

Instructions booklet
for
Sudoku Mahabharat 2021 Finals
&
Indian Sudoku Championship 2021



12th December 2021
(This event will be held online)

Finals: Starts at 9:00 AM Total Solving Time: 225 minutes Total Points: 2000 + Bonus + Base points	Round 1 – The Archetypes	55 minutes: 500 points
	Round 2 – The Seen and the Unseen	80 minutes: 750 points
	Round 3 – The Donor Conference	90 minutes: 750 points

About this document:

These are the instructions for the 2021 Sudoku Mahabharat + Indian Sudoku Championship Finals, organised by Logic Masters India. Any questions related to these instructions should be raised and discussed at

<http://logicmastersindia.com/forum/forums/thread-view.asp?tid=2720>

Schedule on 12th December 2021

09:00 to 09:55 Round 1 – The Archetypes
10:20 to 11:40 Round 2 – The Seen and the Unseen
12:10 to 13:40 Round 3 – The Donor Conference
15:00 to 16:00 Results Announcement

Official Round Timings

Indian participants must start the test during the below time window to be considered for the official rankings

Round 1 – The Archetypes – Must start between 9:00 and 9:15
Round 2 – The Seen and the Unseen - Must start between 10:20 and 10:35
Round 3 – The Donor Conference - Must start between 12:10 and 12:25

Authors & Test-Solvers:

LMI thanks the authors and test solvers for their contributions to ISC 2021:

Akash Douhani (India) - Author + Test-Solving
Amit Sowani (India) - Test-Solving
Anubhav Balodhi (India) - Test-Solving
Chiel Beenhakker (Netherlands) – IB Examples
Eric Fox (USA) - Author
Nikola Zivanovic (Serbia) - Author
R Kumaresan (India) - Author
Priyam Bhushan (India) - Author + Test-Solving
Tawan Sunathvanichkul (Thailand) – Test Solver
TiiT Vunk (Estonia) - Test-Solving
Yanzhe Qiu (China) – Test-Solving

General Structure of the finals

There will be 3 rounds in the finals, of varying lengths and of varying points. Scores from each round, along with bonus if any, will be added up to the base points to determine the final score of the player. This score will be used for ranking in Indian Sudoku Championship 2021.

There will be a separate ranking after these rounds, based on SM eligibility, to determine the Sudoku Mahabharat winner.

How to participate?

- Download the password protected Sudoku booklet for each round. The Sudoku booklets contain the actual Sudokus to be solved. It is password protected.
- You must participate in the contest during the “official” round timings on 12th December to be included in the official rankings.
- For each round, Click on “Start” button. At this time, password for pdf will be shown and timer will start.
- You can print the pdf and solve on paper.
- **Each Sudoku will be marked with 2 lettered arrows. You need to submit the digits in these arrows, in order, including the givens, and click on submit button.**

- This year participants will be able to solve the sudokus online using the Penpa interface. If you plan to solve online do read the FAQ here: <https://www.logicmastersindia.com/live/faq-online-solving.asp>
- **If participants face any technical difficulty during submissions, they can email screenshots of answer keys for solved grids to logicmasteradmin@gmail.com before their timer ends.**

Scoring

Points typically indicate difficulty of the Sudokus and time required to solve them. While the organizers have made best efforts to match them, your personal experience and preference may differ.

This test uses instant grading where a solver can submit any individual Sudoku and receive confirmation that the solution is correct or not. Each incorrect submission reduces the sudoku's potential score. The first, second, third, and fourth incorrect submissions reduce the potential score to 90%, 70%, 40%, and 0% respectively.

Bonus

It is possible that some players may finish all Sudokus in a round before the time allocated. A bonus of **10 points** for each full minute remaining will be awarded to any competitor who correctly solves every Sudoku in a round.

Ties will be broken using following rules:

- i) Maximum points in Round 2 (including bonus points in Round 2)
- ii) Maximum points in Round 1 (including bonus points in Round 1)
- iii) Maximum points in Round 3 (including bonus points in Round 3)

If there is still a tie to determine the first three positions, tie-breaker Sudokus will be used.

SM Rules:

The top "inexperienced" players will be ranked according to their scores, to determine the Sudoku Mahabharat Winner. Ties will be broken using the above tie breaker rules.

Practice Materials

The online rounds of Sudoku Mahabharat will serve as great practice materials for the finals. You can access the Sudokus at <http://logicmastersindia.com/lmitests/downloads.asp?testFilter=SM>

Prohibited Materials

Any kind of external help from other persons, mobile, solvers, computers, etc is not allowed. If the organisers feel any kind of unfair means has been used, they can review/discard individual submissions.

Sudoku rules

The remaining pages in this booklet explain the rules of the types that will appear in the finals.

SM Eligibility and Base Points:

This year the competition is open to all.

Below is the tentative list of players who took part in the online episodes of Sudoku Mahabharat 2021 and their base points, and eligibility for SM.

LMI ID	Base Points	SM Eligibility?
prasanna16391	136	NO
vopani	124	NO
kishy72	117	NO
swaroop2011	100	NO
Peter Maverick	100	YES
mkartik	98	YES
aashay	96	YES
gaurav.kjain	95	NO
shambo	95	YES
Manjiri	94	YES
mjaipal	91	NO
Nityant	87	YES
hpoddar08	86	YES
pndt	82	YES
ravilp	76	YES
rajeshk	74	NO
harmeet	74	YES
poonamgandhi	74	YES
Kumaresan R	73	YES
Reetoo	71	YES
dhruvarajsinhpuwar06	71	YES
witty	70	YES
deepanshu	69	YES
ggmu80	66	YES
neerajmehrotra	63	YES
nayan222	62	YES
pranavmanu	62	NO
Aadvik	62	YES
Sally	60	YES
nikaash	60	YES
scampy	60	YES
lenson	55	YES

Anu G	54	YES
kheti	52	YES
tenaliraman	52	YES
Bhuvi	51	YES
khuski	50	YES
Chandrashekhar	47	YES
deepika m	47	YES
vinitaawalia	46	YES
domarulz	45	YES
vrs719	44	YES
prabhadoshi	44	YES
carburra	43	YES
sena	42	YES
gunasundharid	42	YES
avni	41	YES
mnrhyd	40	YES
Sadhika	39	YES
pallav123goyal	39	YES
soun5	38	YES
sitaswag	37	YES
DanAvi	37	YES
mvalliappan39	36	YES
Mihir Neve	34	YES
zalak	33	YES
sanjaymahesh	33	YES
drsandeepkumarp	33	YES
Swagatam	32	YES
lakshmisv	32	YES
priyambhushan	31	YES
jsarwade	31	YES
PuwarKrutika	30	YES
sunderramanv	30	YES
Venkatachalam V	30	YES
akash.doulani	29	YES
snehasanjeevini	29	YES
KyaFarkPadtaHai	28	YES
paramgoswami	28	YES
fusion3193@gmail.com	28	YES
rpmlrv	28	YES
kumaribhawna	25	YES

anithra	24	YES
prateek706	24	YES
shreyakahali	23	YES
akhila.hhp@gmail.com	22	YES
purifire	21	YES
RICHA	21	YES
Hemant Kr Malani	19	YES
sonnylaskar	19	YES
swati1210	19	YES
vjain9	18	YES
ashaash11ash	18	YES
Esha	18	YES
gn.raviprakash	17	YES
hemanthd	16	YES
amitsowani	15	NO
rajanirokade	15	YES
sha2nks1603	15	YES
Madmahogany	14	YES
Priya Banthia	13	YES
oldmonk	13	YES
Sherwin	12	YES
n1njastorm	12	YES
AbhiShetty	11	YES
Tejal Phatak	11	NO
ezhilmathu.advo	11	YES
RameshLMI	11	YES
purka	11	YES
PAPPULA AKSHITHA	11	YES
piyarc	10	YES
arshpreet	10	YES
Roopesh95	10	YES
Neha1609	10	YES
GBathri	9	YES
Remya	9	YES
supriya2112	9	YES
butterflydust	9	YES
dp_94	9	YES
naveenjog	9	YES
abhi265645	9	YES
huisouvik	8	YES

Saumiali	7	YES
sanket.saxena	7	YES
madhoo6	6	YES
ikthreeo	6	YES
Raunak	6	YES
jesswho	6	YES
rashmin	6	YES
ish4	5	YES
Rushabh	5	YES
shreyasiathalye	5	YES
kamalkumar2001	5	YES
Drsudoku	5	YES
mohanprashanth	4	YES
supriya29	4	YES
poojathakkar	4	YES
shgarg	4	YES
saumyaas	3	YES
karunaraj	3	YES
prajwaldhapte77	3	YES
b.lakshmi.b	3	YES
mms08	3	YES
shoumikk	3	YES
manitshubh	3	YES
Kanishka goyal	2	YES
devarajand	2	YES
Secretsanta	2	YES
DebLuck	2	YES
shivapritham	1	YES
A. Swami	1	YES
avanyakhemka	1	YES
Nishit	0	YES

List of ISC Winners (2015-2020)

<u>Year</u>	<u>1st</u>	<u>2nd</u>	<u>3rd</u>
2020	Rohan Rao	Prasanna Seshadri	Rishi Puri
2019	Rohan Rao	Kishore Kumar	Prasanna Seshadri
2018	Rohan Rao	Prasanna Seshadri	Pranav Kamesh
2017	Rohan Rao	Kishore Kumar	Rishi Puri
2016	Rohan Rao	Rakesh Rai	Kishore Kumar
2015	Rishi Puri	Prasanna Seshadri	Rohan Rao

List of SM Winners (2015-2020)

<u>Year</u>	<u>1st</u>	<u>2nd</u>	<u>3rd</u>
2020	Aashay Patil	Jayant Ameta	Shambo Debnath
2019	Pooja Bansal	Aashay Patil	Avinash
2018	Shaheer Rahman	Aashay Patil	Kartik Reddy
2017	Pranav Kamesh	Jayant Ameta	Hemant Malani
2016	Akash Doulani	Gaurav Jain	Harmeet Singh
2015	Amit Sowani	Rakesh Rai	Gaurav Jain

This Round will have 8 Classic Sudokus, and 5 commonly encountered sudoku variants.

Sudoku	Points
Classic Sudoku 1	20 points
Classic Sudoku 2	20 points
Classic Sudoku 3	20 points
Classic Sudoku 4	30 points
Classic Sudoku 5	30 points
Classic Sudoku 6	30 points
Classic Sudoku 7	40 points
Classic Sudoku 8	40 points
Odd Even Sudoku	35 points
Outside Sudoku	40 points
Killer Sudoku	50 points
Pencilmarks Sudoku	70 points
Diagonal Sudoku	75 points

(1-8). Classic Sudoku (20+20+20+30+30+30+40+40 points)

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.

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

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

55 min

500 points

The Archetypes

9. Odd Even Sudoku (35 points)

Apply Classic Sudoku rules. Additionally, each cell marked with a square must contain an even digit (2/4/6/8), and each cell marked with a circle must contain an odd digit (1/3/5/7/9).

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

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

10. Outside Sudoku (40 points)

Apply classic Sudoku rules. Additionally, the digits outside the grid must appear in one of the cells in the first box (till the next bold line) seen from that edge of the grid

5 8									13
6 7									4 5
									3 4
6 8									5 7
2 3 4									8 9
1									
									4 5 6
3 4									1 2
	6	2	8	6	8	3	7	1	2
	7	3	9	7	9	4	8	9	3

5 8									13
6 7									4 5
									3 4
6 8									5 7
2 3 4									8 9
1									
									4 5 6
3 4									1 2
	6	2	8	6	8	3	7	1	2
	7	3	9	7	9	4	8	9	3

11. Killer Sudoku (50 points)

Apply classic Sudoku rules. Additionally, the sum of digits in cells inside every cage must equal the total given for the cage at the upper left cell. Digits do not repeat inside a cage.

8		16		20		6		
22		15		9		13		30
	24	8		28	10		15	
19		8		8				24
		7		8		10		
	21		18		14		16	

8	3	4	16	6	9	20	5	6	1	2	
22	5	1	15	2	9	4	8	13	9	3	30
	2	7	9	1	5	3	4	8	6		
	8	5	1	7	3	4	6	2	9		
	7	6	4	9	8	2	1	5	3		
19	9	2	8	3	5	6	8	1	7	4	24
	6	3	7	4	8	1	9	10	7	5	
	1	2	8	5	16	3	7	16	2	9	4
	4	9	7	8	2	5	3	6	1		

55 min

500 points

The Archetypes

12. Pencilmarks Sudoku (70 points)

Apply classic Sudoku rules. Additionally, in some cells you find all allowed candidates for the specific cell.

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

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

13. Diagonal Sudoku (75 points)

Apply Classic Sudoku rules. Additionally, each main diagonal (marked by dotted lines) must contain digits from 1-9.

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

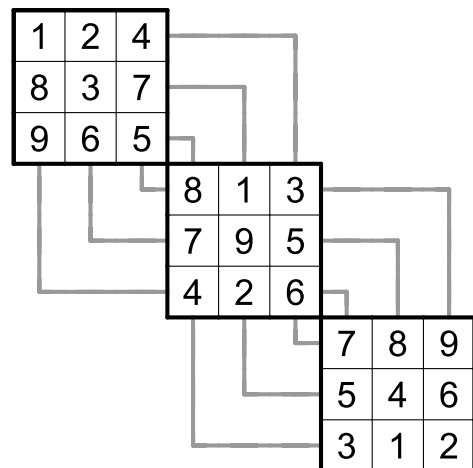
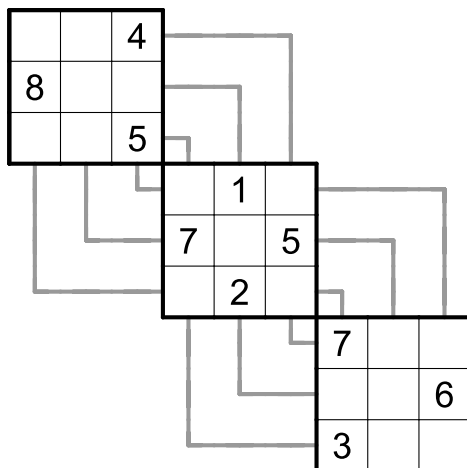
2	4	3	9	7	8	1	5	6
8	9	1	4	5	6	3	2	7
7	6	5	3	2	1	8	9	4
3	5	9	6	1	7	2	4	8
4	7	6	8	3	2	5	1	9
1	2	8	5	9	4	6	7	3
5	3	4	1	8	9	7	6	2
6	1	7	2	4	3	9	8	5
9	8	2	7	6	5	4	3	1

This Round will have thirteen sudoku variants representing some of the online rounds of Sudoku Mahabharat 2021.

Variant	Points
Sudokurve	15 points
Consecutive Pairs Sudoku	35 points
Scattered Sudoku	40 points
Irregular Sudoku	40 points
Kropki Sudoku	45 points
Exclusion Sudoku	45 points
Equal Sudoku	55 points
Palindrome Arrow 50-50 Sudoku	55 points
Pointing Evens Sudoku	60 points
X-Sums Sudoku	70 points
Prime Sum Sudoku	75 points
True or Lie Sudoku	100 points
Equations Sudoku	115 points

1. Sudokurve (15 points)

Apply classic Sudoku rules. Some rows and columns bend as indicated by following the curved lines. The answer key should contain the nine digits in the direction of the arrow along the curved lines.



85 min

800 points

The seen and the unseen

2. Consecutive Pairs Sudoku (35 points)

Apply classic Sudoku rules. Additionally, the numbers placed in adjacent cells marked by white circles must be consecutive. Not all such pairs of cells are marked.

4		3						2
	6							
7								
								4
6								3 5

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

3. Scattered Sudoku (40 points)

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column, outlined region and the nine grey cells. Grey cells are not part of any regions.

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

6	9	4	2	3	7	5	1	8
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

4. Irregular Sudoku (40 points)

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and outlined region. Each outlined region is marked by thick borders.

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

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

85 min

800 points

The seen and the unseen

5. Kropki Sudoku (45 points)

Apply classic Sudoku rules. If the difference between digits in orthogonally adjacent cells is 1, then they are separated by a white dot. If the digit in a cell is half of the digit in an orthogonally adjacent cell, then they are separated by a black dot. The dot between '1' and '2' can have any of these dots. All possible dots are marked.

								9
			6		9			
				3				
			7		4			
				2				
			9		2			
9								

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

6. Exclusion Sudoku (45 points)

Apply classic Sudoku rules. Additionally, the small numbers at the intersection of 4 adjacent cells cannot be placed in any of those 4 cells.

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

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

7. Equal Sudoku (55 points)

Apply classic Sudoku rules. Additionally, the sum of the odd digits is equal to the sum of the even digit in each of the marked regions. Digits may not repeat within a marked region.

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

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

85 min

800 points

The seen and the unseen

11. Prime Sum Sudoku (75 points)

Apply classic Sudoku rules. Additionally, the sum of numbers placed in adjacent cells marked by white circles must be a prime. (3,5,7,11,13,17). All such pairs of cells are marked.

	1		2		4			
4			9			3		
	8			5			1	

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

12. True Or Lie Sudoku (100 points)

Apply classic Sudoku rules. Additionally, given clues (small numbers at top left corner of cells) may be correct or wrong. If the clue is wrong, then the correct digit is either 1 higher or 1 lower.

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

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

13. Equations Sudoku (115 points)

Apply classic Sudoku rules. Additionally, each of the equations given must be satisfied (top to bottom, or left to right). The operations given are addition (+), subtraction (-), multiplication (x), division (/) and exponentiation (^). Each equation consists of exactly three cells.

\oplus	\ominus				7	8		
				\wedge	\ominus	5		
				\ominus	\ominus	9		
	3			9				\oplus
6			\div	\ominus		7		\ominus
1		7	8	3	5	6		
\ominus	8			\times	\ominus		4	
\ominus		5				6		
			9	\ominus	\ominus			

$4 \oplus 5 \ominus 9$	6	1	2	3	7	8		
8	1	6	4	7	$3 \wedge 2 \ominus 9$	5		
3	$7 \ominus 2 \ominus 5$	9	8	4	1	6		
5	3	4	7	6	9	8	2	\oplus
6	9	$8 \div 2 \ominus 4$	1	7	5	3		\ominus
1	2	7	8	3	5	9	6	\oplus
\ominus	8	1	$3 \times 2 \ominus 6$	5	4	7		
\ominus	4	5	1	8	7	6	3	9
\ominus	7	6	3	9	$5 \ominus 4 \ominus 1$	8	2	

This Round will have some 2 Classic Sudokus and 6 Sudoku Variants.

General rules for this round:

- Puzzles 1, 2 and 3 are donor sudokus.
- Puzzle 1 is donor of rows. At least one row from puzzle 1 should be transferred to any row of each of the sudokus 4 - 8.
- Puzzle 2 is donor of columns. At least one column from puzzle 2 should be transferred to any column of each of the sudokus 4 - 8.
- Puzzle 3 is donor of 3x3 boxes. At least one 3x3 box from puzzle 3 should be transferred to any 3x3 box of each of the sudokus 4 - 8.
- Donated rows, columns and boxes can repeat in different sudokus.
- Some sudokus may have multiple solutions but the complete round can be solved in only one way. Puzzles 1, 2 and 3 have unique solutions and can be solved independently.
- Partial points will be given only for every correct grid which is part of the complete solution.
- The puzzles in the puzzle booklet will be laid out so that the puzzles 1-3 are on one sheet while puzzles 4-8 will be presented on 3 separate sheets.

Variant	Points
Classic Sudoku	40 points
Clone Sudoku	155 points
Hundred Sudoku	120 points
Classic Sudoku	80 points
Sequences Sudoku	70 points
Next to 9 Sudoku	85 points
Identical Boxes Sudoku	90 points
Frame Sum Sudokus	110 points

90 min

750 points

Donor Conference

1. Classic Sudoku (40 points)

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.

2. Clone Sudoku (155 points)

Apply classic Sudoku rules. Additionally, digits in each corresponding cell in the shaded figures are identical.

3. Hundred Sudoku (120 points)

Apply classic Sudoku rules. Additionally, in each row, the sum of number combinations in the grey cells is exactly 100.

4. Classic Sudoku (80 points)

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.

5. Sequences Sudoku (70 points)

Apply classic Sudoku rules. Additionally, the digits along each line form an arithmetic progression.

6. Next to 9 Sudoku (85 points)

Apply classic Sudoku rules. Additionally, the clues outside the grid indicate the numbers to be placed in the cells before and after the cell containing 9 in the corresponding direction.

7. Identical Boxes Sudoku (90 points)

Apply classic Sudoku rules. At least two 3x3 boxes are identical (same digits are in the same positions within both boxes.) Identical boxes may or may not be the same as the 3x3 box transferred from sudoku # 3.

8. Frame Sum Sudoku (110 points)

Apply classic Sudoku rules. Additionally, digits outside the grid indicate the sum of the first 3 digits in the corresponding direction.

90 min

750 points

Donor Conference

The example has four sudokus, with the first 3 being the donors, which donate a row, column and 3X3 box to the fourth puzzle.

1. Classic Sudoku (Row Donor)

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

2. Clone Sudoku (Column Donor)

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

3. Hundred Sudoku (3X3 box donor)

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

4. Identical Boxes Sudoku

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

90 min

750 points

Donor Conference

1. Classic Sudoku

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

2. Clone Sudoku

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

3. Hundred Sudoku

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

4. Identical Boxes Sudoku

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

Donations

- P1 row 8 = P4 row 3
- P2 column 9 = P4 column 2
- P3 box 8 = P4 box 6

Independent examples of the other sudokus in the round (Note that these puzzles are not linked with any of the other puzzles in the examples)

Sequences Sudoku

Apply Classic Sudoku rules. Additionally, numbers along the lines have to be different and are in arithmetic sequence. The difference between two following numbers along a line is always the same.

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

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

90 min

750 points

Donor Conference

Next to 9 Sudoku

Apply Classic Sudoku rules. Additionally, clues outside the grid indicate the digit(s) bordering the digit 9 in that row or column.

	5	5	2	5	4	3	2	3	1
3									
14									
25			6						
38									
35				5					
23									
25							6		
56									
5									

	5	5	2	5	4	3	2	3	1
3	9	3	7	5	8	2	1	4	6
14	5	2	4	9	1	6	7	3	8
25	8	1	6	7	3	4	2	9	5
38	6	4	5	1	2	3	9	8	7
35	7	8	1	4	5	9	3	6	2
23	3	9	2	8	6	7	5	1	4
25	1	5	9	2	4	8	6	7	3
56	4	7	3	6	9	5	8	2	1
5	2	6	8	3	7	1	4	5	9

Frame Sum Sudoku

Apply classic Sudoku rules. Additionally, digits outside the grid indicate the sum of the first 3 digits in the corresponding direction.

	17	21	7	11	20	14	21	9	15
13									19
									11
12									15
14									15
									10
12									20
14									12
									13
13									20
	18	6	21	23	12	10	6	22	17

	17	21	7	11	20	14	21	9	15	
13	5	6	2	4	8	1	9	3	7	19
	9	7	4	5	3	6	8	1	2	11
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	6	21	23	12	10	6	22	17	