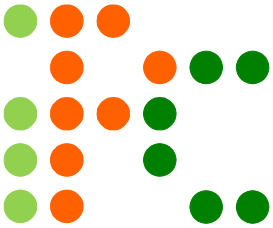
puzzle ramayan

and



Episode – 2
23rd – 27th February 2018

Number Placement and Object Placement
by
Amit Sowani

Puzzle Ramayan rounds will also serve as qualifiers for Indian Puzzle Championship for year 2018. Please check http://logicmastersindia.com/PR/2018pr.asp **for details.**

Important Links

Submission Page : http://logicmastersindia.com/PR/201802/

Discussion Thread : http://logicmastersindia.com/t/?tid=1650

F. A. Q. : http://logicmastersindia.com/t/?tid=381

Registration, if required : http://logicmastersindia.com/register.asp

About this Episode

This episode has 22 Puzzles from the following puzzle types:

- 3* Futoshiki
- 3* Ripple Effect
- 3* Partiti
- 2* Partiti Regions
- 3* Battleships
- 3* Statue Park
- 3* Half Domino
- 2* Hidden Statue

How to participate?

- Understand the rules of different puzzles that will appear in this episode. This Instruction Booklet has rules for each puzzle.
- Download the password protected Puzzle booklet (will be uploaded before the test starts). The Puzzle booklet contains the actual Puzzles to be solved. It is password protected, so you won't be able to open it.
- Any time on or after 23rd February (but on or before 27th February), login at the submission page using your LMI userid and password. Please check the submission page for exact timing.
- Click on "Start". At this time, password for pdf will be shown and timer will start.
- The puzzle booklet should be downloaded, printed and solved on paper.
- There will not be any interface / applet to solve the puzzles on web browser.
- Most of the puzzles are designed to be solved faster on paper.
- We advise you to have a printer accessible with enough paper.
- Outside solving help of any kind is not permitted. This includes but is not limited to: assistance of any kind from any other person; prepared notes, books, calculators, computers, or tools other than items explicitly permitted.
- You are allowed to use writing implements, eraser, blank paper (including commercial graph paper), ruler, scissors, and tape.

If you are participating at LMI for first time, you must check the FAQ at http://logicmastersindia.com/t/?tid=381.

About answer keys and Submission

- Each puzzle has some answer keys, as described in the instructions.
- After solving the puzzle, you need to submit the puzzle using the answer keys.
- You may submit the answer keys anytime during the test duration. You may consider submitting a puzzle as soon as you solve it.
- Answer keys are always to be entered from left to right or top to bottom
- Don't enter any separator unless specified in the answer key
- If one row and one column is marked, enter the row first and then the column
- If multiple rows are marked, enter from top to bottom for marked rows
- If multiple columns are marked, enter from left to right for marked columns
- If horizontal and vertical keys are needed, first enter the horizontal and then the vertical
- Uppercase or lower case of answer key does not matter
- Characters other than alphabets, numbers and comma will be removed while checking the answer

Points Table and Scoring

Points typically indicate difficulty of the Puzzles and time required to solve them. You will get full points if you enter the correct answer key. While the organizers have made best efforts to match them, your personal experience and preference may differ.

Futoshiki	1, 1, 2
Ripple Effect	4, 2, 9
Partiti	2, 6, 12
Partiti Regions	1, 8
Battleships	4, 8, 2
Statue Park	1, 4, 5
Half Dominoes	3, 5, 4
Hidden Statue	3, 13

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

Bonus and Ranking

If you submitted all Puzzles correctly, you can have bonus points 1 point per minute saved, computed up to seconds.

Ranking will be based on following rules in order:

1. Most total points
2. Earliest final submission time, up to seconds (ignoring incorrect submissions)

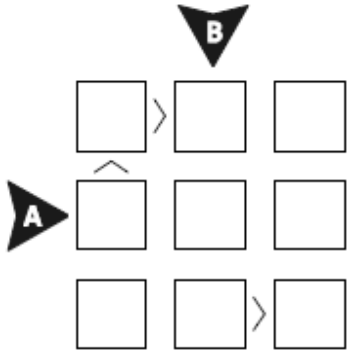
About the Puzzle Booklet

The password protected Puzzle booklet will have 11 pages. We expect you to print and solve on paper, so you would need to have a printer accessible with enough paper.

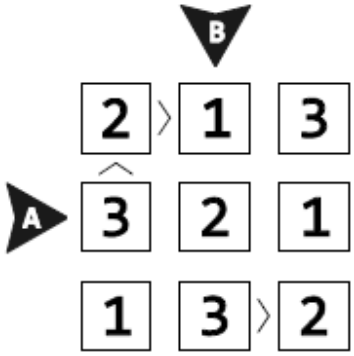
1-3 Futoshiki

1 + 1 + 2 points

Place a digit from 1 to N into each of the empty cells so that each digit appears exactly once in each row and column. If '<' or '>' is present between adjacent cells, the arrow points to the smaller number of the two.



(N = 3)



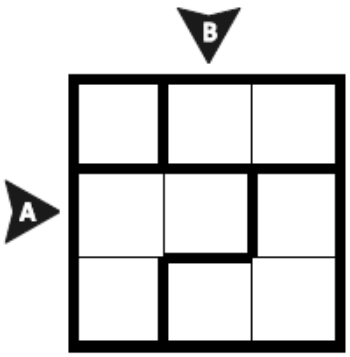
Answer Key: Enter the digits in the marked rows/columns from (left to right) / (top to bottom).

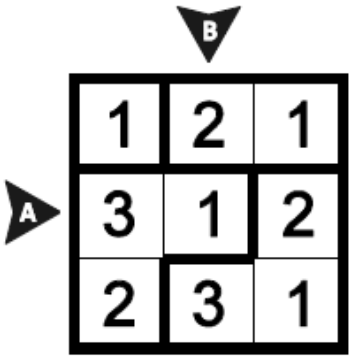
Example: 321,123

4-6 Ripple Effect

4 + 2 + 9 points

Place digits 1-N in each thickly outlined region, where N equals the size of the region. Same digits in the same row or column are separated by at least a number of cells equal to that digit.





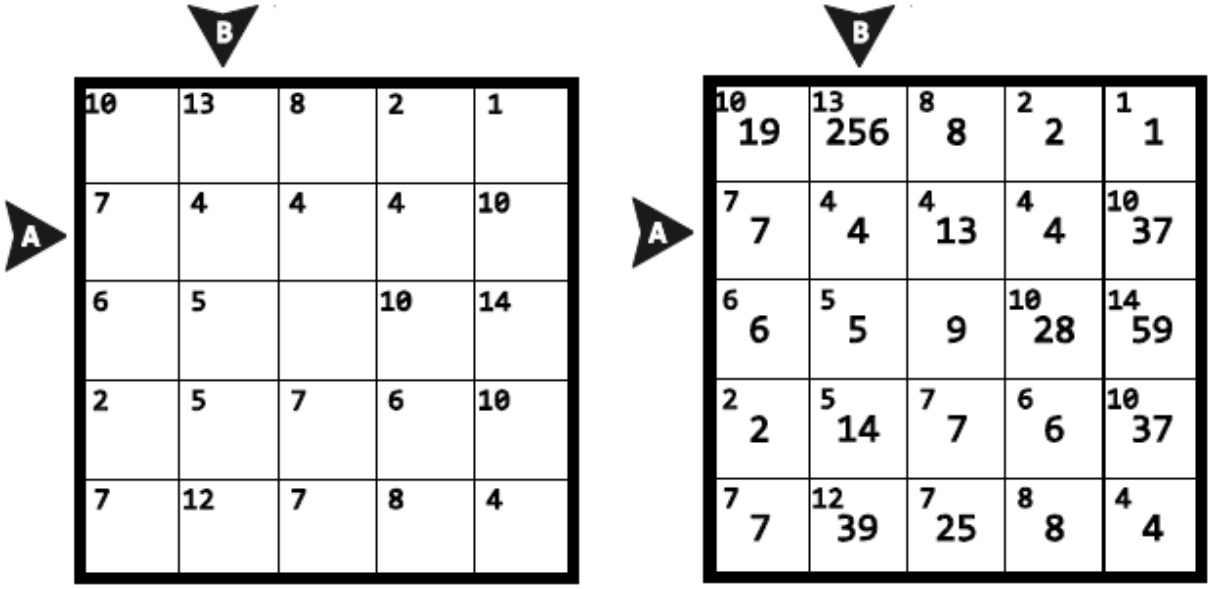
Answer Key: Enter the digits in the marked rows/columns from (left to right) / (top to bottom).

Example: 312,213

7-9 Partiti

2 + 6 + 12 points

Place one or more digits from 1 to 9 in arbitrary order in each empty cell, such that a number in the top left corner of each cell is the sum of digits entered in that cell. Same digits cannot be placed in cells that touch, even diagonally.



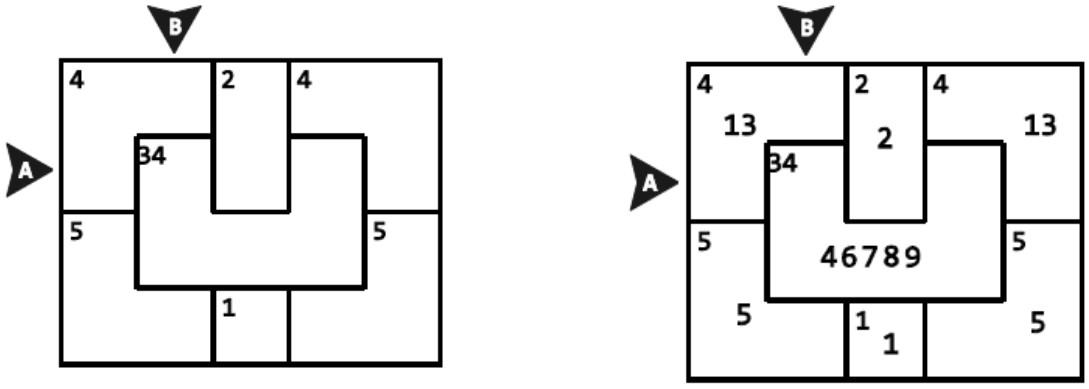
Answer key: Enter the contents of the marked rows/columns. For a cell with multiple digits, enter the largest digit only.

Example: 74347, 64549

10-11 Partiti Regions

1 + 8 points

Place one or more digits from 1 to 9 in arbitrary order in each empty region, such that a number in the top left corner of each region is the sum of digits entered in that cell. Same digits cannot be placed in regions that touch, even diagonally.



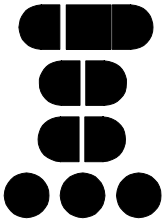
Answer Key: Enter the digits in the marked rows/columns from (left to right) / (top to bottom). For a region with multiple digits, enter the largest digit only.

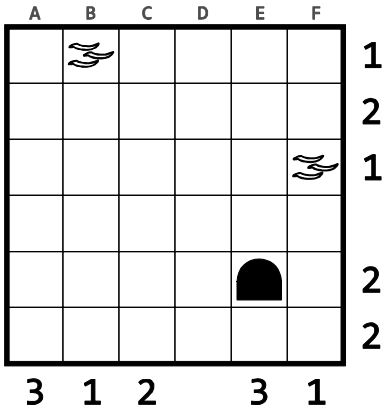
Example: 39293,395

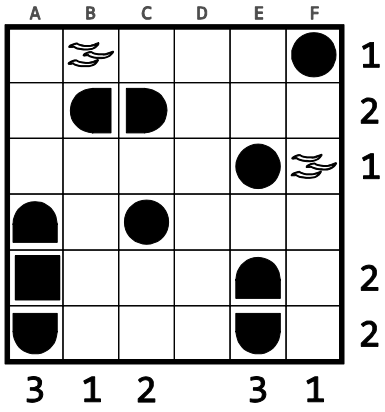
12-14 Battleships

4 + 8 + 2 points

Place the given fleet of ships with the shapes of the ships as shown. The numbers outside the grid indicate the number of cells occupied by ships in that row or column. Ships cannot touch each other, not even diagonally. The ships may be rotated. Some cells are known to be water and are indicated by waves.







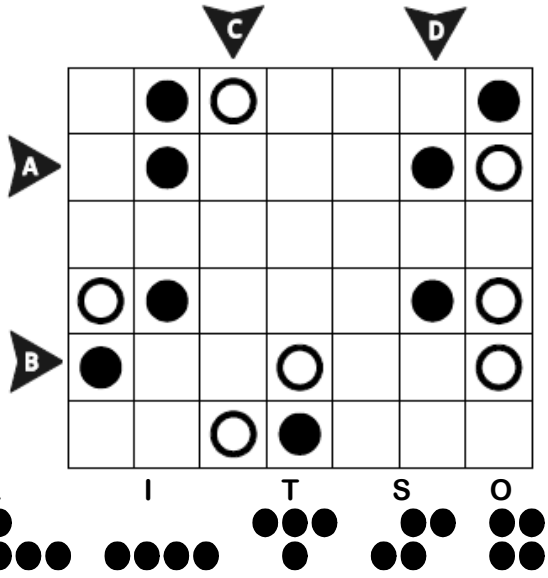
Answer Key: Enter the coordinates of the one-unit ships going from left to right and top to bottom.

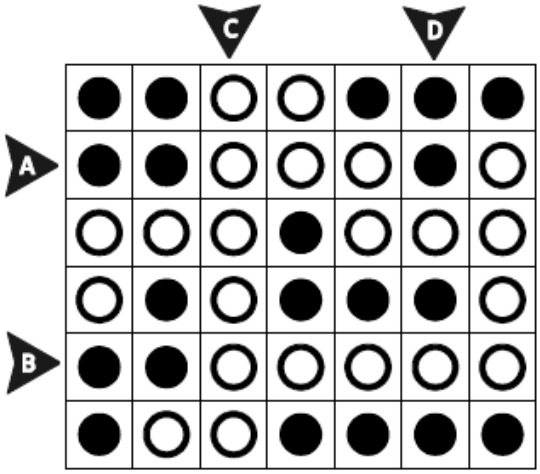
Example: F1E3C4

15-17 Statue Park

1 + 4 + 5 points

Place each of the given shapes exactly once into the grid, with rotations and reflections allowed. No two shapes can overlap or be orthogonally adjacent, and all of the space not occupied by shapes must be connected. Black circles in the grid represent spaces that must be contained in one of the shapes, and white circles represent spaces that cannot be contained in a shape.





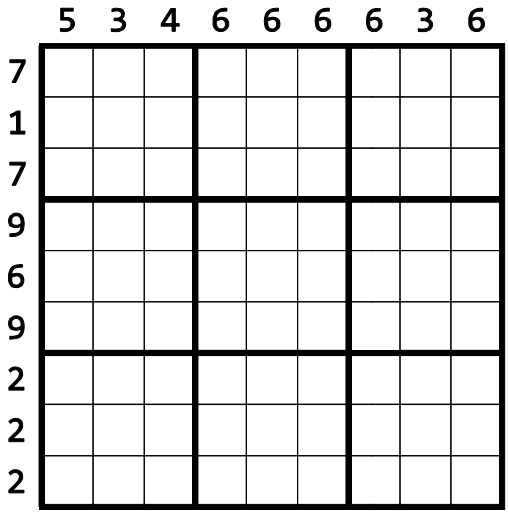
Answer Key: Enter the letters corresponding to first three shapes seen from the marked directions. (– if not enough shapes)

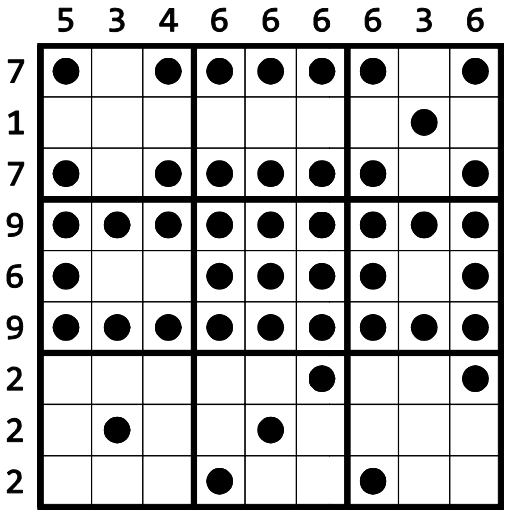
Example: OT-,S--,---,TLI

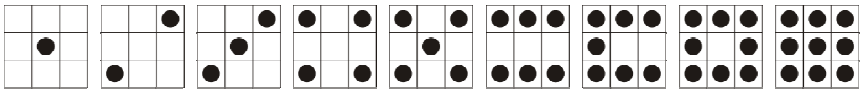
18-20 Half Domino

3 + 5 + 4 points

Put all the nine half dominoes into the puzzle grid. Given numbers outside the grid indicate the sum of black circles in certain rows, columns, or diagonals. The pieces cannot be rotated or mirrored.







Answer Key: Enter the numbers corresponding to the half dominoes from left to right and top to bottom.

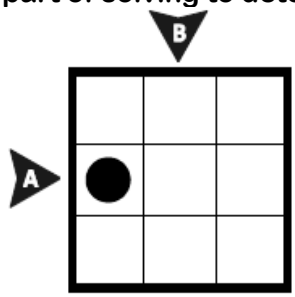
Example: 465798132

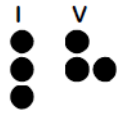
21-22 Hidden Statue

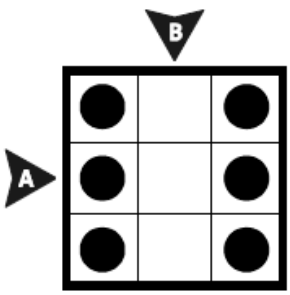
3 + 13 points

Place each of the given shapes into the grid, with rotations and reflections allowed. No two shapes can overlap or be orthogonally adjacent, and all of the space not occupied by shapes must be connected. Black circles in the grid represent spaces that must be contained in one of the shapes, and white circles represent spaces that cannot be contained in a shape.

Exactly one shape will be placed twice, and exactly one shape will not be placed. It is part of solving to determine these shapes.







Answer Key: Enter (a) the missing shape (b) the duplicated shape, and (c) the letters corresponding to first three shapes seen from the marked directions. (– if not enough shapes).

Example: V,I,II-,---