



WPF
SUDOKU/PUZZLE
GRAND PRIX
2016

WPF SUDOKU GP 2016 INSTRUCTION **BOOKLET**

ROUND **5**

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Organised by



WORLD PUZZLE FEDERATION



General Answer Format

Each Sudoku has two marked rows or columns. You need to submit all digits in the corresponding directions, from left to right or from top to bottom.

In the example, the two answer keys are:

1A: 367594218

1B: 283749165

All puzzles will use digits 1-9 in the submission, except 0-8 Skyscrapers Sudoku. 0-8 Skyscrapers Sudoku will use digits 0-8.

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

Submission Page

<http://gp.worldpuzzle.org/content/sudoku-gp>

Version

This is version 2 of the instruction booklet, which corrects a transposition in version 1 with the points scores for 6. Consecutive Sudoku (24 Points) and 7. Ratio Sudoku (59 points).

Points Distribution

1	Classic Sudoku	19
2	Classic Sudoku	25
3	Classic Sudoku	28
4	Classic Sudoku	34
5	Classic Sudoku	39
6	Consecutive Sudoku	24
7	Ratio Sudoku	59
8	Fortress Sudoku	50
9	Renban Groups Sudoku	65
10	% Sudoku	39
11	# Sudoku	66
12	0-8 Skyscrapers Sudoku	70
13	Clock Sudoku	34
14	24-Trio Sudoku	48
TOTAL:		600



1-5 Classic Sudoku

19, 25, 28, 34, 39 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.

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

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

6 Consecutive Sudoku

24 points

Apply classic sudoku rules.

Adjacent cells containing consecutive numbers are marked. Adjacent cells with no marking must not contain consecutive numbers.

				1				
				3				
			9					
			5					

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



7 Ratio Sudoku

59 points

Apply classic sudoku rules.

Numbers placed in adjacent cells must satisfy the given ratios.

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

8	7	4	6	1	5	$2^{2/3}$	3	9	
6	5	9	3	8 $^{1/4}$	2	7	4	1	
$1/3$	2	1	3	7	4	9 $^{8/9}$	8	5	6
9 $^{2/3}$	6	2	5	7 $^{3/7}$	3	1	8	4	
3	8 $^{5/8}$	5	4	6	1	9 $^{2/9}$	2	7	
1	4	7	2 $^{2/9}$	9	8	5	6 $^{1/2}$	3	
7	3	8 $^{1/8}$	1	2	4	6	9	5	
5	2	1	9 $^{1/3}$	3	6	4	7	8 $^{5/8}$	
4	9 $^{2/3}$	6	8	5	7	3 $^{3/4}$	1	2	

8 Fortress Sudoku

50 points

Apply classic sudoku rules.

A number placed in a shaded cell must be strictly greater than numbers placed in adjacent unshaded cells.

	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



9 Renban Groups Sudoku

65 points

Apply classic sudoku rules.

The numbers placed in each shaded region must form a consecutive, non-repeating set.

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

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

10 % Sudoku

39 points

Apply classic sudoku rules.

Numbers placed along the marked line and circles must not repeat. The same set of 8 numbers is used along both circles.

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

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



11 # Sudoku

66 points

Apply classic sudoku rules.

Numbers placed along marked lines must not repeat.

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

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

12 0-8 Skyscrapers Sudoku

70 points

Apply classic sudoku rules, using numbers from 0-8.

Each number from 1-8 represents the height of a building. The clues outside the grid indicate the number of buildings visible from the corresponding direction. A taller building will hide any shorter buildings behind it.

0 does not represent a building, and does not count towards the number of buildings in a corresponding direction.

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

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



13 Clock Sudoku

34 points

Apply classic sudoku rules.

The numbers placed in the marked digital clocks in the grid must display a valid time in HH:MM format. In other words, the hours (HH) must be between 00-23, and the minutes (MM) must be between 00-59.

	:			4		6	8
			9		:		
	5			7			4
4			:				
	8						7
		:					5
8			7				4
:			5				
6	3		8		:		

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

14 24-Trio Sudoku

48 points

Apply classic sudoku rules.

The three numbers placed along marked lines must result in 24 after applying two of the arithmetic operations (+, ×, −, /). The order of these numbers along the line does not matter.

E.g. 395 can be combined as $24 = (3 \times 5) + 9$.

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

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