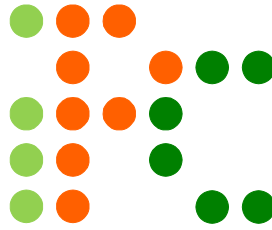


# puzzle रामायण

and



Episode – 6  
8<sup>th</sup> – 12<sup>th</sup> June 2018

Loops and Shading  
by  
Ashish Kumar

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/201806/>

Discussion Thread : <http://logicmastersindia.com/t/?tid=1871>

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

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

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## About this Episode

This episode has 22 Puzzles from the following puzzle types:

- 3\* Slitherlink
- 3\* Reflect Link
- 3\* Yajilin
- 2\* Sli“three”link
- 3\* Crazy Pavement
- 3\* Tapa
- 3\* Cave
- 2\* Crazier Pavement

## 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 8<sup>th</sup> June (but on or before 12<sup>th</sup> June), 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.

<b>Slitherlink</b>	<b>4, 4, 5</b>
<b>Reflect Link</b>	<b>4, 4, 3</b>
<b>Yajilin</b>	<b>2, 7, 7</b>
<b>Sli"three"link</b>	<b>4, 6</b>
<b>Crazy Pavement</b>	<b>2, 2, 5</b>
<b>Tapa</b>	<b>3, 3, 7</b>
<b>Cave</b>	<b>8, 4, 9</b>
<b>Crazier Pavement</b>	<b>5, 2</b>

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

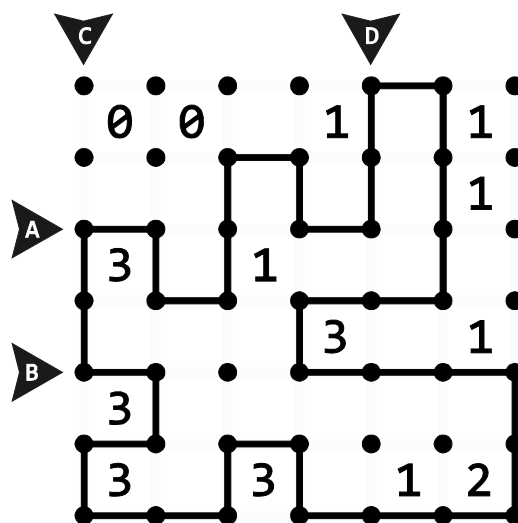
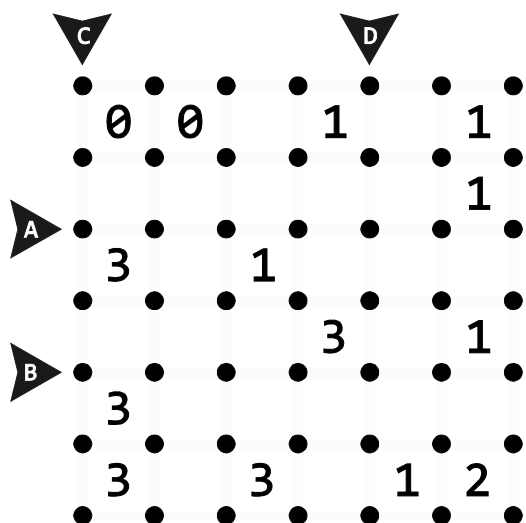
The password protected Puzzle booklet will have 8 pages. We expect you to print and solve on paper, so you would need to have a printer accessible with enough paper.

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### 1-3 Slitherlink

4 + 4 + 5 points

Draw a single closed loop that does not touch or cross itself. Digits in the grid indicate the amount of line segments of that cell used by the loop.



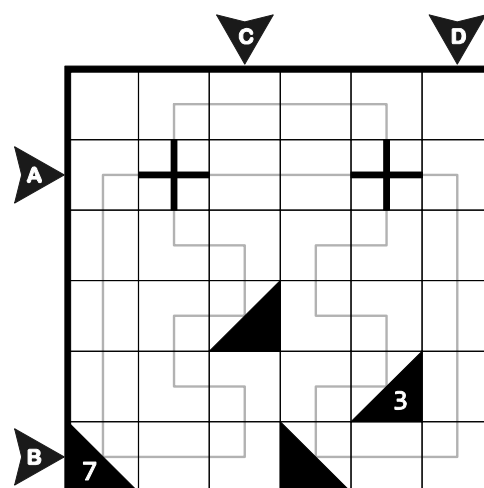
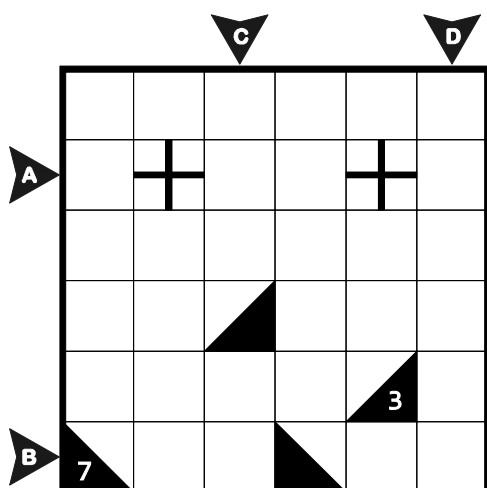
Answer key: Enter lengths of all loop segments in marked rows/columns.

Example: 11,13,21,2

### 4-6 Reflect Link

4 + 4 + 3 points

Draw a closed loop passing through the centres of cells horizontally or vertically. The loop must cross itself only at cells containing a + sign. Cells with triangles in them reflect the loop at right angles, and all cells containing triangles must be visited by the loop. Numbered triangles indicate the total number of cells (including the triangle's cell) that the loop segments travel horizontally and vertically before changing direction.



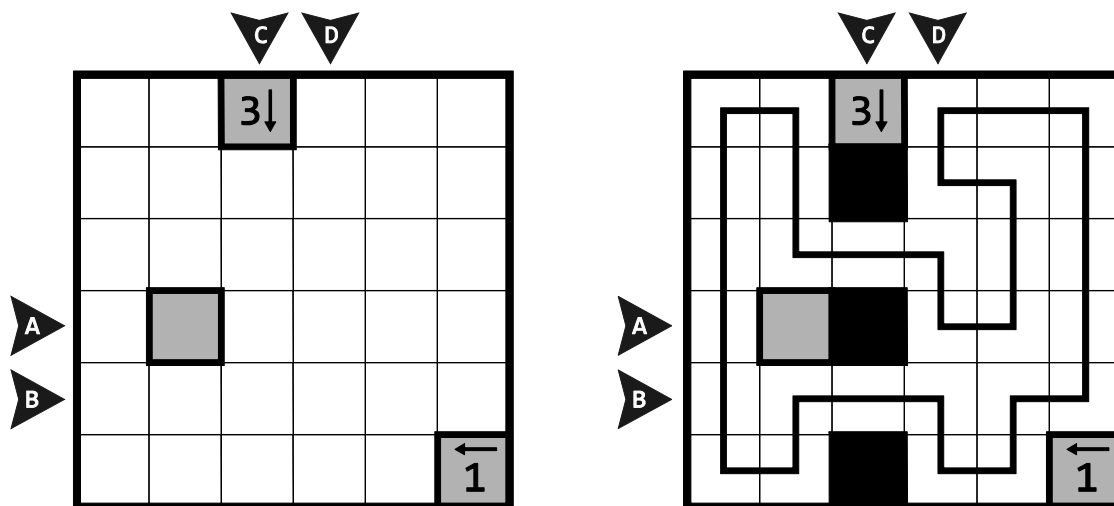
Answer Key: Enter lengths of all loop segments in marked rows/columns.

Example: 5,22,11,4

### 7-9 Yajilin

2 + 7 + 7 points

Blacken some white cells and draw a closed loop passing through centres of all remaining white cells horizontally or vertically. Blackened cells cannot share an edge with each other. Some cells are outlined and in grey and cannot be part of the loop. Numbered arrows in such cells indicate the total number of blackened cells in the direction pointed at by the arrow.



Answer Key: Enter lengths of all loop segments in marked rows/columns.

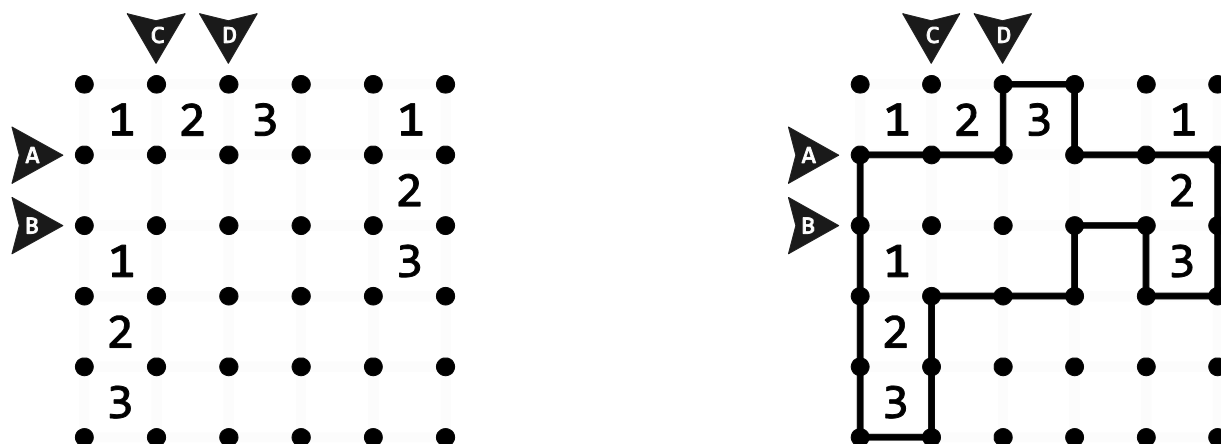
Example: 1,21,0,111

### 10-11 Slitherlink

4 + 6 points

Draw a single closed loop that does not touch or cross itself. Digits in the grid indicate the amount of line segments of that cell used by the loop.

Additionally, among the non-clue cells, there must be exactly one cell with three loop segments.



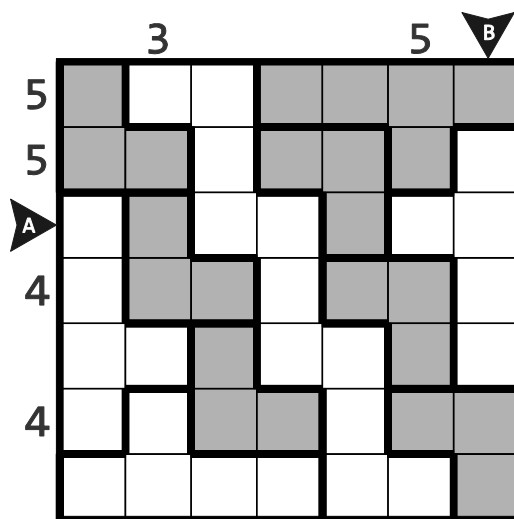
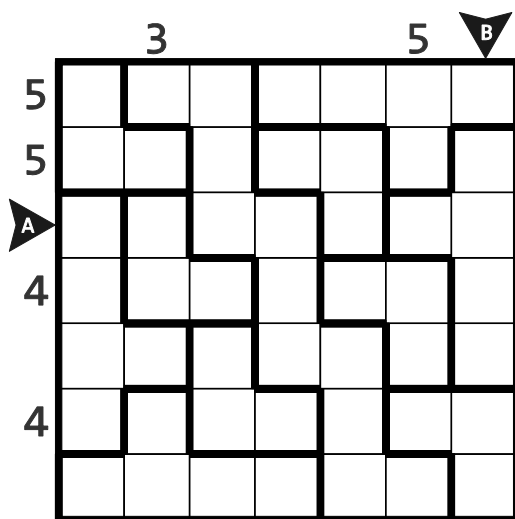
Answer Key: Enter lengths of all loop segments in marked rows/columns.

Example: 22,1,2,1

### 12-14 Crazy Pavement

2 + 2 + 5 points

Shade all cells of some regions. Numbers outside the grid indicate the number of shaded cells in the corresponding row/column.



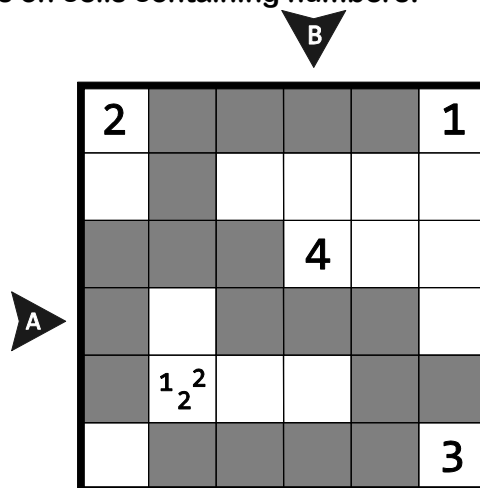
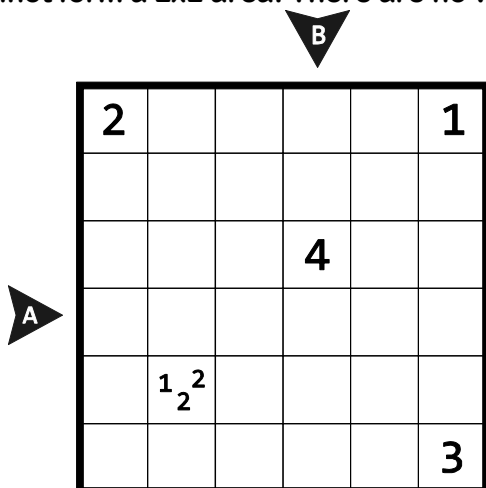
Answer Key: Enter the lengths of groups of shaded cells and white cells, for the marked rows/columns.

Example: 11212,142

### 15-17 Tapa

3 + 3 + 7 points

Shade some cells to form a continuous wall. Number/s in a cell indicate the length of shaded cell blocks on its neighbouring eight cells. If there is more than one number in a cell, there must be at least one white cell between the shaded cell blocks. Shaded cells cannot form a 2x2 area. There are no wall segments on cells containing numbers.



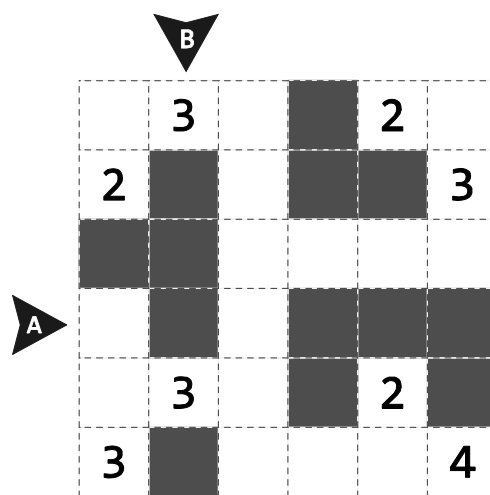
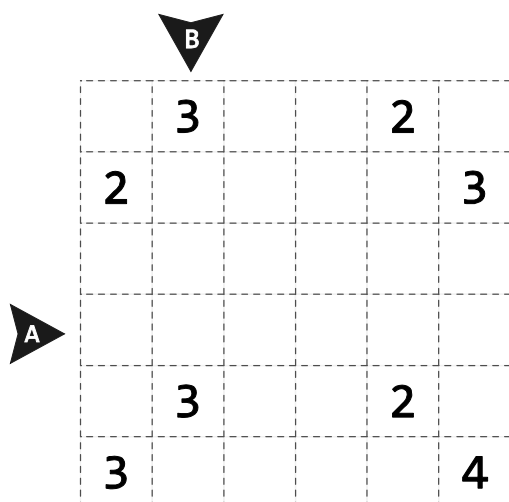
Answer Key: Enter the lengths of groups of shaded cells and white cells, for the marked rows/columns.

Example: 1131, 12111

### 18-20 Cave

8 + 4 + 9 points

Shade some cells to leave behind a single connected group — the cave. All shaded cells must be connected horizontally or vertically through other shaded cells to an edge of the grid. All numbered cells must be a part of the cave, with each number indicating the total number of cells connected vertically and horizontally to the numbered cell, including the cell itself.



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

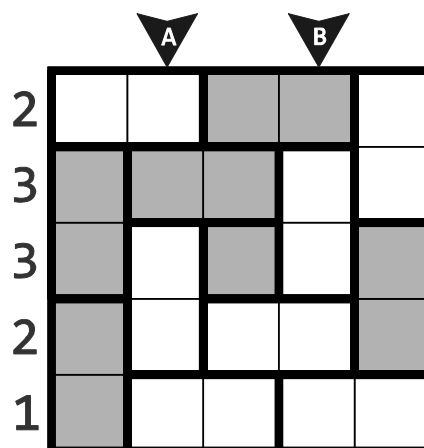
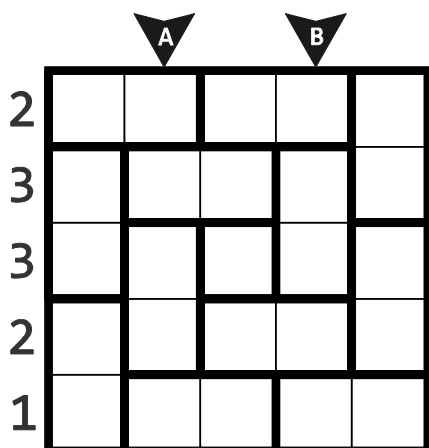
Example: 1113, 1311

### 21-22 Crazier Pavement

5 + 2 points

Shade all cells of some regions. Numbers outside the grid indicate the number of shaded cells in the corresponding row/column.

Additionally, no 2x2 region of cells can be completely shaded.



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

Example: 113,14