

SUDOKU MASTERS 2008

NATIONAL SUDOKU CHAMPIONSHIP

FINALS

BANGALORE

23 MARCH 2008

INSTRUCTION BOOKLET

<http://www.sudokumasters.in>

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SUDOKU MASTERS 2008 • NATIONAL SUDOKU CHAMPIONSHIP • FINALS • BANGALORE, 23 MARCH 2008

Q&A SESSION

10:30 – 10:50

PART 1 • CLASSICS

11:00 – 11:35

PART 2 • SUDOKU MIX

11:50 – 12:30

PART 3 • RELAY

12:45 – 13:20

LUNCH BREAK

13:10 – 14:20

PART 4 • SUDOKU VARIA

14:20 – 15:30

PART 5 • TILED SUDOKU

15:45 – 16:15

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PART 1 • CLASSICS 35 MINUTES

Maximum score: 380 points

1. Classic Sudoku (25 points)
2. Classic Sudoku (40 points)
3. Classic Sudoku (50 points)
4. Classic Sudoku (65 points)
5. Classic Sudoku (75 points)
6. Classic Sudoku (95 points)
- X. Mini Sudoku (6+6+6+6+6 points)

PART 2 • SUDOKU MIX 40 MINUTES

Maximum score: 430 points

1. Trio Sudoku (30 points)
2. Odd/Even Sudoku (45 points)
3. Diagonal Sudoku (50 points)
4. Irregular Sudoku (60 points)
5. Sum Sudoku (65 points)
6. Extra Region Sudoku (70 points)
7. Consecutive Sudoku (80 points)
- X. Mini Sudoku (6+6+6+6+6 points)

PART 3 • SUDOKU RELAY 35 MINUTES

Maximum score: 250 points

1. Irregular Sudoku (50 points)
2. Odd Sudoku (50 points)
3. Diagonal Sudoku (50 points)
4. Classic Sudoku (50 points)

Position bonus for first 9 correct solvers:

50 - 40 - 35 - 30 - 25 - 20 - 15 - 10 - 5

PART 4 • SUDOKU VARIA 70 MINUTES

Maximum score: 650 points

1. Even Pair Sudoku (80 points)
2. All Even / All Odd Sudoku (65 points)
3. Non-consecutive Sudoku (125 points)
4. Substitution Twin Sudoku (80 + 40 points)
5. Numeral Sudoku (105 points)
6. Sudoku XV (95 points)
7. Product Frame Sudoku (60 points)

PART 5 • TILED SUDOKU 30 MINUTES

Maximum score: 250 points

1. Classic Sudoku (120 + 80 points)

Position bonus for first 9 correct solvers:

50 - 40 - 35 - 30 - 25 - 20 - 15 - 10 - 5

Classic Sudoku

Fill in the grid so that every row, every column and every 3x3 box contains the digits 1 through 9.

Start

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

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NSC07PS10

Solution

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

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NSC07PS10

Diagonal Sudoku

Fill in the grid so that every row, every column, every diagonal and every 3x3 box contains the digits 1 through 9.

Start

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

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NSC07PS20

Solution

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

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NSC07PS20

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Sum Sudoku

Fill in the grid so that every row, every column and every 3x3 box contains the digits 1 through 9. The sum of the digits within each dotted subarea equals the number given in the top left corner of that subarea. No digit can occur more than once in each subarea.

Start

11	6	10		16	12			16
			11	13		6		
11	13			4		24	14	
		3		17				4
16		14	17				11	
	17		4		9			16
10			5		9	11		
		11		11			12	10
	23				8			

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NSC07PS30

Solution

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

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NSC07PS30

Odd/Even Sudoku

Fill in the grid so that every row, every column and every 3x3 box contains the digits 1 through 9. Shaded cells contain the even digits while the others contain the odd digits.

Start

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

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NSC07PS40

Solution

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

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NSC07PS40

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Irregular Sudoku

Fill in the grid so that every row, every column and every outlined region of nine cells contains the digits 1 through 9.

Start

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

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NSC07PS50

Solution

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

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NSC07PS50

Trio Sudoku

Fill in the grid so that every row, every column and every 3x3 box contains the digits 1 through 9. Cells with circles must contain digits 1-2-3, cells with squares must contain digits 4-5-6 and blank cells must contain digits 7-8-9.

Start

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

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NSC07PS60

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Solution

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

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NSC07PS60

Consecutive Sudoku

Fill in the grid so that every row, every column and every 3x3 box contains the digits 1 through 9. Neighbouring cells which contain consecutive digits are separated by white bars.

Start

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

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NSC07PS70

Solution

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

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NSC07PS70

Extra Region Sudoku

Fill in the grid so that every row, every column and every 3x3 box contains the digits 1 through 9. Each group of nine like coloured cells must also contain the digits 1 through 9.

Start

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

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NSC07PS80

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Solution

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

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NSC07PS80

Even Pair Sudoku

Fill in the grid so that every row, every column and every 3x3 box contains the digits 1 through 9. The sum of the pair of digits in each 1x2 marked rectangle is even.

Start

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

Solution

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

All Even / All Odd Sudoku

Fill in the grid so that every row, every column and every 3x3 box contains the digits 1 through 9. The grey cells have same parity: if one is odd, all are odd, OR if one is even then all are even.

Start

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

Solution

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

Non-consecutive Sudoku

Fill in the grid so that every row, every column and every 3x3 box contains the digits 1 through 9. All the adjacent cell pairs (sharing an edge) cannot contain digits which are consecutive to each other.

Start

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

Solution

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

Sudoku XV

Fill in the grid so that every row, every column and every 3x3 box contains the digits 1 through 9. All the adjacent cell pairs (sharing an edge) with two digits summing to 5 are marked by V, while those summing to 10 are marked by X.

Start

x		x		x				
9			v		x	4		
2					x		x	
	x	v			x	v	x	v
					x	v		x
				v	x			x
						2		x
	v	x	x				x	v
					x			

Solution

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

Numeral Sudoku

Fill in the grid so that every row, every column and every 3x3 box contains the digits 1 through 9. Cells with a letter contain a digit for which the corresponding numeral contains the given letter.

Start

I	O		R	H		R	I	
T	N		V		S		H	E
F		I		R		T		
V	I	S	E		F		V	T
S					N			
N	O	N		F	N	R		R
T	N		S					R
T	F					O	U	
	O	N	F	E	H			N

Solution

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

NUMERALS

- | | | |
|----------|---------|----------|
| 1. ONE | 4. FOUR | 7. SEVEN |
| 2. TWO | 5. FIVE | 8. EIGHT |
| 3. THREE | 6. SIX | 9. NINE |

Product Frame Sudoku

Fill in the grid so that every row, every column and every 3x3 box contains the digits 1 through 9. The numbers outside the grid represent the product of first 3 digits inside the grid in the corresponding direction.

Start

192	126	15	84		27	360	24	42	
36									70
210									24
48									216
216									105
14									192
140									162
96									20
27									112
	10	96	378	360		56	24	42	360

Solution

192	126	15	84		27	360	24	42	
36	4	9	1	6	8	3	5	2	7
210	6	7	5	2	4	9	8	3	1
48	8	2	3	7	5	1	9	4	6
216	9	6	4	1	2	8	7	5	3
	3	5	8	4	7	6	1	9	2
14	7	1	2	3	9	5	6	8	4
140	5	4	7	8	1	2	3	6	9
96	2	8	6	9	3	7	4	1	5
27	1	3	9	5	6	4	2	7	8
	10	96	378	360		56	24	42	360

Substitution Twin Sudoku

Fill in the grids so that every row, every column and every 3x3 box contains the digits 1 through 9. There must be a one-to-one correspondence between the grids, i.e. each digit in the first grid is substituted by a different digit in the second grid.

Start

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

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

Solution

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

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

Fill in the grid so that every row, every column and every 3x3 box contains the digits 1 through 9. Each shaded cell must contain an odd digit.

Start

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

Solution

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

In this round, there are four sudokus in the following order:

1. Irregular Sudoku
2. Odd Sudoku
3. Diagonal Sudoku
4. Classic Sudoku

In each of the sudokus except the first one, there will be some cells with a dot inside. Before starting to solve the sudoku, for each dotted cell first transfer the digit in the corresponding cell in the previous puzzle.

This transfer process is illustrated below.

solution relay sudoku 1

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

relay sudoku 2 with dots representing digits to be transferred from sudoku 1

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

relay sudoku 2 with digits transferred from relay sudoku 1

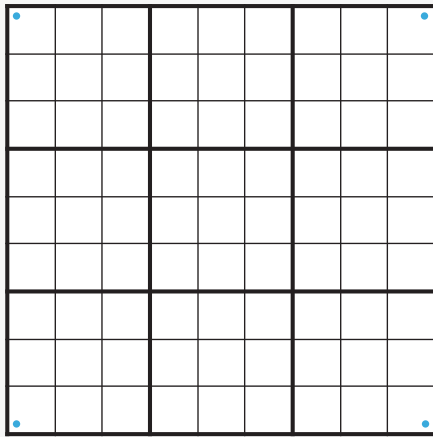
		3	8		4	9		
	1			5			8	
	2						7	
		8				3		
	7	4		1		5	9	
		1				2		
	8						6	
	3			9			5	
		5	6		2	7		

Tiled Sudoku

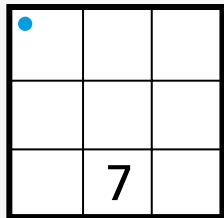
In this part along with your answer sheet you will be provided an envelope containing 9 tiles. Four of these tiles can be distinguished as corner tiles by a dot at one of their corners. Tiles can be rotated, but the resulting numbers in the configuration must be upright.

Place these tiles on the blank grid so as to form a standard classic sudoku. When you have found the correct arrangement, transfer the digits onto the grid on your answer sheet and solve the sudoku there.

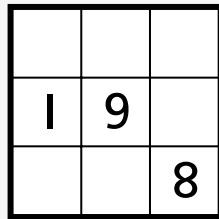
Partial points will be awarded for transferring the correct configuration on the grid. You will get the entire 200 points only after solving the resulting classic sudoku.



sample
corner tile



sample
rotatable tile



sample
non-rotatable tile

