



Instruction Booklet

U-18/Casual

Individual Competition

7th Asian Sudoku Championship 2026

Bangkok, Thailand

v1.0

Schedule

Round	Type	Time	Duration	Title	Total Score
1	Individual	09:00 – 09:30	30 mins	Direct Current	300
2	Individual	09:40 – 10:25	45 mins	Alternating Current	450
3	Individual	10:35 – 11:20	45 mins	AND	450
4	Individual	11:30 – 12:15	45 mins	OR	450
Lunch					
5	Individual	13:30 – 14:15	45 mins	NOT	450
6	Individual	14:25 – 15:15	50 mins	Circuit Boards	500
7	Team	15:35 – 16:05	30 mins	Loy Krathong	1200
8	Team	16:30 – 17:30	60 mins	Elephant Park	2400
Break					
		19:00 – 20:30	Dinner and closing ceremony		

Competition Rules

Individual Competition

The individual competition is based on 6 rounds. The sum of scores from these rounds will determine the individual ranking of the 7th Asian Sudoku Championship. Points will be awarded only for correctly solved puzzles. If a player finishes all puzzles correctly, a bonus of 10 points per minute will be awarded for each full minute saved. If a single “minor” error (defined as no more than two incorrectly filled cells) is present in a round submitted for bonus, a bonus of 6 points per minute will be awarded for each full minute saved. In case of ties, rankings will be determined by scores in round 2, then 1, 3, 4, 5 and 6.

Team Competition

The team competition is based on 2 rounds. The sum of scores from these rounds will determine the team ranking of the 7th Asian Sudoku Championship. If a player finishes all puzzles correctly, a bonus of 40 points per minute will be awarded for each full minute saved. If a single “minor” error (defined as no more than two incorrectly filled cells) is present in a round submitted for bonus, a bonus of 24 points per minute will be awarded for each full minute saved. In case of ties, rankings will be determined by scores in round 7, then 8.

Competition Hall Rules

1. All competitors in both individual and team competitions have to sit at their pre-allocated desks.
2. Competitors must ensure they are at their desks ready for the start of the round. Late arrivals may not be permitted to enter the competition hall to take part in a round (at the discretion of the organizers).
3. Prior to the start of each round, competitors should clearly write their name and team on the front page of their competition booklet in the allocated space. If this information is not complete, then the organizers reserve the right not to award any points to that competitor for that round.
4. Competitors must not open their booklets before the official start of the round. Only when the signal for the start of the round has been given, competitors may open their booklets and begin solving the puzzles.
5. During each individual round, competitors must keep silent, unless declaring completion of a round.
6. Puzzles can be completed in any order within a round. The point value of a puzzle is an indication of its expected difficulty, although individual solving experience

may differ. The difficulty of an example puzzle does not necessarily reflect the difficulty of the corresponding competition puzzle.

7. The official puzzle booklets will not contain puzzle examples. Competitors are allowed (and encouraged) to bring the Instruction Booklet to their desk as it contains examples for almost every puzzle which will be part of the championship.
8. When a competitor believes that there is a problem with a puzzle, they must clearly state that puzzle is wrong by writing "Wrong puzzle" next to it. The competitor must not notify the organizers during the round. This will be investigated upon completion of the round.
9. To declare a round complete, a competitor must close their booklet, clearly state "finished" and raise their arm with the booklet. The competitor's arm must be raised until the booklet is collected. The same rules apply for the team competition.
10. Competitors or teams who complete a round with more than five minutes in advance, are allowed to leave the competition hall quietly. However, competitors or teams who complete a round with five minutes or less left are not allowed to leave their desks as to not disrupt fellow competitors.
11. If a competitor leaves the competition hall for any reason, they may not be allowed to continue in that round (at the discretion of the organizers).
12. When the signal is given that the round is finished, competitors must immediately stop solving, close their booklets, put their pens or pencils down and remain seated until all booklets have been collected. The signal to get up and leave will be given by the supervisor.
13. Mobile phones and electronic devices are not permitted to use in the competition hall. The devices have to be turned off and must not be placed on the competitor's desk.
14. Only official observers and guests equipped with a name tag are allowed to enter the competition hall while either individual or team rounds are taking place. Other non-competing participants may enter the competition hall at the discretion of the organizers.
15. Competitors may not use cameras or other recording devices during rounds. Only official observers and guests may do so, at the discretion of the organizers. They have to respect the competitors and not use flash photography or cameras with excessive sounds.

Permitted Items

1. Permitted items are pens and pencils (except for red pens), pencil sharpeners, erasers, rulers, and instruction booklets annotated with notes regarding puzzle instructions.
2. Drinks and snacks are permitted as long as they do not disturb other competitors with a strong smell or rustling packet.
3. It is strictly forbidden to use electronic devices such as music players and headphones or any type of calculator. Use of such equipment may lead to the disqualification of the competitor.
4. Any other items brought into the hall must be kept in a bag on the floor and placed under the competitor's desk.

Marking and Protest

1. When a round has been evaluated, fully marked booklets are returned to each competitor and teams.
2. In case of protests, after a booklet has been evaluated and returned, the protest must be raised to the organizers in the specified time. The booklet will be left with the organizers for investigation.
3. Papers may be photographed during the marking to prevent subsequent alterations.
4. The decision of the 7th Asian Sudoku Competition director (Sinchai Jaturangkhajit) is final.

Credits

Puzzles and examples of the 7th Asian Sudoku Competition are written by Sakulbuth Ekvittayaniphon, Sinchai Jaturangkhajit, Tawan Sunathvanichkul and Tana Wattanawaroon. We would like to thank the test solvers: Tom Collyer, Tantan Dai, Matúš Demiger and Tiit Vunk.

Some puzzle rules in this Instruction Booklet are borrowed from past World Sudoku Championships.

The 7th Asian Sudoku Competition director has a degree in Electrical Engineering but never had the opportunity to use that knowledge in his current field of work. The occasion has finally come as we were planning the theme of the Individual Competition.

Round 1: Direct Current

09:00–09:30

300 points

30 mins

- 1.1 9 × 9 Classic Sudoku 25 points
 1.2 9 × 9 Classic Sudoku 30 points
 1.3 9 × 9 Classic Sudoku 30 points
 1.4 9 × 9 Classic Sudoku 40 points

- 1.5 9 × 9 Classic Sudoku 80 points
 1.6 9 × 9 Irregular Sudoku 30 points
 1.7 9 × 9 Irregular Sudoku 65 points

This round consists of Classic Sudokus followed by some Irregular Sudokus.

1.1 – 1.5 9 × 9 Classic Sudoku 25 + 30 + 30 + 40 + 80 points

Fill each empty cell with numbers from 1 to 9 so that each row, column, and outlined 3 × 3 box contains each number from 1 to 9 exactly once.

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

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

1.6 – 1.7 9 × 9 Irregular Sudoku 30 + 65 points

Fill each empty cell with numbers from 1 to 9 so that each row, column, and outlined region contains each number from 1 to 9 exactly once.

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

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



Round 2: Alternating Current

09:40–10:25

450 points

45 mins

2.1	6 × 6 Numbered Rooms Sudoku	20 points
2.2	6 × 6 Numbered Rooms Sudoku	25 points
2.3	6 × 6 Renban Sudoku	35 points
2.4	6 × 6 Renban Sudoku	35 points
2.5	6 × 6 Odd Labyrinth Sudoku	30 points
2.6	6 × 6 Odd Labyrinth Sudoku	30 points
2.7	9 × 9 Odd Labyrinth Sudoku	50 points
2.8	9 × 9 Thermo Sudoku	40 points
2.9	9 × 9 Blackout Sudoku	50 points
2.10	9 × 9 Diagonal Sudoku	60 points
2.11	9 × 9 Odd/Even Sudoku	75 points

This round contains a mix of variants. Some are well-known and some are less so.

2.1 – 2.2 6 × 6 Numbered Rooms Sudoku 20 + 25 points

6×6 Classic Sudoku rules apply. Additionally, clues outside the grid indicates the number that is in the Xth cell in the corresponding direction, where X is the number in the first cell in that direction.

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

2.3 – 2.4 6 × 6 Renban Sudoku 35 + 35 points

6×6 Classic Sudoku rules apply. Additionally, each marked line contains a set of distinct, consecutive numbers in any order.

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2.5 – 2.6 6 × 6 Odd Labyrinth Sudoku**30 + 30 points**

6 × 6 Classic Sudoku rules apply. Additionally, there must be at least one path that runs from the left top corner to the right bottom corner over cells that contain odd numbers. This path can only travel horizontally and vertically.

①	4				5
				4	
2					
					2
	1				
5				1	③

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

2.7 9 × 9 Odd Labyrinth Sudoku**50 points**

9 × 9 Classic Sudoku rules apply. Additionally, there must be at least one path that runs from the left top corner to the right bottom corner over cells that contain odd numbers. This path can only travel horizontally and vertically.

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

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

2.8 9 × 9 Thermo Sudoku**40 points**

9 × 9 Classic Sudoku rules apply. Additionally, some thermometer shapes are in the grid. Numbers must be strictly increasing from the bulb to the flat end.

	1					5		
8								7
			4					
9								1
	7						2	

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

2.9 9 × 9 Blackout Sudoku**50 points**

Fill each empty cell with numbers from 1 to 9 so that each row, column, and outlined 3 × 3 box contains distinct numbers.

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

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

2.10 9 × 9 Diagonal Sudoku**60 points**

9 × 9 Classic Sudoku rules apply. Additionally, each number appears exactly once in the each of the two main diagonals.

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

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

2.11 9 × 9 Odd/Even Sudoku**75 points**

9 × 9 Classic Sudoku rules apply. Additionally, the numbers in cells marked with circles are odd, and the numbers in cells marked with squares are even.

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

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



Round 3: AND

10:35–11:20

450 points

45 mins

3.1	6 × 6 Arrow + Killer Sudoku	30 points
3.2	9 × 9 Tight Fit + Shape Sudoku	40 points
3.3	9 × 9 Hexagon + Fortress Sudoku	50 points
3.4	8 × 8 Greater Than + Odd/Even/Big/Small Sudoku	50 points
3.5	9 × 9 Kropki Pairs + Non-consecutive Sudoku	80 points
3.6	9 × 9 Odd Labyrinth + Killer Sudoku	100 points
3.7	9 × 9 Outside + Pencilmark Sudoku	100 points

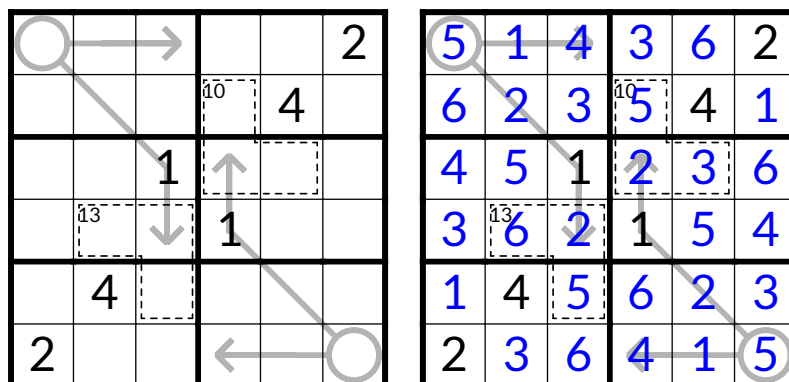
This round consists of hybrids where two variants appear in one grid.

3.1 6 × 6 Arrow + Killer Sudoku

30 points

6 × 6 Classic Sudoku rules apply. Additionally, the following rules apply.

- **Arrow:** Some arrow shapes are in the grid. The sum of the numbers along the path of each arrow must equal the number in the circled cell. Numbers can repeat within an arrow shape.
- **Killer:** The clue in each cage indicates the sum of all numbers in the corresponding cage. Numbers must not repeat within the same cage.

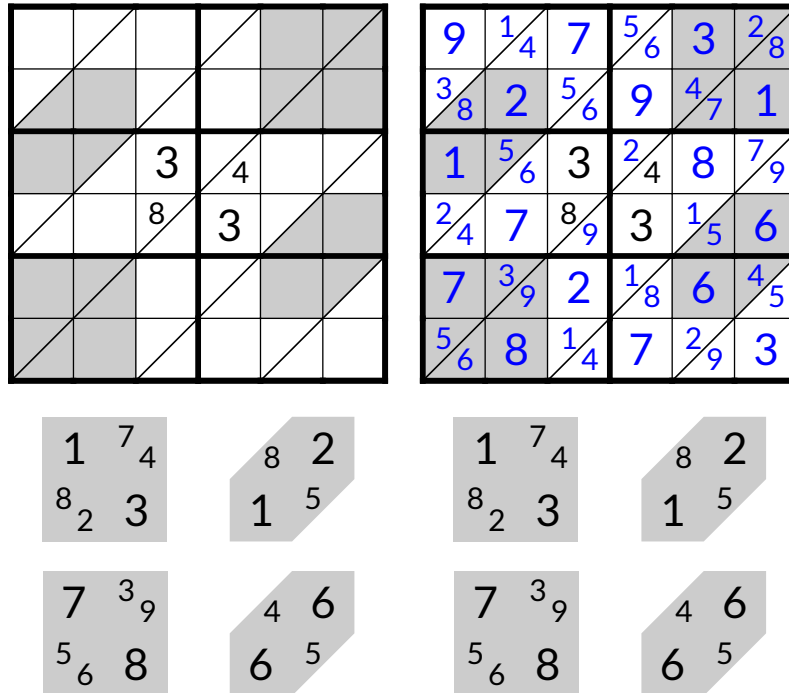


3.2 9 × 9 Tight Fit + Shape Sudoku

40 points

9 × 9 Classic Sudoku rules apply. Additionally, the following rules apply.

- **Tight Fit:** Some cells are split by slashes. In these cells the smaller number must go above the larger number.
- **Shape:** There are some numbered shapes that must be put into the grid. Shapes can be rotated, but cannot be reflected.

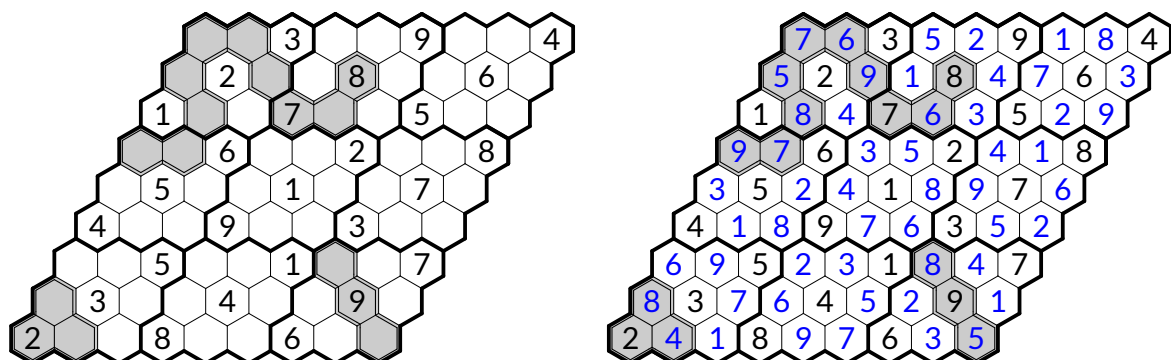


3.3 9 × 9 Hexagon + Fortress Sudoku

50 points

Fill each empty cell with numbers from 1 to 9. Additionally, the following rules apply.

- **Hexagon:** Each line (of any length) in the three main directions and outlined “3×3” region contains each number from 1 to 9 exactly once.
- **Fortress:** Each number in a shaded cell must be larger than any number in an unshaded cell that it shares an edge with.



3.4 8 × 8 Greater Than + Odd/Even/Big/Small Sudoku 50 points

Fill each empty cell with numbers from 1 to 8 so that each row, column, and outlined 2×4 box contains each number from 1 to 8 exactly once. Additionally, the following rules apply.

- **Greater Than:** Numbers must follow the given inequality signs.
- **Odd/Even/Big/Small:** The clues outside the grid indicate the property of the numbers in the first 2 cells in the corresponding direction:
 Odd = {1, 3, 5, 7}; Even = {2, 4, 6, 8}; Big = {5, 6, 7, 8}; Small = {1, 2, 3, 4}

小 小
Small Small

							3
							1
						2	
					3		
			5				
			3				
	6						
2							

大 大
Big Big

小 小
Small Small

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

大 大
Big Big

3.5 9 × 9 Kropki Pairs + Non-consecutive Sudoku 80 points

9 × 9 Classic Sudoku rules apply. Additionally, the following rules apply.

- **Kropki Pairs:** If a black circle is given between two adjacent cells, then the two numbers must have a ratio of 2; that is, one number must be exactly double the other number. Pairs of cells without black circles may have any ratio.
- **Non-consecutive:** Numbers placed in two cells that share an edge must not be consecutive.

There are no “white circles” because of the **Non-consecutive** rule.

			7					
			5					
					3			
9						1		
	7						9	
		5						7
			4					
			1					
				9				

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

3.6 9 × 9 Odd Labyrinth + Killer Sudoku

100 points

9 × 9 Classic Sudoku rules apply. Additionally, the following rules apply.

- **Odd Labyrinth:** There must be at least one path that runs from the left top corner to the right bottom corner over cells that contain odd numbers. This path can only travel horizontally and vertically.
- **Killer:** The clue in each cage indicates the sum of all numbers in the corresponding cage. Numbers must not repeat within the same cage.

①		21		4		10		8
	2						3	
25		3		16		5	11	
			4					
4		11		5	12			6
				15	6		17	
12		1				7		
	6	25			11		8	
2				6				⑨

①	5	7	3	4	2	10	6	9	8
9	2	6	5	1	8	4	3	7	
25	8	4	3	6	9	7	5	12	1
6	7	8	4	2	9	1	5	3	
4	1	2	8	5	3	9	7	6	
5	3	9	1	7	6	8	4	2	
12	3	9	1	2	8	4	7	6	5
7	6	5	9	3	1	2	8	4	
2	8	4	7	6	5	3	1	⑨	

3.7 9 × 9 Outside + Pencilmark Sudoku

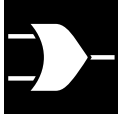
100 points

9 × 9 Classic Sudoku rules apply. Additionally, the following rules apply.

- **Outside:** The clues outside the grid must appear within the first 3 cells in the corresponding direction.
- **Pencilmark:** Each pencilmark clue includes all possible candidates for the number placed in the corresponding cell. There are no restrictions for cells without pencilmark clues.

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

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



Round 4: OR

11:30–12:15

450 points

45 mins

4.1	6 × 6 Fortress or Anti-fortress Sudoku	20 points
4.2	6 × 6 Fortress or Anti-fortress Sudoku	80 points
4.3	6 × 6 Renban or Palindrome Sudoku	40 points
4.4	6 × 6 Renban or Palindrome Sudoku	70 points
4.5	9 × 9 Diagonal or Anti-diagonal Sudoku	40 points
4.6	9 × 9 Point-to-Next or Search 9 Sudoku	55 points
4.7	9 × 9 7 or 11 Sudoku	75 points
4.8	9 × 9 Anti-knight or No Touch or Neither Sudoku	70 points

This round consists of puzzles where different rules may apply to elements in the same grid. Solvers have to determine which rule applies to each element.

4.1 – 4.2 6 × 6 Fortress or Anti-fortress Sudoku 20 + 80 points

6 × 6 Classic Sudoku rules apply. Additionally, for each orthogonally connected group of shaded cells, one of the following applies:

- **Fortress:** Each number in a shaded cell must be larger than any number in an unshaded cell that it shares an edge with.
- **Anti-fortress:** Each number in a shaded cell must be smaller than any number in an unshaded cell that it shares an edge with.

		2		6	
			1		
				5	
	1				
		4			
	5		2		

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

4.3 – 4.4 6 × 6 Renban or Palindrome Sudoku**40 + 70 points**

6 × 6 Classic Sudoku rules apply. Additionally, for each marked line, one of the following applies:

- **Palindrome:** Numbers placed along the line forms a palindromic sequence—they read the same from both directions.
- **Renban:** The line contains a set of distinct, consecutive numbers in any order.

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

4.5 9 × 9 Diagonal or Anti-diagonal Sudoku**40 points**

9 × 9 Classic Sudoku rules apply. Additionally, there are two diagonals, one each of the following types:

- **Diagonal:** The diagonal contains each number from 1 to 9 exactly once.
- **Anti-diagonal:** The diagonal contains exactly **three** distinct numbers.

There must be one diagonal of each type. No diagonal can have more than one type.

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

4.6 9 × 9 Point-to-Next or Search 9 Sudoku**55 points**

9 × 9 Classic Sudoku rules apply. Additionally, for each number X in a cell with an arrow, one (or both) of the following applies:

- **Point to Next:** The number $X + 1$ is in one of the cells in the direction of the arrow.
- **Search 9:** The nearest 9 is X cells away in the direction of the arrow.

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

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

4.7 9 × 9 7 or 11 Sudoku**75 points**

9 × 9 Classic Sudoku rules apply. Additionally, orthogonally adjacent cells with numbers summing to 7 or 11 are marked by a black square. All possible squares are given; that is, orthogonally adjacent cells without a black square sum to a number other than 7 and 11.

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

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

4.8 **9 × 9 Anti-knight or No Touch or Neither Sudoku****70 points**

Define the following properties.

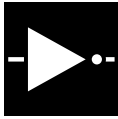
- A number has the **Anti-knight** property if it never appears in a pair of cells that are a chess knight's move away.
- A number has the **No Touch** property if it never appears in a pair of diagonally touching cells.

9 × 9 Classic Sudoku rules apply. Additionally, split the numbers 1 to 9 into three groups of three numbers each.

- Three numbers have the **Anti-knight** property but not the **No Touch** property. (Each number appears in at least one pair of diagonally touching cells).
- Three numbers have the **No Touch** property but not the **Anti-knight** property. (Each number appears in at least one pair of cells that are a chess knight's move away).
- Three numbers have neither the **No Touch** property nor the **Anti-knight** property.

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

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



Round 5: NOT

13:30–14:15

450 points

45 mins

5.1	9 × 9 Anti-renban Sudoku	55 points
5.2	9 × 9 Almost-renban Sudoku	60 points
5.3	6 × 6 Exclusion Sudoku	20 points
5.4	6 × 6 Exclusion Sudoku	30 points
5.5	9 × 9 Exclusion Sudoku	100 points
5.6	9 × 9 Non-consecutive Sudoku	70 points
5.7	9 × 9 Between (Lockout Liar) Sudoku	115 points

This round consists of variants involving negative constraints and false clues.

5.1 9 × 9 Anti-renban Sudoku

55 points

9 × 9 Classic Sudoku rules apply. Additionally, each marked line must not contain a pair of consecutive numbers. In other words, all numbers on each marked line must be at least 2 apart from every other number on the same line.

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

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

5.2 9 × 9 Almost-renban Sudoku**60 points**

9 × 9 Classic Sudoku rules apply. Additionally, each marked line contains a set of distinct, consecutive numbers in any order, except for one number which must be at least 2 apart from every other number in that region.

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

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

5.3 – 5.4 6 × 6 Exclusion Sudoku**20 + 30 points**

6 × 6 Classic Sudoku rules apply. Additionally, some clues are given at cell intersections. The 4 cells around the clue must not contain numbers from the clue.

	1		2		4
		2		12	
	2		34		1
		45		5	
	4		1		6

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

5.5 9 × 9 Exclusion Sudoku**100 points**

9 × 9 Classic Sudoku rules apply. Additionally, some clues are given at cell intersections. The 4 cells around the clue must not contain numbers from the clue.

			5					
		12 34		3		45 79		
		2						
1			78 9		6		34 5	
		2		5				
25 6		4			3			9
			13 4					
				8				
		34 69				12 78		
			7					
				9				

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

5.6 9 × 9 Non-consecutive Sudoku**70 points**

9 × 9 Classic Sudoku rules apply. Additionally, numbers placed in two cells that share an edge must not be consecutive.

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

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

5.7 9 × 9 Between (Lockout Liar) Sudoku**115 points**

9×9 Classic Sudoku rules apply. Additionally, for each marked line, the following applies:

- **Between:** Every number on the line must have a value which lies between the values of the numbers in the two circle ends.

However, one marked line is a **lockout liar** and the following applies instead:

- **Lockout:** Every number on the line must have a value which do not lie between the values of the numbers in the two circle ends. Numbers on the two circle ends may be equal.

In all cases, every number on the line must be different from the numbers in the two circle ends.

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

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



Round 6: Circuit Boards

14:25–15:15

500 points

50 mins

6.1 9×9 Interconnected Sudoku with Meta 500 points

This round consists of interconnected Sudokus being laid out on a circuit diagram.

There are nine 9×9 Sudoku grids arranged in a 3×3 configuration. The center cell of each 3×3 box in the Sudoku grids is shaded.

Fill each empty cell with numbers from 1 to 9 so that all these conditions are met.

- Each Sudoku grid follows the 9×9 Classic Sudoku rules.
- The shaded cells form another “meta” 9×9 Classic Sudoku, where each Sudoku grid is a 3×3 box in the “meta” Sudoku.
- If there is a dashed line connecting cells between two Sudoku grids, then the numbers in these cells must be the same. There are no restrictions for cells without dashed lines between them.

Scoring

For each Sudoku grid:

- A correctly completed grid is worth 55 points.
- A grid that is not correctly completed but all shaded cells are correctly completed is worth 10 points.

If all grids are correctly completed, additional 5 points are awarded.

For the purpose of calculating bonus points, the nine Sudoku grids are treated like nine separate puzzles.

The example is a smaller puzzle, consisting of four 4×4 Sudoku grids arranged in a 2×2 configuration. The shaded cells form another “meta” 4×4 Classic Sudoku.

