

7th World Sudoku
Championship



21st World Puzzle
Championship

■ 1-3 October 2012 ■

KRALJEVICA, CROATIA

■ 4-7 October 2012 ■

7TH World Sudoku Championship
CROATIA, October 1-7 2012

INSTRUCTION BOOKLET

Schedule:

Tuesday, October 2nd

Part 1:	Pinocchio	10.00. - 10.25.
Part 2:	Smurfs	10.40. - 12.00.
Part 3:	Snow White and the Seven Dwarfs	12.15. - 13.00.
Part 4:	The Muppet Show	14.45. - 15.45.
Part 5:	Professor Balthazar	16.00. - 17.00.
Part 6:	Disneyland	17.15. - 18.05
Part 7:	TNT	18.20. - 18.30.
Part 8:	Cinderella's Diamond	19.00. - 19.25.
Part 9:	Three Little Pigs	19.40. - 20.10.

Wednesday, October 3rd

Individual playoffs	10.00. - 13.00.
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GENERAL RULES OF WSC 2012

This instruction booklet contains all the necessary information regarding puzzles and competition of the 7th World Sudoku Championship and competitors are welcome to use it during the course of the competition.

The competition is divided into 9 parts. 7 of them are individual parts. Part 8 and part 9 will be solved by teams of 4 competitors.

SCORING AND BONUSES

In all puzzles in the championship points are awarded only if the puzzle is completely correctly solved. Partial points are awarded only in part 7 and they are explained further in the booklet.

In individual parts 1 and 7 order bonuses are available for 10 fastest solvers. The bonus points are, in order of submission: 25, 21, 18, 15, 12, 10, 8, 6, 4 and 2, respectively.

Solving time for part 1 is 25 minutes and 10 minutes for part 7, but these are the approximate solving times. The real solving times will depend on competitors. In the moment when the 20th competitor finishes and hands in his/her puzzle booklet to a judge solving in these parts will be interrupted. If after 25 minutes (10 in part 7) of solving less than 10 competitors have finished solving, there will be 5 minutes of extra time for solving, but only one 5-minute extension is possible.

In team part 8 there are bonuses for 5 fastest teams and the points are: 100, 80, 60, 40 and 20, respectively. There will be no interruption or time extension in this part.

In all other individual parts there are time bonuses available for solvers who finish before the time runs out. 1 point will be awarded for every incomplete 30 seconds of time saved (eg. 1:47 before the end will score 4 extra points).

In team part 9 time bonuses are available for teams which finish before the time runs out. 4 points will be awarded for every incomplete 30 seconds of time saved.

Both time and order bonus points are awarded only if all the puzzles in the set are completely correctly solved.

JUDGING AND PROTESTING

All puzzle booklets will be checked by three different judges.

In individual and team parts where order or time bonuses are assigned, competitors/teams who finish solving before the time runs out need to raise their hand(s) and clearly state that they have finished. A judge will come to their table and note the exact time of submission on their puzzle booklets.

After the judges check and evaluate all the puzzle booklets of a puzzle part, point ranking will be made public on scoreboards and on the official WSC/WPC 2012. web site.

There will be two different rankings: official (only for official competitors/teams from all countries) and unofficial (for all competitors and teams taking part in the championship).

Each country can have up to 4 official competitors and 1 team (which consists of those 4 competitors only) in the official ranking table. All other competitors from a country will be listed in the unofficial ranking table only. Unofficial individual competitors can form unofficial teams (a country's B-team or UN-teams by mixing with competitors from different countries) in whatever way they like.

Competitors and team captains have the right to make a complaint to the judges, regarding checking and evaluation of any part of their puzzle booklets, by 10.00 on Wednesday, October 3rd, before the start of the playoffs.

RANKING AND TIE BREAKING

Individual ranking will be done by summing up the results from 7 individual parts. Top 8 official competitors will compete in individual playoffs.

If two or more competitors are tied after final results, the criteria for determining the higher ranked competitor are, in order:

- points received from part 2 (Smurfs)
- points received from part 4 (The Muppet Show)
- points received from part 6 (Disneyland)
- draw

Team ranking will be done by summing up the results from the team parts and individual results of 4 team members.

There will be no team playoffs.

If two or more teams are tied after final results, the criteria for determining the higher ranked team are:

- points received from part 8 (Cinderella's Diamond)
- points received from part 9 (Three Little Pigs)
- the lower total of ranking positions of a team's members in individual competition
- draw

PLAYOFFS

Individual playoffs will be held on billboards in front of the audience.

They will be conducted in several rounds - quarterfinal, semifinal and final.

There will be no time advantage for higher ranked competitors, but they will have the advantage of choosing the puzzles to be solved in their matches.

You will find further details regarding playoffs at the end of the booklet.

CODE OF CONDUCT

All competitors and teams are kindly asked to be in their assigned tables before the official starting time of each part.

No conversation will be allowed between competitors (except in the team parts) or between spectators/captains and competitors during all parts.

The use of any electronic device (mobile phones, laptops, tablets, calculators, music players with headphones etc.) is not allowed during all parts.

Individuals and teams who finish solving before the end of official solving time are not allowed to leave their tables before the end of official solving time.

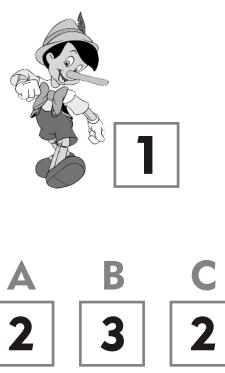
Organizers will give their best to insure fair competition and the application of all rules.

PART 1 PINOCCHIO - individual

October 2nd, 10.00. - 10.25.

Place numbers 1-9 in every empty cell (one number per cell) so that each row, column and thickly outlined 3x3 square (and two main diagonals where indicated) contain only different numbers. There are three numbers in each puzzle marked differently than the rest. Two of them are correct, while the third (Pinocchio) is incorrect. Find out the correct value of Pinocchio and the numbers on cells marked with A, B and C and write those numbers in the corresponding cells next to each grid. You don't need to solve the whole puzzle, the judges will be looking at those numbers next to the grids only.

9	1			4	5	2	6	
				A				9
4	2		3		7			
		3		6			7	
6		9			5	B	8	
	4			7	1			
		7		6		5	2	
8			C					
	5	2	4	3			8	7



9	1	8	7	4	5	2	6	3
7	3	5	6	1	A	2	8	4
4	2	6	3	9	8	7	1	5
2	8	3	5	6	1	9	7	4
6	7	1	9	2	4	5	B	3
5	4	9	8	7	3	1	2	6
3	9	7	1	8	6	4	5	2
8	6	4	C	2	5	7	3	9
1	5	2	4	3	9	6	8	7

MAXIMUM
50
POINTS
+ ORDER BONUS

PART 2 SMURFS - individual

October 2nd, 10.40. - 12.00.

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box.

Classic sudokus in this part are grouped in triplets. Each triplet is connected by a Smurf - a two-digit number indicated by circles in two neighbouring cells. Each sudoku connected in a triplet has the same Smurf next to the grid. Each Smurf represents a different 2-digit number.

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



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

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



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

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



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

MAXIMUM
160
POINTS

PART 3 SNOW WHITE AND THE SEVEN DWARFS - individual

October 2nd, 12.15. - 13.00.

Puzzles in this part are all interconnected by the Seven Dwarfs. Each Dwarf represents a different number from 1 to 7 (the same Dwarf represents the same number in all the puzzles he appears in). Puzzles from 1 to 7 have two Dwarfs each in them, indicated by two circles in the grid and two cartoon characters next to the grid (it is not known which character is represented by which circle). Each dwarf is appearing in two of those puzzles.

Puzzle 8 contains all Seven Dwarfs. After discovering which Dwarf represents which number, place each number from 1 to 7 in seven circles in the grid. There are two Dwarfs next to some rows and columns containing circles. One of those two Dwarfs has to be placed in one of the circles in the corresponding row/column, while the other cannot be placed in those circles.

PART 3 SNOW WHITE AND THE SEVEN DWARFS - individual

October 2nd, 12.15. - 13.00.

1. SLEEPY'S IRREGULAR SUDOKU

Place a digit from 1 to 6 into every empty cell in the grid so that each digit appears exactly once in all rows, columns and thickly outlined areas.

	5	1		4	
				6	
	2				
	6				1
			3		



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

7
POINTS

2. SNEEZY'S RELATION SUDOKU

Place a digit from 1 to 6 into every empty cell in the grid so that each digit appears in each row, column and 2x3 region exactly once. All relation signs, indicating larger and smaller of the two neighbouring digits, have to be true.

>	>		<	>	
	<		>	>	
V					A
>	<			>	
		V			



6 > 5 > 4	1 < 3 > 2
1 2 < 3	6 > 5 > 4
4 6 5 3 2 > 1	
2 3 1 5 4 6	
3 > 1 < 2 4 6 > 5	
5 4 6 2 1 3	

7
POINTS

3. BASHFUL'S DEFICIT SUDOKU

Place a digit from 1 to 6 (1-5 in the example) into every empty cell in the grid so that no digit is repeated in any of the rows, columns and thickly outlined regions.

				4	
3					
	3				
1				5	



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

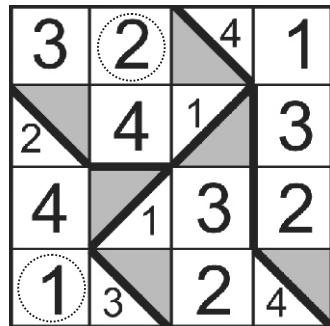
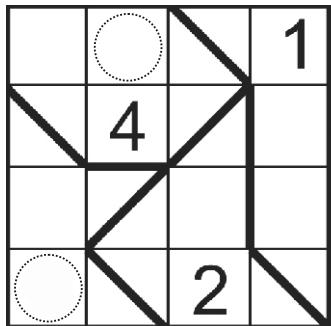
8
POINTS

PART 3 SNOW WHITE AND THE SEVEN DWARFS - individual

October 2nd, 12.15. - 13.00.

4. GRUMPY'S HALVED SQUARES SUDOKU

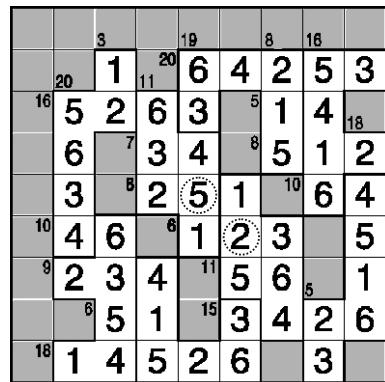
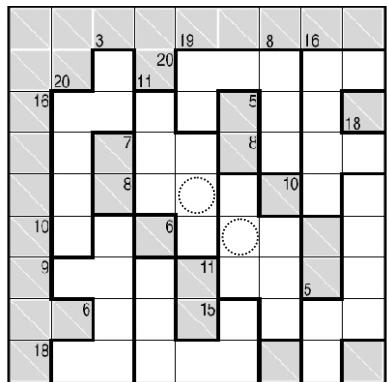
Place a digit from 1 to 6 (1-4 in the example) into every empty cell in the grid so that each digit appears in each row, column and thickly outlined region exactly once. Some squares are divided in two parts by diagonals. Only one part of any such square can contain a digit.



**9
POINTS**

5. HAPPY'S SUDOKURO

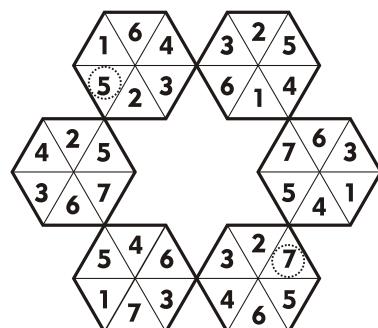
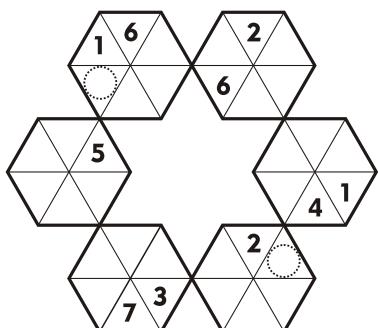
Place a digit from 1 to 6 into every empty cell in the grid so that each digit appears in each row, column and thickly outlined region exactly once. Numbers on gray cells indicate the sum of digits in the sequence below/right of that number, up to another gray cell or the edge of the grid.



**9
POINTS**

6. DOC'S SNOWFLAKE SUDOKU

Place a digit from 1 to 7 into every empty cell in the grid so that no digit is repeated in any of the rows in three possible directions and snowflake's areas.



**10
POINTS**

PART 3 SNOW WHITE AND THE SEVEN DWARFS - individual

October 2nd, 12.15. - 13.00.

7. DOPEY'S TIGHT FIT SUDOKU

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears in each row, column and 2×3 region exactly once. Cells with diagonal lines contain two digits. Upper part of any such cell has to contain smaller digit.



A 5x5 grid puzzle. The grid contains the following elements:

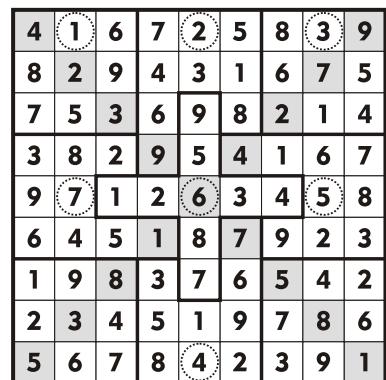
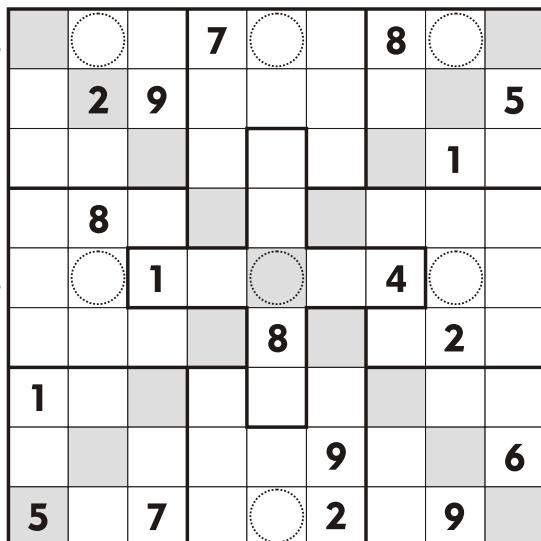
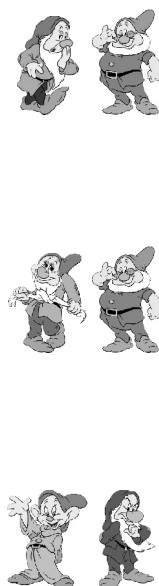
- Diagonal slashes: A thick diagonal line from the top-left corner to the bottom-right corner, and a thick diagonal line from the top-right corner to the bottom-left corner.
- Numbers: There are several numbers placed in the grid:
 - Top row: 7 (top-left), empty, empty, empty, 1 (top-right).
 - Second row: 4 (middle-left), 5 (middle-center), 7 (middle-right), empty, empty.
 - Third row: 6 (center-left), empty, empty, empty, 9 (center-right).
 - Fourth row: 3 (bottom-left), empty, empty, empty, 4 (bottom-center).
 - Fifth row: empty, empty, 7 (bottom-center), 4 (bottom-right), 5 (bottom-right).
 - Bottom row: 5 (bottom-left), empty, empty, empty, 8 (bottom-right).
- Circled numbers: There are two circled numbers:
 - A dotted circle containing the number 6 is located in the third row, second column.
 - A dotted circle containing the number 4 is located in the fourth row, fifth column.

$\frac{7}{8}$	2	3	$\frac{5}{9}$	6	$\frac{1}{4}$
1	$\frac{4}{9}$	$\frac{5}{6}$	$\frac{7}{8}$	2	3
4	$\frac{6}{7}$	1	3	$\frac{8}{9}$	$\frac{2}{5}$
$\frac{2}{9}$	$\frac{3}{5}$	8	6	$\frac{1}{4}$	7
6	8	$\frac{2}{7}$	$\frac{1}{4}$	$\frac{3}{5}$	9
$\frac{3}{5}$	1	$\frac{4}{9}$	2	7	$\frac{6}{8}$

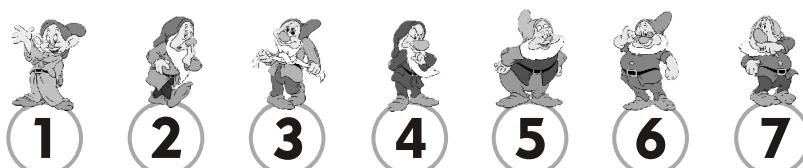
10
POINTS

8. SNOW WHITE

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in all rows, columns, thickly outlined areas and two main diagonals.



30
POINTS

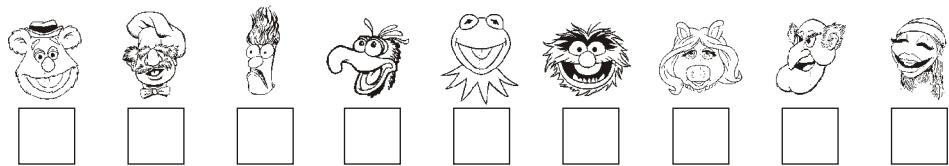


**MAXIMUM
90
POINTS**

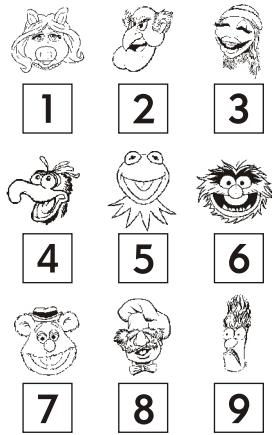
PART 4 THE MUPPET SHOW - individual

October 2nd, 14.45. - 15.45.

Place numbers 1-9 in every empty cell of the grid so that every row, column and irregularly shaped region (and two main diagonals, where indicated) contains different numbers. Each of the irregular sudokus in this part contains 9 Muppet Show characters in the grid. Replace them with numbers so that each character represents a different number, but the same character represents the same number in all puzzles.



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



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

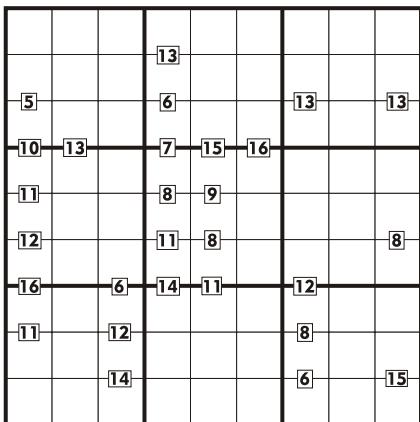
MAXIMUM
120
POINTS

PART 5 PROFESSOR BALTHAZAR - individual

October 2nd, 15.45. - 16.45.

1. HANNIBAL'S SUMS

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. Numbers in small rectangles represent the sums of numbers in two horizontally or vertically neighbouring cells.

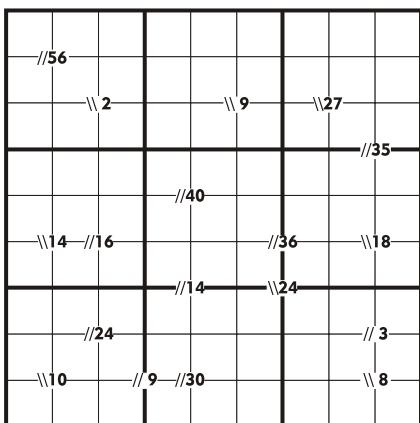


8	6	7	9	1	5	2	3	4
1	2	5	4	3	6	7	9	8
5	6	7	8	9	10	11	12	13
4	9	3	2	8	7	6	1	5
10	13	7	15	16	11	12	13	14
6	4	1	5	7	9	8	2	3
11	8	9	3	2	1	4	6	7
5	12	11	10	9	8	7	6	1
7	3	2	8	6	4	9	5	1
16	6	14	11	12	13	12	11	10
9	1	4	6	5	8	3	7	2
11	2	7	8	1	9	5	4	6
3	5	6	7	4	2	1	8	9

5
POINTS

2. HORATIO'S PRODUCTS

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. Numbers in small rectangles represent the products of numbers in two diagonally touching cells, indicated by lines inside the small rectangles.

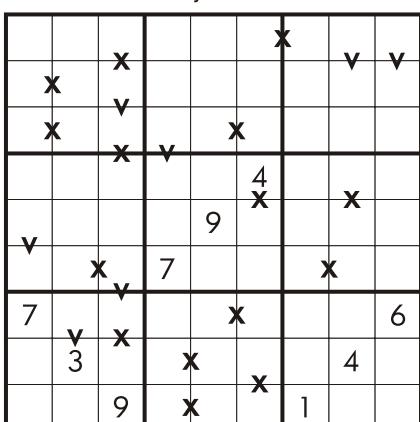


6	7	9	8	3	5	1	4	2
8	1	5	4	9	2	3	6	7
4	3	2	7	6	1	8	9	5
5	9	6	1	8	3	2	7	4
7	4	8	5	2	6	9	3	1
3	2	1	9	7	4	5	8	6
9	8	4	2	1	7	6	5	3
2	6	7	3	5	8	4	1	9
1	5	3	6	4	9	7	2	8

6
POINTS

3. FABIAN'S XV

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. Signs X and V on some grid lines indicate all pairs of numbers (horizontally and vertically neighbouring) in the grid which sum up to 10 (indicated by X) and 5 (indicated by V).



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

14
POINTS

PART 5 PROFESSOR BALTHAZAR - individual

October 2nd, 15.45. - 16.45.

4. MARTIN'S OUTSIDE SUMS

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. Numbers outside the grid indicate the sum of first three numbers in the corresponding direction.

	7	19	22	14	9	13	
13							11
17							13
20							11
17							18
15							22
20							12
	21	18	13	19	14	16	

	7	19	22	14	9	13			
13	8	4	3	6	2	1	5	7	9
17	5	1	7	9	4	8	3	2	6
20	6	2	9	7	3	5	1	4	8
17	9	6	5	4	8	2	7	3	1
15	4	3	1	5	9	7	6	8	2
20	7	8	2	1	6	3	9	5	4
15	2	7	6	3	1	4	8	9	5
20	3	9	8	2	5	6	4	1	7
	1	5	4	8	7	9	2	6	3
	21	18	13	19	14	16			

9
POINTS

5. VICTOR'S DIFFERENCES

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. Small numbers 5 on some grid lines indicate all pairs of numbers (horizontally and vertically neighbouring) in the grid whose difference is 5.

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

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

7
POINTS

6. ALFRED'S KILLER

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. The grid is divided into cages. The sum of the cells in a cage must equal the total given for the cage. Numbers can be repeated within a cage.

14'	24		11'	8	5	12	
		10		7	9		
10'		15			17		24
	10		11	18			
23'		10		16		8	4
4					22		3
	7					24	
3	13	14	4	16			14
				6			
		9					

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

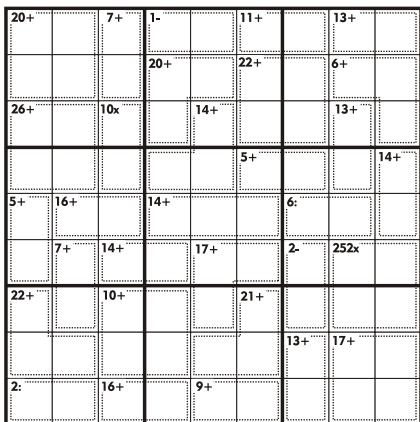
7
POINTS

PART 5 PROFESSOR BALTHAZAR - individual

October 2nd, 15.45. - 16.45.

7. SILVESTAR'S KENDOKU

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. The grid is divided into cages. Numbers in each cage must give the result given for the cage by using the indicated operation: addition, subtraction, multiplication or division. Numbers can be repeated within a cage.

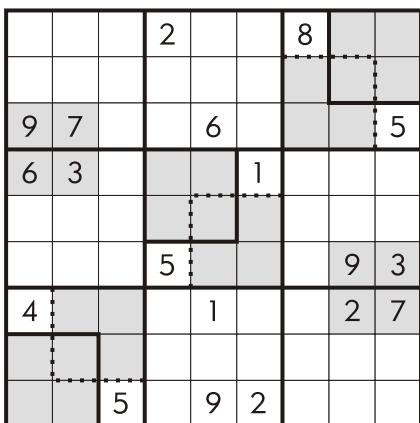


5	8	1	3	4	2	9	7	6
4	3	6	5	7	9	8	1	2
7	9	2	8	6	1	4	5	3
6	4	5	7	1	3	2	8	9
3	7	9	4	2	8	1	6	5
2	1	8	6	9	5	3	4	7
8	6	4	2	3	7	5	9	1
9	5	3	1	8	6	7	2	4
1	2	7	9	5	4	6	3	8

8
POINTS

8. ZVONKO'S PRODUCT SQUARES

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. For each gray square (containing four numbers) the two bottom cells contain a two-digit number which is the product of the numbers in the two upper cells.

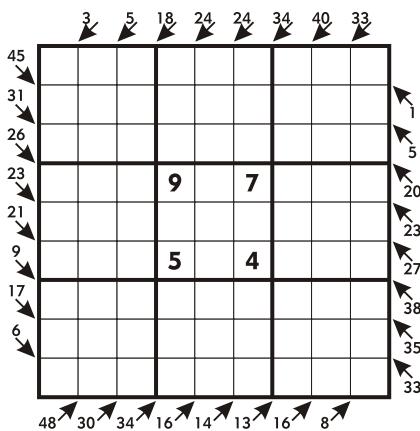


3	1	6	2	5	7	8	4	9
2	5	4	1	8	9	7	3	6
9	7	8	4	6	3	2	1	5
6	3	2	9	7	1	4	5	8
5	4	9	6	3	8	1	7	2
7	8	1	5	2	4	6	9	3
4	9	3	8	1	6	5	2	7
8	2	7	3	4	5	9	6	1
1	6	5	7	9	2	3	8	4

15
POINTS

9. AMADEUS'S LITTLE KILLER

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. Numbers around the grid indicate the sums of all numbers in the direction of the arrows.



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

10
POINTS

PART 5 PROFESSOR BALTHAZAR - individual

October 2nd, 15.45. - 16.45.

10. CHARLIE'S STAR PRODUCTS

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and irregularly shaped box. Numbers around the grid indicate the product of digits in all cells marked with stars in the corresponding row/column.

*				*	*	*	*
*			*	*			*
*			*				*
*	*			*		*	
*		*		*			*
*		*		*		*	
*				*			*
*			*	*			
*	*			*			*

240
70
12
630
105
216
40
45
126

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

240
70
12
630
105
216
40
45
126

5 POINTS

11. MIRKO'S ARROW PRODUCTS

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. For each gray 1x2 rectangle the two cells indicate a two-digit number which is the product of two numbers indicated by the arrow.

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

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

12 POINTS

12. DANIEL'S RATIOS

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. Ratio of two numbers in small rectangles has to be equal to the ratio of two numbers in the corresponding (horizontally or vertically) neighbouring cells.

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

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

9 POINTS

PART 5 PROFESSOR BALTHAZAR - individual

October 2nd, 15.45. - 16.45.

13. AXEL'S RINGS

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. The sums of numbers in two gray rings are equal.

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

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

7
POINTS

14. VIOLETA'S MATH

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. Numbers in circles indicate either the sum or the product of two numbers pointed by corresponding arrows.

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

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

6
POINTS

MAXIMUM
120
POINTS

PART 6 DISNEYLAND - individual

October 2nd, 17.15. - 18.05.

1. HUEY, DEWEY AND LOUIE

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. A digit placed in a gray cell has to be bigger than all digits placed in horizontally and vertically neighbouring white cells.

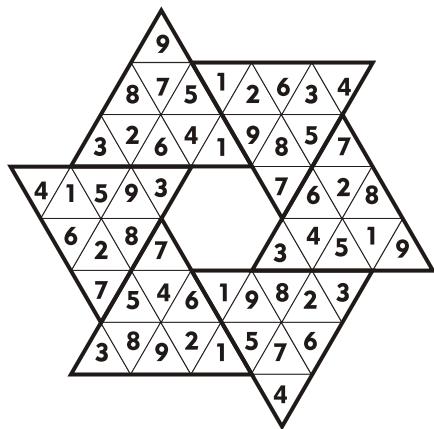
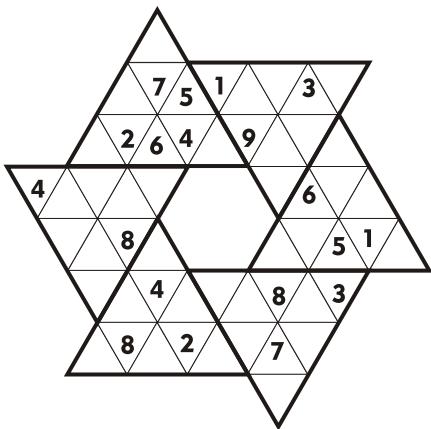
	3		7	6				
	5		6	1	3			
2						7		
	8					2		
3							6	
	2					8		
1			5	9			8	
	7				4			
6						1		

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

7
POINTS

2. MICKEY MOUSE

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row (in all three directions) and every marked triangle. Rows consisting of less than 9 cells also have to contain only different digits.



4
POINTS

3. WALL-E

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. The 4 digits written inside each "wheel" must be located in those four cells (in the given order) but the "wheel" can be rotated (it doesn't have to be rotated necessarily) by 90, 180 or 270 degrees.

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

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

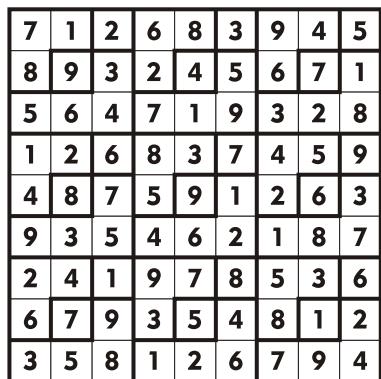
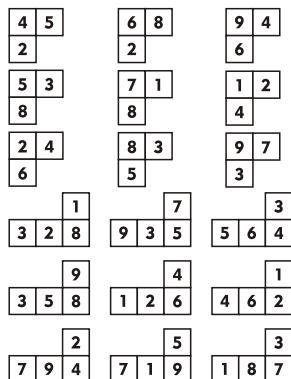
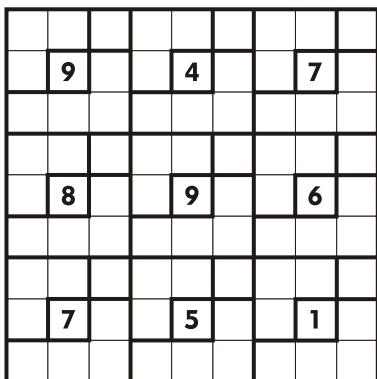
8
POINTS

PART 6 **DISNEYLAND - individual**

October 2nd, 17.15. - 18.05.

4. ANTZ

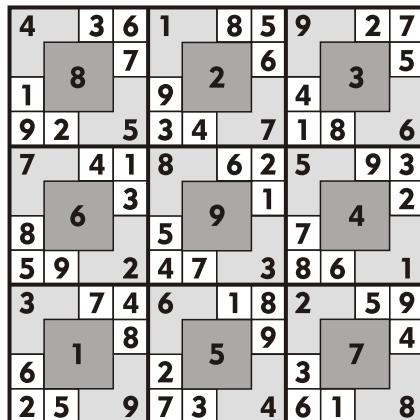
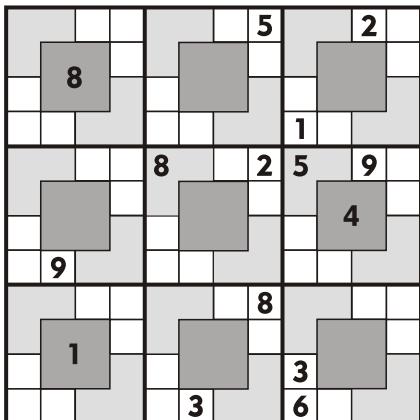
Place all the given pieces inside the grid and solve a classic sudoku - each digit appears exactly once in every row, column and 3x3 box. Each 3x3 box contains one smaller and one bigger piece. The pieces cannot be rotated and/or mirrored. The pieces cannot overlap the numbers already written in the grid.



7
POINTS

5. WOODY

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 4x4 box. The digits also have to be different in 9 top left corner cells, 9 bottom right corner cells and 9 central cells of the 4x4 boxes.

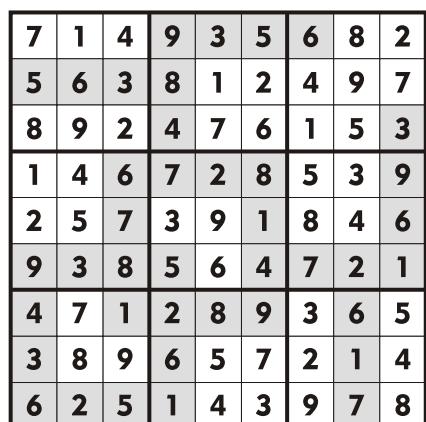
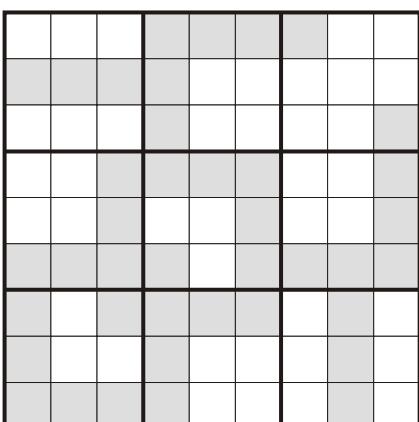


**4
POINTS**

6. BIANCA

Place all the listed number sequences into the gray strips as in a crossword puzzle - from left to right and from top to bottom. Then solve the sudoku using the classic rules - each digit appears exactly once in every row, column and 3x3 box.

1289	6728
2617	6781
3961	8149
4721	9356
5261	9385
5638	9436
6251	9847



6
POINTS

PART 6 **DISNEYLAND - individual**

October 2nd, 17.15. - 18.05.

7. CHIP 'N' DALE

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. Every pair of two horizontally and vertically neighbouring cells containing consecutive digits is marked.

A 5x5 grid containing the following values:

	5			6
		5		2
1				8
3		6		
4				8

The grid features several black horizontal and vertical bars. Notable bars include a vertical bar at x=1 from y=1 to y=5, a horizontal bar at y=1 from x=1 to x=5, a horizontal bar at y=3 from x=1 to x=5, a vertical bar at x=3 from y=1 to y=5, a horizontal bar at y=5 from x=1 to x=5, and a vertical bar at x=5 from y=1 to y=5.

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

**6
POINTS**

8. LILO & STITCH

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. For every cell the top/bottom small number in it indicates the number of bigger/smaller digits in 8 (or less for edge and corner cells) neighbouring cells.

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

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

5
POINTS

9. BEAUTY AND THE BEAST

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3×3 box. Two consecutive numbers cannot be placed in two horizontally or vertically neighbouring cells.

4						9
	9					4
	1				5	
		1		5		
			3			
		4		2		
	3				1	
1						5
2						7

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

12
POINTS

PART 6 DISNEYLAND - individual

October 2nd, 17.15. - 18.05.

10. DUMBO

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. Numbers outside the grid have to be placed in one of the first three cells in the corresponding direction.

	1	7	2	7	4	3	6	7	4
5	9		8	9	8	8	7	7	4
7									
45									
68									
5									
3									
124									
3									
4									
3									
4									
7									
3	6	4	7	2	3	6	1	9	4
5	9	5	8	9	8	9	2	7	4
7	7	6	5	1	4	3	7	2	3
4	8	9	3	8	4	5	1	6	2
3	9	5	7	2	8	4	1	6	4
4	7	8	4	1	3	6	2	9	5
6	2	1	9	4	5	7	3	8	7

	1	7	2	7	4	3	6	7	4
5	9		8	9	8	9	5	4	5
7	2	1	7	6	8	3	9	5	4
45	4	5	3	2	7	9	8	6	1
68	8	6	9	5	1	4	3	7	2
5	5	7	6	8	9	2	1	4	3
3	9	3	8	4	5	1	6	2	7
124	1	4	2	3	6	7	5	8	9
3	3	9	5	7	2	8	4	1	6
4	7	8	4	1	3	6	2	9	5
6	2	1	9	4	5	7	3	8	7
3	6	4	7	2	3	6	1	9	4
5	9	5	8	3	7	2	6	4	1
7	7	6	5	1	4	3	8	7	2
4	8	9	4	2	6	1	5	3	7
6	2	1	7	8	3	4	6	5	9
3	3	7	9	5	4	1	2	8	6

5
POINTS

11. ALICE

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. Numbers outside the grid indicate the distance between two numbers in the corresponding row/column. The order of numbers in indicated distances has to be from left to right and top to bottom.

3-7:5	5-2:6	6-1:7	4-9:5	4-1:5	6-4:6	3-1:5	4-2:7	6-5:4

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

6
POINTS

12. WINNIE-THE-POOH

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. Each digit has to contain the corresponding letter (written in its cell), according to the number - word key in a specific language, given next to the grid.

- 1. JEDAN
- 2. DVA
- 3. TRI
- 4. ČETIRI
- 5. PET
- 6. ŠEST
- 7. SEDAM
- 8. OSAM
- 9. DEVET

	I		A	M		S
V			D	T	A	
V	R	M		Č		T
N			S	S		
S					V	T
	D			S	J	A
			I	R	M	A
E	O	P	S		A	
M			T	I		Š

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

9
POINTS

PART 6 DISNEYLAND - individual

October 2nd, 17.15. - 18.05.

13. GOOFY

Place all the listed number sequences given below the grid into the gray snake-like strips in the grid and solve a classic sudoku - each digit appears exactly once in every row, column and 3x3 box.

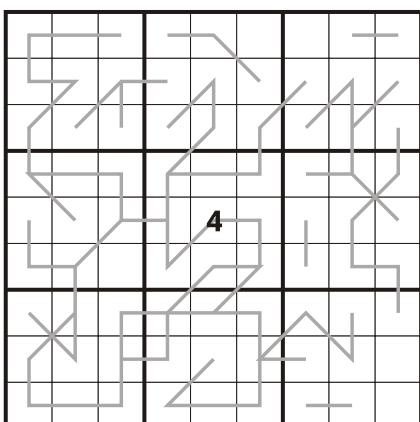
1283982								
4164589								
3423957								
6126416								
3987526								
7129619								

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

10
POINTS

14. DONALD DUCK

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. Each pair of horizontally, vertically and diagonally neighbouring cells containing consecutive digits is connected with a line.

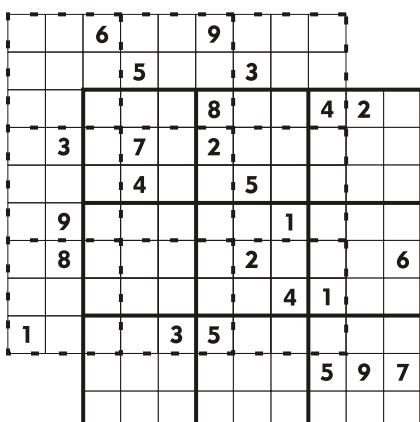


4	5	6	3	2	7	1	9	8
3	2	8	9	5	1	7	4	6
1	9	7	4	6	8	3	5	2
2	3	4	7	8	9	5	6	1
8	1	5	6	4	3	9	2	7
7	6	9	5	1	2	8	3	4
9	7	1	2	3	4	6	8	5
6	8	2	1	9	5	4	7	3
5	4	3	8	7	6	2	1	9

4
POINTS

15. TWEEDLEDUM AND TWEEDLEDEE

Place a digit from 1 to 9 into every empty cell in the grid so that each digit appears exactly once in every row, column and 3x3 box. The puzzle consists of two interconnected sudokus, one with bold and the other with dotted lines.



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

7
POINTS

MAXIMUM
100
POINTS

PART 7 TNT - individual

October 2nd, 18.20. - 18.30.

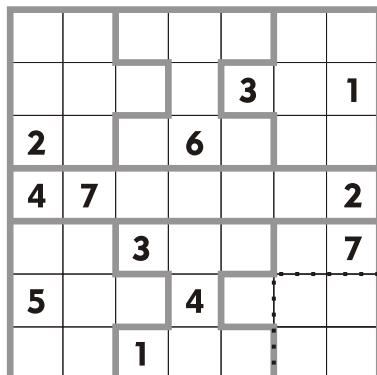
This part contains only one puzzle which consists of three linked sudokus (samurai sudoku).

For the central sudoku follow the classic rules - place digits from 1 to 9 into every empty cell of the grid so that no digit is repeated in any row, column and 3x3 box.

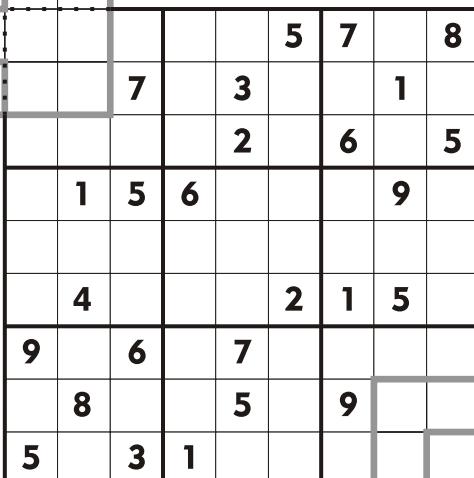
For the two outer sudokus the rules are: place numbers from 1 to 7 into every empty cell of the grid so that no digit is repeated in any row, column and irregularly shaped region.

Partial points are awarded for each of the three linked sudokus but only if their solution is consistent with the unique solution of the whole puzzle.

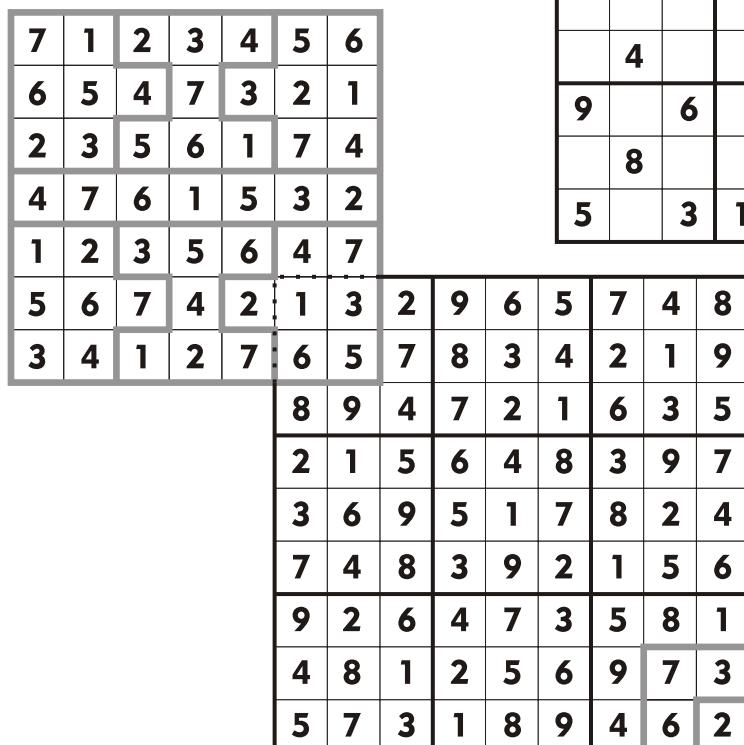
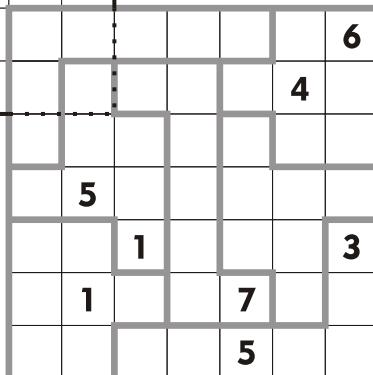
BOB ROCK **9**
POINTS



NUMBER 1 **12**
POINTS



ALAN FORD **9**
POINTS



MAXIMUM
30
POINTS
+ ORDER BONUS

PART 8 CINDERELLA'S DIAMOND - team

October 2nd, 19.00. - 19.25.

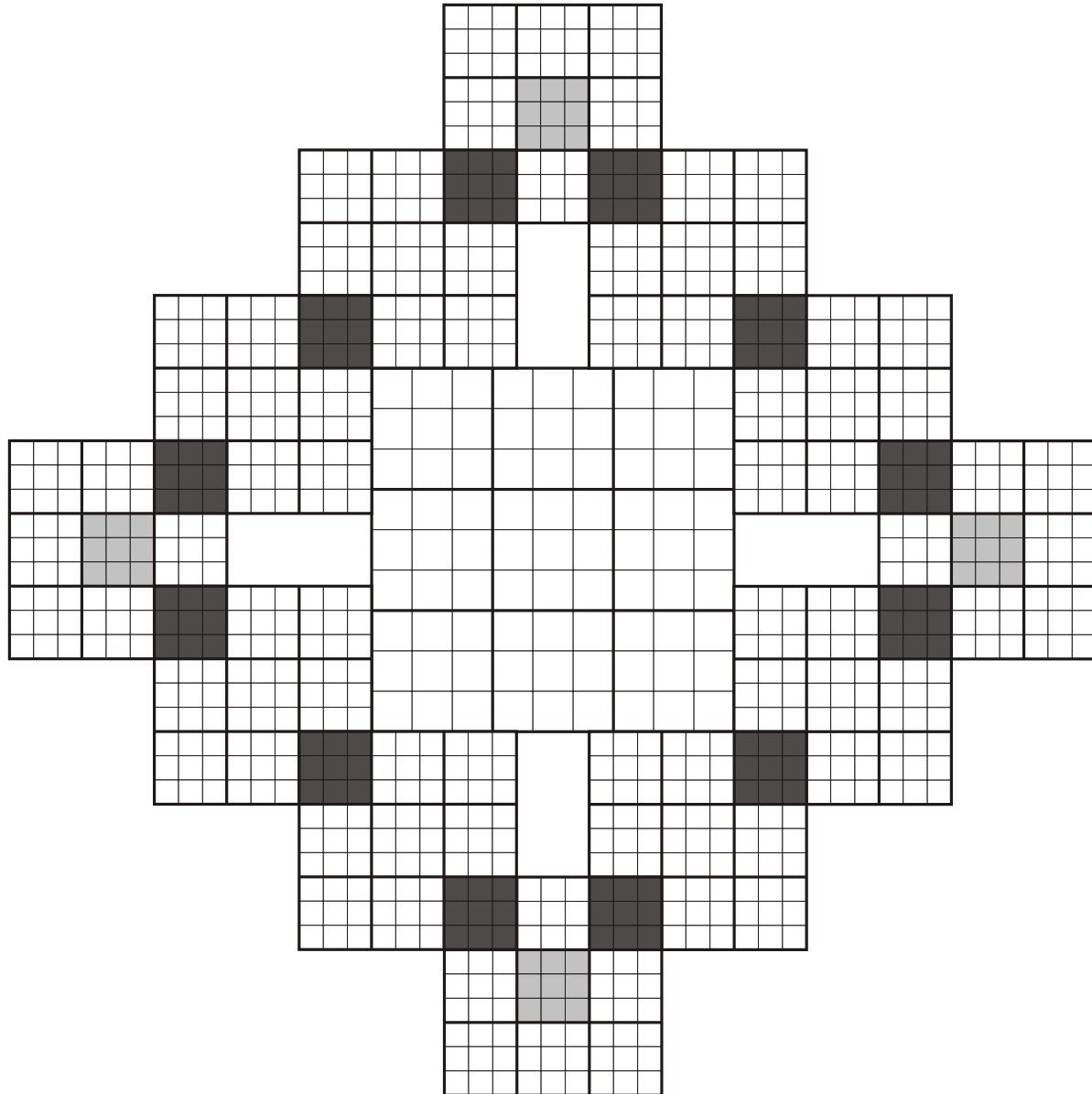
This is a team part and it contains 13 classic sudoku puzzles. The first 12 puzzles have to be arranged in a diamond-like structure according to the given scheme (which will be included in the puzzle booklet). The puzzles are connected with their corner 3x3 boxes and they cannot be solved independently.

When you determine which 4 puzzles are placed in the four corners of the diamond, use their central 3x3 boxes to solve the 13th sudoku. 3 out of 4 central boxes have to be used and they can be placed on any 3x3 box of the final puzzle. All of the puzzles in the set will be on separate sheets of paper so you can arrange them on your table.

Since puzzles from 1 to 12 have multiple solutions if solved independently, only the unique solution for each puzzle that matches the complete solution of the whole set will be awarded with points.

Puzzles 1-12 **15**
 points

Puzzle 13 **20**
 points



**MAXIMUM
200
POINTS
+ ORDER BONUS**

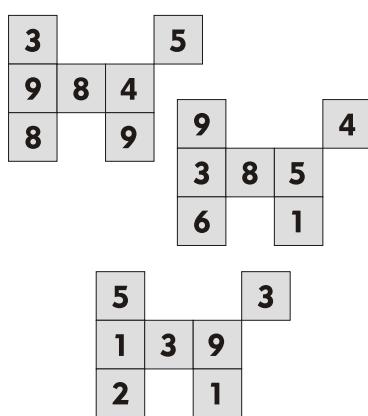
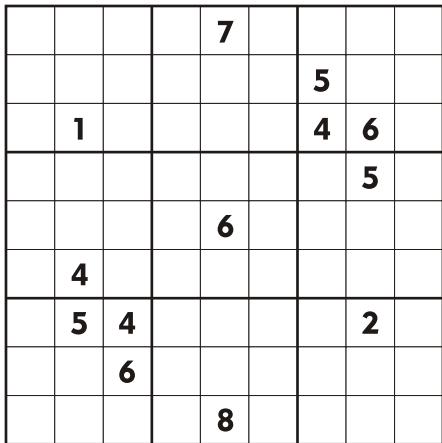
PART 9 THREE LITTLE PIGS - team

October 2nd, 19.40. - 20.10.

This is a team part consisting of 6 classic sudokus.

First, places the given 18 sudoku pieces (pigs) into 6 grids (wolves). Each wolf has "eaten" exactly three little pigs. The pigs can touch each other, but they cannot be rotated, mirrored or overlapped. They also cannot overlap the numbers already written in the grids.

Then solve each sudoku following the classic rules: place digits from 1 to 9 into every empty cell of the grid so that no digit is repeated in any row, column and 3x3 box.



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

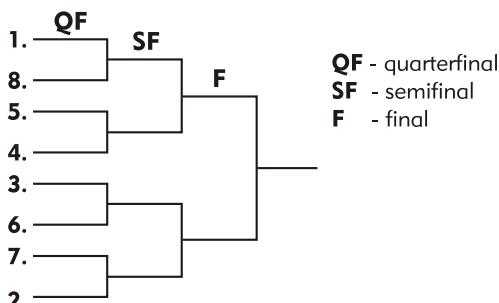
MAXIMUM
150
POINTS

INDIVIDUAL PLAYOFFS

October 3rd, 10.00. - 13.00.

The top 8 official competitors after 7 individual parts in the 7th World Sudoku Championship will participate in the playoffs held on billboards in front of the audience.

They will compete 1 against 1 in several rounds according to the next scheme:



Each pair of competitors will solve one puzzle at a time, until one of them correctly solves it and gets one point. Then they will solve the next puzzle etc.

In quarterfinals, semifinals and in the bronze medal match, the winner will be the first competitor to get two points.

In the gold medal match the winner will be the first competitor to get three points.

There will be 3 puzzle pools with 9 puzzles each. Pool no.1 will contain classic sudokus rated easy and medium. Pool no.2 will

contain hard classics and common variations (irregular, diagonal, outside, consecutive...). Pool no.3 will contain innovative and mathematical variations.

All sudoku variations in the playoffs will be the ones already used in puzzle parts 1-9 in the championship. Their complete list will be known before the start of the championship.

The higher ranked competitors from previous rounds will not have the time advantage but they will have the advantage of choosing the puzzles from the pools for their matches.

Before the beginning of the quarterfinal matches, competitors will choose puzzles from the puzzle pools according to their ranking - the first 4 ranked competitors will choose 2 puzzles each, starting from the competitor no.1 on. Then, competitors ranked 5-8 will choose 1 puzzle each, also starting from the highest ranked competitor on.

Each time a competitor chooses 2 puzzles, they have to be from 2 different pools. Each time a competitor chooses only one puzzle, it has to be from the third pool, not chosen by their opponent.

After the puzzle selection, quarterfinal matches will take place in the order shown in the scheme (first match 1-8, then 5-4, etc.).

The first puzzle in each match will be a puzzle selected by the higher ranked competitor. The second one will be the lower ranked competitor's choice. If the match is tied after two puzzles, the third puzzle (selected by the higher ranked competitor) will decide the winner.

If a competitor wins a match 2:0, the third, unused, puzzle will be returned to the puzzle pool and can be selected again in any of the next rounds (semifinal or final).

After the quarterfinal round, the winners will again start the selection of puzzles for the semifinals in a similar way as in the quarterfinals. First, the highest ranked competitor will choose 2 puzzles (from 2 different pools), then the second highest ranked competitor will choose 1 (if he/she plays against the higher ranked competitor; from the third pool, not chosen by his/her opponent) or 2 puzzles (if he/she plays against a lower ranked competitor, from 2 different pools), then the third ranked competitor will also choose 1 or 2 puzzles, and finally the lowest ranked competitor will choose 1 puzzle (from the third pool, not chosen by his/her opponent).

When puzzles are selected, semifinal matches will be played in the same way as the quarterfinals.

Unused puzzles will be returned to the puzzle pool to be available for the bronze and gold medal match puzzle selection.

The puzzle selection for the gold and bronze medal match will be conducted as follows: first, the higher ranked finalist will choose 3 puzzles (1 puzzle from each pool), then the lower ranked finalist will choose 2 puzzles (from 2 different pools), then the higher ranked bronze medal match competitor will choose 2 puzzles (from 2 different pools), and finally the lower ranked bronze medal match competitor will choose 1 puzzle (from the third pool, not chosen by his/her opponent).

After the final puzzle selection is complete, the bronze medal match will take place in the same way as quarterfinals and semifinals.

The last match of the day, which will decide the sudoku champion for 2012, will be conducted in a similar way - the 1st, 3rd and 5th (if needed) puzzle will be the choice of the higher ranked competitor and the 2nd and 4th (if needed) will be the choice of the lower ranked competitor.

Puzzles in the playoffs will be checked by the judges standing next to the competitors on the stage. When a competitor finishes solving his/her puzzle, he/she needs to raise his/her hand and clearly state that he/she has finished. At that moment the judge will note the exact time of submission on the billboard and check the solution. If the solution is correct the judge will notify the competitor that he/she has won a point and stop the other competitor. If the solution is not correct the judge will wait until precisely one minute has passed and then the competitor can continue solving the puzzle. There will be no other penalties for incorrect solutions. During one minute of checking the competitor is not allowed to leave the stage or to look at other competitor's puzzle or to talk to anybody in the audience. He/she is also not allowed to look at his/her puzzle or the judge while checking the solution. There will be more judges making sure all the rules are strictly obeyed.