Клуб Логика
Club Logika

10TH WORLD SUDOKU CHAMPIONSHIP
11–15 OCT SOFIA 2015

World Puzzle Federation

World Sudoku Championship 2015

Instruction Booklet

Monday, 12th October

Round 1: Classics	30m	09:10-09:40	320 points
Round 2: Assorted	50m	09:50-10:40	580 points
Round 3: Assorted	60m	11:00-12:00	640 points
Round 4: Straight	30m	12:10-12:40	200 points
	LUNCH		
Round 5: Assorted	80m	14:30-15:50	880 points
Round 6: Assorted	50m	16:10-17:00	550 points
Round 7: Relay (TEAM)	30m	17:30-18:00	2400 points

Tuesday, 13th October

Round 8: Zodiac	50m	09:00-09:50	545 points
Round 9: Multisudoku	30m	10:10-10:40	150 points
Round 10: X-Killer (TEAM)	30m	11:10-11:40	2400 points
Round 11: Fractal (TEAM)	30m	11:50-12:20	2400 points
	LUNCH		
Individual Play-off		15:00	

Competition Rules

Scoring and Bonuses

Points will be awarded only for fully and correctly solved puzzles. There will be no partial credit, unless explicitly stated in a round's description.

Individual Rounds

A bonus of 10 points for each full minute remaining will apply to any competitor who correctly solves every puzzle in a round. At the judge's discretion, 0.75x bonus (rounded to a whole number) will be awarded in the case of a single minor mistake on no more than 1 puzzle. For the avoidance of doubt, a minor mistake is considered at most two incorrectly placed numbers in at most one puzzle.

Team Rounds

A bonus of 40 points for each full minute remaining will apply to any team who correctly solves every puzzle in a round. If there are any mistakes, there will be no bonus awarded.

Competition Hall Rules

1.1. Each competitor must sit at their pre-allocated desk to take part in individual rounds. Teams must work at their pre-allocated desks/areas for team rounds.

1.2. Competitors should ensure that they are at their desk ready for the start of each round. Late arrivals may not be permitted to enter the competition hall to take part in a round (at the discretion of the organizers).

1.3. Prior to the start of each round competitors should clearly write their name, team and reference number on the front of their competition booklet. If this information is not completed the organizers reserve the right not to award any points to that competitor for that round. Competitors must not open their booklet.

1.4. Once the signal to start a round is given, competitors may open their booklet and begin solving the puzzles.

1.5. During each individual round, competitors must remain silent, unless declaring completion of a round.

1.6. During team rounds, team members may talk amongst themselves, but should do this with respect to other teams that may be near them.

1.7. If declaring a round complete, close your booklet, clearly state 'finished' and raise your arm. Keep your arm raised until your paper has been collected. Teams should declare in the same way if they complete a team round.

1.8. Competitors or teams that complete a round with more than five minutes left will be allowed quietly leave the competition hall.

1.9. Competitors or teams that complete a round with five minutes or less left will not be allowed to leave their desk or table so as not to cause unnecessary disruption to fellow competitors.

1.10. If any competitor needs to leave the competition hall prior to the end of a round, they will not be allowed to take any further part in that round.

1.11. Once the signal to finish a round is given, competitors must immediately stop solving, close their booklets and put their pens/pencils down, and be ready to hand their booklets in for marking.

1.12. At the end of a round, you must remain seated until all puzzle booklets have been collected. You will be told when you can get up and leave.

1.13. Mobile phones are not permitted to be used in the competition hall and must be turned off.

1.14. Only team captains and official observers will be allowed access to the competition hall whilst either individual or team rounds are taking place. Other non-competing people must stay outside the competition hall at all times, as there is no space for spectators.

1.15. Competitors may not use cameras or other recording devices during rounds. Only official observers may do so, at the discretion of the organizers. They must respect the competitors and not use flash photography or cameras with excessive sounds.

1.16. If you believe that there is a problem with a puzzle, leave that puzzle and continue with another. This will be investigated upon completion of the round.

1.17. Puzzles can be completed in any order. The points' value of a puzzle is an indication of its anticipated difficulty, although your solving experience may differ.

1.18. The boxed area at the bottom of each puzzle booklet page is reserved for markers' notes - do not write in this area.

Permitted Items

2.1. Unless specifically stated for any round permitted items which may be taken into the competition hall and used are: Pens, pencils, erasers, rulers, instruction booklets (optionally annotated with notes regarding puzzle instructions and preparation notes) and blank paper. Drinks and snacks will also be allowed so long as they do not disturb other competitors (e.g. rustling a crisp packet, or a very strong smell).

2.2. It is strictly forbidden to use electronic devices such as music players and headphones of any type or any type of calculator. Use of such equipment may lead to the competitor being disqualified from the competition.

2.3. Any other items brought into the hall must be left in a bag on the floor under your desk, so as not to block the aisles.

Marking and Queries

3.1. Once a round has been, fully marked booklets will be returned to team captains at a specified location.

3.2. In the event of any query after a booklet has been marked and returned to a competitor, the query must be raised through the captain with the organizers. The booklet should be left with the organizers for investigation.

3.3. Some puzzles may be photographed during the marking phase to confirm that no subsequent alteration has been made to the puzzle.

3.4. Team captains are responsible for ensuring that any information given to them relating to the competition is effectively relayed to their team.

3.5. The decision of the tournament director is final.

Breach of Rules

4.1. Any breach of these rules may lead to a competitor or team being disqualified from the competition.

Play-offs

Overview

The top 10 competitors from the individual competition will qualify for the play-offs. This is broken into three rounds. The format of each round is a set of puzzles that were previously encountered in the tournament.

Play-offs competitors will solve as per previous rounds on desks. Each puzzle will be taped centrally toll the desk and will be filmed by a camera for relay to spectators.

The first round will feature competitors who finished in positions 7-10, with staggered starts determined by points' differences, as defined below.

The winner of the first round, 'A', will progress into the second round along with competitors who finished in positions 4-6. 'A' will have a staggered start as determined by the 7th place competitor.

Similarly, the winner of the second round, 'B', will progress into the third and final round, and play against competitors who finished in positions 1-3. 'B' will have a staggered start as determined by the position of the 4th place competitor. This round will determine the podium places for the 10th World Sudoku Championship.

Staggered starts

Given S1; S2; : : : ; S10 are the point scores of the top 10 competitors, and B = 600 / (S1 - S10):

The staggered start, in seconds, for competitor i in the first round is: B(S7 - Si).

The staggered start, in seconds, for competitor i in the second round is: B(S4 - Si).

The staggered start, in seconds, for competitor i in the third round is: B(S1 - Si).

Solving and Submission

When a play-off competitor completes a puzzle, they must raise their hand to indicate to a judge to enter the submission period.

The entire puzzle will then be judged over the next minute. After one minute, if the puzzle is correct, the judge will allow the competitor to begin the next puzzle. If the puzzle is incorrect, the judge will return the incorrect puzzle to the competitor. The competitor can resubmit a returned puzzle at any time, and will again enter the submission period.

Puzzle Rules and Examples

The example puzzles are a true reflection in quantity, grid dimension and format of the corresponding competition puzzles wherever possible. Some irregularly shaped grids may have different geometric layouts. The competition puzzles will appear at a significantly larger size - one per page. The difficulty of an example puzzle is not necessarily reflective of the difficulty of the corresponding competition puzzle.

Puzzle Credits

Authors will remain anonymous individually until the solutions are distributed. The organisers would like to collectively thank Richard Stolk, Deyan Razsadov, Gabriele Simionato, Masatoshi Kengo, Olga Leontyeva, and the World Puzzle Federation for the example and competition puzzles.

ROUND 1: Classics

Individual

Monday 12th October 2015, 09:10 - 09:40

30 minutes - 320 total points

CLASSIC SUDOKU × 12 — 15-35 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.

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

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

ROUND 2: Assorted

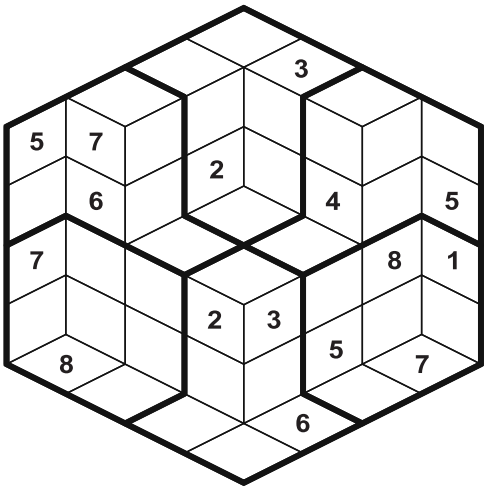
Individual

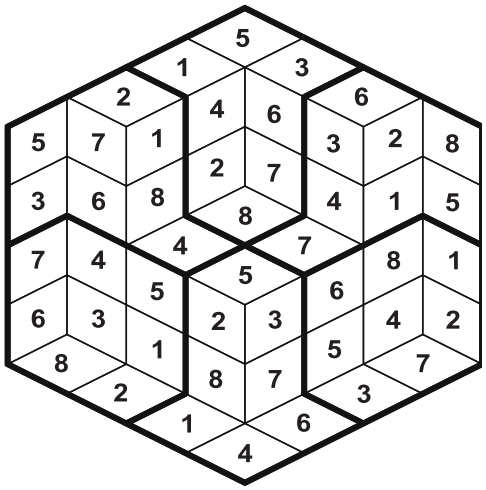
Monday 12th October 2015, 09:50 - 10:40

50 minutes - 580 total points

CUBE SUDOKU — 20 points

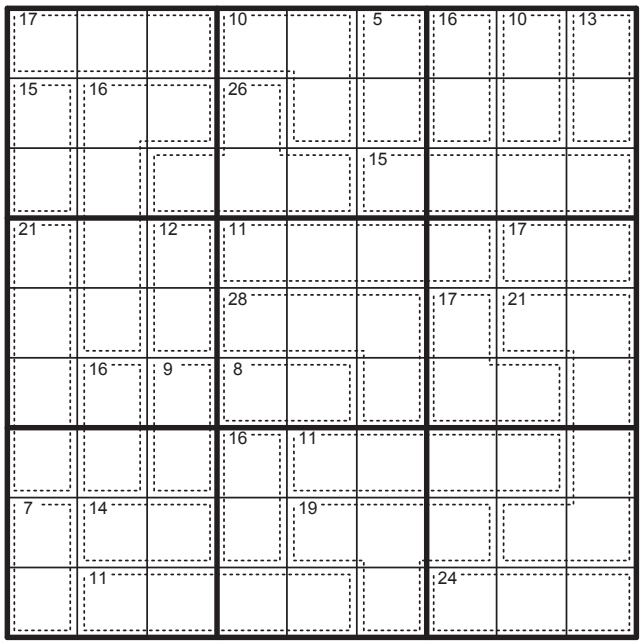
Fill in the grid with digits 1-8 so that the digits are different in all selected areas and in all lines going through the rhombuses parallel their edges.





KILLER SUDOKU — 30 points

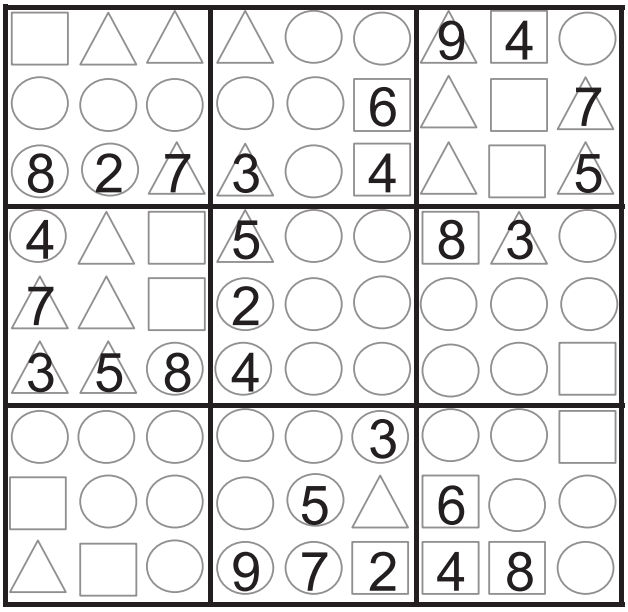
Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The numbers placed in each marked cage must sum to the total given in its top-left. Numbers must not repeat in cages.

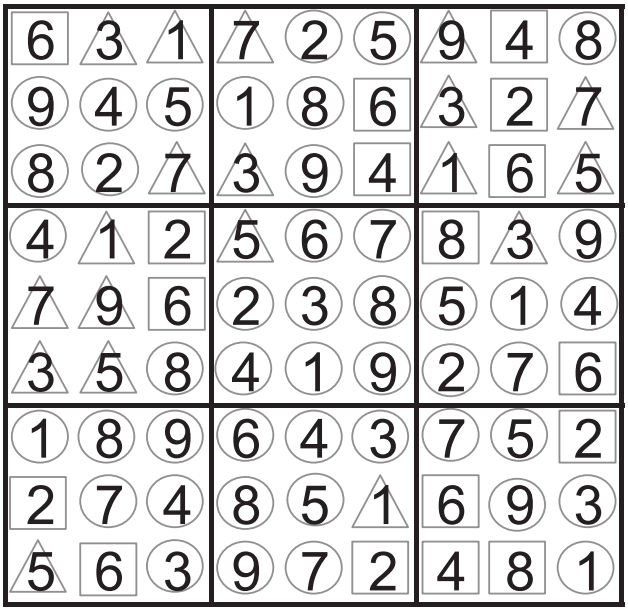


17 2	8	7	10 1	4	5 3	16 9	10 6	13 5
15 9	16 3	1	26 6	5	2	7	4	8
6	4	5	8	7	15 9	3	1	2
21 7	6	12 4	11 3	1	5	2	17 8	9
1	2	8	28 4	9	7	17 6	21 5	3
5	16 9	9 3	8 2	6	8	4	7	1
8	7	6	16 9	11 2	1	5	3	4
7 3	14 5	9	7	19 8	4	1	2	6
4	11 1	2	5	3	6	24 8	9	7

ODD/EVEN SUDOKU — 40 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
A cell with a triangle must contain an odd digit, whereas a cell with a square must contain an even digit. A cell with a circle can contain either odd or even.





NO TOUCH SUDOKU — 40 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Numbers placed in cells that meet diagonally at a point must be different.

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

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

IRREGULAR SUDOKU — 55 points

Place a number from 1-9 in each empty cell in the grid such that each row, column, and outlined region contains each number exactly once.

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

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

RENBAN GROUPS SUDOKU — 60 points

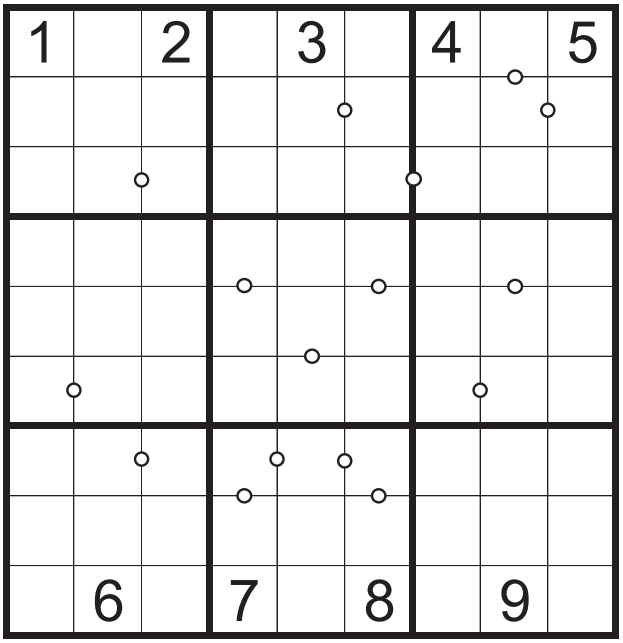
Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The numbers placed in each shaded region must form a consecutive, non-repeating set.

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

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

CONSECUTIVE SUDOKU — 50 points

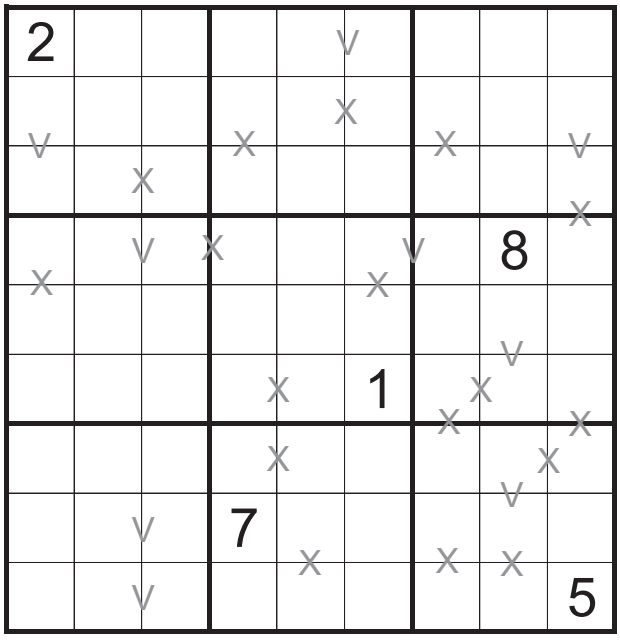
Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Adjacent cells containing consecutive numbers are marked. Adjacent cells with no marking must not contain consecutive numbers.



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

XV SUDOKU — 20 points

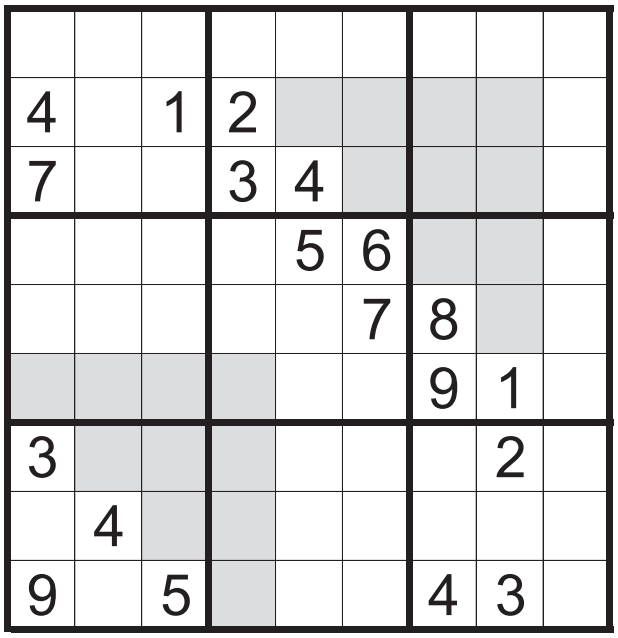
Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Adjacent cells containing numbers summing to 5 are marked with a "V"; adjacent cells containing numbers summing to 10 are marked with an "X". Adjacent cells with no marking must not contain numbers summing to 5 or 10.



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

CLONE SUDOKU — 45 points

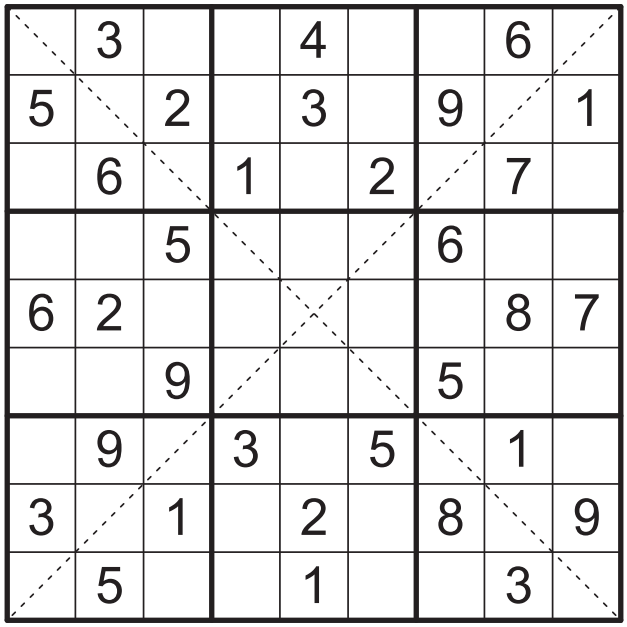
Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
In each shaded region of the same shape, the numbers placed in corresponding cells of the regions must be the same.



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

DIAGONAL SUDOKU — 75 points

Place a number from 1-9 in each empty cell in the grid such that each row, column, both diagonals, and marked 3×3 box contains each number exactly once.



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

1234 SUDOKU — 95 points

Place one 1, two 2s, three 3s and four 4s in every row, column, and outlined 10-cell region. Adjacent cells must contain different digits.

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

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

CLASSIC SUDOKU — 25+25 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.

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

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

ROUND 3: Assorted

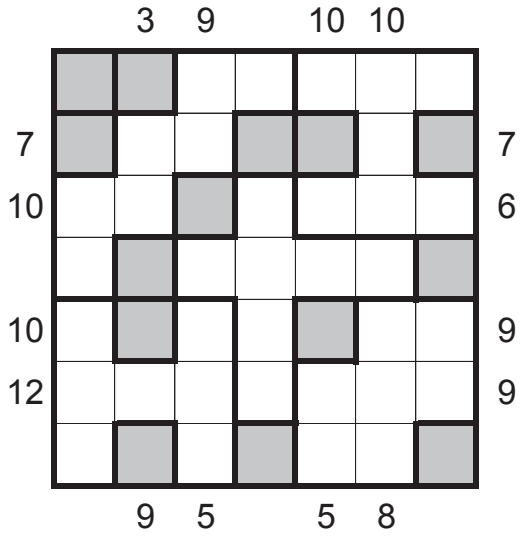
Individual

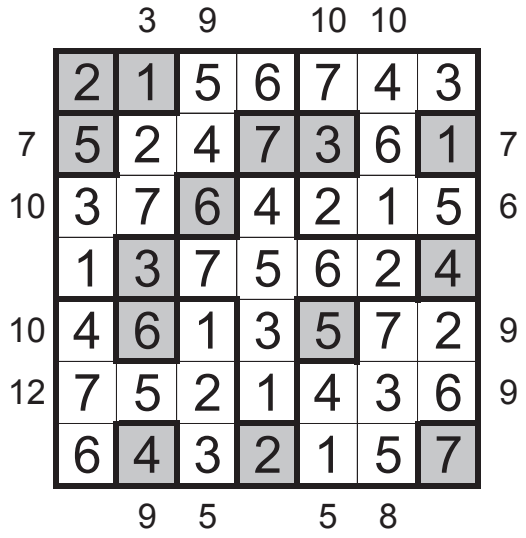
Monday 12th October 2015, 11:00 - 12:00

60 minutes - 640 total points

EDGE SUMS SUDOKU — 30 points

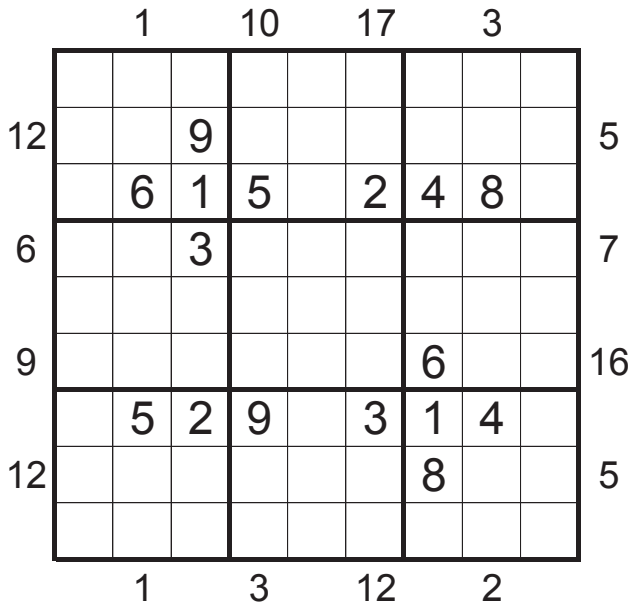
Place the digits from 1 to 7 in every row, column, bold outlined area and twice in the grey cells. The clues outside the grid are the sum of the first two digits seen from that side.

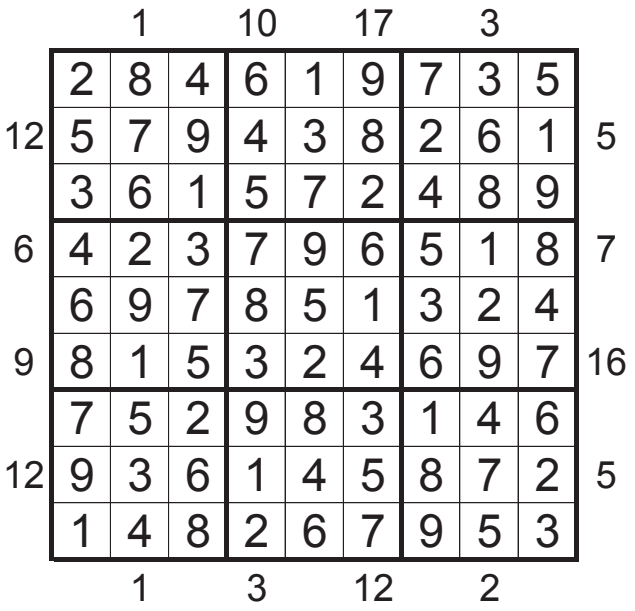




SUM OR DIFFERENCE SUDOKU — 40 points

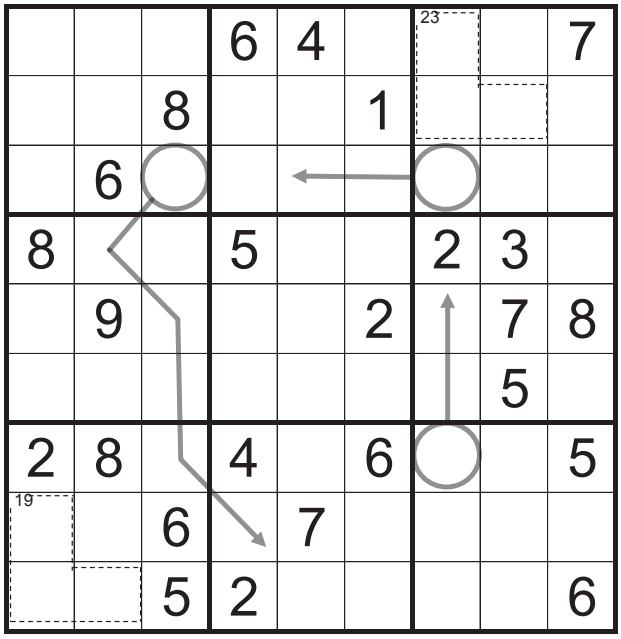
Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The clue outside the grid indicates either sum or difference of the two nearest digits in the corresponding row/column.

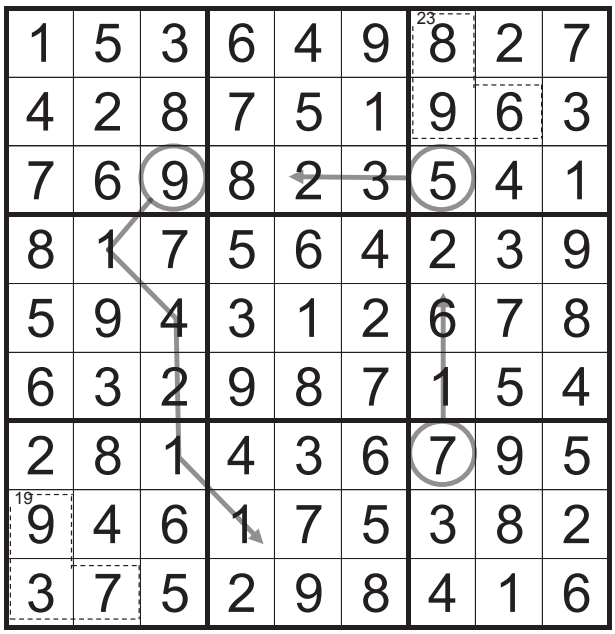




ARROW KILLER SUDOKU — 30 points

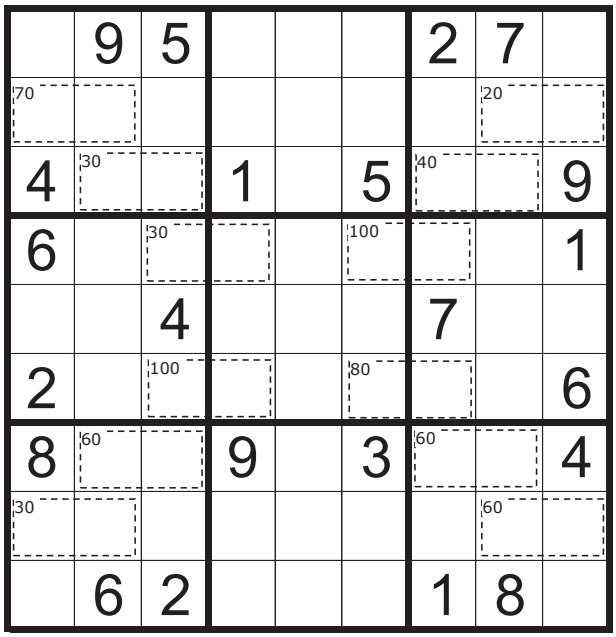
Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The numbers placed in each marked cage must sum to the total given in its top-left. Numbers must not repeat in cages. The number placed in a cell with a circle must be the sum of the numbers placed in cells the adjoining arrow passes through. Numbers may repeat on arrows.

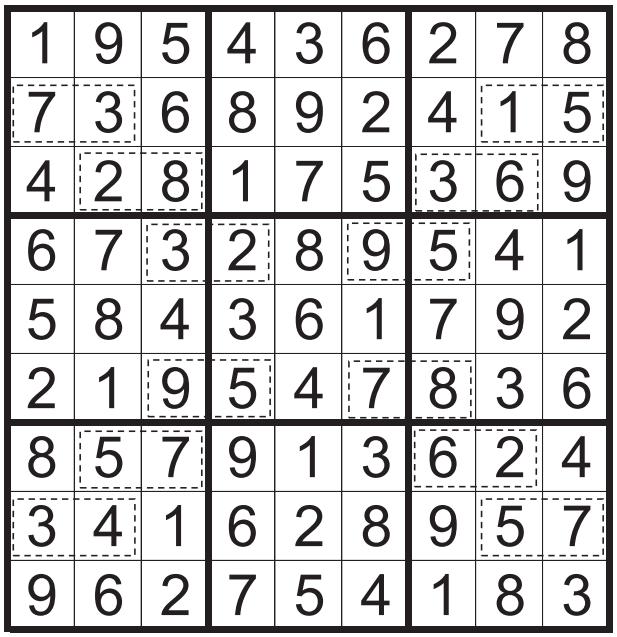




ROUND OFF SUDOKU — 40 points

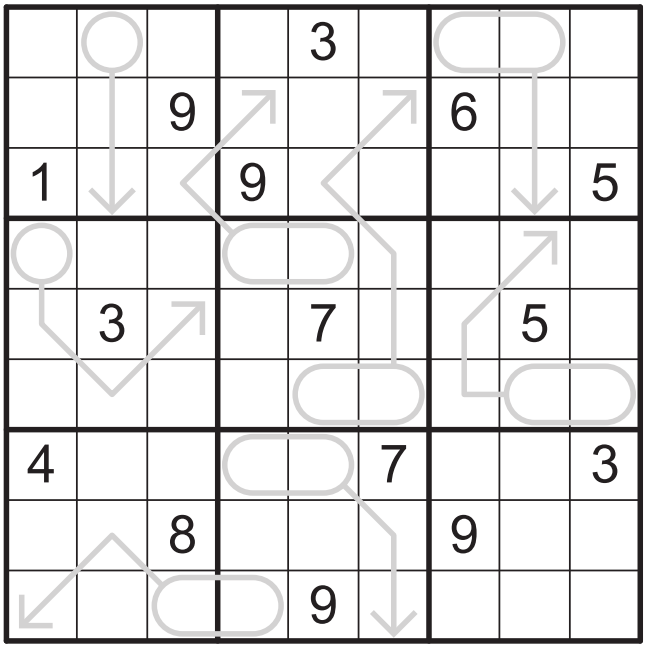
Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Each cage clue indicates the value of rounding off the two-digit number within that cage to the nearest multiple of 10. Ending digits 1-4 are rounded down, 5-9 are rounded up.



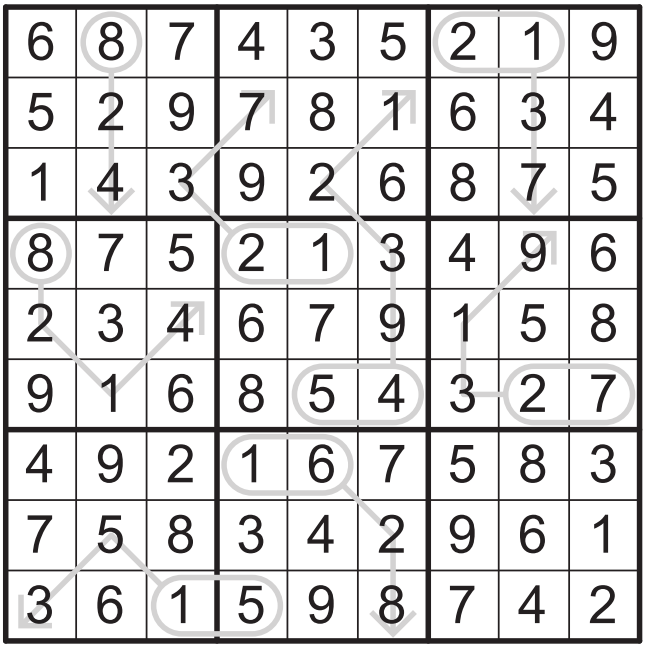


PRODUCT ARROW SUDOKU — 80 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
There some arrows in the grid. The encircled 1, 2, or more digits form a number that must be equal to the product of the digits that appear along the path of the arrow. Digits can repeat within an arrow shape.



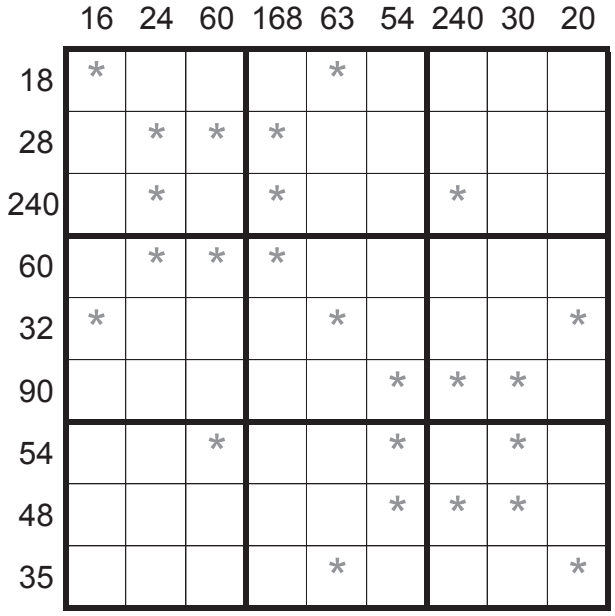
				3				
		9				6		
1			9					5
	3			7			5	
4					7			3
		8				9		
				9				



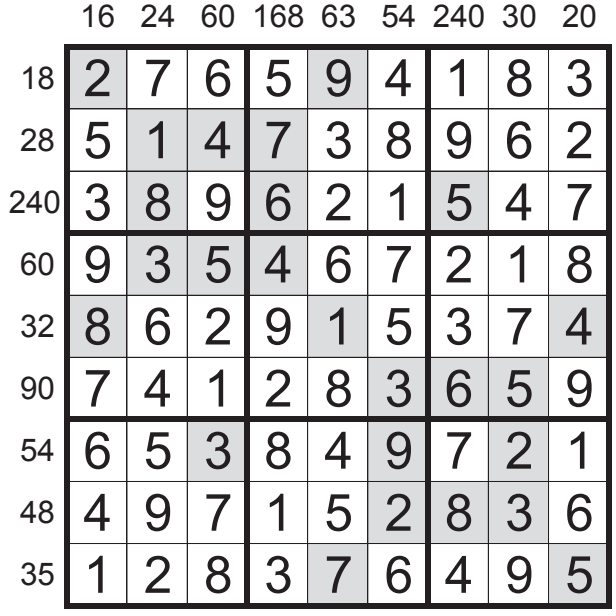
6	8	7	4	3	5	2	1	9
5	2	9	7	8	1	6	3	4
1	4	3	9	2	6	8	7	5
8	7	5	2	1	3	4	9	6
2	3	4	6	7	9	1	5	8
9	1	6	8	5	4	3	2	7
4	9	2	1	6	7	5	8	3
7	5	8	3	4	2	9	6	1
3	6	1	5	9	8	7	4	2

STAR PRODUCTS SUDOKU — 45 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The clues outside the grid indicate the product of the numbers to be placed in cells containing stars.



	16	24	60	168	63	54	240	30	20
18	*				*				
28		*	*	*					
240		*		*			*		
60		*	*	*					
32	*				*				*
90						*	*	*	
54			*			*		*	
48						*	*	*	
35					*				*



	16	24	60	168	63	54	240	30	20
18	2	7	6	5	9	4	1	8	3
28	5	1	4	7	3	8	9	6	2
240	3	8	9	6	2	1	5	4	7
60	9	3	5	4	6	7	2	1	8
32	8	6	2	9	1	5	3	7	4
90	7	4	1	2	8	3	6	5	9
54	6	5	3	8	4	9	7	2	1
48	4	9	7	1	5	2	8	3	6
35	1	2	8	3	7	6	4	9	5

1 ~ 9 SUDOKU — 50 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The clues outside the grid are the sum of the digit(s) placed between 1 and 9 in the corresponding row or column.

	19	10	7	11	14	33	0	23	22
15		3							
7	2		8				7		
7		7				3		6	
9							5		
16									
13			6						
28		1		8				2	
27			2				4		8
2								7	

	19	10	7	11	14	33	0	23	22
15	6	3	4	7	9	2	8	5	1
7	2	5	8	4	6	1	7	9	3
7	1	7	9	5	8	3	2	6	4
9	3	9	7	2	1	4	5	8	6
16	5	8	1	6	3	7	9	4	2
13	4	2	6	9	5	8	1	3	7
28	7	1	5	8	4	6	3	2	9
27	9	6	2	3	7	5	4	1	8
2	8	4	3	1	2	9	6	7	5

X-SUMS SUDOKU — 40 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The clues outside the grid indicate the sum of the first X numbers placed in the corresponding direction, where X is equal to the first number placed in that direction.

	7	27			40	21		31	9	
8										9
18										27
16										
15										42
										31
1										39
33										15
	34	45		35	5			12	35	

	7	27			40	21		31	9	
8	2	6	9	8	7	4	1	5	3	9
18	5	3	7	2	1	9	8	6	4	27
16	4	8	1	3	6	5	7	9	2	
	9	2	4	6	8	3	5	7	1	
15	3	7	5	1	9	2	6	4	8	42
	8	1	6	5	4	7	3	2	9	
	7	4	3	9	5	8	2	1	6	31
1	1	5	2	4	3	6	9	8	7	39
33	6	9	8	7	2	1	4	3	5	15
	34	45		35	5			12	35	

OUTSIDE SUMS SUDOKU — 75 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The clues outside the grid are the sum of the first, second, and third digit seen from that side.

	15	17	13	18	8	19	18	6	21	
18										14
9										20
18			3				4			11
20										12
18					5					17
7										16
13			4				5			20
17										14
15										11
	13	15	17	12	21	12	14	21	10	

	15	17	13	18	8	19	18	6	21	
18	5	4	9	2	3	8	6	1	7	14
9	2	6	1	7	4	5	8	3	9	20
18	8	7	3	9	1	6	4	2	5	11
20	6	9	5	8	2	3	1	7	4	12
18	7	3	8	1	5	4	9	6	2	17
7	4	1	2	6	9	7	3	5	8	16
13	1	8	4	3	7	2	5	9	6	20
17	9	2	6	5	8	1	7	4	3	14
15	3	5	7	4	6	9	2	8	1	11
	13	15	17	12	21	12	14	21	10	

INNER FRAME SUDOKU — 60 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The clues outside the grid are the sum of the second, third and fourth digit seen from that side.

	12	7	13	15	15	20	10	23	20	
18										15
6										22
15										18
14										13
17										10
19										12
20										10
13										18
13										17
	18	24	21	7	17	11	16	13	8	

	12	7	13	15	15	20	10	23	20	
18	9	5	7	6	1	8	4	3	2	15
6	8	1	2	3	4	7	6	9	5	22
15	3	4	6	5	2	9	1	8	7	18
14	1	2	5	7	9	4	3	6	8	13
17	4	6	3	8	5	1	7	2	9	10
19	7	9	8	2	3	6	5	1	4	12
20	6	7	9	4	8	3	2	5	1	10
13	5	8	4	1	6	2	9	7	3	18
13	2	3	1	9	7	5	8	4	6	17
	18	24	21	7	17	11	16	13	8	

MAX TRIPLET SUDOKU — 100 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The clues outside the grid indicate the maximum sum of any three consecutively placed numbers in the corresponding direction. This sum must be achieved at least once in that direction.

	18	21			19	17			23
	7			9					5
			9					3	
18		8					7		
	3					4			
23					1				
18				2					1
21			8					5	
		6					2		
20	9					2			3

	18	21			19	17			23
	7	3	1	9	2	8	4	6	5
	6	2	9	7	4	5	1	3	8
18	5	8	4	1	6	3	7	2	9
	3	1	2	5	9	4	8	7	6
23	8	9	6	3	1	7	5	4	2
18	4	5	7	2	8	6	3	9	1
21	2	7	8	6	3	1	9	5	4
	1	6	3	4	5	9	2	8	7
20	9	4	5	8	7	2	6	1	3

CLASSIC SUDOKU — 25+25 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.

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

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

ROUND 4: Straight

Individual

Monday 12th October 2015, 12:10 - 12:40

30 minutes - 200 total points

Bonus: 5 points/minute
Partial scoring possible

STRAIGHT SUDOKU — 200 points

Place A, 2, 3, 4, 5, 6, 7, 8, 9, 10, J, Q, K in each empty cell so that each number appears exactly once in every row and column.
Additionally, each outlined region contains a set of consecutive numbers, with no constraint on the order of the numbers.

Partial scoring rules:
If there is a mistake in any cell: the score is 0 points
If some cells are filled in and no mistakes: 200 - <number_of_empty_cells> * 2. If negative, then 0.

7	A	2		3		6		10		Q	J	K
6			Q		2		4		5			J
8			K			2			6			Q
	5	7	8		9		Q		4	A	2	
J				9	10	K	A	5				7
	2		3	7				8	J		9	
K		10		4		Q		A		6		5
	3		9	Q				6	A		5	
9				A	Q	5	J	2				8
	J	Q	10		8		6		2	5	7	
5			A			9			8			2
4			5		6		7		10			A
2	4	5		8		A		J		10	Q	3

7	A	2	4	3	5	6	8	10	9	Q	J	K
6	K	9	Q	10	2	3	4	7	5	8	A	J
8	7	J	K	5	A	2	3	4	6	9	10	Q
3	5	7	8	6	9	J	Q	K	4	A	2	10
J	8	6	2	9	10	K	A	5	Q	3	4	7
Q	2	A	3	7	4	10	5	8	J	K	9	6
K	9	10	J	4	3	Q	2	A	7	6	8	5
10	3	8	9	Q	J	7	K	6	A	2	5	4
9	10	K	7	A	Q	5	J	2	3	4	6	8
A	J	Q	10	K	8	4	6	3	2	5	7	9
5	6	4	A	J	K	9	10	Q	8	7	3	2
4	Q	3	5	2	6	8	7	9	10	J	K	A
2	4	5	6	8	7	A	9	J	K	10	Q	3

ROUND 5: Assorted

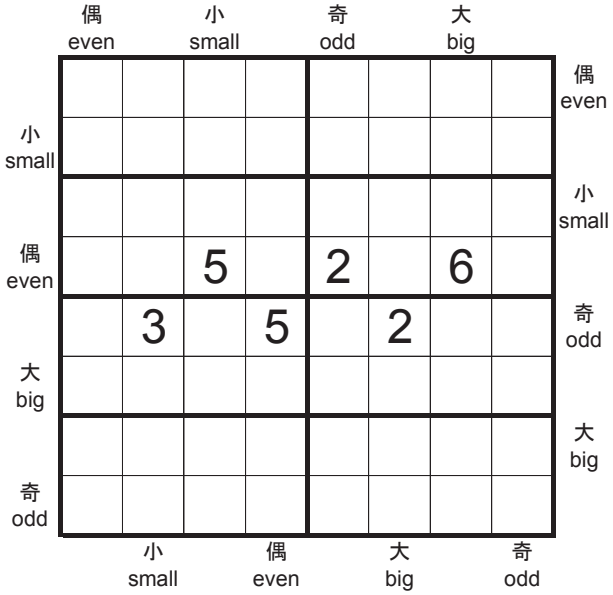
Individual

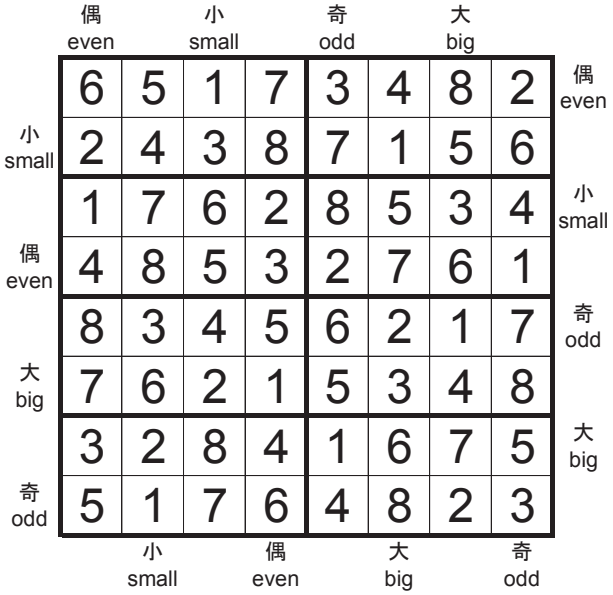
Monday 12th October 2015, 14:30 - 15:50

80 minutes - 880 total points

ODD-EVEN-BIG-SMALL SUDOKU — 35 points

Place a digit from 1 to 8 in each empty cell so that each digit appears exactly once in each row, column and outlined region.
The clues outside the grid indicate that the first two digits along that row or column are either odd (1,3,5,7), even (2,4,6,8), big (5,6,7,8), or small (1,2,3,4).





ANTI-KNIGHT SUDOKU — 30 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Numbers placed in cells related by a chess Knight's move must be different.

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

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

MANY ORDERS SUDOKU — 40 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
All the neighboring 5 cells of the cell marked with 'E' must contain an even digit (2,4,6,8)
All the neighboring 8 cells of the cell marked with 'O' must contain an odd digit (1,3,5,7,9)
All the neighboring 5 cells of the cell marked with '÷3' must contain a multiple of 3 (3,6,9)
All the neighboring 8 cells of the cell marked with '≠' must contain different digits

2	4		7					
9								
		≠		5		4		
4								E
		7		3		5		
÷3								7
		9		2		O		
								3
					4		6	9

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

QUAD MAX DIFFERENCE SUDOKU — 45 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The clues marked at the intersection of a 2×2 block of cells indicate the maximum difference between numbers placed in these blocks. This difference must be realized.

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

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

ANTI-DIAGONAL SUDOKU — 45 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Each marked diagonal must contain exactly three different numbers.

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

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

ELIMINATE SUDOKU — 50 points

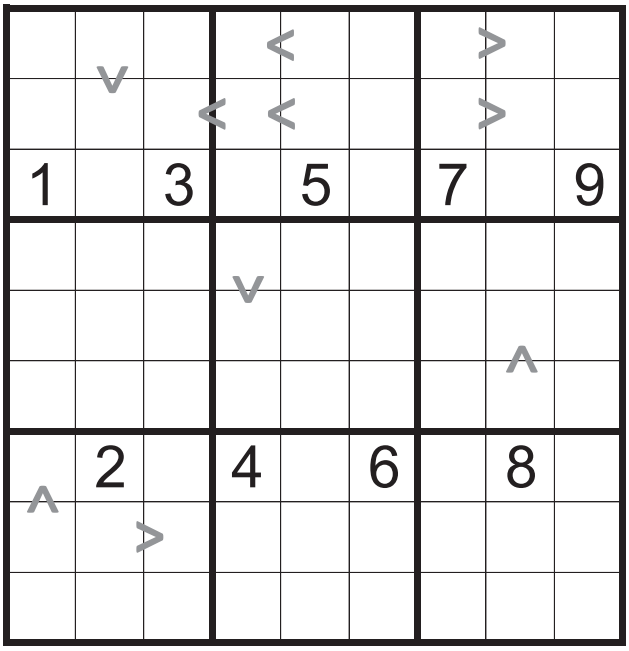
Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Numbers placed in cells with arrows must not repeat in the corresponding direction.

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

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

GREATER THAN CONSECUTIVE SUDOKU — 60 points

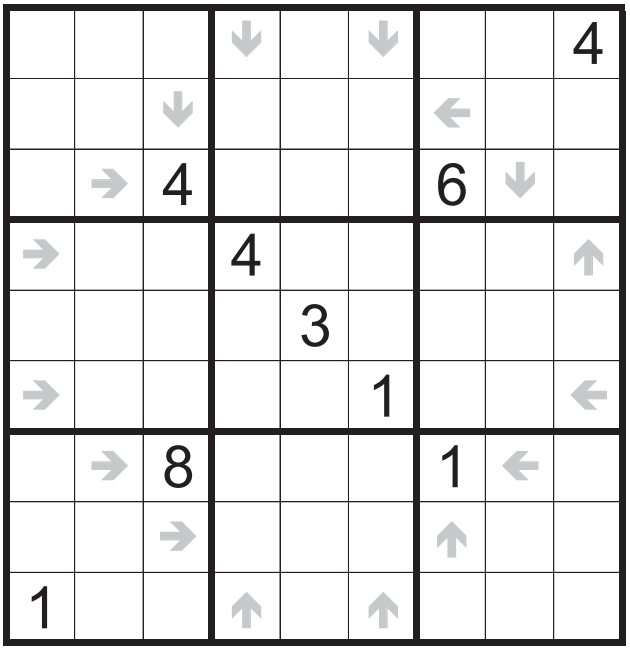
Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
In all cases where the difference between two neighbouring digits is 1, there is a greater or less sign between
those digits. Digits must be placed in accordance with the signs.



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

SEARCH 9 SUDOKU — 50 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Some arrows are marked in the grid. If a number n is placed in a cell containing an arrow, then a 9 must be placed in the Nth cell in the corresponding direction.



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

FORTRESS SUDOKU — 40 points

Place a number from 1-9 in each empty cell in the grid such that each row, column, and outlined region contains each number exactly once.
Each digit in a shaded cell must be larger than any digit in an unshaded cell that it shares an edge with.

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

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

BETWEEN SUDOKU — 50 points

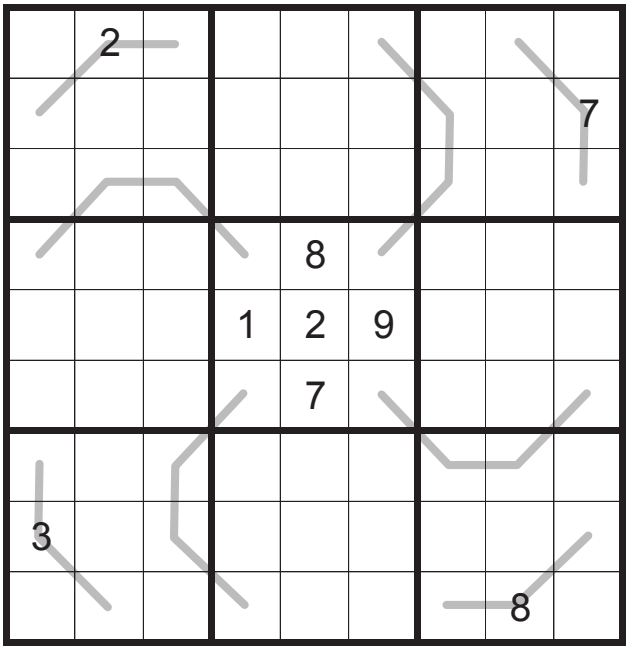
Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The values of the numbers placed along marked lines must be strictly between the two numbers placed in the corresponding circles.

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

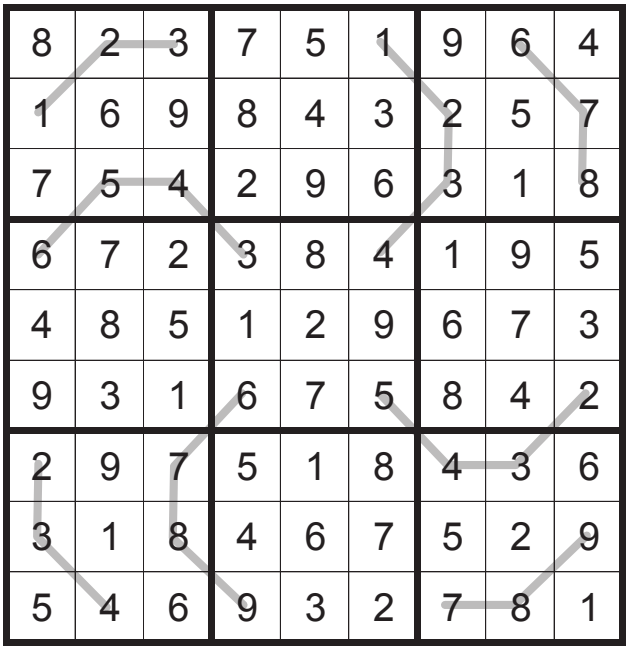
8	1	5	6	2	4	7	9	3
7	3	9	5	1	8	2	6	4
4	2	6	7	3	9	8	1	5
2	5	4	1	9	3	6	7	8
3	9	8	2	6	7	4	5	1
6	7	1	4	8	5	9	3	2
5	4	2	9	7	1	3	8	6
9	6	3	8	5	2	1	4	7
1	8	7	3	4	6	5	2	9

CONSECUTIVE SEQUENCES SUDOKU 55 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Numbers placed along marked sequences must form an arithmetic progression whose common difference is 1.



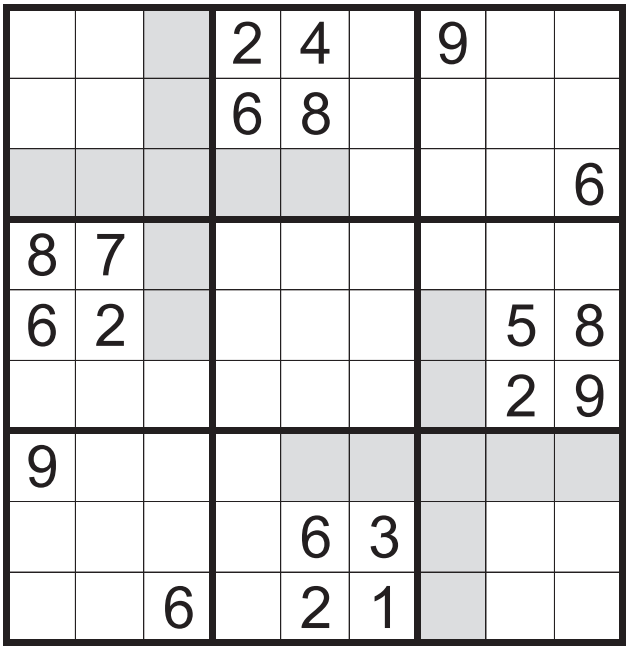
	2							
								7
				8				
			1	2	9			
				7				
3								
							8	



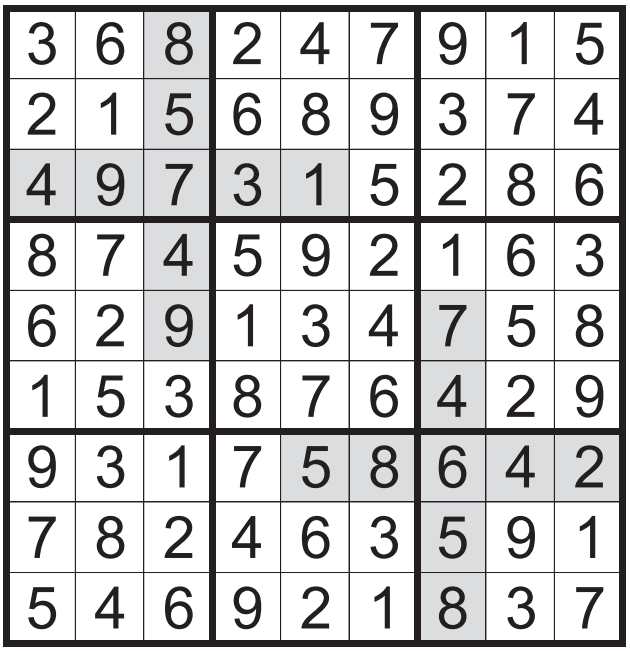
8	2	3	7	5	1	9	6	4
1	6	9	8	4	3	2	5	7
7	5	4	2	9	6	3	1	8
6	7	2	3	8	4	1	9	5
4	8	5	1	2	9	6	7	3
9	3	1	6	7	5	8	4	2
2	9	7	5	1	8	4	3	6
3	1	8	4	6	7	5	2	9
5	4	6	9	3	2	7	8	1

CONSECUTIVE CLONE SUDOKU 60 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
In each shaded region of the same shape, the numbers placed in corresponding cells of the regions must be consecutive (differ by 1).



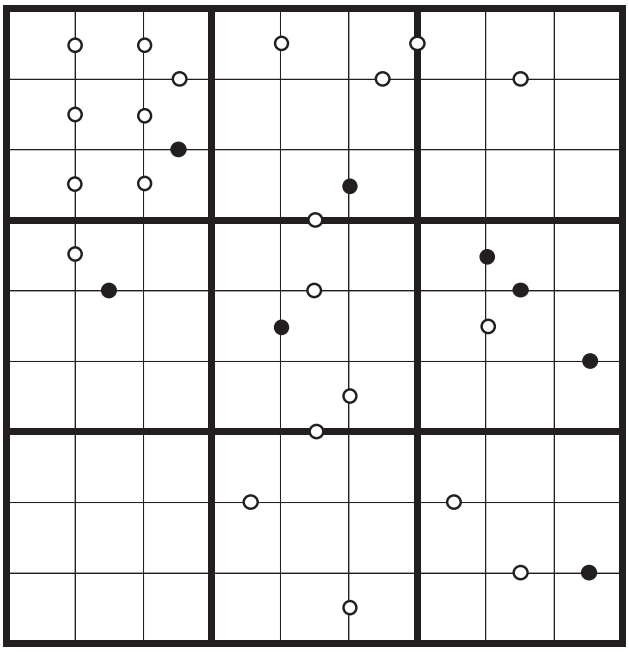
			2	4		9		
			6	8				
								6
8	7							
6	2						5	8
							2	9
9								
				6	3			
		6		2	1			



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

KROPKI SUDOKU — 70 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Adjacent cells containing consecutive numbers are marked with a white dot. Adjacent cells containing numbers whose ratio is 2 are marked with a black dot. Adjacent cells with no marking must not contain numbers that are neither consecutive nor whose ratio is 2. Adjacent cells containing 1 and 2 can be marked by a dot of either colour.



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

EVEN SANDWICH SUDOKU — 50 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The clues outside the grid indicate all numbers in the corresponding direction whose two neighboring cells in that direction both contain even numbers.

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

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

NEXT TO 9 SUDOKU — 60 points

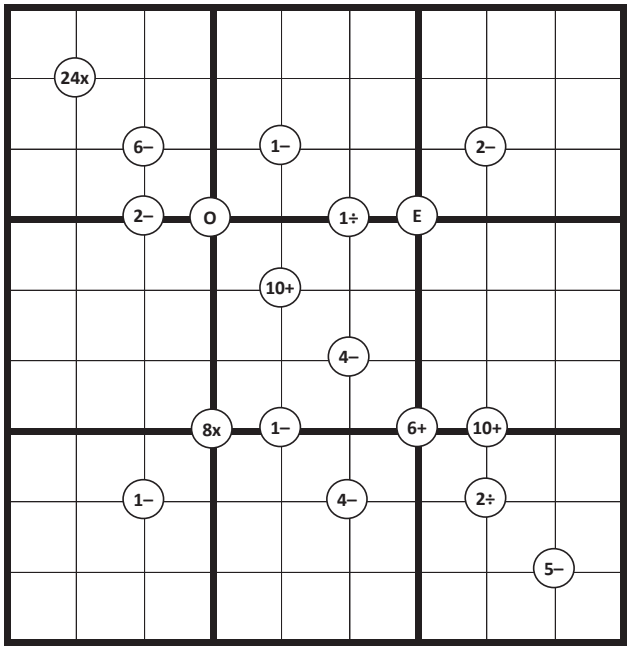
Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The clues outside the grid indicate the numbers to be placed in the cells before and after the cell containing 9 in the corresponding direction.

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

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

MATHRAX SUDOKU — 90 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Some intersections of the grid lines are marked by a number and an operator in a circle or a letter in a circle. A number clue is the value of the operation applied to both pairs of diagonally opposite cells. An `O` indicates all four surrounding digits are odd; an `E` indicates all four surrounding digits are even.



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

CLASSIC SUDOKU 25+25 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.

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

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

ROUND 6: Assorted

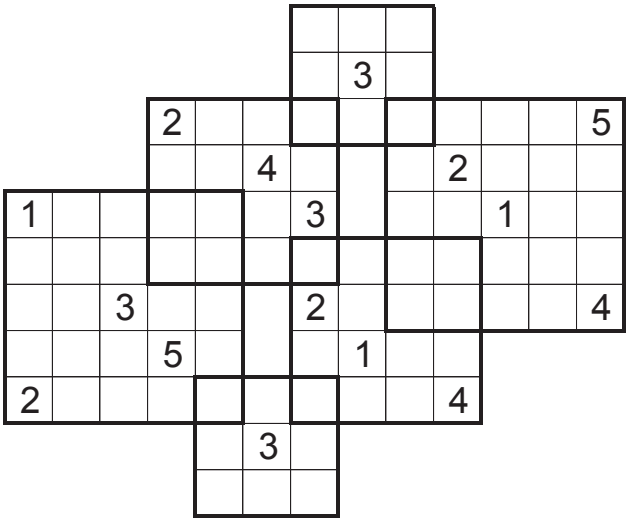
Individual

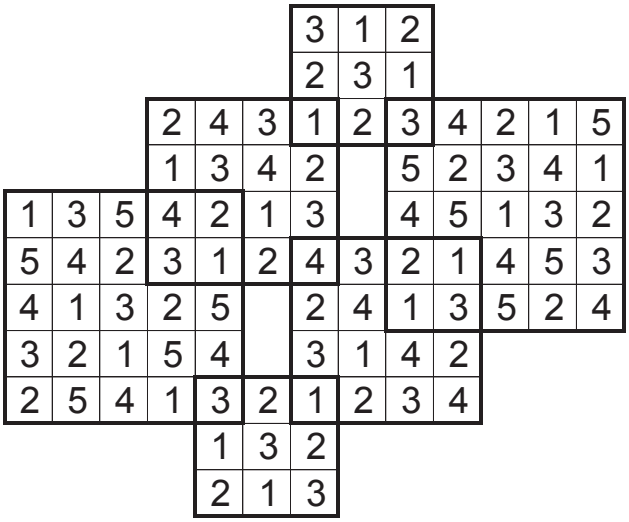
Monday 12th October 2015, 16:10 - 17:00

50 minutes - 550 total points

OVERLAPPING SUDOKU — 20 points

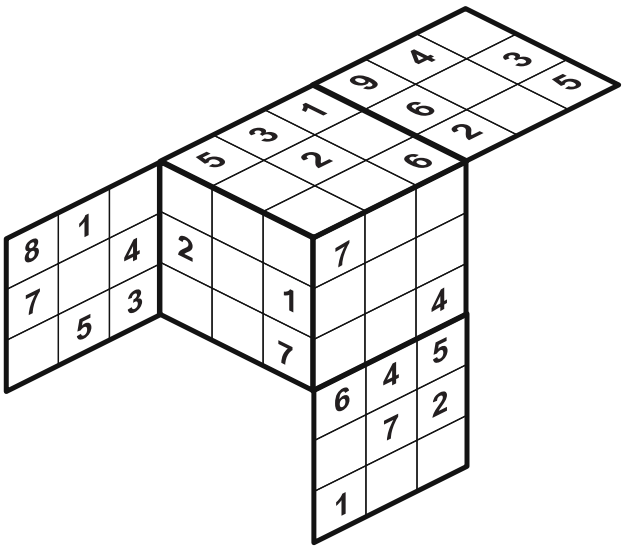
In each grid, place a digit from 1 to N (N is the grid size) in each empty cell so that each digit appears exactly once in every row and column. Also some areas are overlapped.

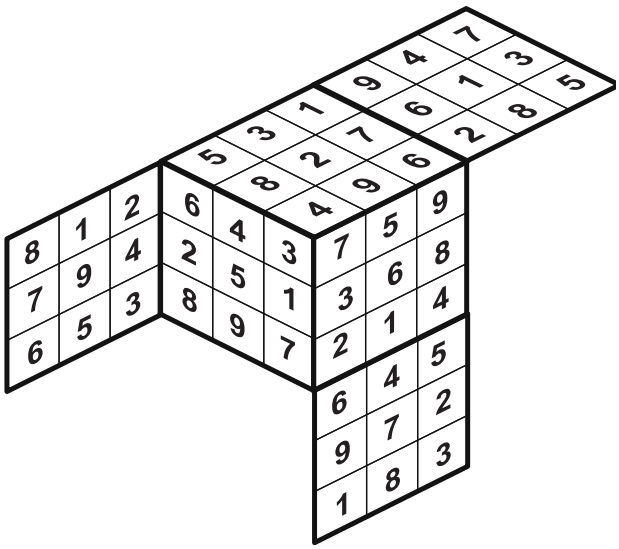




TRIDOKU — 15 points

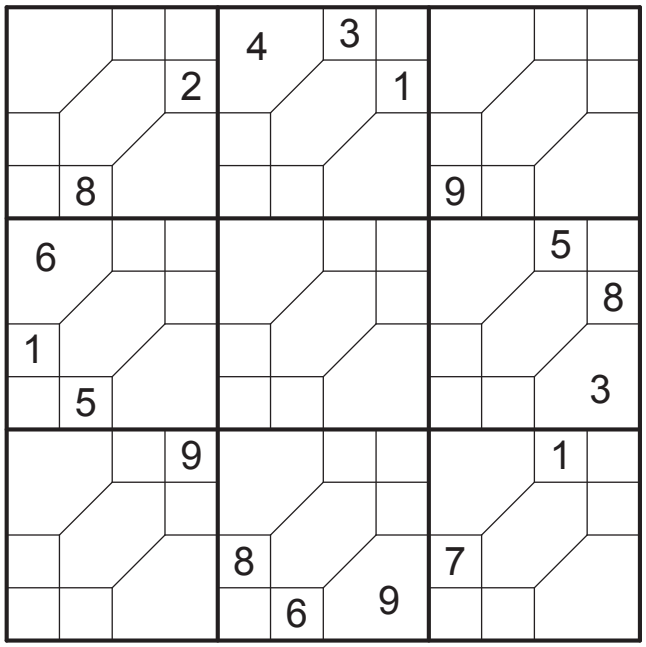
Fill in the grid with digits 1-9 so that the digits are different in all selected areas and in all lines going through the rhombuses parallel their edges.

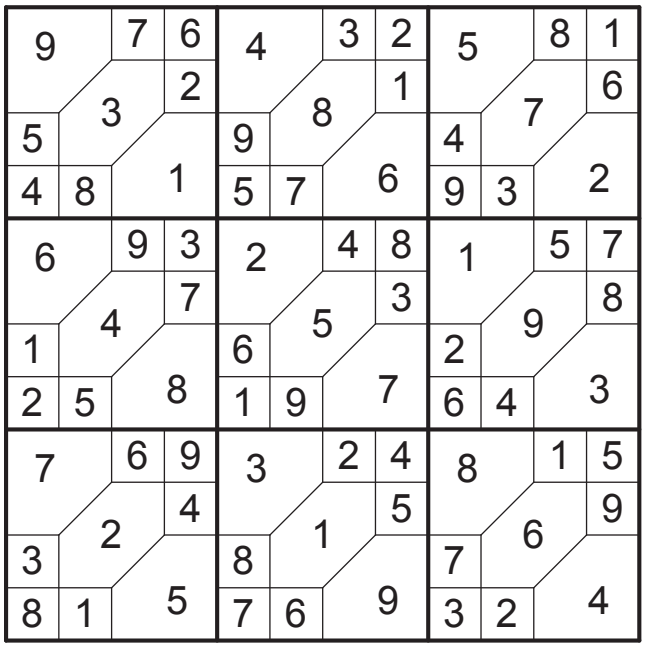




PARQUET SUDOKU 30 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Some cells belong to multiple rows and/or columns.





FREE BLOCK SUDOKU 35 points

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in every row and column. Digits cannot repeat inside an outlined region.

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

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

ROMAN NUMERAL SUDOKU — 50 points

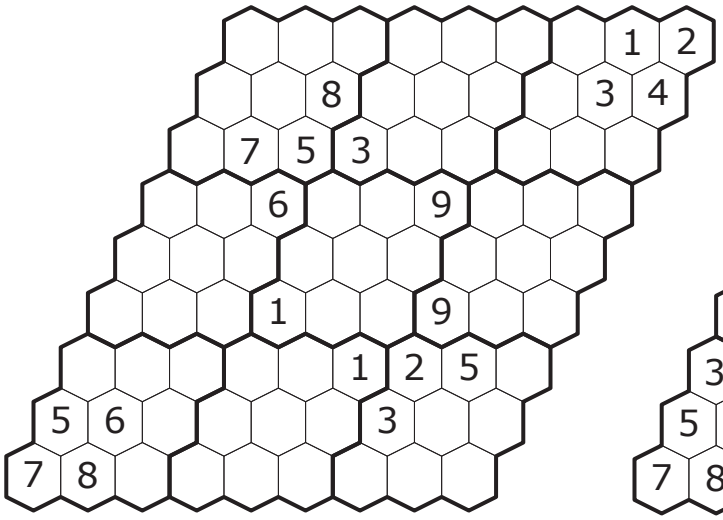
Place a number from 1-9 in each empty cell in the grid such that each row, column, and outlined region contains each number exactly once.
Instead of clues for the digits 1 to 9, this sudoku gives clues for Roman numerals I, II, III, IV, V, VI, VII, VIII, IX. Not all clues are complete numbers; some of them may be just part of the Roman numeral.

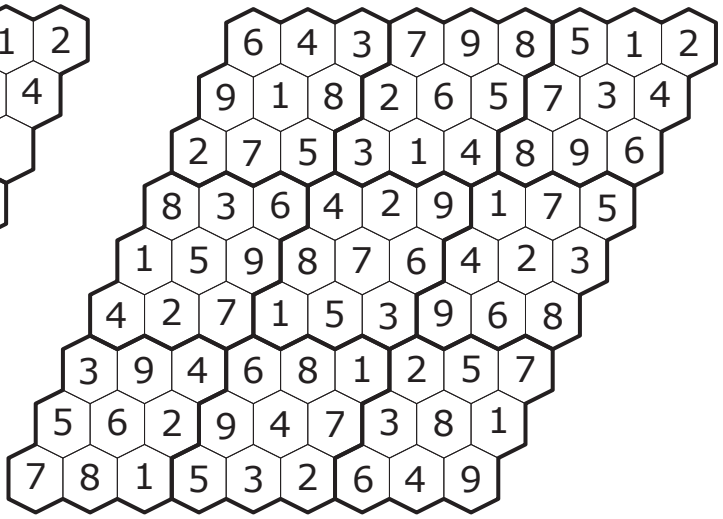
V	VI		V	V		III		II
	VI		VI	I	III		VII	I
		X		VI				I
	II		I	V	II		VII	
	I		VI	V		V		VI
	V	II			IV			
	V		VII			V	V	V
	VIII		I	IX			V	
			V	II		II		VII

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

HEX SUDOKU — 70 points

Place a number from 1-9 in each empty cell in the grid such that each generalised row and marked 3×3 region contains each number at most once. Note that generalised rows pass through
parallel edges of adjacent cells in three possible directions.

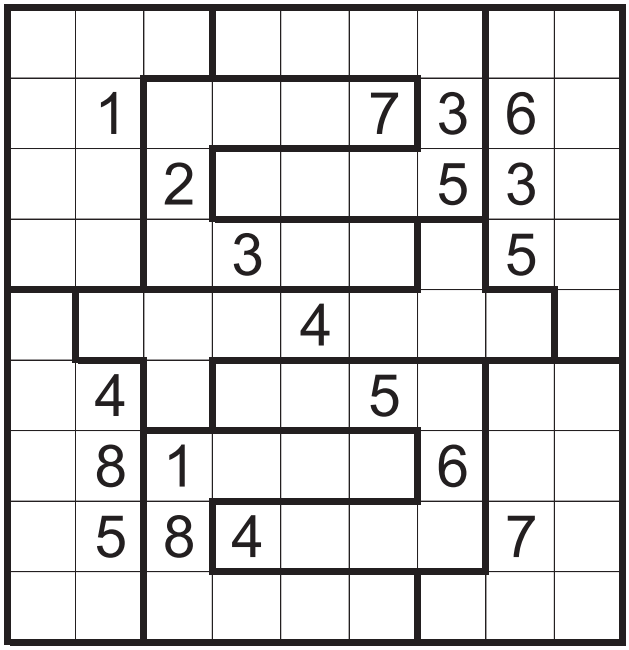




IRREGULAR TWINS SUDOKU 65 points

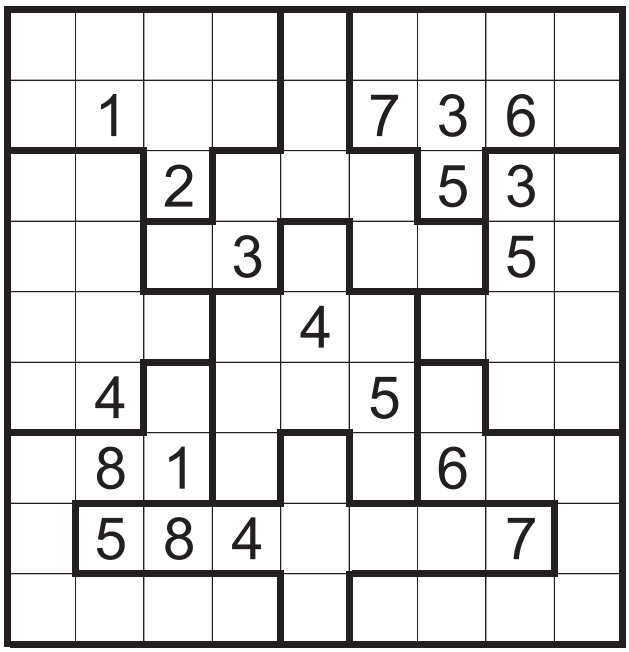
Place a number from 1-9 in each empty cell in the grid such that each row, column and outlined region contains each number exactly once.
Both grids have the same solution.

NB! You must fill in completely at least one of the grids in order your solution to be accepted.



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

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

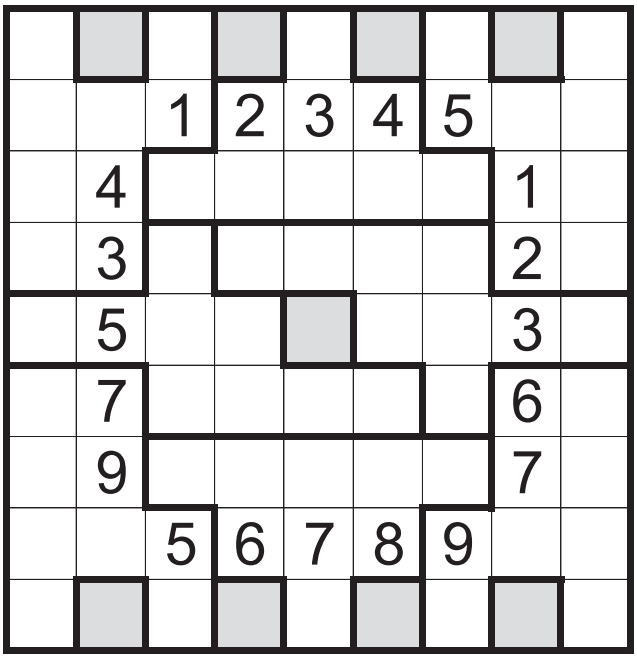


	1				7	3	6	
		2				5	3	
			3				5	
				4				
	4				5			
	8	1				6		
	5	8	4				7	

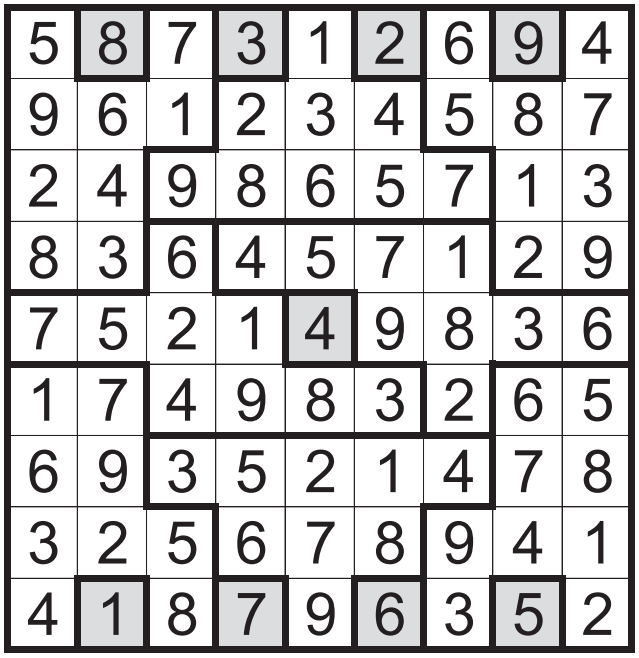
5	3	7	6	2	8	4	9	1
4	1	9	8	5	7	3	6	2
8	6	2	1	7	9	5	3	4
9	2	6	3	1	4	8	5	7
3	7	5	2	4	6	9	1	8
1	4	3	9	8	5	7	2	6
2	8	1	7	9	3	6	4	5
6	5	8	4	3	1	2	7	9
7	9	4	5	6	2	1	8	3

SCATTERED SUDOKU — 60 points

Place digits from 1 to 9 in every row, column, bold outlined area and the 9 grey cells.



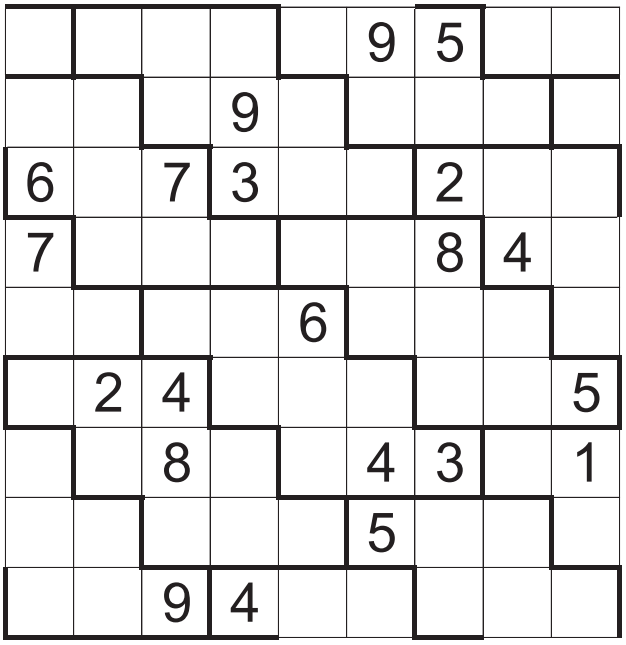
		1	2	3	4	5		
	4						1	
	3						2	
	5						3	
	7						6	
	9						7	
		5	6	7	8	9		



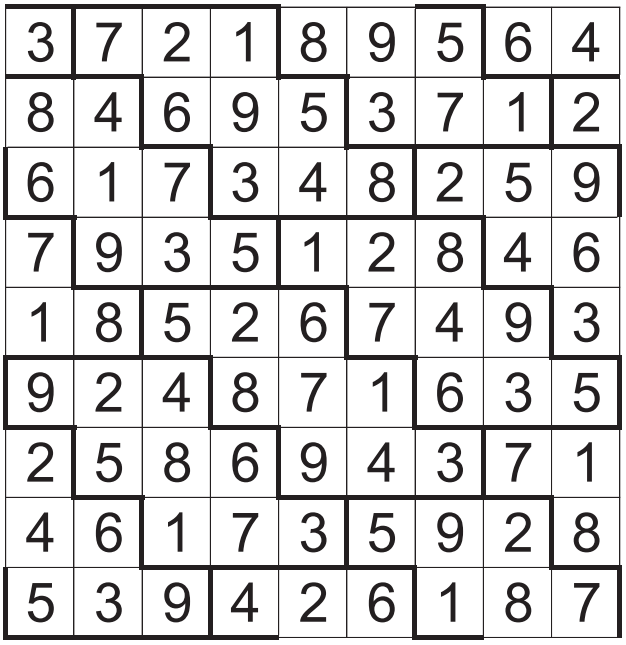
5	8	7	3	1	2	6	9	4
9	6	1	2	3	4	5	8	7
2	4	9	8	6	5	7	1	3
8	3	6	4	5	7	1	2	9
7	5	2	1	4	9	8	3	6
1	7	4	9	8	3	2	6	5
6	9	3	5	2	1	4	7	8
3	2	5	6	7	8	9	4	1
4	1	8	7	9	6	3	5	2

TOROIDAL SUDOKU — 95 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and outlines region contains each number exactly once.
Some marked regions wrap across the grid from left to right and/or from top to bottom.



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



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

MISSING DIGIT SUDOKU — 60 points

Place a digit from 0 to 9 in each empty cell. Digits in a row/column/region must be different. The clues outside the grid indicate the digit that is not included in the corresponding row/column.

	8	4		3	0	8		2	7
8			7	9		1	0		
7									3
		0			5	2	6		9
0		6			1	9			5
4		3			8			9	
2	9			6	4			0	
	1		0	8	2			5	
2	5								
9			4	0		5	8		

	8	4		3	0	8		2	7
8	6	5	7	9	3	1	0	4	2
7	2	9	1	4	6	0	5	8	3
	4	0	3	7	5	2	6	1	9
0	7	6	8	2	1	9	4	3	5
4	0	3	2	5	8	7	1	9	6
2	9	1	5	6	4	3	7	0	8
	1	7	0	8	2	6	9	5	4
2	5	8	6	1	9	4	3	7	0
9	3	2	4	0	7	5	8	6	1

CLASSIC SUDOKU — 25+25 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.

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

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

ROUND 7: Relay

Team

Monday 12th October 2015, 17:30 - 18:00

30 minutes - 2400 total points

In Relay round a puzzle solved by one of the team members will provide clues to the puzzle to be solved by the next team member.

The seats for the team are numbered numbered from 1 to 4. Competitors may select any of the seats. They will solve the same puzzle types and intended the same difficulty.

Each player will receive 3 puzzles marked A, B, and C:

A - Extra region sudoku

B - Irregular sudoku

C - Classic sudoku

Only puzzle A will have all clues on it. The other puzzles will have some or all clues missing. The cells, where clues should be located, will be marked grey.

All four players start solving puzzles A. When a player solves the puzzle, he or she shall pass the solution to the next player (1->2, 2->3, 3->4, 4->1).

When a player receives a solution, he or she will transfer the clues to the puzzle B. Each grey cell should be copied the digit from the corresponding cell in puzzle A received.

When a player solves the puzzle B, the same process repeats.

Players may communicate about their progress, but must not help each other.

Each team member will receive a different colored pen for this round. They may use their own pencils for some markup, but only digits written by their pen will be considered part of the solution and checked. A puzzle that is not filled completely using the assigned pen with be scored 0 points.

It's allowed unfinished sudoku to be passed to the next team member. He can complete the sudoku and transfer the clues to his next sudoku. As the passed sudoku will be filled in by two different pens, it will get 0 points, but the next puzzle may be completed and score points. The team will be still eligible for a bonus, as soon they submit 12 solved puzzles.

The round is complete when all 12 puzzles are solved.

Puzzles are scored 200 points each.

Example

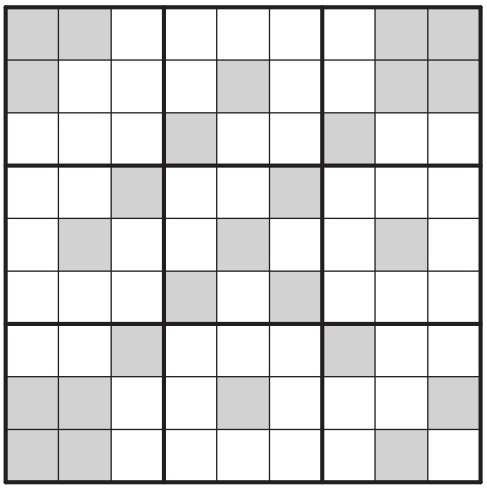
Player 1 solves the irregular puzzle:

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

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

Player 1 gives the solved puzle to player 2.
Player 2 writes down the clues to the next puzzle

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



Player 2 solves the classic puzzle

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

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

ROUND 8: Zodiac

Individual

Tuesday 13th October 2015, 09:00 - 09:50

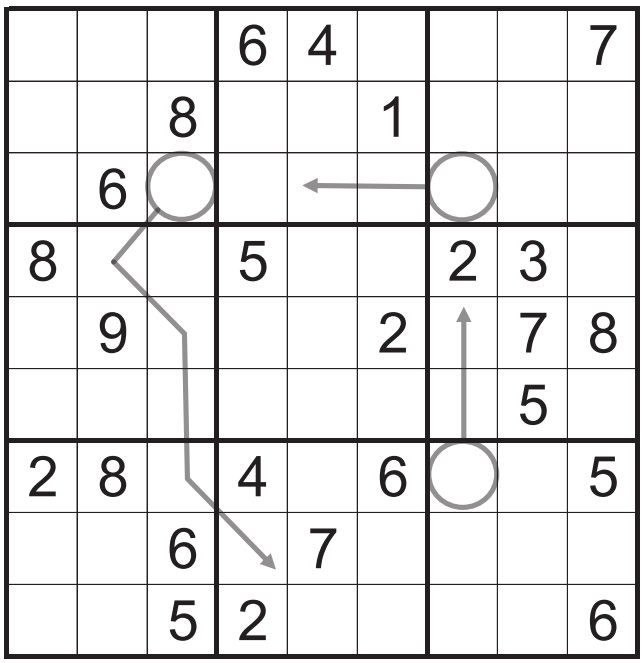
50 minutes - 545 total points

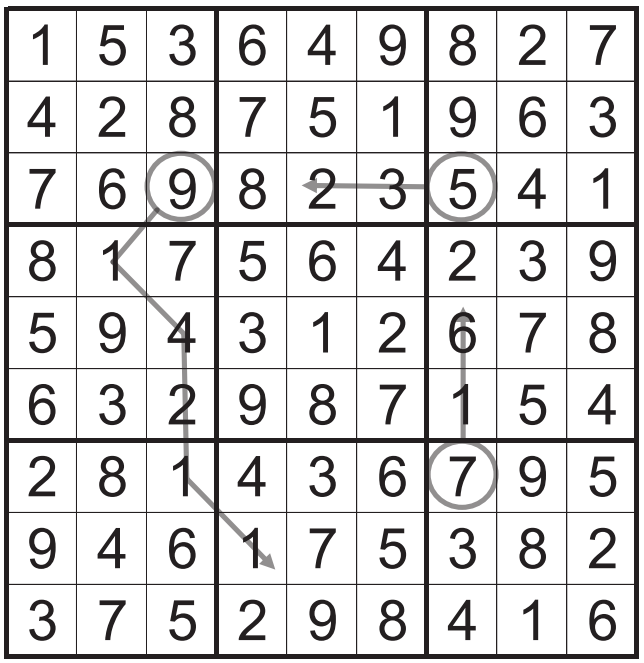
The theme of this round is the zodiac. There will be 12 puzzles and each of them will represent one of the zodiac signs. The puzzle design either imitates the symbol or reminds in another way about the sign.

Puzzle	Type	Points
Aries	Arrow Sudoku	**30**
Taurus	Extra Region Sudoku	**50**
Gemini	Twin Region Sudoku	**100**
Cancer	6-9 Sudoku	**35**
Leo	Arrow Sudoku	**75**
Virgo	Extra Region Sudoku	**30**
Libra	Killer Sudoku	**40**
Scorpio	Arrow Sudoku	**60**
Sagittarius	Arrow Sudoku	**30**
Capricorn	Extra Region Sudoku	**35**
Aquarius	Extra Region Sudoku	**35**
Pisces	Extra Region Sudoku	**25**

ARROW SUDOKU — 30+75+60+30 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The number placed in a cell with a circle must be the sum of the numbers placed in cells the adjoining arrow passes through. Numbers may repeat on arrows.





EXTRA REGION SUDOKU 50+30+35+35+25 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Each of the shaded regions must also contain each number from 1-9 exactly once.

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

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

TWIN REGION SUDOKU 100 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Each of the shaded regions must also contain each number from 1-9 exactly once. Each shaded region is a chain of cells through the grid. Both ends should be considered connected to form a cyclic region. The sequence of the numbers in these regions is the same. The dirction if the sequence does not need to be the same..

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

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

6-9 SUDOKU — 35 points

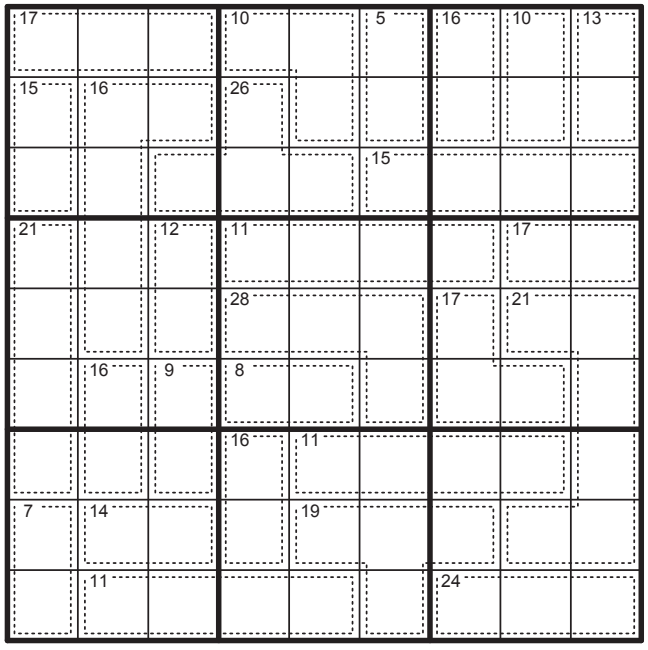
Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
Every 6 is adjacent to at least one 9, and vice versa. A 6 can't touch diagonally another 6 and a 9 can't touch diagonally another 9.

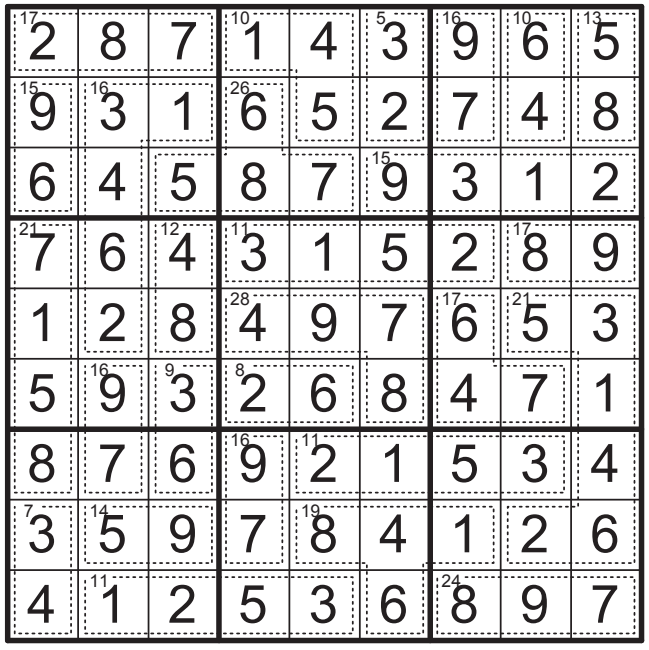
5			9		6			1
	3			1			4	
		1		3		2		
1			5		4			8
	5			7			1	
4			1		3			2
		4		6		1		
	1			4			3	
7			3		1			4

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

KILLER SUDOKU — 40 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked 3×3 box contains each number exactly once.
The numbers placed in each marked cage must sum to the total given in its top-left. Numbers must not repeat in cages.





ROUND 9: Multisudoku

Individual

Tuesday 13th October 2015, 10:10 - 10:40

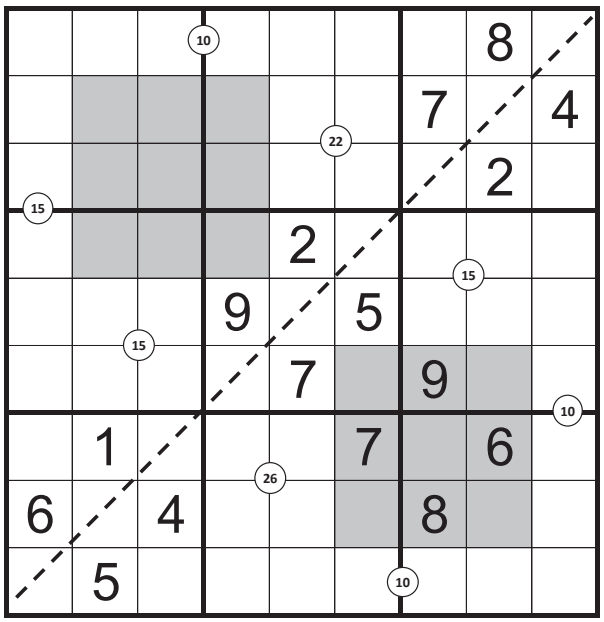
30 minutes - 150 total points

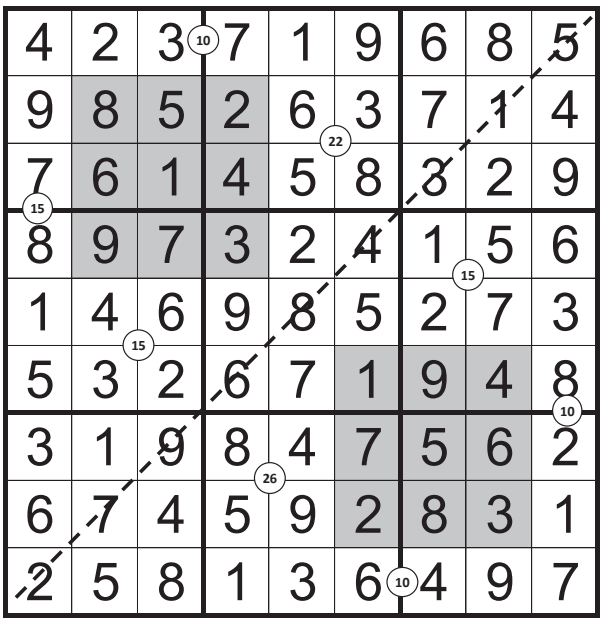
Bonus: 5 points/minute
Partial scoring possible

MULTISUDOKU — 150 points

Place a number from 1-9 in each empty cell in the grid such that each row, column and marked region contains each number exactly once.
In addition:
- Each grey cells marked region and each marked diagonal contain 1-9 exactly once.
- The circles with numbers on some intersections between 2, 3, or 4 cells show the sum of the digits in that cells. All digits that form the sum must be different.

NB!: The example shown contains one grid demonstrating all the clues that might appear on the puzzle. The actual puzzle will contain 2 overlapping grids, with partial score for solving one grid only of 75 points.





ROUND 10: X-Killer

Team

Tuesday 13th October 2015, 11:10 - 11:40

30 minutes - 2400 total points

There will be four classic sudokus in this part. Each of them will have some clues, but not enough to solve the sudoku.

Some cells will be marked with letters. Same letter may appear on 2, 3, or 4 different grids. Digits marked with the same letter must be different and sum up to the provided total.

Although every separate grid may have many solutions, there's only one solution where all grids are solved and sum up to the clues.

Only solved grids that are a part of the overall solution will be scored, each one 600 points.

NB!: The example is using 6x6 sudokus. The competition puzzle will use 9x9 sudokus.

1		L			
	G		5		
H	3				D
		B		6	
		2	K	F	
				E	4

2		L			
	G		3		
H	1				D
		B		5	
		4	K	F	
				E	6

3		L			
	G		5		
H	4				C
		A		6	
		1	K	F	
				E	2

4		L			
	G		2		
H	3				C
		A		1	
		6	K	F	
				E	5

Sudokus

Letters	1	2	3	4	Sums
A	-	-			9
B			-	-	4
C	-	-			3
D			-	-	4
E					10
F					11
G					12
H					14
K					15
L					18

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

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

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

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

ROUND 11: Fractal

Team

Tuesday 13th October 2015, 12:00 - 12:30

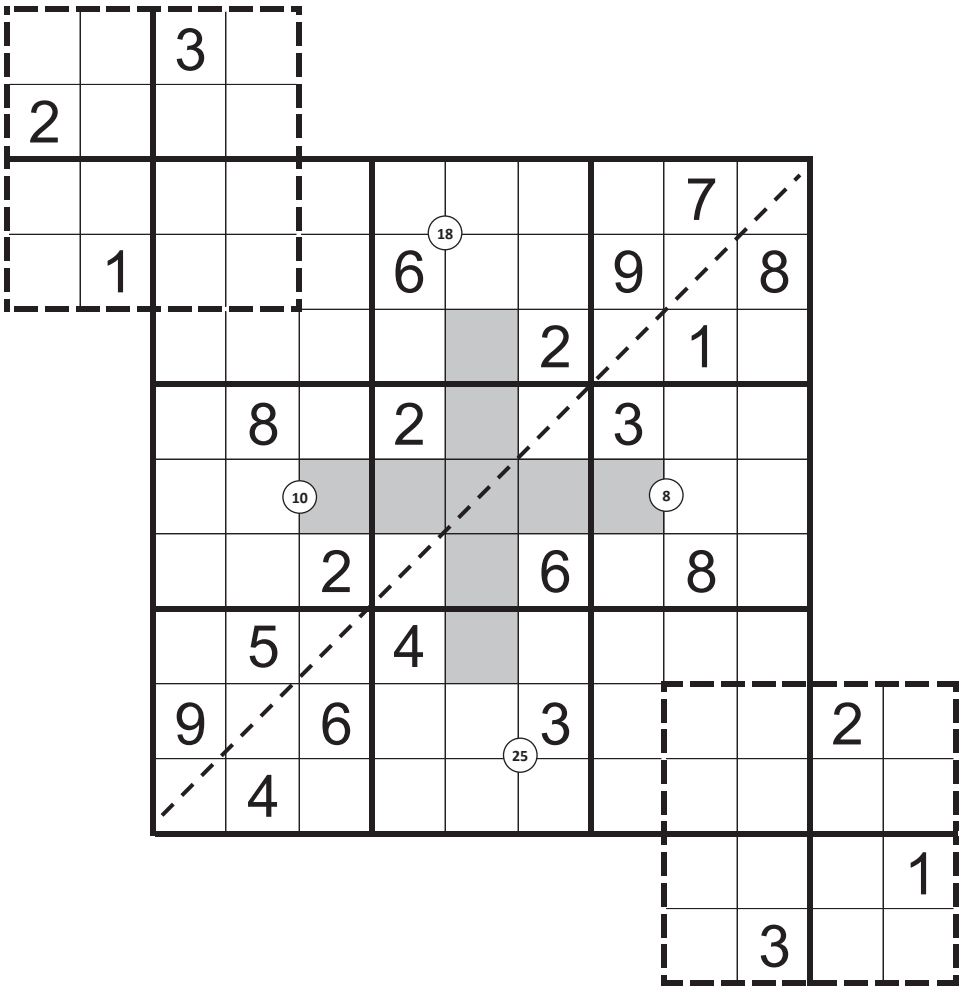
30 minutes - 2400 total points

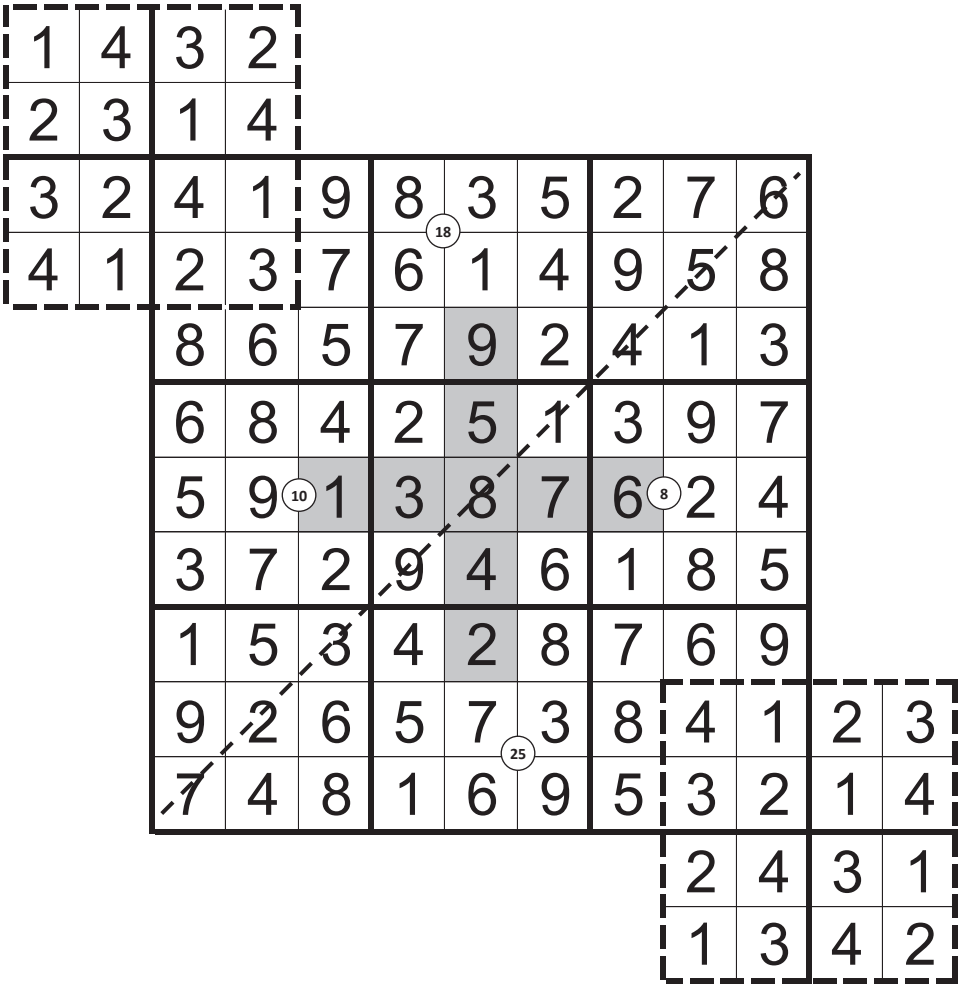
Several sudokus of different sizes are interconnected to make a big sudoku. They are designed to be solved starting from bordering sudokus to the center. Every team member may solve any part of the puzzle.

FRACTAL SUDOKU — xx points

Place a number from 1-N in each empty cell in the grid such that each row, column and marked region contains each number exactly once. N here is the grid size
In addition:
- Each grey cells marked region and each marked diagonal contain 1-N exactly one, when N is the number of cells in the region (may differ from grid size)
- The circles with numbers on some intersections between 2, 3, or 4 cells show the sum of the digits in that cells. All digits that form the sum must be different.

NB!: The example shown contains one grid demonstrating all the clues that might appear on the puzzle. The actual puzzle will contain multiple overlapping grids of multiple types. Next to each grid it will be marked the number of points to be awarded for solving that grid.




1 4 3 2
2 3 1 4
3 2 4 1 9 8 3 5 2 7 6
4 1 2 3 7 6 1 4 9 5 8
8 6 5 7 9 2 4 1 3
6 8 4 2 5 1 3 9 7
5 9 1 3 8 7 6 2 4
3 7 2 9 4 6 1 8 5
1 5 3 4 2 8 7 6 9
9 2 6 5 7 3 8 4 1 2 3
7 4 8 1 6 9 5 3 2 1 4
2 4 3 1
1 3 4 2
18
10
8
25

Play-offs

Tuesday 13th October 2015, 15:00 - 17:00

There will be 3 rounds of play-offs in order:

Play-off 1 (7-10 place) with 3 sudokus
Play-off 2 (4-7 place) with 4 sudokus
Play-off 3 (1-4 place) with 5 sudokus

There will be 3 Classic Sudokus and 9 Variant Sudokus of types already presented in individual rounds of WSC 2015:

Arrow Sudoku
Diagonal Sudoku
Even Sandwich Sudoku
Extra Region Sudoku
Greater Than Consecutive
Inner Frame Sudoku
Irregular Sudoku
Killer Sudoku
Surprise Sudoku (the type will be revealed after all sudokus have been placed)

Sudoku types for each play-off round and their order will be set by the finalists before starting the play-offs according to the formula:

Finalist 1 selects a variant sudoku and its order from 1 to 5 in play-off 3
Finalist 2 selects a variant sudoku and places it on a free position in play-off 3
Finalist 3 selects a variant sudoku and places it on a free position in play-off 3
Finalist 4 selects a variant sudoku and its order from 1 to 4 in play-off 2
Finalist 5 selects a variant sudoku and places it on a free position in play-off 2
Finalist 6 selects a variant sudoku and places it on a free position in play-off 2
Finalist 7 selects a variant sudoku and its order from 1 to 3 in play-off 1
Finalist 8 selects a variant sudoku and places it on a free position in play-off 1
Finalist 1 select the position of the remaining variant sudoku in play-off 3
The 3 classics are placed in the remaining positions, one per play-off.
Surprise Sudoku type is revealed.