# Sudoku Day 2014 

On the occasion of International Sudoku Day on 9/9

Dates : $6^{\text {th }}$ Sep $-9^{\text {th }}$ Sep
Sudokus by Nikola Zivanovic
Submission Link : http://logicmastersindia.com/2014/09S/

## About the Test

Early last year, World Puzzle Federation had announced 9/9 as International Sudoku Day. To promote this day, we hold this very special contest with 9 9X9 sudokus. But more interestingly, all the nine sudokus appearing in this contest are rarely or never seen variants - innovative variants.

## General Rules

- The duration of the test is 99 minutes. Total points is 99 .
- For all puzzles the following rule is applied "Place numbers in the grid such that each row, column and $3 \times 3$ contain the numbers 1 to 9 "
- The answer key will be 2 rows.
- This test will be included in LMI Monthly Sudoku Ratings.


## Instant Grading

This test uses instant grading where a solver can submit any individual sudoku and receive confirmation that the solution is correct or not. Each incorrect submission reduces the sudoku's potential score. The first, second, third, and fourth incorrect submission reduces the potential score to $90 \%, 70 \%, 40 \%$, and $0 \%$ respectively.

## Bonus

If you submitted all solutions correct you can have bonus points 1 point per minute saved, computed upto seconds.

## About the examples

Please note that the examples available in the booklet are not complete. That means they will not be solvable uniquely. They are provided as a guidance to help you understand the rules. If rules are not clear, please ask in forum, preferably before the test starts.

Link for forum discussion : http://logicmastersindia.com/t/?tid=867

## Online Solving

LMI online interface is not good enough for several of the variants in this test. So it is decided that online solving will not be available for this test.

## Points Table

The list of Sudoku types are shown in the right and the rules are explained in next pages. Points typically indicate difficulty of the sudokus and time required to solve them. While the organizers have made best efforts to match them, your personal experience and preference may differ.

| PODIUM SUDOKU | 6 |
| :--- | :---: |
| TRUE OR LIE SUDOKU | 6 |
| ROLLING THE DICE SUDOKU | 6 |
| ASPIRATOR SUDOKU | 10 |
| DIAGONAL PATH SUDOKU | 10 |
| SECOND EVEN PRODUCT SUDOKU | 13 |
| T CROSSWORD SUDOKU | 13 |
| SINGLE TRIPLET SUDOKU | 17 |
| BLACK AND WHITE SUDOKU | 18 |

## PODIUM SUDOKU

Standard sudoku rules apply. Number on the top of the podium (1st place) is greater than the number on the left side (2nd place), and number on the left side of the podium is greater than the number on the right side (3rd place).


## TRUE OR LIE SUDOKU

Standard sudoku rules apply. Given clues may be correct or wrong. If the clue is wrong, than the correct number is either 1 higher or 1 lower.

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


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

## ROLLING THE DICE SUDOKU

Standard sudoku rules apply. One dice with numbers 1 to 6 is rolled along the grid. The path of the dice is marked by gray colour. Starting/ending number can be any one of 1 to 6 . The orientation of the dice is shown on the below picture and it will be the same in puzzle booklet.


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



## ASPIRATOR SUDOKU

Standard sudoku rules apply. There are several aspirators in the grid marked by different letters. In all 8 directions they suck up all numbers which are smaller than aspirator number. They stop suction when they hit the greater or equal number. All sucked cells are marked by the small letter(s) which is the same as the letter of the aspirator.

| $B$ | $A B$ | $B$ |  |
| :--- | :--- | :--- | :--- |
|  | $A B$ | $A B$ |  |
| $B$ | $A$ | $B$ |  |
| $A$ |  |  |  |


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

## DIAGONAL PATH SUDOKU

Standard sudoku rules apply. Each number from the top row of the grid has its own diagonal way (at least one) throughout the same numbers to a couple in the bottom row.
Note: No arrows will be given, it's just for demonstration.


## SECOND EVEN PRODUCT SUDOKU

Standard sudoku rules apply. Numbers outside the grid indicate the product of the numbers next to the second even number in that row or column.


T CROSSWORD SUDOKU (inspired by last WPC's puzzle „T for Trees")
Place the given list of words into the grid (across or down) to form an interlocking crossword, so only the words in the list are formed and no others. Within each bold-lined $3 \times 3$ square, the cells occupied by letters (numbers) must form a " $T$ " in any one of 4 possible orientations. One letter (number) is already placed, and all words must be used. With the given conditions standard sudoku rules apply.


451
594
857
6418
175482
319247


## SINGLE TRIPLET SUDOKU

Standard sudoku rules apply. Each marked cage contain exactly one triplet of consecutive digits, not necessary in the order. For example: numbers 38521 are allowed in one cage, but numbers 76425 not because two triplets of consecutive digits appear (456 and 567). Numbers must not repeat in cages.


## BLACK AND WHITE SUDOKU

Standard sudoku rules apply. Somewhere in the grid one digit 1, two digits 2, three digits 3, four digits 4 , five digits 5 , six digits 6 , seven digits 7 , eight digits 8 and nine digits 9 are blackened. Clues outside the grid indicate the sum of all blackened numbers in that row or column.


