



# Instruction Booklet

**U-12/U-15**

**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 Wattanawaroон. 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  $6 \times 6$  Classic Sudoku 20 points

1.2  $6 \times 6$  Classic Sudoku 20 points

1.3  $6 \times 6$  Classic Sudoku 40 points

1.4  $9 \times 9$  Classic Sudoku 55 points

1.5  $9 \times 9$  Classic Sudoku 55 points

1.6  $6 \times 6$  Irregular Sudoku 30 points

1.7  $6 \times 6$  Irregular Sudoku 30 points

1.8  $9 \times 9$  Irregular Sudoku 50 points

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

### 1.1 – 1.3 $6 \times 6$ Classic Sudoku

20 + 20 + 40 points

Fill each empty cell with numbers from 1 to 6 so that each row, column, and outlined  $2 \times 3$  box contains each number from 1 to 6 exactly once.

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

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

### 1.4 – 1.5 $9 \times 9$ Classic Sudoku

55 + 55 points

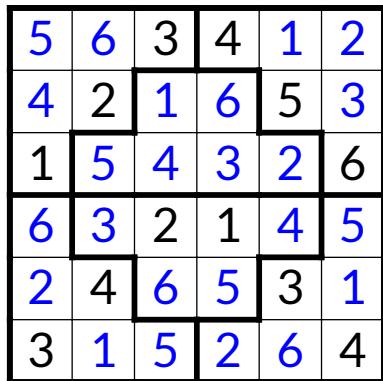
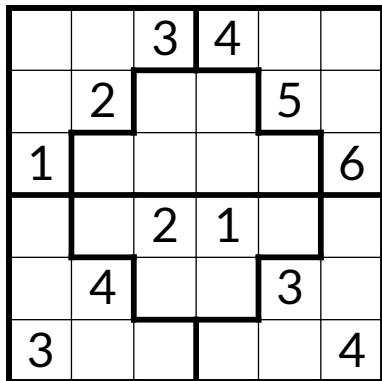
Fill each empty cell with numbers from 1 to 9 so that each row, column, and outlined  $3 \times 3$  box contains each number from 1 to 9 exactly once.

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	

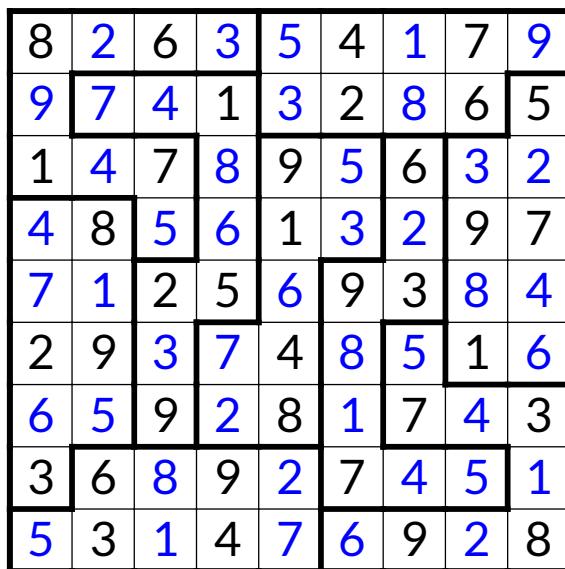
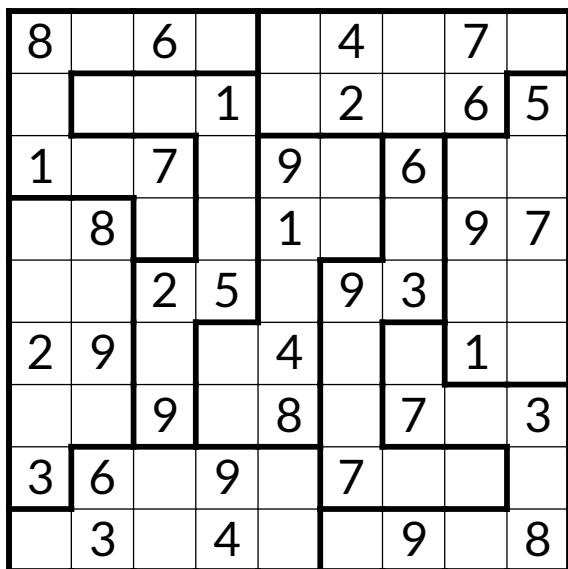
1	3	9	8	7	2	6	5	4
6	5	2	4	1	9	8	3	7
4	8	7	6	3	5	2	1	9
2	1	5	9	8	7	4	6	3
7	4	3	2	6	1	9	8	5
9	6	8	5	4	3	7	2	1
3	2	1	7	9	6	5	4	8
5	9	4	3	2	8	1	7	6
8	7	6	1	5	4	3	9	2

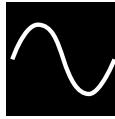
**1.6 – 1.7**  **$6 \times 6$  Irregular Sudoku****30 + 30 points**

Fill each empty cell with numbers from 1 to 6 so that each row, column, and outlined region contains each number from 1 to 6 exactly once.

**1.8**  **$9 \times 9$  Irregular Sudoku****50 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.





## Round 2: Alternating Current

09:40-10:25

450 points

45 mins

2.1	6 × 6 Blackout Sudoku	25 points
2.2	6 × 6 Numbered Rooms Sudoku	30 points
2.3	6 × 6 Numbered Rooms Sudoku	45 points
2.4	6 × 6 Arrow Sudoku	30 points
2.5	6 × 6 Arrow Sudoku	50 points
2.6	6 × 6 Odd Labyrinth Sudoku	40 points
2.7	6 × 6 Odd Labyrinth Sudoku	40 points
2.8	6 × 6 Diagonal Sudoku	25 points
2.9	6 × 6 Diagonal Sudoku	60 points
2.10	6 × 6 Renban Sudoku	45 points
2.11	6 × 6 Renban Sudoku	60 points

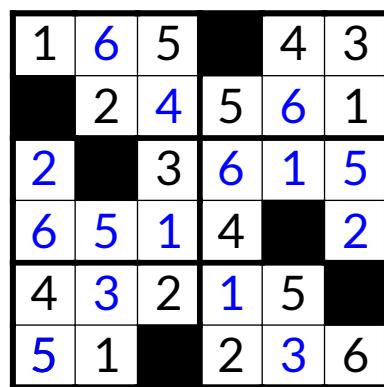
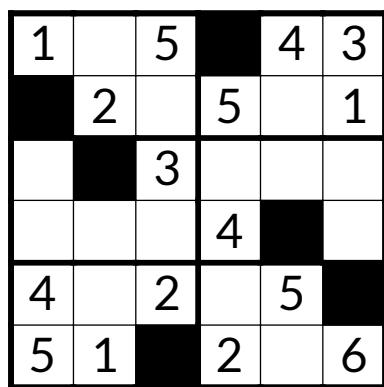
*This round contains a mix of variants. Some are well-known and some are less so.*

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### 2.1 6 × 6 Blackout Sudoku

25 points

Fill each empty cell with numbers from 1 to 6 so that each row, column, and outlined 2 × 3 box contains distinct numbers.

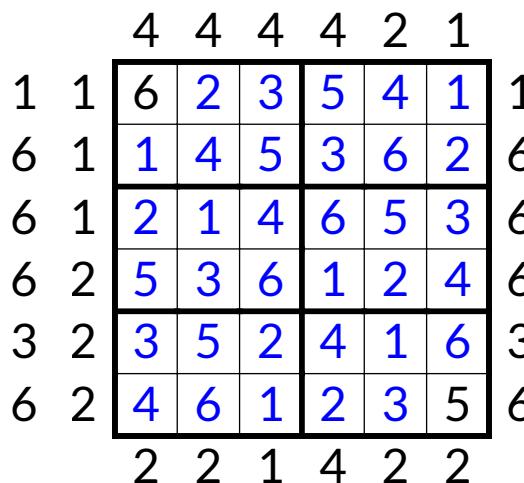
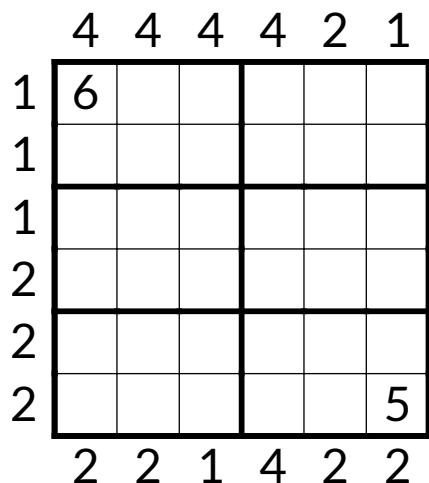


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### 2.2 – 2.3 6 × 6 Numbered Rooms Sudoku

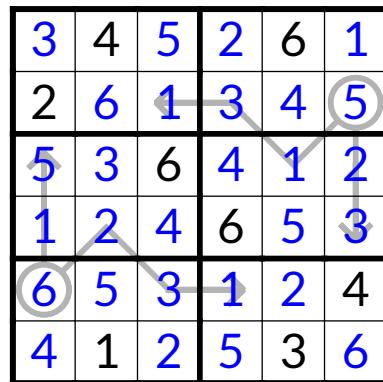
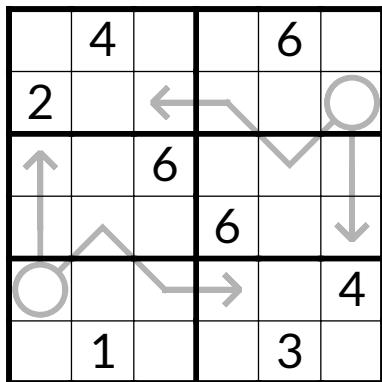
30 + 45 points

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.

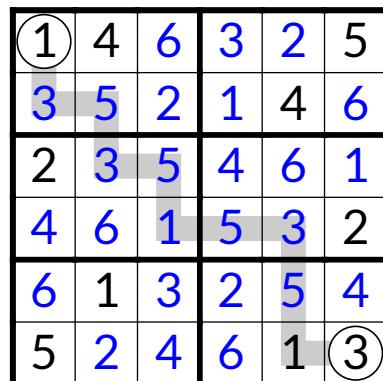
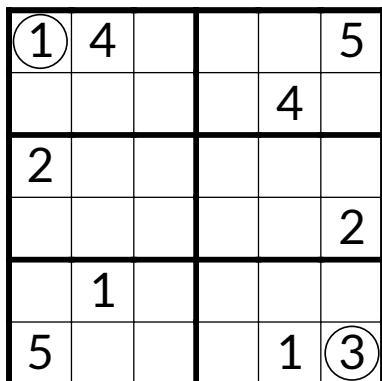


**2.4 – 2.5** **6 × 6 Arrow Sudoku****30 + 50 points**

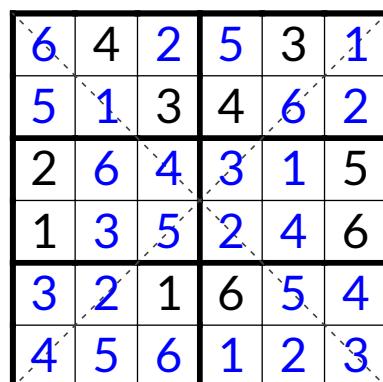
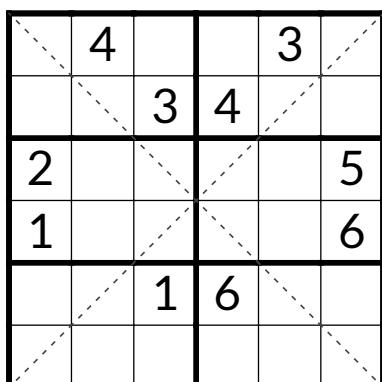
6 × 6 Classic Sudoku rules apply. Additionally, some arrow shapes are in the grid. The sum of the numbers along the path of each arrow must equal the number in the circled cell. Numbers can repeat within an arrow shape.

**2.6 – 2.7** **6 × 6 Odd Labyrinth Sudoku****40 + 40 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.

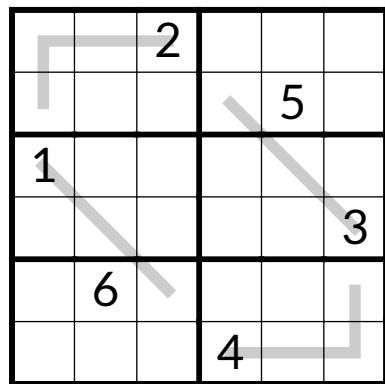
**2.8 – 2.9** **6 × 6 Diagonal Sudoku****25 + 60 points**

6 × 6 Classic Sudoku rules apply. Additionally, each number appears exactly once in the each of the two main diagonals.



**2.10 – 2.11 6 × 6 Renban Sudoku****45 + 60 points**

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



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



## Round 3: AND

10:35-11:20

450 points

45 mins

3.1	$6 \times 6$ Arrow + Killer Sudoku	35 points
3.2	$6 \times 6$ Arrow + Killer Sudoku	35 points
3.3	$6 \times 6$ Diagonal + Thermo Sudoku	35 points
3.4	$6 \times 6$ Diagonal + Thermo Sudoku	50 points
3.5	$9 \times 9$ Tight Fit + Shape Sudoku	60 points
3.6	$9 \times 9$ Hexagon + Fortress Sudoku	60 points
3.7	$8 \times 8$ Greater Than + Odd/Even/Big/Small Sudoku	80 points
3.8	$9 \times 9$ Kropki Pairs + Non-consecutive Sudoku	95 points

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

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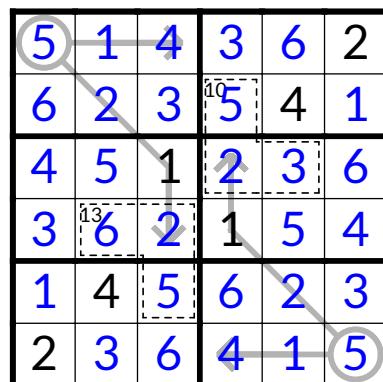
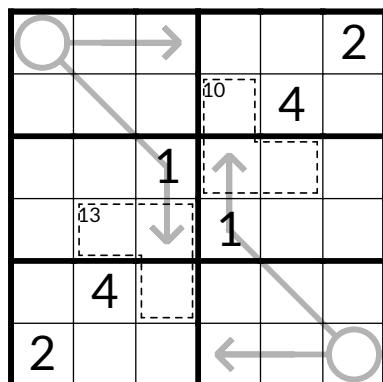
### 3.1 - 3.2 $6 \times 6$ Arrow + Killer Sudoku

35 + 35 points

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$6 \times 6$  Classic Sudoku rules apply. Additionally, the following rules apply.

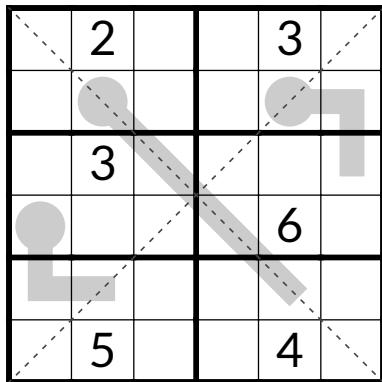
- **Arrow:** Some arrow shapes are in the grid. The sum of the numbers along the path of each arrow must equal the number in the circled cell. Numbers can repeat within an arrow shape.
- **Killer:** The clue in each cage indicates the sum of all numbers in the corresponding cage. Numbers must not repeat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



**3.3 – 3.4 6 × 6 Diagonal + Thermo Sudoku****35 + 50 points**

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

- **Diagonal:** Each number appears exactly once in the each of the two main diagonals.
- **Thermo:** Some thermometer shapes are in the grid. Numbers must be strictly increasing from the bulb to the flat end.

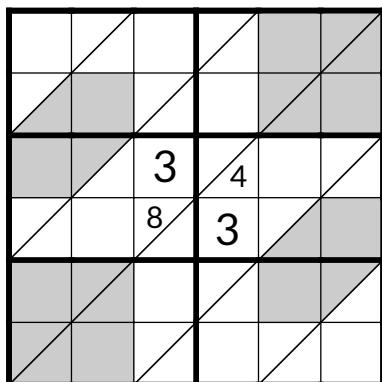


4	2	6	5	3	1
5	1	3	6	2	4
6	3	2	4	1	5
1	4	5	3	6	2
2	6	4	1	5	3
3	5	1	2	4	6

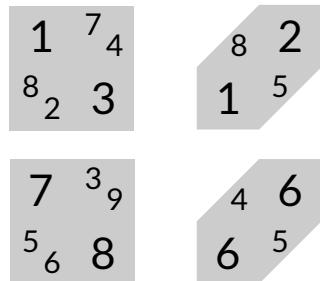
**3.5 9 × 9 Tight Fit + Shape Sudoku****60 points**

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.



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

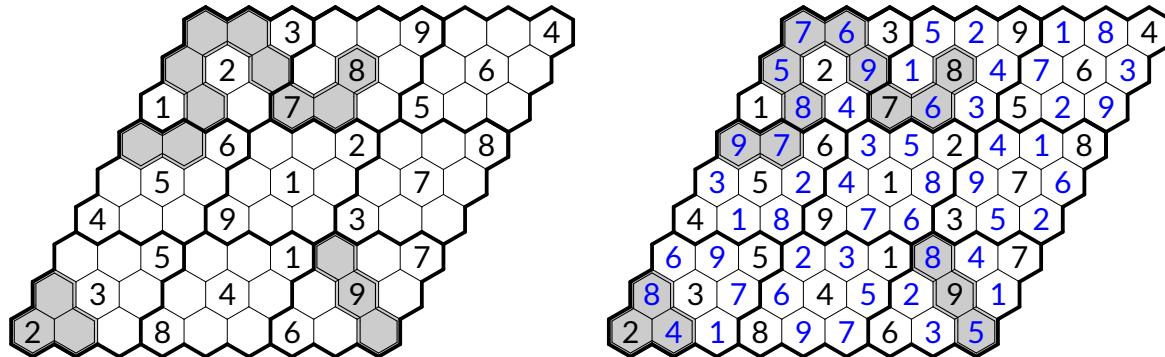


## 3.6 9 × 9 Hexagon + Fortress Sudoku

**60 points**

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

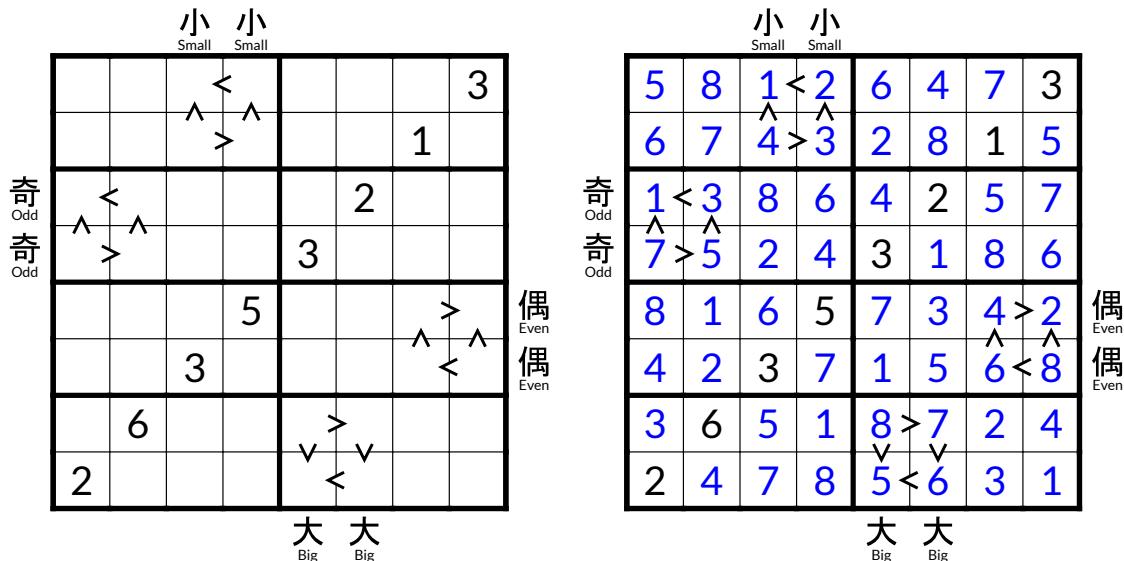
- **Hexagon:** Each line (of any length) in the three main directions and outlined “ $3 \times 3$ ” region contains each number from 1 to 9 exactly once.
- **Fortress:** Each number in a shaded cell must be larger than any number in an unshaded cell that it shares an edge with.



### 3.7 8 × 8 Greater Than + Odd/Even/Big/Small Sudoku 80 points

Fill each empty cell with numbers from 1 to 8 so that each row, column, and outlined  $2 \times 4$  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}



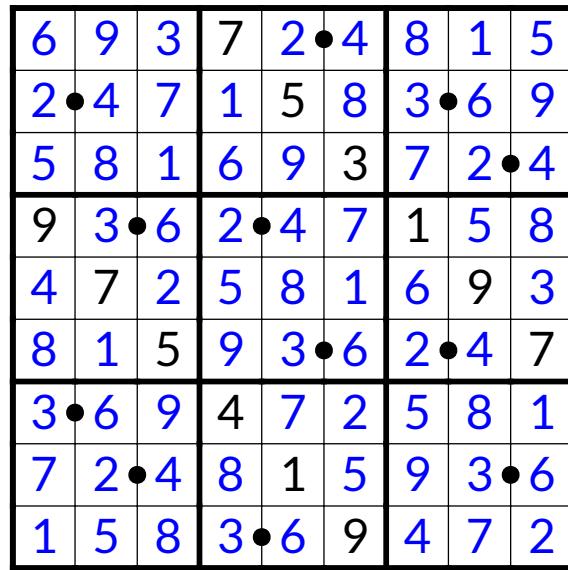
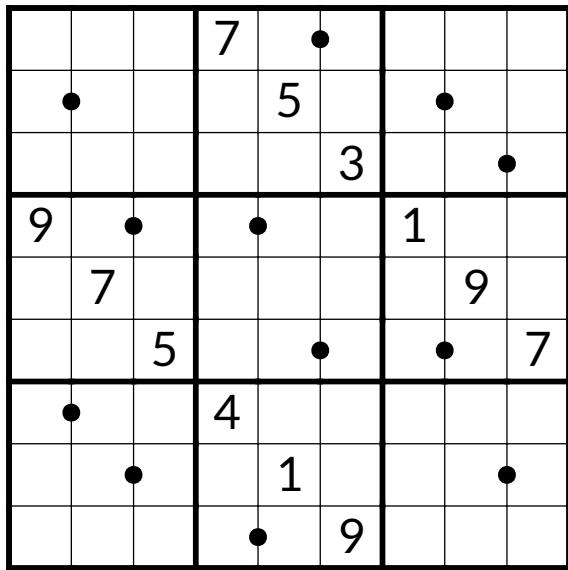
### 3.8 9 × 9 Kropki Pairs + Non-consecutive Sudoku

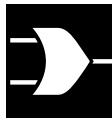
95 points

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.





## Round 4: OR 11:30-12:15

450 points

45 mins

4.1 $6 \times 6$ 7 or 11 Sudoku	30 points
4.2 $6 \times 6$ 7 or 11 Sudoku	40 points
4.3 $6 \times 6$ 7 or 11 Sudoku	40 points
4.4 $6 \times 6$ Diagonal or Anti-diagonal Sudoku	45 points
4.5 $6 \times 6$ Diagonal or Anti-diagonal Sudoku	45 points
4.6 $9 \times 9$ Diagonal or Anti-diagonal Sudoku	65 points
4.7 $6 \times 6$ Fortress or Anti-fortress Sudoku	35 points
4.8 $6 \times 6$ Renban or Palindrome Sudoku	60 points
4.9 $6 \times 6$ Renban or Palindrome Sudoku	90 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.*

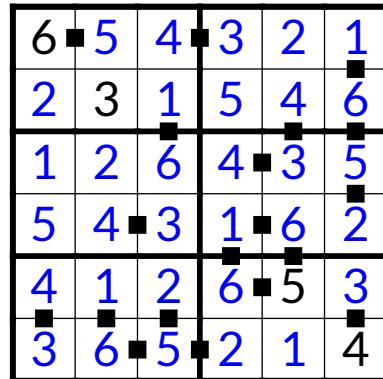
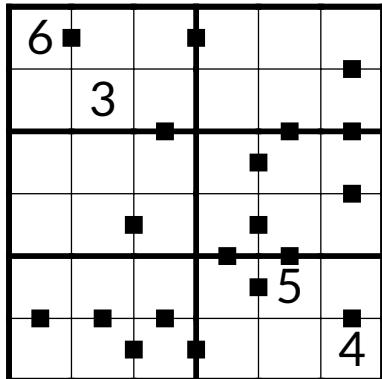
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### 4.1 – 4.3 $6 \times 6$ 7 or 11 Sudoku

30 + 40 + 40 points

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$6 \times 6$  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.

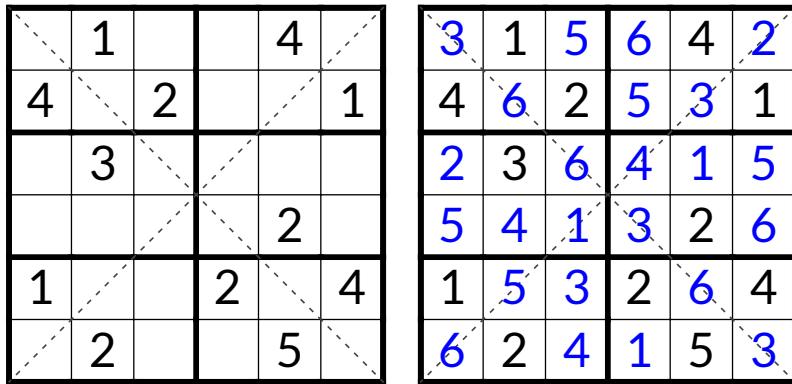


## 4.4 – 4.5 6 × 6 Diagonal or Anti-diagonal Sudoku 45 + 45 points

6 × 6 Classic Sudoku rules apply. Additionally, there are two diagonals, one each of the following types:

- **Diagonal:** The diagonal contains each number from 1 to 6 exactly once.
- **Anti-diagonal:** The diagonal contains exactly **two** distinct numbers.

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

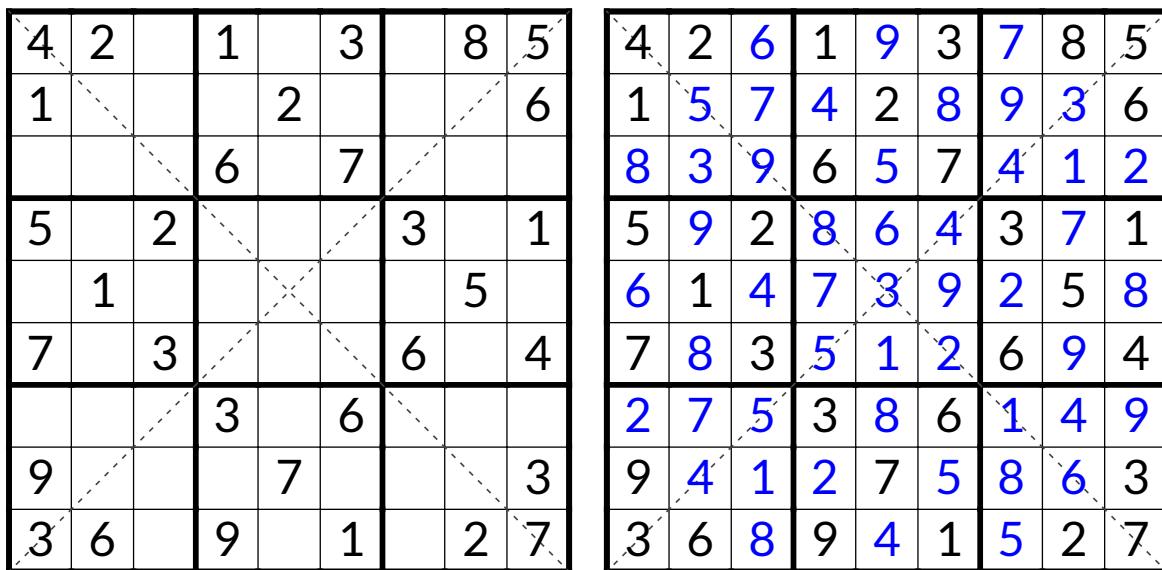


## 4.6 9 × 9 Diagonal or Anti-diagonal Sudoku 65 points

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.

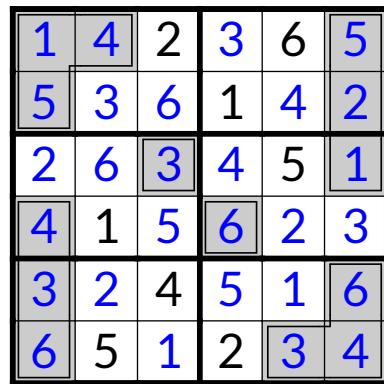
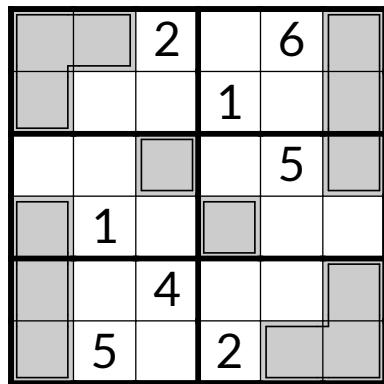
There must be one diagonal of each type. No diagonal can have more than one type.



**4.7**  **$6 \times 6$  Fortress or Anti-fortress Sudoku****35 points**

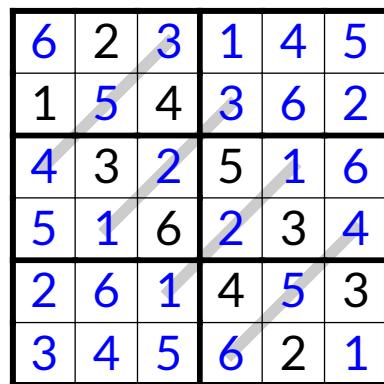
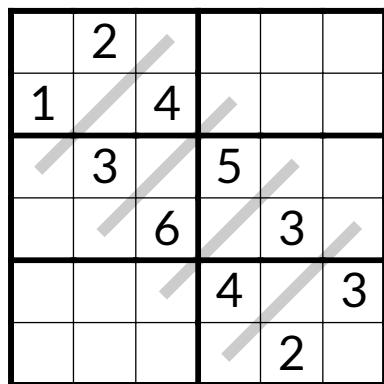
$6 \times 6$  Classic Sudoku rules apply. Additionally, for each orthogonally connected group of shaded cells, one of the following applies:

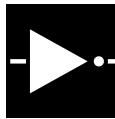
- **Fortress:** Each number in a shaded cell must be larger than any number in an unshaded cell that it shares an edge with.
- **Anti-fortress:** Each number in a shaded cell must be smaller than any number in an unshaded cell that it shares an edge with.

**4.8 – 4.9**  **$6 \times 6$  Renban or Palindrome Sudoku****60 + 90 points**

$6 \times 6$  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.





## Round 5: NOT

13:30-14:15

450 points

45 mins

5.1	$6 \times 6$ No Touch Sudoku	40 points
5.2	$6 \times 6$ No Touch Sudoku	60 points
5.3	$6 \times 6$ Non-consecutive Sudoku	30 points
5.4	$6 \times 6$ Non-consecutive Sudoku	30 points
5.5	$9 \times 9$ Non-consecutive Sudoku	100 points
5.6	$6 \times 6$ Exclusion Sudoku	35 points
5.7	$6 \times 6$ Exclusion Sudoku	50 points
5.8	$6 \times 6$ Clone (Liar) Sudoku	20 points
5.9	$6 \times 6$ Pinocchio Sudoku	35 points
5.10	$6 \times 6$ Pinocchio Sudoku	50 points

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

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### 5.1 – 5.2 $6 \times 6$ No Touch Sudoku

40 + 60 points

$6 \times 6$  Classic Sudoku rules apply. Additionally, diagonally touching cells must not contain the same number.

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

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

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### 5.3 – 5.4 $6 \times 6$ Non-consecutive Sudoku

30 + 30 points

$6 \times 6$  Classic Sudoku rules apply. Additionally, numbers placed in two cells that share an edge must not be consecutive.

	1			2	
	3			4	
	2			3	

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

**5.5 9 × 9 Non-consecutive Sudoku****100 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

**5.6 – 5.7 6 × 6 Exclusion Sudoku****35 + 50 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

**5.8**  **$6 \times 6$  Clone (Liar) Sudoku****20 points**

$6 \times 6$  Classic Sudoku rules apply. Additionally, some shaded shapes are given. Numbers in the same corresponding cell in all shaded shapes must be identical. **However**, one shaded shape is a **liar** and contains at least one number that is different from the remaining shapes in the corresponding cell.

1					3
	2				
3			1		
	4				6
			5		
2					4

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

**5.9 – 5.10**  **$6 \times 6$  Pinocchio Sudoku****35 + 50 points**

$6 \times 6$  Classic Sudoku rules apply. Additionally, three numbers are highlighted. Two of these are correct. **However**, one highlighted number is **Pinocchio** and needs to be replaced with a different number.

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

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



## Round 6: Circuit Boards

14:25–15:15

500 points

50 mins

6.1  $9 \times 9$  Interconnected Sudoku

500 points

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

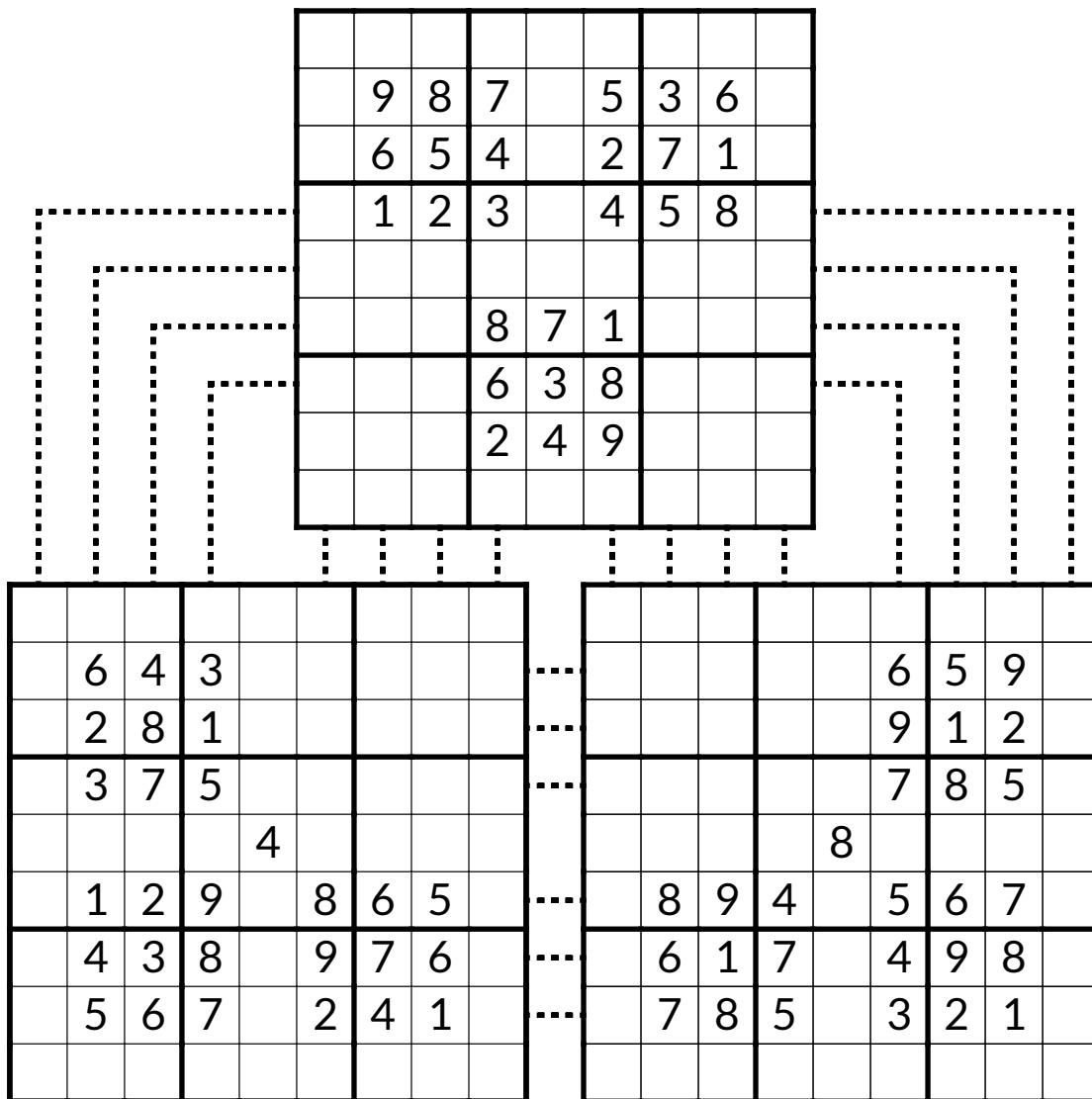
There are seven  $9 \times 9$  Classic Sudoku grids. If there is a dashed line connecting cells between two Sudoku grids, then the numbers in these cells must be the same. There are no restrictions for cells without dashed lines between them.

### Scoring

Each correctly completed Sudoku grid is worth 70 points. If all grids are correctly completed, additional 10 points are awarded.

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

The example is a smaller puzzle, consisting of three  $9 \times 9$  Classic Sudoku grids.



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

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

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