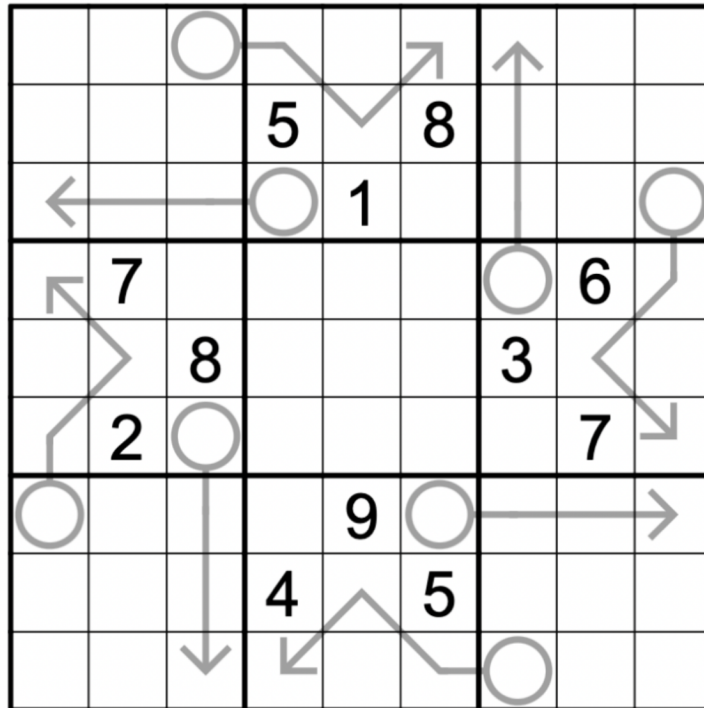
Experienced Points:

Arrow	8
Killer	9
Antiknights	9
Extra Regions	6
Little Killer	9
Palindrome	6
Sandwich Sums	16
Entropic Line	15
Region Sum Line	13
First Seen Odd/Even	9
Total	100

BEGINNER/EXPERIENCED

Arrow

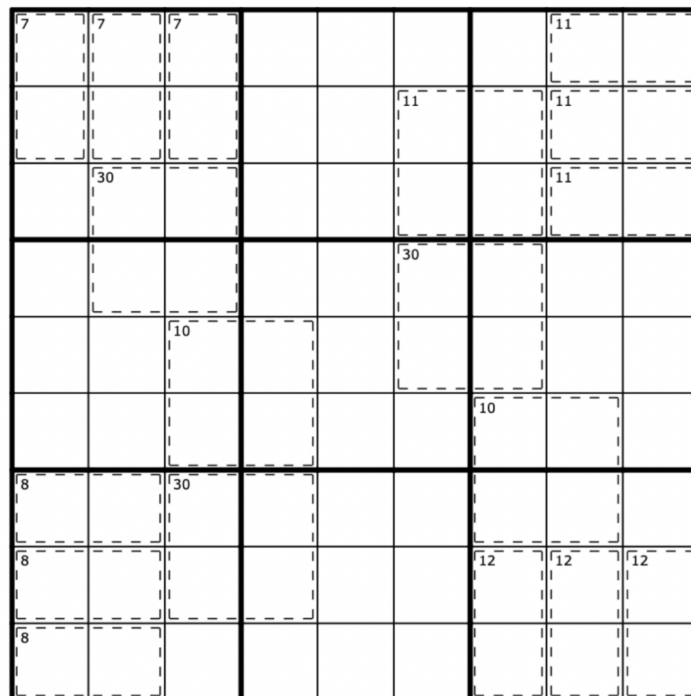
Normal 9x9 sudoku rules apply. Digits along an arrow sum to the value in the adjoining circle. Digits may repeat along an arrow if permitted by Sudoku rules.



BEGINNER/EXPERIENCED

Killer

Normal 9x9 sudoku rules apply. Digits in cages may not repeat and must sum to the indicated number.



BEGINNER/EXPERIENCED

Antiknight

Normal 9x9 sudoku rules apply. The same digit may not appear a chess knight's move away from itself.

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

BEGINNER/EXPERIENCED

Extra Regions

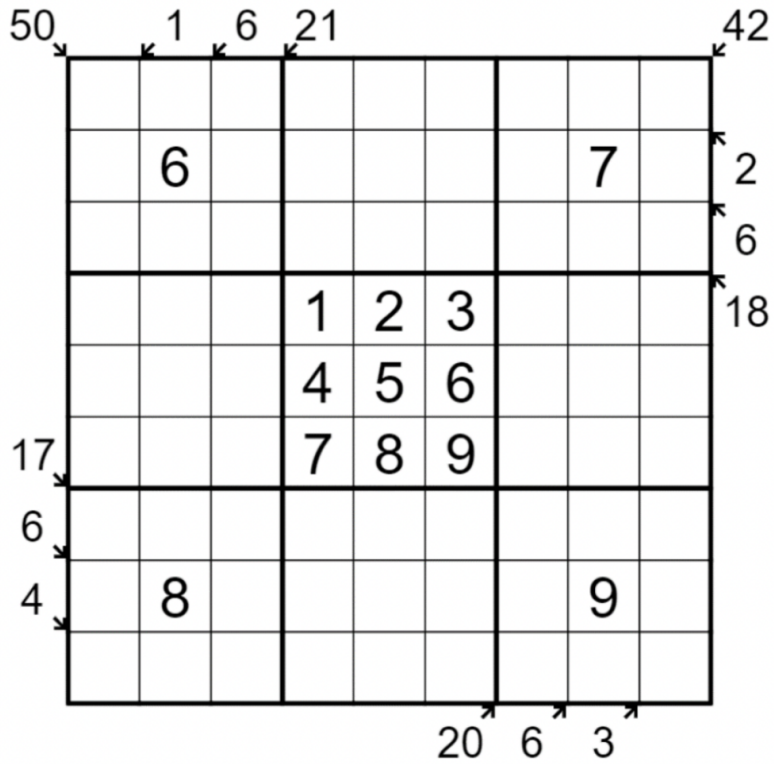
Normal 9x9 sudoku rules apply. The digits 1-6 must appear exactly once in each shaded region.

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

BEGINNER/EXPERIENCED

Little Killer

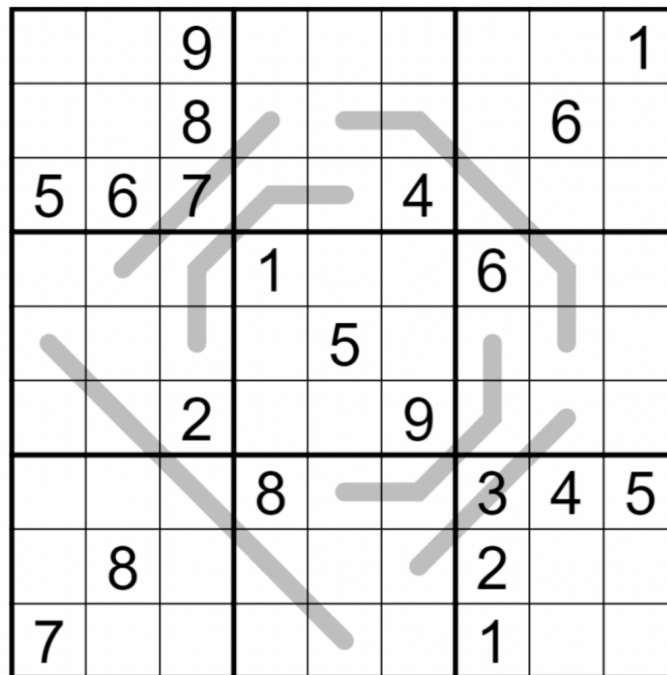
Normal 9x9 sudoku rules apply. Numbers with arrows indicate the sum of the numbers in that direction.



BEGINNER/EXPERIENCED

Palindrome

Normal 9x9 sudoku rules apply. Numbers along shaded lines must be the same forwards and backwards.



EXPERIENCED

Sandwich Sums

Normal 9x9 sudoku rules apply. Numbers at ends of rows and columns represent the sum of digits in between 1 and 9 (non-inclusive) in that row or column.

	20	35	2	30		31	4	0	32
11									
26		2						5	
29									
8									
7				9					
14									
31									
2		7						8	
33									

EXPERIENCED

Entropic Line

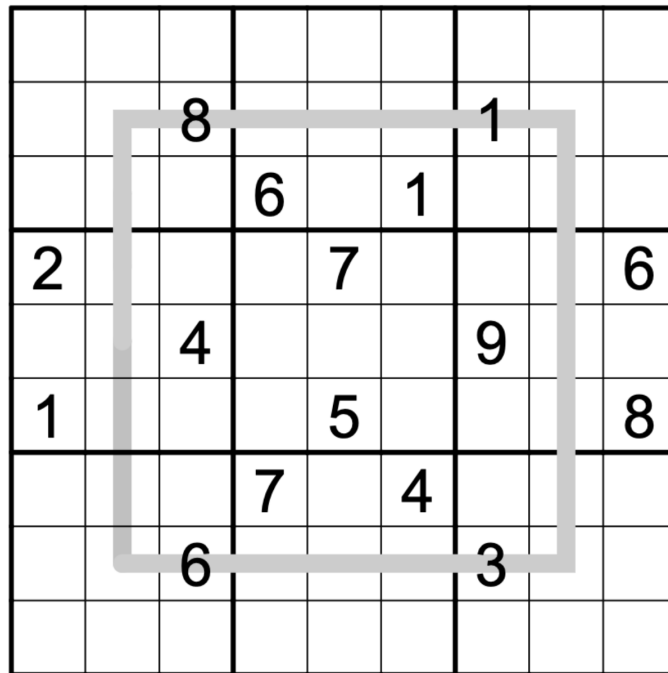
Normal 9x9 sudoku rules apply. Along the gray line, every group of three adjacent cells must contain exactly one low (123), one medium (456), and one high (789) digit.

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

EXPERIENCED

Region Sum Line

Normal 9x9 sudoku rules apply. Along the gray line, the digits in each region of the grid have the same sum.



EXPERIENCED

First Seen Odd/Even

Normal 9x9 sudoku rules apply. Clues outside of the grid give the first odd or first even value in that row or column, starting from the direction of the clue.

