## JUNIOR SUDOKU CHAMPIONSHIP

## By



A division of Magik Minds
\&

https://logicmastersindia.com/
Indian Affiliate of the World Puzzle Federation

## INSTRUCTIONS BOOKLET

Grade C (11-15 Years)

## General Instructions

- There will be one round. It will contain
$29 \times 9$ Classic Sudokus
1 6x6 Overlapping Sudoku
1 6x6 Irregular Sudoku
1 6x6 Diagonal Sudoku
1 6x6 Palindrome Sudoku
$19 \times 9$ Pencil Marks Sudoku
$19 \times 9$ Extra Regions Sudoku
- There will be arrows marked for each Sudoku which are solution code. The examples below will show what solution code to enter based on the marked arrows.
- The duration of the contest is 60 minutes.
- Bonus points will be computed if all Sudokus are solved ahead of time.


## Rules and Regulations

- Students can solve online only and must be connected to the Zoom video at all times.
- Students are not permitted to use outside assistance of any kind to solve the Sudokus.
- Parents are allowed to submit online on behalf of the students, but NOT permitted to assist in actual solving. Any prompting, etc. will result in a disqualification.


## Classic Sudoku (9x9) (55 + 50 Points)

Rules: Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 3X3 box.
Link to solve example - https://git.io/JcLBK
There will be $29 \times 9$ Classic Sudokus in the contest.

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

Solution


## Overlapping Sudoku (6x6) (65 Points)

Rules: Two 6x6 Sudokus are overlapping. Separately, they each follow these rules: Place a digit from 1 to 6 in each empty cell so that each digit appears exactly once in each row, column and 2X3 box.
Link to solve example - https://git.io/JcLwV


Solution


## Irregular Sudoku (6x6) (30 Points)

Rules: Place a digit from 1 to 6 in each empty cell so that each digit appears exactly once in each row, column and thickly outlined 6-cell region.

## Link to solve example - https://git.io/JcLKJ



## Mini Diagonal Sudoku (6x6) (100 Points)

Rules: Place a digit from 1 to 6 in each empty cell so that each digit appears exactly once in each row, column and 2X3 box. Additionally, each main diagonal (marked by dotted lines) must contain digits from 1 to 6.

## Link to solve example - https://git.io/JcLgB

| $A$ |  | $\ddots$ |  |  |  | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\ddots$ |  |  |  |
| 1 | 2 |  | $\ddots$ |  |  |  |
| 2 |  | 1 |  | $\ddots$ |  |  |
|  |  |  |  |  |  |  |


| Solution |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 | 6 | 3 | 4 | 2 | 1 |
| A | 4 | 1. | 2 | 6 | 5 | 3 |
| - | 3 | 5 | 6 | 2 | 1 | 4 |
|  | 1 | 2 | 4 | 3 | 6 | 5 |
|  | 2 | 3 | 1 | 5 | 4 | 6 |
|  | 6 | 4 | 5 | 1 | 3 | 2 |
| Solution Codes - |  |  |  |  |  |  |
| A: 412653 |  |  |  |  |  |  |
| B: 356214 |  |  |  |  |  |  |

## Palindrome Sudoku (6x6) (40 Points)

Rules: Place a digit from 1 to 6 in each empty cell so that each digit appears exactly once in each row, column and 2X3 box. Each grey line is separately a palindrome, i.e., digits along the line must read the same from both sides, e.g. 1551.

Link to solve example - https://git.io/JcL6Y


A: 453126
B: 134652

## Extra Region Sudoku (9x9) (115 Points)

Rules: Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and $3 \times 3$ box. The 9 -cell grey areas also must contain 1-9 exactly once without repeating.
Link to solve example - https://git.io/JctCb

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

Solution


## Pencil Marks Sudoku (9x9) (145 Points)

Rules: Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and $3 \times 3$ box. In cells where there are small numbers, no other number can be placed except one of the small numbers.
Link to solve example - https://git.io/JctW2

| 12 | 12 | ${ }^{13}$ | 14 | 15 | 16 | ${ }^{17}$ | 18 | 19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 46 |  |  |  |  |  |  |  | 19 |
| 45 |  | 28 |  | 19 |  | ${ }^{37}$ |  | 29 |
| ${ }^{24}$ |  |  | 8 |  | 5 |  |  | 39 |
| ${ }^{47}$ |  | 5 |  |  |  | 6 |  | 49 |
| ${ }^{34}$ |  |  | 6 |  | 1 |  |  | 59 |
| 49 |  | ${ }_{37}$ |  | 19 |  | 28 |  | 69 |
| 48 |  |  |  |  |  |  |  | 79 |
| 48 | ${ }^{58}$ | ${ }^{68}$ | ${ }^{78}$ | ${ }^{38}$ | 28 | 18 | ${ }^{89}$ | 89 |

Solution

$\Rightarrow$| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 6 | 7 | 9 | 2 | 8 | 3 | 4 | 5 | 1 |
| 5 | 4 | 8 | 1 | 9 | 7 | 3 | 6 | 2 |
| 2 | 6 | 1 | 8 | 4 | 5 | 9 | 7 | 3 |
| 7 | 8 | 5 | 3 | 2 | 9 | 6 | 1 | 4 |
| 3 | 9 | 4 | 6 | 7 | 1 | 8 | 2 | 5 |
| 9 | 3 | 7 | 5 | 1 | 8 | 2 | 4 | 6 |
| 8 | 1 | 2 | 9 | 6 | 4 | 5 | 3 | 7 |
| 4 | 5 | 6 | 7 | 3 | 2 | 1 | 9 | 8 |
| Solution codes - <br> A: 548197362 <br> B: 812964537 |  |  |  |  |  |  |  |  |

