

# 2025 Indian Sudoku Championship

# Instructions Booklet

1<sup>st</sup> June 2025, Kolkata



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### Round 1:

## A Little

## Twisted

## 10 Sudokus

## 40 minutes

**Points: 350**

## Sudokus Points

**Classic 1** 25

**Classic 2** 20

**Classic 3** 20

**Classic 4** 30

**Classic 5** 20

**Classic 6** 25

**Classic 7** 35

**Classic 8** 50

Overlapping 55

**Sudokurve 70**

**Total** 350

**Round 2:**

**A Little**

**Familiar**

**8 Sudokus**

**50 minutes**

**Points: 500**

**Sudokus Points**

**Thermo** 75

**Disjoint** 75

**Mathdoku** 100

**The Greater** 35

**Battenburg** 50

**Irregular** 70

**Rossini** 40

**Thermo & Region Sum Lines** 55

**Total** 500

**Round 3:**

**A Little**

**Unknown**

**10 Sudokus**

**60 minutes**

**Points: 600**

**Sudokus Points**

**Palindrome** 50

**Kropki** 55

**Pandigital Sums** 70

**Renban** 65

**German Whispers** 90

**Parity Lines** 25

**Disparity** 45

**234 Outside** 55

**Arrow & Killer** 95

**Instructionless** 50 \*Partial Points available

**Total** 600

**Round 4:**

**A Little**

**Mastermind**

**45 minutes**

**Points: 320**

**Sudokus Points**

**Sudoku Mastermind** 320 \*Partial Points available

**Total** 320

## Acknowledgments:

LMI Thanks the following puzzlers for their involvement in putting this competition together

**Authors:** Bill Murphy (Australia), Chandrachud Nanduri (India), James Peter (India), Madhav Sankaranarayanan (India), Nikola Zivanovic (Serbia), Philip Newman (USA), Prasanna Seshadri (India), Wessel Strijkstra (The Netherlands)

**Testers:** Bill Murphy, Chiel Beenhakker (The Netherlands), Ken Endo (Japan), Philip Newman, Prasanna Seshadri (India)

**Curator/Editor:** Prasanna Seshadri (India)

## Tie Breakers & Bonus Points:

- In case of a tie, the participant with the higher score in Round 3 will rank higher. If there is still a tie, we will look at Round 2, then Round 1. If there is still a tie, a tie-breaker puzzle will be used if the position in question is relevant to the team selection positions or the Sudoku Mahabharat playoffs.
- For rounds 1-3, if all puzzles are solved correctly in a round, the participant will score an additional 10 points per minutes saved. For round 4, the bonus is adjusted to 6 points per minute saved. In both cases, if there is a minor error in exactly one grid of up to 2 cells wrong, then a partial bonus of 50% (5 points per minute in Rounds 1-3, 3 points per minute in Round 4) will be awarded.

## Schedule

Time	Activity
9:00-9:30	Completing registration
9:30-10:15	Q & A
10:25-11:05	Round 1
11:15-12:05	Round 2
12:05-13:30	Lunch
13:35-14:35	Round 3
14:45-15:15	Round 4
15:25-16:00	Fun Event
16:10-17:30	SM Playoffs
17:30-18:00	Results & Prize Distribution

## Round 1: A Little Twisted

Round Description: This round has 8 Classic Sudokus and two Twisted Classic variants.

### 1-8 Classic Sudoku

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.

25+20+20+30+20+25+35+50 points

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

### 9 Overlapping Sudokus

55 points

Two 9x9 Sudokus are overlapping. Separately, they each follow Classic Sudoku rules: 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.

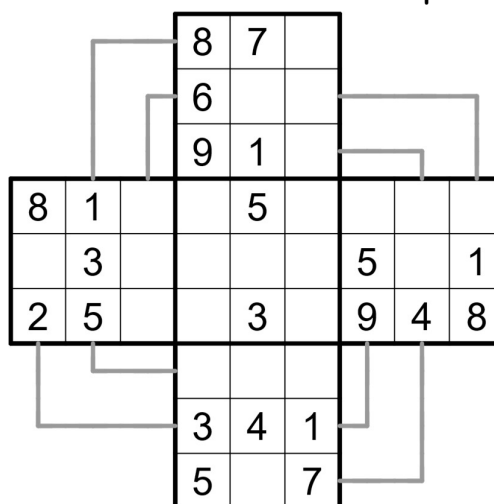
		7				6		
	8			4			2	
2			5					
		6			3	4		
	7			2		5		7
			1		8		6	2
6			2			9	7	
	9			3		6		1
					4	5		2
						3		6
			8			4		3
				9			1	

## 10 Sudokurve

70 points

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

Some rows and columns are bent, marked by curved lines.



# Round 2: A Little Familiar

Round Description: This round contains variations that appeared in the 2025 SM Rounds.

## 1 Thermo Sudoku (Standard)

75 points

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

Digits along each thermometer are strictly increasing from its bulb to each of its ends.

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

## 2 Disjoint Sudoku (Converse)

75 points

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

No digit can appear in the same cell position in different 3x3 outlined boxes.

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

### 3 Mathdoku (Math)

100 points

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

Some boxes contain numbers between adjacent cells that are the result of a mathematical operation (+, -, \*, /) of the digits in those cells. If there are multiple such numbers within a 3x3 box, each number is the result of a different operation.

45	7		24	11		3	11	
	13			2			21	
	4			7			3	5
	3						13	
5		9	63	13		5		4
	15						72	
3				48			3	
	13							
	2			13			3	
4		72	2	5		42	2	

### 4 The Greater Sudoku (Neighbours)

35 points

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

Each digit between adjacent cells is the larger of the digits in those two cells.

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

### 5 Battenburg Sudoku (OE)

50 points

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

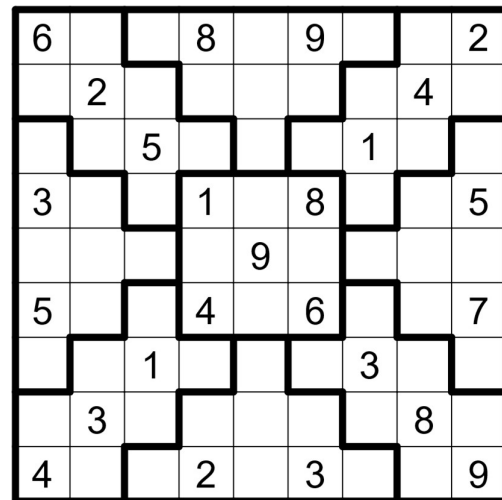
Each 2x2 area with two odd digits and two even digits forming a checkerboard pattern is marked with a Battenburg symbol. All such 2x2 areas are marked.

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

## 6 Irregular Sudoku (Irregular)

**70 points**

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and outlined region.

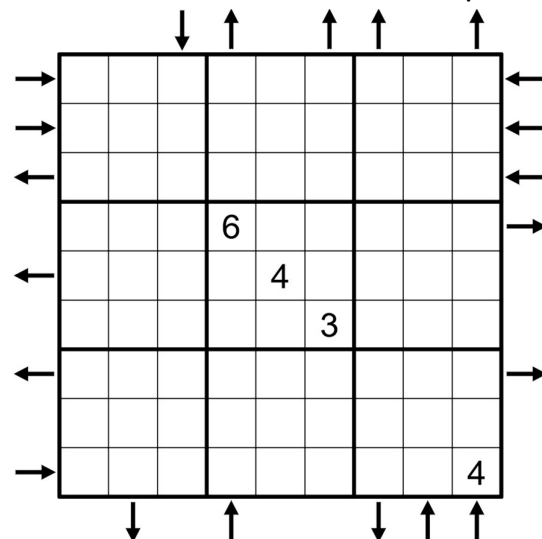


## 7 Rossini Sudoku (Outside)

**40 points**

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

Each arrow outside the grid indicates that the digits within the first box (till the next bold line) in the corresponding direction are in ascending order in the direction of the arrow. All such arrows are marked.



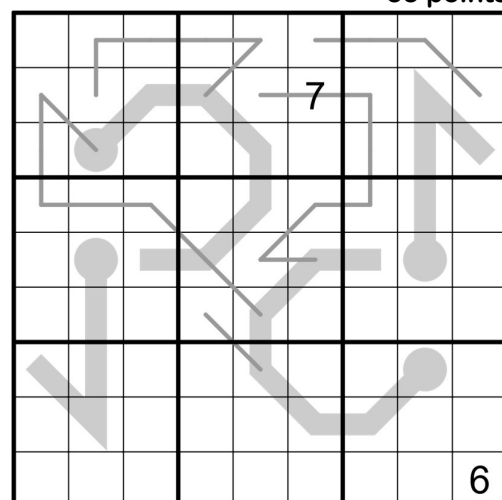
## 8 Thermo & Region Sum Lines Sudoku (Hybrids)

**55 points**

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

**Digits along each thermometer are strictly increasing from its bulb to each of its ends.**

**Digits on each line add up to the same number in each box it visits.**





## Round 3: A Little Unknown

**Round Description:** This round has variations that did not appear in the 2025 SM Rounds, but belong to the various categories explored.

### 1 Palindrome Sudoku (Standard)

50 points

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

Digits along each line are a palindrome, they read the same from both directions.

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

### 2 Kropki Sudoku(Converse)

55 points

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

Adjacent cells marked with a white circle contain consecutive digits. Adjacent cells marked with a black circle contains digits where one digit is double of the other digit. The circle between 1 and 2 can be of either colour. All possible circles are marked.

	○	●	○	●	○	○		
	○			○				○
○		○				●		○
○				○			○	○
○	○	○	○	○			○	○
○		○		○	○			○
	○		○		○	○		
○	○	○	○	○			○	

### 3 Pandigital Sums Sudoku

(Math)

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

Some rows and columns represent arithmetic equations with 3-digit numbers. Numbers are read left to right or top to bottom.

70 points

			+				=			
4		8			6				3	
	5			1		7		4		

+

		4		9			3		
				2		1		7	
					3		9		

=

6		7			3		2	
	3					7		
		2					5	

### 4 Renban Sudoku

(Neighbours)

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

Each marked line contains a set of consecutive digits, in any order. Digits do not repeat within a line.

Note: Lines intersecting at a point go straight and cannot turn.

65 points

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

### 5 German Whispers Sudoku

(Neighbours)

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

Adjacent digits along the marked grey lines have a difference of at least 5.

90 points

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

## 6 Parity Lines Sudoku (Odd Even)

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

Digits along each line alternate between odd and even, i.e. Any two consecutive cells along a line must have an odd sum.

25 points

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

## 7 Disparity Sudoku (Irregular)

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and outlined region.

Neighbouring cells in different regions must be of opposite parity, i.e. any two digits separated by a region border must have an odd sum.

Note: Example taken from Sudoku Surprise, a past Monthly Test on LMI.

45 points

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

## 8 234 Outside Sudoku (Outside)

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

Each digit outside the grid appears in one of 2nd, 3rd or 4th cells in the corresponding direction.

55 points

	279	178	346		456	259	138	
126								789
148								569
348								257
457								123
369								248
235								189
	138	349	789		128	346	256	

## 9 Arrow & Killer Sudoku (Hybrids)

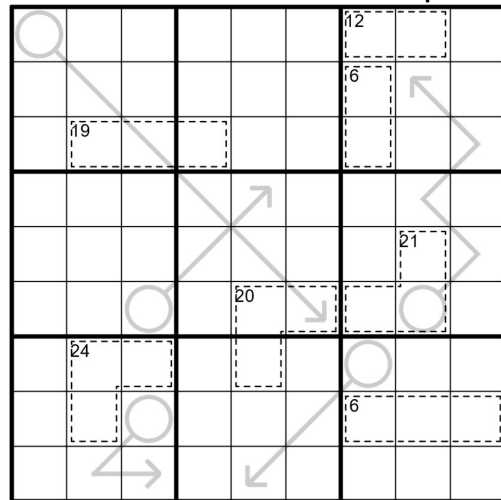
Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

The digit in each circled cell is the sum of digits along the path of its arrow. Digits can repeat within an arrow shape.

Note: Arrows intersecting at a point go straight and cannot turn.

The number at the top-left corner of each cage is the sum of digits inside the cage. Digits do not repeat within a cage.

95 points



## 10 Instructionless Sudoku

50 points

There are no instructions for this variation. An example image will be given with a solution in order to derive the rules and solve the competition Sudoku below them.

Participants will have a choice to opt in to knowing the rules of this variant, and in such a case, correctly solving it will only score 25 points.

In case all Sudokus of the round are correctly solved using this, the bonus of the round will be reduced to 6 points per minute.

More details of the procedure to make this choice will be explained at the venue.

## Round 4: A Little Mastermind

**Round Description:** This round will have an interconnected set of 6x6 Classic Sudokus. Different grids are connected by numbers between them. The clues between grids give the number of digits in the same position in the corresponding rows or columns on each side, reading from left to right and top to bottom respectively. An example is given below, with four interconnected grids. **Partial points will be awarded per individual 6x6 grid that matches the eventual solution. This will be explained further at the venue.**

			3						2		
3		5		4						6	1
										1	2
						1	4				
	1		2		6	4	5				
		6						3			
0		1		2		3		3		4	
		6									
			3				4				
		5					5				
			6							3	
		2								6	
			1								

# Solutions

## Round 1

Classic Sudoku

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

Sudokuurve

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

Overlapping Sudoku

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

## Round 2

Thermo

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

Disjoint

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

Mathdoku

5	45	9	7	2	6	24	4	11	7	1	3	3	11	8
8	4	3	1	2	5	9	7	3	6	21	7	3	7	6
7	1	6	8	9	3	2	4	5						
9	2	7	4	3	8	6	5	1						
1	5	9	4	9	63	7	13	6	3	5	8	4	2	
6	3	8	5	1	2	4	9	7						
3	7	5	2	6	4	8	1	9						
4	6	1	7	8	9	5	2	3						
2	4	8	72	3	2	5	5	1	7	42	6	2	4	

The Greater

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

Battenburg

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

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

Rossini

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

Thermo & Region Sum Lines

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



## Round 3

Palindrome

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

Kropki

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

Pandigital Sums

2	1	9
4	7	8
3	5	6

 $+$ 

3	4	8
5	6	9
1	2	7

 $=$ 

5	6	7
2	3	1
4	9	8

 $+$ 

8	6	4
5	9	3
7	2	1

7	9	5
2	8	1
6	3	4

3	1	2
6	7	4
9	8	5

 $=$ 

6	8	7
9	3	5
1	4	2

4	5	3
8	1	2
9	7	6

1	2	9
7	4	6
8	5	3

Renban

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

German Whispers

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

Parity Lines

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



Disparity

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

	279	178	346	234 Outside			456	259	138	
126	5	6	2	1	3	9	7	8	4	789
148	7	1	4	8	2	5	6	9	3	569
348	9	8	3	4	6	7	5	2	1	257
	2	7	6	9	1	3	4	5	8	
	4	5	1	2	8	6	3	7	9	
	3	9	8	7	5	4	1	6	2	
457	8	4	7	5	9	1	2	3	6	123
369	1	3	9	6	7	2	8	4	5	248
235	6	2	5	3	4	8	9	1	7	189
	138	349	789				128	346	256	

Arrow & Killer

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

### Round 4

4	6	1	3	2	5		3	1	6	2	4	5
3	2	5	6	4	1	2	5	2	4	3	6	1
6	5	3	4	1	2		6	3	5	4	1	2
1	4	2	5	6	3	4	1	4	2	5	3	6
5	1	4	2	3	6		4	5	1	6	2	3
2	3	6	1	5	4	4	2	6	3	1	5	4
0							3	3	4			
3	2	6	5	4	1	6	3	2	6	5	4	1
5	4	1	3	6	2		1	4	5	3	2	6
6	3	5	2	1	4	4	6	5	3	2	1	4
2	1	4	6	5	3		4	1	2	6	3	5
1	5	2	4	3	6	1	5	3	1	4	6	2
4	6	3	1	2	5		2	6	4	1	5	3