## $]^{\text {WPF }}$ <br> SUDOKUPUZZLE GRAND PRIX <br> 2014

# WPFsuDOKUGP 2014 INSTRUCTION BOOKLET 

## PLAYOFFS

Puzzle authors：
Russia（Andrey Bogdanov），India（Prasanna Seshadri）， Bulgaria（Deyan Razsadov），Turkey（Salih Alan）， Japan（Ko Okamoto 岡本広），Serbia（Cedomir Milanovic） Switzerland（Fred Stalder）

Organised by
ハーローム！
World Puzzle Federation

## General Playoff Format:

The Sudoku Grand Prix playoffs will consist of seven puzzles, to be solved in a fixed order. The puzzles contain a mix of classic sudoku, standard variations, and less common variations representative of the entire Sudoku GP series. Each host nation has contributed one sudoku to the playoffs.

The competitors will begin with a staggered start based on the total number of points earned in the qualifying rounds. Each point will convert to one second, with the start times as shown:
Competitor:
Tiit Vunk (Estonia)
Kota Morinishi (Japan)
Bastien Vial-Jaime (France)
Seungjae Kwak (South Korea)
Hideaki Jo (Japan)
Michael Ley (Germany)
Nikola Zivanovic (Serbia)
Ulrich Voigt (Germany)
Rishi Puri (India)
Timothy Doyle (France)

Points:
572.91
556.39
510.20
503.88
482.81
471.10
468.96
460.39
459.56
458.00

## Start Time (mm:ss):

00:00
00:17
01:03
01:09
01:30
01:42
01:44
01:53
01:54
01:55

When a competitor completes a sudoku, he can raise his hand to indicate to a proctor that he is done. The entire grid will then be judged over the next minute. After one minute, if the puzzle is correct, the proctor will indicate the competitor can begin the next puzzle. If the puzzle is incorrect, the proctor will return the incorrect puzzle to the competitor but will make no indication of where any mistake is in that grid. The competitor can resubmit a returned sudoku at any time, but another full one minute grading process will follow.

The playoffs will continue until 3 solvers have completed all seven puzzles. These solvers, in order of finish, will be the top 3 prize winners for this year's Sudoku Grand Prix.

## Puzzles:

1 - Double Sudoku (Russia)
2 - Classic Sudoku (India)
3 - Irregular Sudoku (Bulgaria)
4 - Classic Sudoku (Turkey)
5 - Triomino Sudoku (Japan)
6 - Classic Sudoku (Serbia)
7 - Palindrome Sudoku (Switzerland)

## 2,4,6 Classic Sudoku

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in every row, column, and outlined $3 \times 3$ region.

Example

|  | 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 |  |

Solution

| 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 |

## 1 Double Sudoku

Place a digit from 1-4 in each empty cell so that each digit appears exactly twice in each row, column, and outlined region. Identical digits cannot share an edge.

Example

| 1 |  | 3 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2 |  | 4 | 1 | 2 | 3 | 4 |
| 4 |  |  |  |  |  |  |  |
|  | 3 |  | 1 | 2 | 3 | 4 |  |
|  |  | 2 |  |  |  |  | 4 |
|  |  |  | 1 |  |  |  |  |
|  |  |  |  | 4 | 3 | 2 | 1 |
|  | 4 | 3 | 2 | 1 |  |  |  |

Solution

| 1 | 4 | 3 | 2 | 3 | 4 | 1 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 | 2 | 1 | 4 | 1 | 2 | 3 | 4 |
| 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 |
| 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 |
| 3 | 1 | 2 | 4 | 3 | 2 | 1 | 4 |
| 2 | 3 | 4 | 1 | 2 | 1 | 4 | 3 |
| 4 | 2 | 1 | 3 | 4 | 3 | 2 | 1 |
| 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 |

## 3 Irregular Sudoku

Apply Classic Sudoku rules. Additionally, instead of $3 \times 3$ regions, the regions have irregular shapes.

Example

| 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 |

Solution

| 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 |

## 5 Triomino Sudoku

Place a digit from 1 to 6 into each empty cell or blacken the cell so that each digit appears exactly once in every row, column, and outlined $3 \times 3$ region along with three black cells. Each black cell should be part of an orthogonally connected group of three blackened cells (a triomino). No two triominoes can share an edge.

Example

|  |  |  |  | 5 | 2 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2 |  |  |  | 6 |  | 1 |

Solution

|  |  | 3 | 1 | 5 | 2 | 4 | 6 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2 | 4 |  | 3 | 6 | 5 | 1 |  |
| 5 | 6 | 1 |  | 4 |  | 2 | 3 |  |
| 4 | 3 | 6 |  | 1 |  |  | 5 | 2 |
|  |  | 5 | 2 | 6 | 4 | 1 |  | 3 |
| 1 | 2 | 5 |  | 3 | 6 |  | 4 |  |
| 2 | 4 |  | 6 | 5 | 3 |  | 1 |  |
| 3 | 5 | 4 |  | 1 |  | 2 | 6 |  |
| 6 | 1 |  | 3 | 2 |  |  | 4 | 5 |

## 7 Palindrome Sudoku

Apply Classic Sudoku rules. Additionally, the numbers formed by the digits on the gray lines are palindromes meaning they can be read equally in both directions.

Example

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

Solution

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

