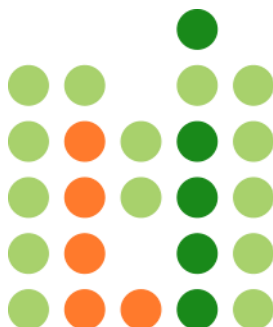


**Instructions Booklet
General (Over 18)
Version 1
Individual Rounds only**



**ASIAN
SUDOKU
CHAMPIONSHIP
2025 ♦ CHENNAI**

Event by Logic Masters India



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Notes:

- This is a preliminary version of the Instructions, with only Individual rounds covered.
- The points distribution, exact duration of rounds and details about team rounds will be released in a later version of this booklet.
- The rules on the online solving links are only meant to serve as reminders, always refer to the document for the most precise and robust versions.
- Please use the ASC 2025 forum for all queries:
<https://logicmastersindia.com/forum/forums/forum-view.asp?fid=65>

Round 1 – Order and Chaos

This round has Classic Sudokus followed by Twisted Classic and Irregular grid variants.

1. Classic Sudoku 1
2. Classic Sudoku 2
3. Classic Sudoku 3
4. Classic Sudoku 4
5. Classic Sudoku 5
6. Classic Sudoku 6
7. Irregular Sudoku
8. Scattered Sudoku
9. Overlapping Sudoku
10. Sudokurve

Classic Sudoku

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.

Penpa for example:

<https://tinyurl.com/2do3f5tj>

	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

Irregular Sudoku

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.

Penpa for example:

<https://tinyurl.com/26ed4pb3>

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

Scattered Sudoku

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, outlined region and the set of shaded cells.

Penpa for example:

<https://tinyurl.com/27t42fns>

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

Overlapping Sudoku

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.

Penpa for example:

<https://tinyurl.com/228q35y9>

		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	

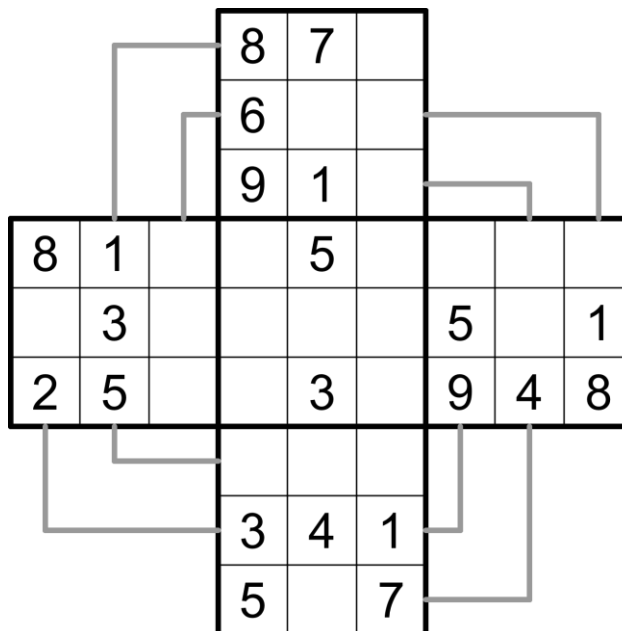
Sudokurve

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.

Penpa for example:

<https://tinyurl.com/25jb5xfI>





Round 2 – Shades of Symbology

This round has Sudoku variants with shaded clues followed by Sudoku variants with clues in some form of symbols/decorations.

1. Odd Sudoku
2. Extra Regions Sudoku
3. Clone Sudoku
4. Fortress Sudoku
5. Battenburg Sudoku
6. Consecutive Pairs Sudoku
7. XV Sudoku
8. Inequality Sudoku

Odd Sudoku

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.

Shaded cells contain odd digits.

Penpa for example:

<https://tinyurl.com/23bpzh2x>

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

Extra Regions Sudoku

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 grey shaded region contains each digit from 1 to 9.

Penpa for example:

<https://tinyurl.com/25vljs7t>

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

Clone Sudoku

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 in the same corresponding cell in each shaded figure must be identical.

Penpa for example:

<https://tinyurl.com/28dl5hqs>

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

Fortress Sudoku

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.

If a shaded cell and an unshaded cell are adjacent then the digit in the shaded cell is larger.

Penpa for example:

<https://tinyurl.com/2a5f9dyn>

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

Battenburg Sudoku

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.

Penpa for example:

<https://tinyurl.com/2caktu8v>

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

Consecutive Pairs Sudoku

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 by a circle contain consecutive digits. All possible circles are not necessarily marked.

Penpa for example:

<https://tinyurl.com/27332eye>

				2	3			
		9	1					
8								
				9				
						5		
				8	1			
		8	7					

XV Sudoku

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 with digits summing to 5 are marked by V. Adjacent cells with digits summing to 10 are marked by X. All possible V and X are marked.

Penpa for example:

<https://tinyurl.com/2dknbfpy>

			x	v			
	9		8		5		2
		8			2		4
	1		6			2	
		2			3		5
	8		5			3	
	4		1		6		8
				v	x		

Inequality Sudoku

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 inequality sign ('<' or '>') between adjacent cells indicates the larger of the two digits is on the open side of the sign.

Penpa for example:

<https://tinyurl.com/27y67vdb>

^	<	<	^	v	>	>	^	v	>	<	^
	7				1				4		
^			v	^		^		^		v	
			>	>		>	<		>	<	
v	<	>	v	^	>	>	^	v	>	>	v
	9				2				8		
v			^	v		^		^		^	
			>	<		<	<		>	<	
^	<	>	^	v	<	>	^	v	<	>	v
	2				6				7		
v			v	v		^		^		v	
			>	>		<	>		<	>	

Round 3 – Inside Out

This round has Sudoku variants with numbers inside like a Classic, followed by Sudoku variants with numbers outside.

1. Self-Disjoint Sudoku
2. Anti-Knight Sudoku
3. Non-Consecutive Sudoku
4. Disjoint Sudoku
5. Skyscrapers Sudoku
6. Descriptive Pairs Sudoku
7. Frame Sudoku
8. X-Sums Sudoku

Self-Disjoint Sudoku

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.

Numbering each cell in a box from left to right and top to bottom, a digit N cannot be in position N in any box.

Penpa for example:

<https://tinyurl.com/23rff5qh>

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

Anti-Knight Sudoku

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 cell that is a knight-step away can contain the same digit. A knight's move is 2 in a line and 1 to the side, as in chess.

Penpa for example:

<https://tinyurl.com/29395wf3>

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

Non-Consecutive Sudoku

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 in adjacent cells must not be consecutive.

Penpa for example:

<https://tinyurl.com/2yp47jos>

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

Disjoint Sudoku

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.

Penpa for example:

<https://tinyurl.com/25mnr45m>

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

Skyscrapers Sudoku

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 inside the grid represents the height of a skyscraper in that cell. Each number outside the grid indicates the number of skyscrapers that can be seen in the corresponding row or column. Taller skyscrapers hide shorter ones.

Penpa for example:

<https://tinyurl.com/24obt2fn>

6 5

3 7

4 7

4 4

7 4

7

Descriptive Pairs Sudoku

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.

For each pair of digits (X and Y) outside the grid, either X is in the Yth position in the corresponding direction or Y is in the Xth position in the corresponding direction or both.

Penpa for example:

<https://tinyurl.com/2948slu8>

37 29 33 24 59 19 34 67 14

26 12

29 12

17 14

39 35

23 23

25 15

36 37

23 45

24 23

34 55 27 15 24 23 68 18 79

Frame Sudoku

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 number outside the grid is the sum of digits within the first box in the corresponding direction.

Penpa for example:

<https://tinyurl.com/29n6ed29>

	17	7	11	14	21	15		
13								19
								15
14								15
								10
12								20
14								12
								13
13								20
	18	21	23	10	6	17		

X-Sums Sudoku

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 number outside the grid is the sum of the first X numbers placed in the corresponding direction, where X is the first digit placed in that direction.

Penpa for example:

<https://tinyurl.com/27y4ggo8>

	1	9	12	26	39	41	21	45	19	
1										26
42										11
29										30
37										23
20										40
45										9
17										31
10										1
14										45
	9	21	33	38	1	13	40	6	45	



Round 4 – Lines of Direction

This round has Sudoku variants with lines followed by Sudoku variants with clues in some form of arrows.

1. Palindrome Sudoku
2. German Whispers Sudoku
3. Renban Sudoku
4. Sequence Sudoku
5. Search 9 Sudoku
6. Quad Max Sudoku
7. Point To Next Sudoku
8. Hidden Skyscrapers Sudoku

Palindrome Sudoku

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.

Penpa for example:

<https://tinyurl.com/2b9cww94>

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

German Whispers Sudoku

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.

Penpa for example:

<https://tinyurl.com/2yhp3quq>

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

Renban Sudoku

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.

Penpa for example:

<https://tinyurl.com/22te8r3p>

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

Sequence Sudoku

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 in arithmetic progression, i.e. the difference between adjacent digits along the line is the same and the digits constantly increase or decrease along the line.

Penpa for example:

<https://tinyurl.com/2b92kent>

			7	8	3			
			9					
					7			
			3	2	6			

Search 9 Sudoku

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 points to at least one 9 in the corresponding direction. Each digit in a cell with an arrow is the distance from that cell to the nearest cell containing a 9.

Penpa for example:

<https://tinyurl.com/29a622tz>

→		5	↓		1			9
2							7	
		7	←	5				↑
	6							5
↘			2		4	↘		
1			↗				4	
				7		3	↓	
	8				←			1
5		↑	6	↖		7		

Elimination Sudoku

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 in a cell with an arrow does not appear in any of the cells pointed by its arrow.

Penpa for example:

<https://tinyurl.com/274nqb8t>

5								3
	↘		3	4	5		←	
		2		↘		6		
	1						7	
			6		4			
	↗	7	↘	5	↘	3	↖	
	8			↖			2	
9			8		3			1
				2				

Point to Next Sudoku

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.

If digit 'X' is placed in a cell with an arrow, digit 'X+1' must be placed in one of the cells pointed by the arrow.

Penpa for example:
<https://tinyurl.com/2xusmq9p>

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

Hidden Skyscrapers Sudoku

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 represents the height of a skyscraper in that cell. Each number in a cell with an arrow indicates the number of skyscrapers that can be seen in the direction of the arrow. Taller skyscrapers hide shorter ones.

Penpa for example:
<https://tinyurl.com/2ansfxq6>

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

Round 5 – Connected Disconnect

This round has two groups of interconnected Classic Sudokus, one 6x6 group and one 9x9 group. The rules are given on this page. There is a 6x6 example on the next page. There is no 9x9 example. The solution at the end has the pairings highlighted.

1. Connected Disconnect 6x6
2. Connected Disconnect 9x9

Rules:

There are four grids that each follow Classic Sudoku rules: Place a digit from 1 to 6 (1 to 9) into each empty cell in the grid so that each digit appears exactly once in each row, column and 2x3 (3x3) outlined box.

There are two distinct pairs of grids among the four, that share a box that has the same digits in the same positions. Each pair must share a different box.

Once a pairing is established, the two grids in the other pairing also interact with it, but conversely: No digit can be in the same position in the corresponding box as the digits in the paired grids.

Example: In a set of grids A, B, C and D, if A and C are paired and have a cloned top right box, B and D must not have digits in the same position as A and C in the top right box, and B and D will also have a different cloned box that A and C won't match.

Penpa for example: <https://tinyurl.com/229majht>

4				5	
			3		4
		6			
	1				
2					
	3				

2				5	
			2		4
		1			
	5			1	
3			1		
	1				2

1				4	
			1		5
		2			
	3				
6					
	2				1

4				1	
			6		4
		1			
	2			3	
6			1		
	5				



Classic

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

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

Scattered

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

Sudokurve

			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



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

Odd

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

Extra Regions

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

Clone

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

Fortress

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

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

XV

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

Self-Disjoint

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

Consecutive Pairs

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

Inequality

1 < 4 < 6	9 > 5 > 3	8 > 2 < 7
5 ^ 7 ^ 8	2 v 1 ^ 6	3 ^ 4 ^ 9
9 > 3 > 2	8 > 4 < 7	5 > 1 < 6
6 < 8 > 7	4 > 3 > 1	9 > 5 > 2
4 v 9 v 3	7 ^ 2 ^ 5	6 v 8 v 1
2 > 1 < 5	6 < 8 < 9	7 > 3 < 4
3 < 6 > 1	5 < 7 > 2	4 < 9 > 8
8 ^ 2 ^ 9	3 v 6 ^ 4	1 v 7 v 5
7 > 5 > 4	1 < 9 > 8	2 < 6 > 3

Anti-Knight

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



Non-Consecutive

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

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

Skyscrapers

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

Descriptive Pairs

	37	29	33	24	59	19	34	67	14	
26	4	6	5	2	8	9	3	1	7	12
29	1	9	8	4	7	3	5	6	2	12
17	7	2	3	6	5	1	4	9	8	14
39	6	7	9	5	3	4	8	2	1	35
23	8	5	2	1	9	7	6	3	4	23
25	3	1	4	8	2	6	9	7	5	15
36	5	8	6	3	1	2	7	4	9	37
23	2	3	7	9	4	8	1	5	6	45
24	9	4	1	7	6	5	2	8	3	23
	34	55	27	15	24	23	68	18	79	

Frame

	17		7	11		14	21		15	
13	5	6	2	4	8	1	9	3	7	19
	9	7	4	5	3	6	8	1	2	
12	3	8	1	2	9	7	4	5	6	15
14	2	9	3	7	5	4	6	8	1	15
	7	4	8	1	6	9	5	2	3	10
12	1	5	6	3	2	8	7	4	9	20
14	8	1	5	9	7	3	2	6	4	12
	6	3	9	8	4	2	1	7	5	13
13	4	2	7	6	1	5	3	9	8	20
	18		21	23		10	6		17	

X-Sums

	1	9	12	26	39	41	21	45	19	
1	1	2	3	6	7	8	5	9	4	26
42	8	7	4	1	9	5	2	6	3	11
29	6	9	5	2	4	3	1	8	7	30
37	7	6	1	8	2	9	4	3	5	23
20	5	3	2	4	6	7	9	1	8	40
45	9	4	8	5	3	1	6	7	2	9
17	4	1	9	3	8	2	7	5	6	31
10	2	8	7	9	5	6	3	4	1	1
14	3	5	6	7	1	4	8	2	9	45
	9	21	33	38	1	13	40	6	45	

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

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

Renban

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

Sequence

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

Search 9

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

Elimination

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



Point to Next

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

Hidden Skyscrapers

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

Connected Disconnect

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

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

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

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