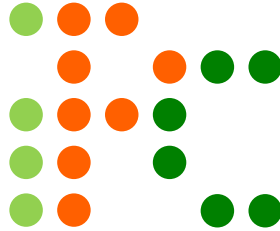


puzzle Ramayan

and



Episode – 2
17th – 20th February

Shading and Loops by Walker Anderson

Puzzle Ramayan rounds will also serve as qualifiers for Indian Puzzle Championship for year 2017. Please check <http://logicmastersindia.com/PR/2016-17pr.asp> for details.

Important Links

Submission Page : <http://logicmastersindia.com/PR/201702/>

Discussion Thread : <http://logicmastersindia.com/t/?tid=1389>

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 eight puzzle types:

- 3* Heyawacky
- 3* Yin Yang
- 3* Lakes
- 2* Bosnian Snake
- 3* Almost Simple Loop
- 3* Masyu
- 3* Bosnian Road
- 2* Lakes Loop

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 after 17th February (but before 20th 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 F.A.Q. 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.

Heyawacky	3, 5, 12
Yin Yang	2, 3, 11
Lakes	1, 4, 6
Bosnian Snake	3, 8
Almost Simple Loop	2, 2, 5
Masyu	1, 6, 4
Bosnian Road	2, 3, 3
Lakes Loop	4, 10

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 submission reduces 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)

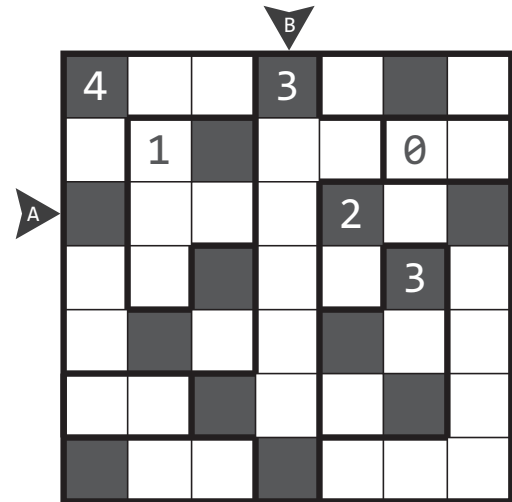
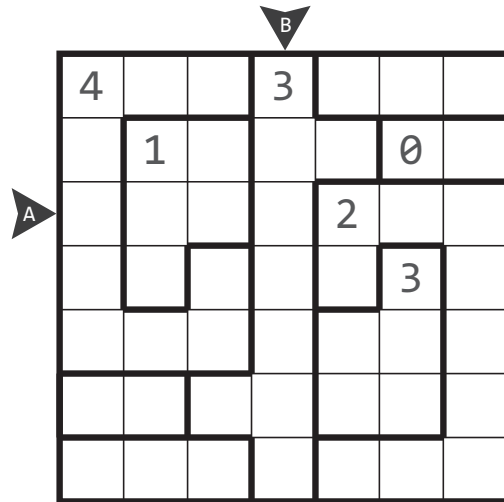
About the Puzzle Booklet

The password protected Puzzle booklet will have 8 pages. We expect you to print and solve on page, so you would need to have a printer accessible with enough paper.

Heyawacky

3 + 5 + 12 points

Shade some of the cells so that the given number in a region indicates the number of shaded cells in that region. Shaded cells cannot be orthogonally adjacent. The remaining white area must be connected to each other, horizontally or vertically. The white area cannot span across 2 consecutive borders (thick lines).



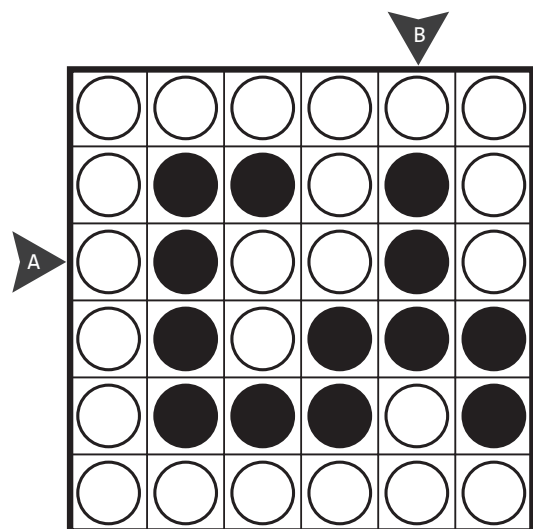
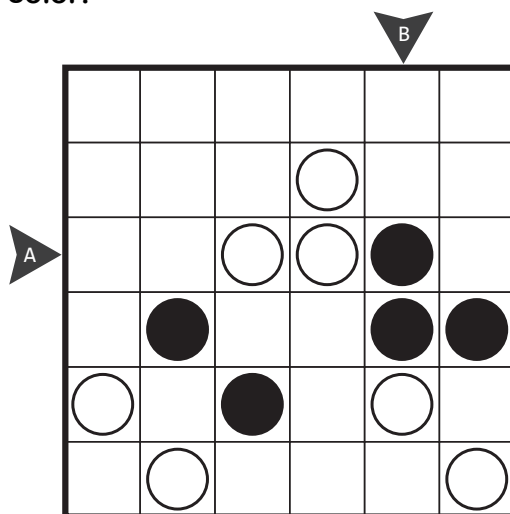
Answer key: Enter the lengths of groups of shaded cells and white cells, for the marked rows/columns.

Example: 13111,151

Yin Yang

2 + 3 + 11 points

Place either a black or a white circle in each empty cell, so that the grid is divided into two areas of black and white. All circles of same color should be connected to each other, vertically or horizontally. No 2X2 group of cells can contain circles of a single color.



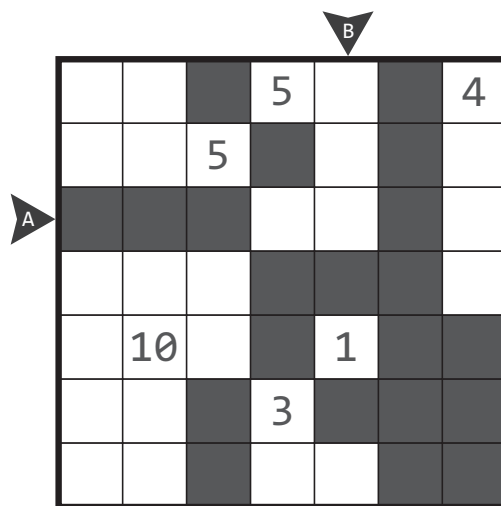
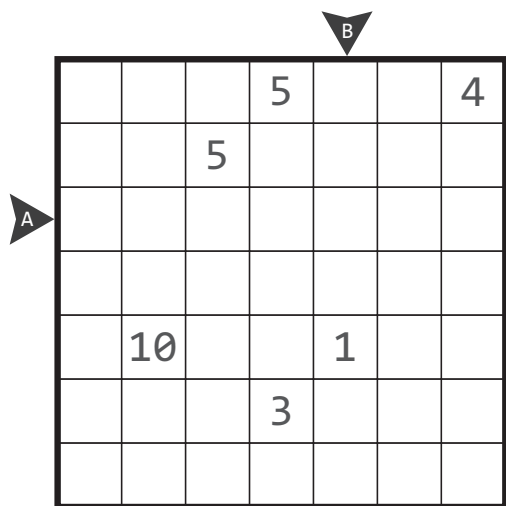
Answer Key: For each marked row/column, enter the length of continuous white and black circle blocks - from left to right / top to bottom.

Example: 11211,132

Lakes

1 + 4 + 6 points

Shade some of the cells so that the grid is divided into white areas. Each white area must contain exactly one number and that number must be the size of the white area it is included in. Cells with numbers cannot be shaded.



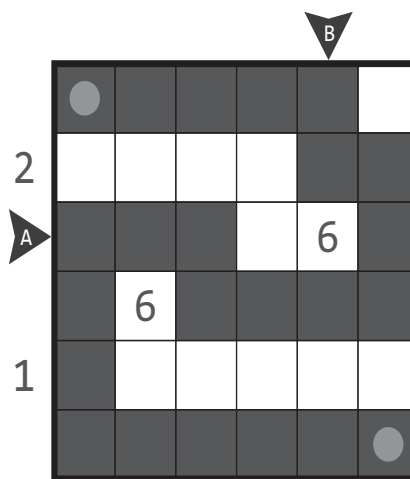
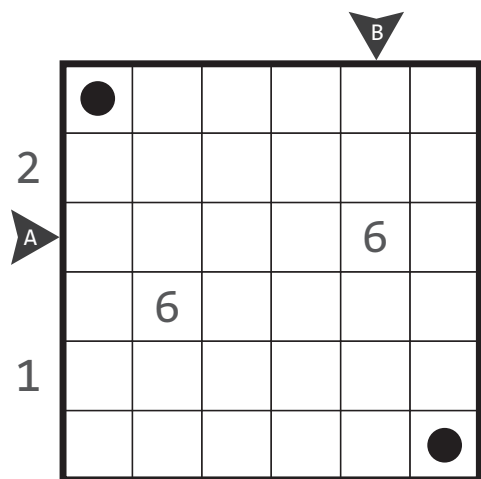
Answer key: Enter the lengths of groups of shaded cells and white cells, for the marked rows/columns.

Example: 3211,31111

Bosnian Snake

3 + 8 points

Locate a snake (a 1 cell-wide single continuous path) in the grid whose head and tail are given. The snake does not touch itself, even diagonally. Numbers outside the grid indicate the number of snake cells in that row/column. Numbers inside the grid indicate how many of the 8 cells around it are used by the snake.



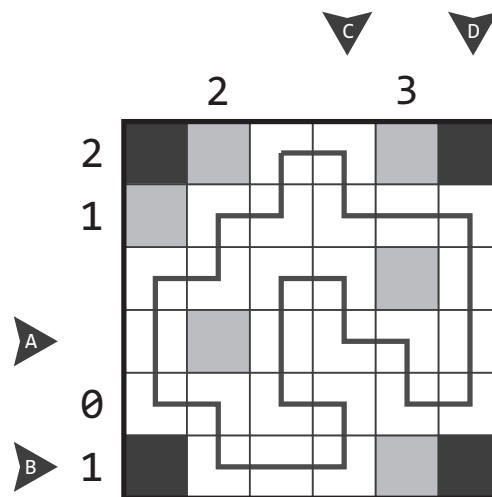
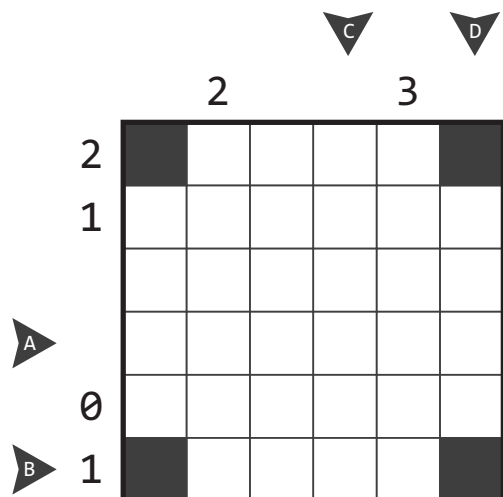
Answer key: Enter the lengths of groups of snake cells and non-snake cells, for the marked rows/columns.

Example: 321,21111

Almost Simple Loop

2 + 2 + 5 points

Draw a single closed loop that does not touch or cross itself. A number on the outside edge of the grid gives the number of empty (gray) cells in that row or column, empty cells cannot touch side by side. The loop cannot pass through given black cells.

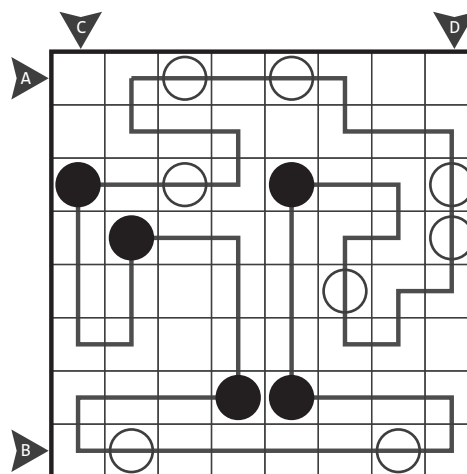
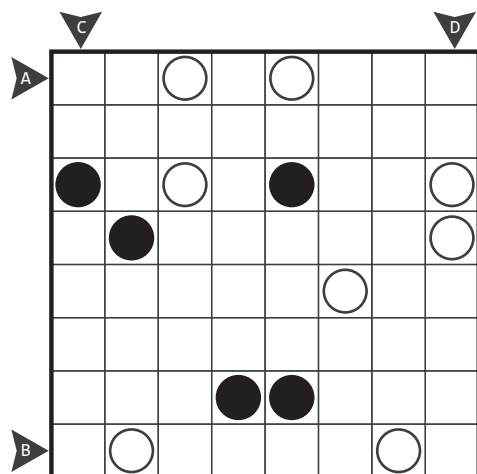


Answer key: Enter lengths of largest loop segment in marked rows/columns.
Example: 1213

Masyu

1 + 6 + 4 points

Draw a single closed loop, which connects centers of some (not necessarily all) cells horizontally and vertically. The loop can't cross or touch itself. The loop turns in every black circle and goes straight through both adjacent squares. The loop goes straight through every white circle and turns in at least one or both adjacent squares.

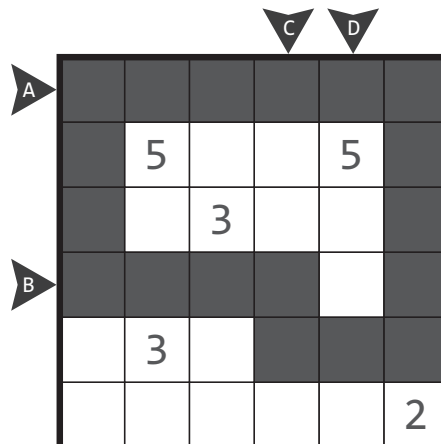
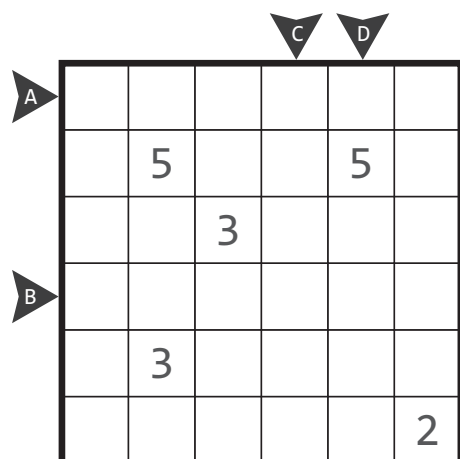


Answer key: Enter lengths of largest loop segment in marked rows/columns.
Example: 4733

Bosnian Road

2 + 3 + 3 points

Draw a single closed path (one-cell wide), which connects some (not necessarily all) cells horizontally and vertically. The path cannot touch itself, not even diagonally. The path cannot go through clue cells. The clues indicate how many of the 8 cells around it are used by the path.

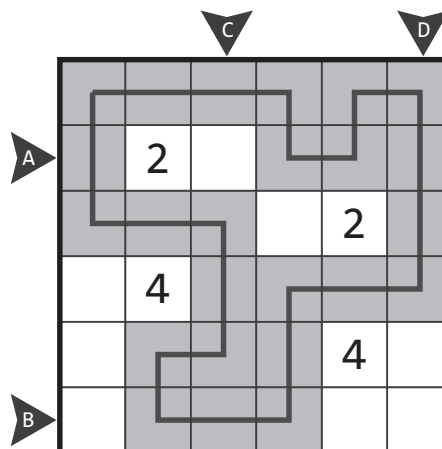
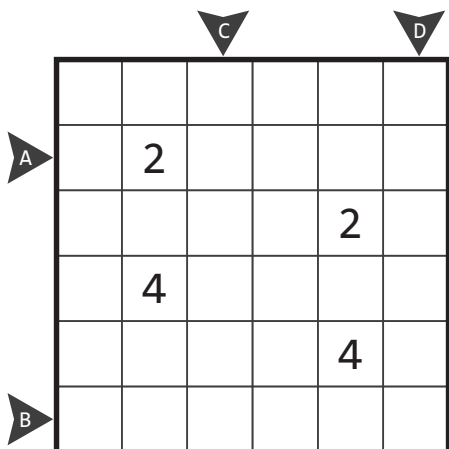


Answer Key: Enter lengths of largest path segments in marked rows/columns.
Example: 6421

Lakes Loop

4 + 10 points

Shade some of the cells so that the grid is divided into white areas. Each white area must contain exactly one number and that number must be the size of the white area it is included in. Cells with numbers cannot be shaded. In the shaded cells, draw a single closed loop that does not touch or cross itself.



Answer key: Enter lengths of largest loop segment in marked rows/columns.
Example: 1223