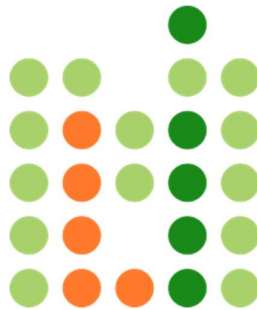


**Instructions Booklet
General (Over 18)
Version 3
All Rounds**



**ASIAN
SUDOKU
CHAMPIONSHIP
2025 ♦ CHENNAI**

Event by Logic Masters India



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Notes:

- The updates from the earlier version are the points distribution and schedule.
- 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.
- **There are significant changes to the number of puzzles in the team rounds and a slight change to the 9x9 rules in Round 7.**
- Please use the ASC 2025 forum for all queries:
<https://logicmastersindia.com/forum/forums/forum-view.asp?fid=65>

Bonus Points:

- For **Round 1, Round 2, Round 3 and Round 4**, a bonus of **10 points** per minute saved will be awarded if all Sudokus are correctly solved. If there are up to 3 digits wrong in just one Sudoku, a partial bonus of **5 points** per minute will be awarded, with a 0 for the Sudoku in question.
- For **Round 5**, a bonus of **8 points** per minute saved will be awarded if all Sudokus are correctly solved. If there are up to 3 digits wrong in just one Sudoku, a partial bonus of **4 points** per minute will be awarded, with a 0 for the Sudoku in question.
- For **Round 6 and Round 7**, a bonus of **20 points** per minute saved will be awarded if all Sudokus are correctly solved. There is **no partial bonus** scheme in the team rounds.

Schedule:

18th January, 2025

8:00:00 PM to 9:00:00 PM – Q & A Session

19th January, 2025

9:00:00 AM to 9:45:00 AM – Round 1 – Order and Chaos

9:55:00 AM to 10:40:00 AM – Round 2 – Shades of Symbology

10:50:00 AM to 11:30:00 AM – Round 3 – Inside Out

11:45:00 AM to 12:25:00 PM – Round 4 – Lines of Direction

12:30:00 PM to 2:25:00 PM – Lunch

2:30:00 PM to 3:10:00 PM – Round 5 – Connected Disconnect

3:40:00 PM to 4:20:00 PM – Round 6 – Mean Mini Medley

4:40:00 PM to 5:40:00 PM – Round 7 – Snapshot Jigsaw

Open Category Round Summary			
R1 – Order and Chaos 45 minutes 9:00:00 AM to 9:45:00 AM	Points	R2 – Shades of Symbology 45 minutes 9:55:00 AM to 10:40:00 AM	Points
Classic Sudoku 1	20	Odd Sudoku	20
Classic Sudoku 2	15	Extra Regions Sudoku	95
Classic Sudoku 3	25	Clone Sudoku	40
Classic Sudoku 4	20	Fortress Sudoku	85
Classic Sudoku 5	50	Battenburg Sudoku	55
Classic Sudoku 6	75	Consecutive Pairs Sudoku	30
Irregular Sudoku	70	XV Sudoku	65
Scattered Sudoku	95	Inequality Sudoku	55
Overlapping Sudoku	60	Total	450
Sudokuurve	20		
Total	450		

R3 – Inside Out 40 minutes 10:50:00 AM to 11:30:00 AM	Points	Round 4 – Lines of Direction 40 minutes 11:45:00 AM to 12:25:00 PM	Points
Self-Disjoint Sudoku	40	Palindrome Sudoku	75
AntiKnight Sudoku	35	German Whispers Sudoku	50
NonConsecutive Sudoku	60	Renban Sudoku	60
Disjoint Sudoku	25	Sequences Sudoku	35
Skyscrapers Sudoku	60	Search 9 Sudoku	30
Descriptive Pairs Sudoku	45	Elimination Sudoku	50
Frame Sudoku	45	Point to Next Sudoku	25
X-Sums Sudoku	90	Hidden Skyscrapers Sudoku	75
Total	400	Total	400

R5 – Connected Disconnect 40 minutes 2:30:00 PM to 3:10:00 PM	Points	R6 – Team – Mean Mini Medley 40 minutes 3:40:00 PM to 4:20:00 PM	Points
CD 6x6	65	MMM 1	550
	(20+20+15+10)		(200+175+175)
CD 9x9	235	MMM 2	350
	(70+70+50+45)		(130+110+110)
Total	300	MMM 3	350
			(130+110+110)
		MMM 4	350
			(130+110+110)
		Total	1600
		R7 – Team – Snapshot Jigsaw 60 minutes 4:40:00 PM to 5:40:00 PM	Points
		SJ 6x6	600
			(170+160+140+130)
		SJ 9x9	1800
			(490+470+430+410)
		Total	2400

Round 1 – Order and Chaos

45 minutes

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

1. Classic Sudoku 1	20 Points
2. Classic Sudoku 2	15 Points
3. Classic Sudoku 3	25 Points
4. Classic Sudoku 4	20 Points
5. Classic Sudoku 5	50 Points
6. Classic Sudoku 6	75 Points
7. Irregular Sudoku	70 Points
8. Scattered Sudoku	95 Points
9. Overlapping Sudoku	60 Points
10. Sudokurve	20 Points
Total	450 Points

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/2do3f5ti>

	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/228g35y9>

		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	

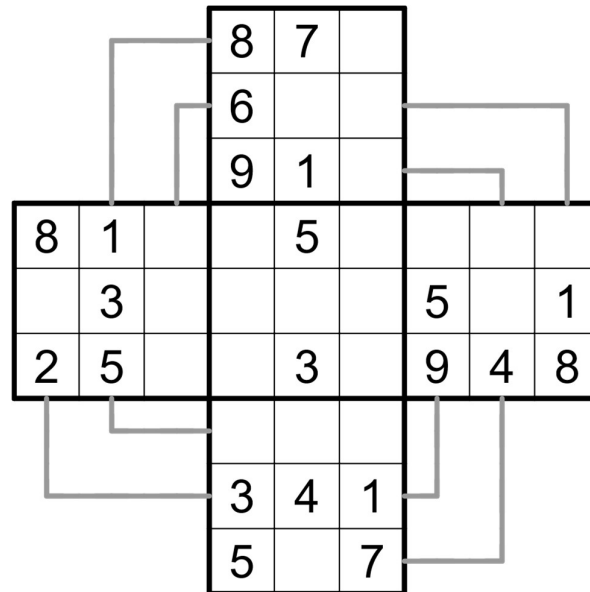
Sudokurve

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

45 minutes

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

1. Odd Sudoku	25 Points
2. Extra Regions Sudoku	95 Points
3. Clone Sudoku	40 Points
4. Fortress Sudoku	85 Points
5. Battenburg Sudoku	55 Points
6. Consecutive Pairs Sudoku	30 Points
7. XV Sudoku	65 Points
8. Inequality Sudoku	55 Points
Total	450 Points

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			
9				1				
		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>

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

Round 3 – Inside Out

40 minutes

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

1. Self-Disjoint Sudoku	40 Points
2. Anti-Knight Sudoku	35 Points
3. Non-Consecutive Sudoku	60 Points
4. Disjoint Sudoku	25 Points
5. Skyscrapers Sudoku	60 Points
6. Descriptive Pairs Sudoku	45 Points
7. Frame Sudoku	45 Points
8. X-Sums Sudoku	90 Points
Total	400 Points

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
12										15
14										10
										20
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

40 minutes

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

1. Palindrome Sudoku	75 Points
2. German Whispers Sudoku	50 Points
3. Renban Sudoku	60 Points
4. Sequence Sudoku	35 Points
5. Search 9 Sudoku	30 Points
6. Elimination Sudoku	50 Points
7. Point To Next Sudoku	25 Points
8. Hidden Skyscrapers Sudoku	75 Points
Total	400 Points

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/2yhp3guq>

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.

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

Penpa for example:
<https://tinyurl.com/22te8r3p>

	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		

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

40 minutes

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	20+20+15+10 Points
2. Connected Disconnect 9x9	70+70+50+45 Points
Total	300 Points

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.

Scoring: The points given above are for first, second, third, and fourth Sudoku solved respectively, regardless of which ones were solved within the set. As an example if three Sudokus are correctly solved in the 9x9 set, the solver will be awarded 70+70+50=190 points. Note that this is all only if the individual solutions match the single overall solution considering connection rules.

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

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

XV

5	2	7	9 ^x	1 ^v	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 ^v	2 ^x	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

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

Open Category

Inequality

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

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

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

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	4	7	5
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

Round 6 – Team – Mean Mini Medley

40 minutes

Change: There are four sets instead of the earlier mentioned two.

This round has Overlapping Sudokus that follow the Mean Minis concept of having a set of six digits from 1 to 9.

Mean Mini Medley Set 1	200+175+175=550 Points
Mean Mini Medley Set 2	130+110+110=350 Points
Mean Mini Medley Set 3	130+110+110=350 Points
Mean Mini Medley Set 4	130+110+110=350 Points
Total	1600 Points

Rules: There are three 6x6 Overlapping Sudokus within a set. Each Sudoku has six digits from 1 to 9. It is part of solving to determine the six digits. If the three missing digits from each Sudoku in the set are taken together, they form the full set of digits from 1 to 9.

The variant rulesets listed below represent elements that are used in the Sudokus. Each ruleset may be used across multiple grids and each grid may contain elements from multiple different rulesets. To serve as appropriate practice, the examples of the variant rulesets illustrate the Mean Minis concept. **At the end, there is a sample provided of how a full set will look (just the grids and layout).**

***Rules of Overlapping Sudoku Mean Mini:** Two 6x6 Sudokus are overlapping. Separately, they each follow Mean Mini rules: Place six distinct digits from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 2x3 box.

Scoring:

For each set, participants will be awarded points for number of fully completed grids that match the overall solution. As an example, in set 1, if 1 grid is completed correctly it will be awarded 200 points, if a second grid is completed correctly it will be awarded an additional 175 points, and if all 3 are completed correctly, the set will be awarded 550 points.

Variant Rules:

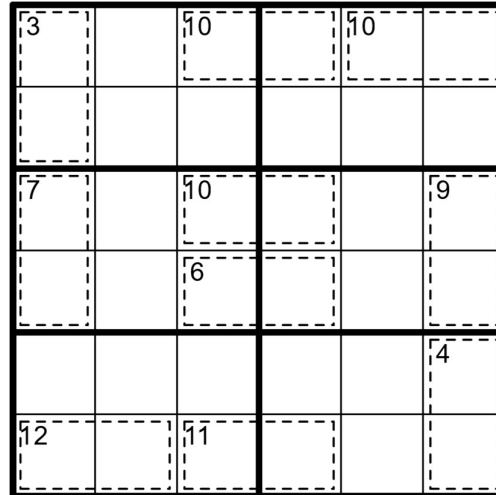
Killer Sudoku

Place six distinct digits from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 2x3 box.

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.

Penpa for Example:

<https://tinyurl.com/2amtj23n>



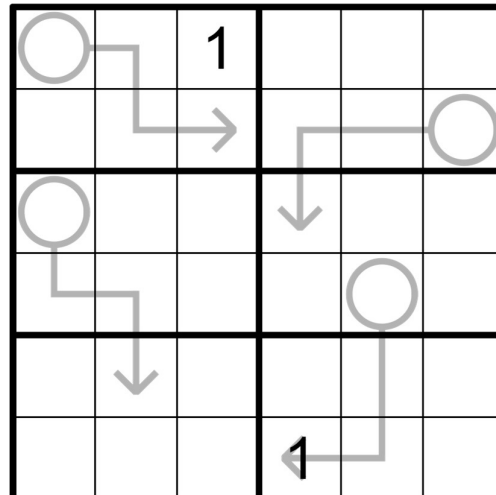
Arrow Sudoku

Place six distinct digits from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 2x3 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.

Penpa for Example:

<https://tinyurl.com/25p584gd>



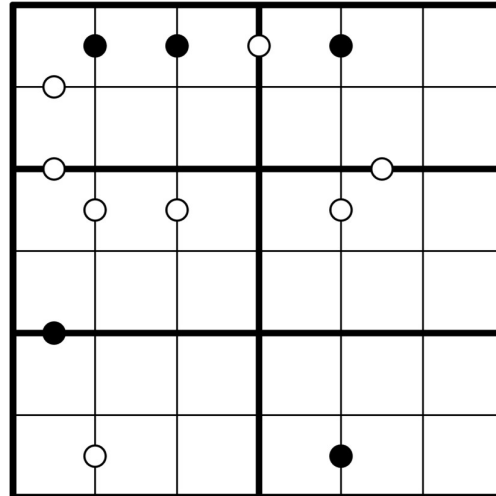
Kropki Pairs Sudoku

Place six distinct digits from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 2x3 box.

Adjacent cells marked with a white circle contain consecutive digits. Adjacent cells marked with a black circle contain digits where one digit is double of the other digit. Not all possible circles are necessarily marked.

Penpa for Example:

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



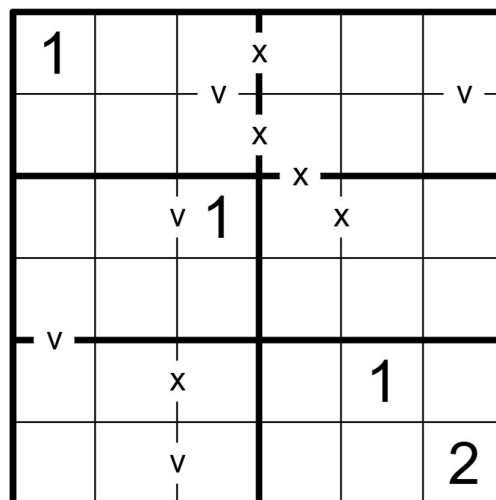
XV Pairs Sudoku

Place six distinct digits from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 2x3 box.

Adjacent cells with digits summing to 5 are marked by V. Adjacent cells with digits summing to 10 are marked by X. Not all possible V and X are necessarily marked.

Penpa for Example:

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



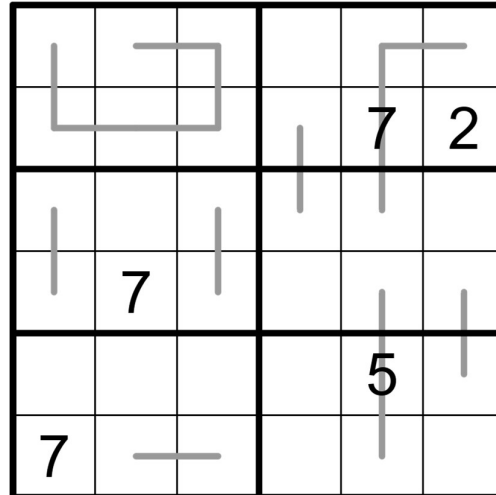
Dutch Whispers Sudoku

Place six distinct digits from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 2x3 box.

Adjacent digits along the marked grey lines have a difference of at least 4.

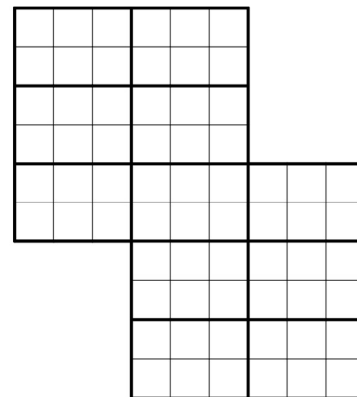
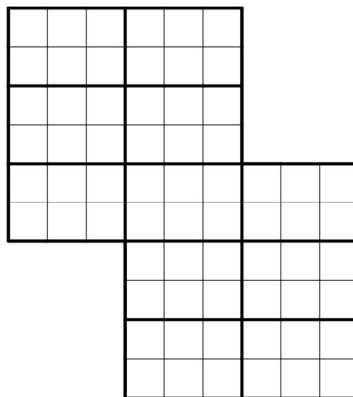
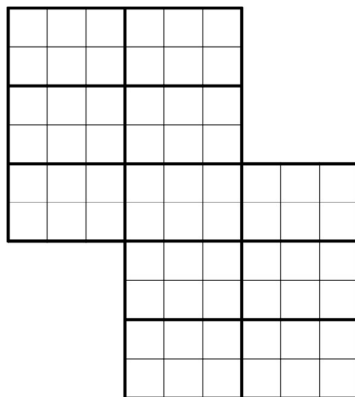
Penpa for Example:

<https://tinyurl.com/2yt2wvyc>



Here is a sample of the layout, one set will be like this with a helper grid provided with it as shown. L, M, R stands for Left, Middle, Right but this can be used arbitrarily and is irrelevant to scoring.

	1	2	3	4	5	6	7	8	9
L									
M									
R									



Round 7 – Team – Snapshot Jigsaw

60 minutes

Important changes are in red.

This round has Irregular Sudokus and snapshots of elements that must be placed correctly into them.

Snapshot Jigsaw 6x6	170+160+140+130=600 Points
Snapshot Jigsaw 9x9	490+470+430+410=1800 Points
Total	2400 Points

Rules: There are four 6x6 (9x9) Irregular Sudokus, but their clues are missing! There are snapshots given, containing some variant elements that were supposed to be the clues. **Snapshots cannot be rotated or reflected. The pieces will have a marker in the top left so that orientation is clear.** Assign the snapshots to Sudokus, 2 per Sudoku (3 per Sudoku in the 9x9), so that the variant rules are satisfied along with Irregular Sudoku rules for each grid. Credit will be given only if a grid matches the overall solution.

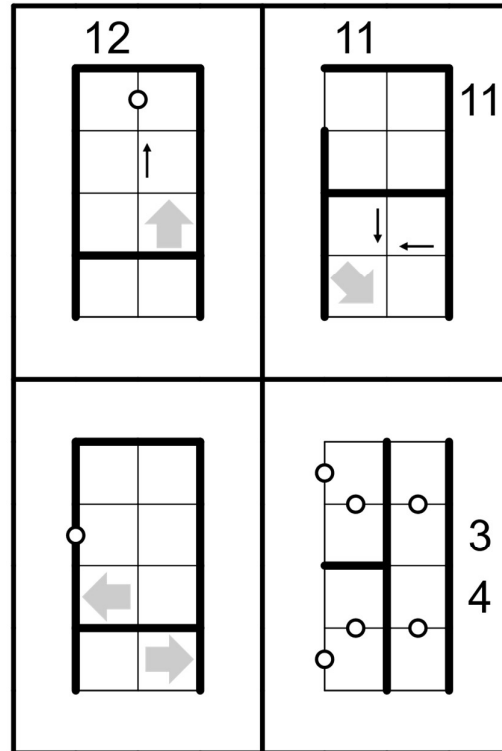
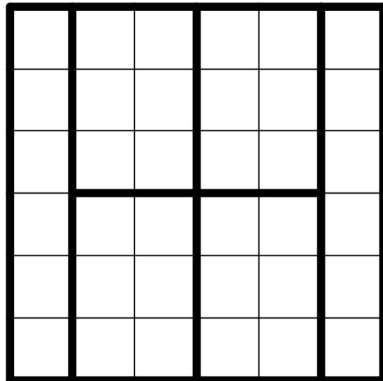
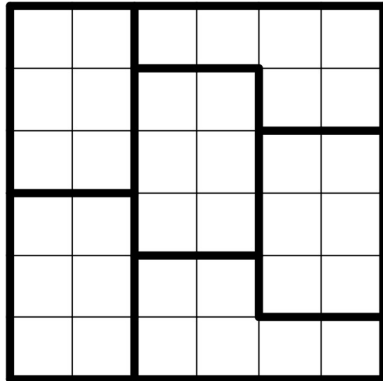
The variants used here have all appeared in previous rounds, and so there won't be dedicated examples for them. There is an example of Snapshot Jigsaw 6x6, but with two grids instead of four.

The variants are: Consecutive Pairs, Frame, Search 6 (9 in 9x9), Hidden Skyscrapers.

Penpa for Example: <https://tinyurl.com/27l6zyrs>

Scoring:

For each set, participants will be awarded points for number of fully completed grids that match the overall solution. As an example, in the 6x6 set, if 1 grid is completed correctly it will be awarded 170 points, if a second grid is completed correctly it will be awarded an additional 160 points, and so on.



Killer Solution

2	4	7	3	1	9
1	9	3	2	7	4
4	7	9	1	3	2
3	1	2	4	9	7
7	2	1	9	4	3
9	3	4	7	2	1

Arrow Solution

9	3	1	2	4	5
5	4	2	3	1	9
4	9	3	5	2	1
1	2	5	4	9	3
3	4	9	5	2	
2	5	9	1	3	4

Kropki Pairs Solution

8	4	2	3	6	7
7	6	3	8	4	2
6	7	8	2	3	4
2	3	4	6	7	8
4	8	6	7	2	3
3	2	7	4	8	6

XV Pairs Solution

1	8	3	7	2	4
4	7	2	8	3	1
7	4	1	2	8	3
3	2	8	1	4	7
2	3	7	4	1	8
8	1	4	3	7	2

Dutch Whispers Solution

1	2	7	5	3	9
5	9	3	1	7	2
9	3	1	7	2	5
2	7	5	3	9	1
3	1	2	9	5	7
7	5	9	2	1	3

Snapshot Jigsaw Solution

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

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

