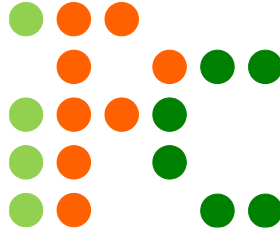


puzzle Ramayan

and



Episode – 4
10th – 16th April 2026

Shading & Loops
by
Martin Ender & Wessel Strijkstra

Puzzle Ramayan rounds will also serve as qualifiers for Indian Puzzle Championship for year 2026. Please check <http://logicmastersindia.com/PR/2026pr.asp> for details.

Important Links

Submission Page: <http://logicmastersindia.com/live?contest=PR202604>

Discussion Thread: <http://logicmastersindia.com/t/?tid=7803>

F. A. Q. (contests): <http://logicmastersindia.com/t/?tid=2773>

F. A. Q. (online solving): <https://logicmastersindia.com/live/faq-online-solving.asp>

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

About this Episode

This episode has 22 Puzzles from the following puzzle types:

- 3* Choco Banana
- 3* Isowatari
- 3* Guide Arrow
- 2* Guide Arrow [Loop]
- 3* Mukkonn Enn
- 3* Pento Loop
- 3* Water Walk
- 2* Water Walk [Isowatari]

How to participate?

- Understand the rules of different puzzles that will appear in this episode. This Instruction Booklet has rules for each puzzle.
- Any time on or after 10th Apr (but on or before 16th Apr), login at the submission page using your LMI user-id and password. Please check the submission page for exact timing.
- **If you plan to solve on paper:**
 - a) 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.
 - b) Click on "Start". At this time, password for pdf will be shown and timer will start. **The contest duration is 60 minutes.**
 - c) The puzzle booklet can be downloaded, printed and solved on paper.
 - d) We advise you to have a printer accessible with enough paper.
 - e) You are allowed to use writing implements, eraser, blank paper (including commercial graph paper), ruler, scissors, and tape.
- **If you plan to solve on LMI's Penpa-Integrated Interface:**
 - a) Click on this link and understand the instructions - <https://logicmastersindia.com/live/faq-online-solving.asp>
 - b) It is noted on the link too, but we note it here as well to be clear – the participants must still input the answer keys in the boxes below the puzzle and submit them to receive credit as given below.
- 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.
- Participants may use both paper solving and online solving, even interchangeably. Eventually our system will only count anything submitted in the submission boxes in either mode.

If you are participating at LMI for first time, it will be useful to check the F.A.Q. at <http://logicmastersindia.com/t/?tid=2773>.

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
- Uppercase or lower case does not matter for answer keys where letters must be entered.
- Characters other than the ones explicitly expected by the answer key will cause the red highlight to appear around the submission box.

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.**

Choco Banana	2, 3, 8
Isowatari	1, 7, 4
Guide Arrow	2, 4, 3
Guide Arrow [Loop]	4, 4
Mukkonn Enn	3, 6, 6
Pento Loop	3, 6, 8
Water Walk	2, 6, 8
Water Walk [Isowatari]	3, 7

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. A demonstration for this is shown below.

Original points

04 Araf	50 points	4A	Sum should be 10
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Potential points after 1 incorrect submission

04 Araf	45 / 50	4A	1234
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Potential points after 2 incorrect submissions

04 Araf	35 / 50	4A	23311
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Potential points after 3 incorrect submissions

04 Araf	20 / 50	4A	111111111
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Potential points after 4 incorrect submissions

04 Araf	0 / 50	4A	541
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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)

Credits

- **Botaku** for test solving the puzzles and providing invaluable feedback.
- The original creator **opt-pan** for penpa edit - <https://opt-pan.github.io/penpa-edit/>
- **Swaroop Guggilam** for his recent efforts in adding features to Penpa-edit - <https://swaroopg92.github.io/penpa-edit/> and also working to integrate it with our contest engine.

About the Puzzle Booklet

The password protected Puzzle booklet will have 12 pages. This is relevant only for paper solvers.

Solutions and keys (including the key explanation) to examples are towards the end of the booklet in the Solutions section.

1-3 Choco Banana

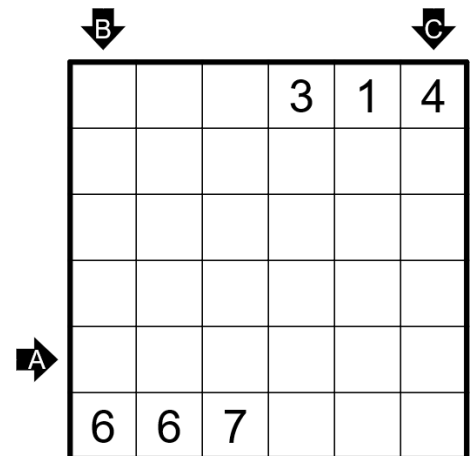
Shade some cells so that all areas of orthogonally connected shaded cells are rectangular and all areas of orthogonally connected unshaded cells are not rectangular. A clue represents the size of its group of shaded/unshaded cells. Groups may contain any number of clues, including none.

[The puzzles in the contest will be of sizes 9x9, 11x11 and 11x11. This example is 6x6.]

Penpa for example:

<http://logicmastersindia.com/s/za2-fdi-f1r>

2 + 3 + 8 points



4-6 Isowatari

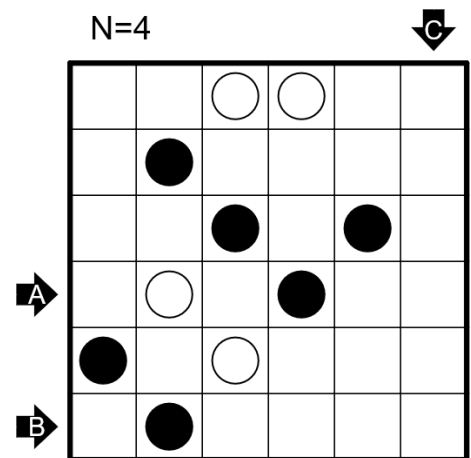
Shade some cells such that every orthogonally connected group of shaded cells is of the size 'N' indicated outside the grid and the remaining unshaded cells form one orthogonally connected region. Cells with black circles must be shaded, and cells with white circles must not be shaded. No 2x2 region may be entirely unshaded.

[The puzzles in the contest will be of sizes 6x11, 11x11 and 11x11. This example is 6x6.]

Penpa for example:

<http://logicmastersindia.com/s/62y-wtw-r7d>

1 + 7 + 4 points



7-9 Guide Arrow

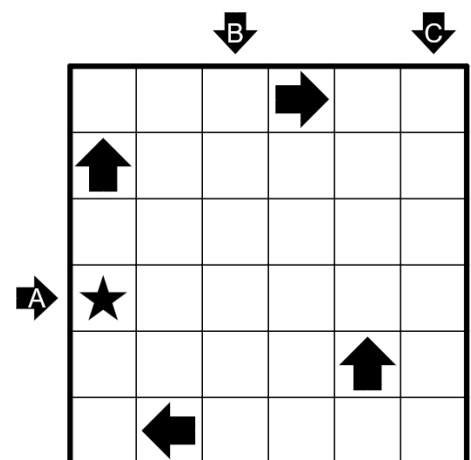
Shade some empty cells so that no two shaded cells are orthogonally adjacent and the remaining unshaded cells form one orthogonally connected area. No complete loop of cells may be unshaded (including 2x2s). An arrow indicates the only direction in which one could begin a path to the star without going through a shaded cell or backtracking.

[The puzzles in the contest will be of sizes 7x7, 9x9 and 11x11. This example is 6x6.]

Penpa for example:

<http://logicmastersindia.com/s/ohe-wb2-54c>

2 + 4 + 3 points



10-11 Guide Arrow [Loop]

Apply regular 'Guide Arrow' rules with the following modification.

There is exactly one loop of unshaded cells (which may be a 2x2). All given stars (if any) are on the loop. **Arrows must remain unshaded, but not on the loop.** An arrow indicates the only direction in which one could begin a path to the loop without going through a shaded cell or backtracking.

[The puzzles in the contest will be of sizes 7x7 and 9x9. This example is 6x6.]

Penpa for example:

<http://logicmastersindia.com/s/77w-ra4-wsp>

12-14 Mukkonn Enn

Draw a non-intersecting loop through the centers of all cells. When the loop exits a clued cell from a side with a number, it must travel in a straight line for exactly the indicated number of cells (turning on the Nth cell, where N is the value of the clue). A number does not necessarily mean that the clue must be exited from its side.

[The puzzles in the contest will be of sizes 8x8, 8x8 and 8x8. This example is 6x6.]

Penpa for example: <https://tinyurl.com/26ldeptg>

15-17 Pento Loop

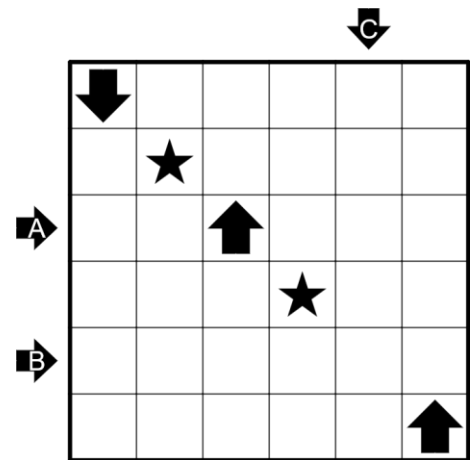
Shade some pentominoes such that no two pentominoes are orthogonally adjacent. Draw a non-intersecting loop through the centres of all unshaded cells. Given clues must be shaded and indicate the letter associated with the shape of the pentomino they belong to. A question mark can belong to any pentomino shape. Pentominoes may contain any number of clues (including none), and pentomino shapes may be used any number of times.

[The puzzles in the contest will be of sizes 9x9, 10x10 and 12x12. This example is 5x5.]

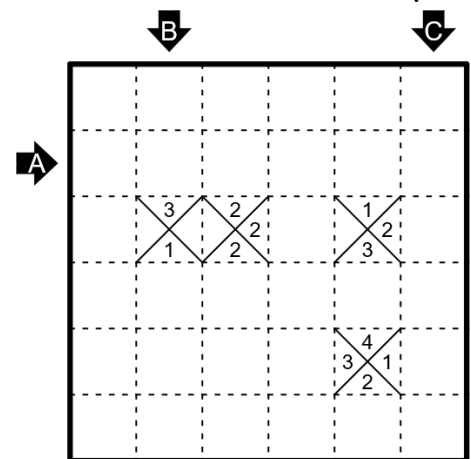
Penpa for example:

<http://logicmastersindia.com/s/yhy-r3b-nme>

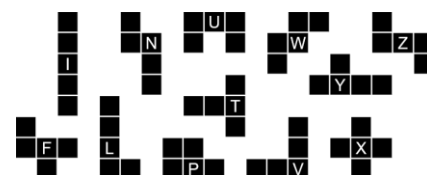
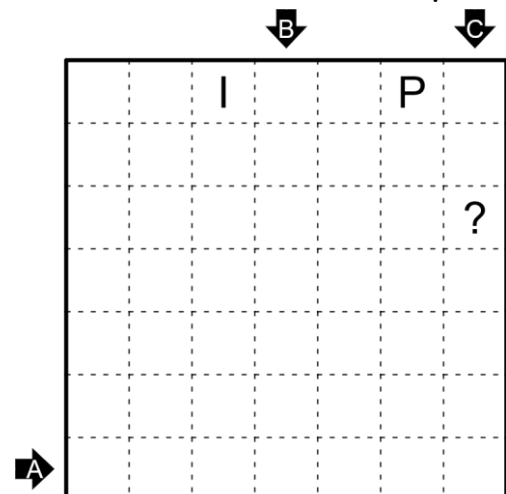
4 + 4 points



3 + 6 + 6 points



3 + 6 + 8 points



18-20 Water Walk

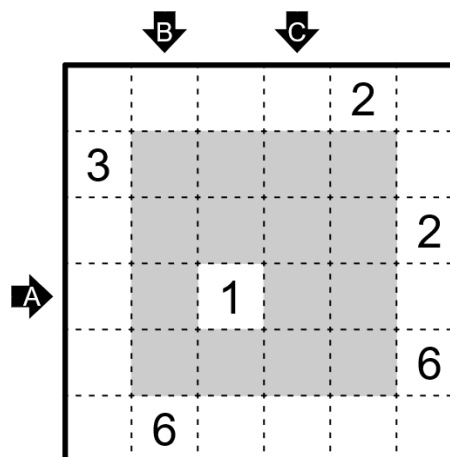
2 + 6 + 8 points

Draw a non-intersecting loop through the centers of some cells. The loop may not travel through more than two water cells consecutively. A number indicates how many cells make up the continuous non-water section of the loop that the number is on.

[The puzzles in the contest will be of sizes 7x7, 10x10 and 11x11. This example is 6x6.]

Penpa for example:

<http://logicmastersindia.com/s/eli-4kp-wen>



21-22 Water Walk [Isowatari]

3 + 7 points

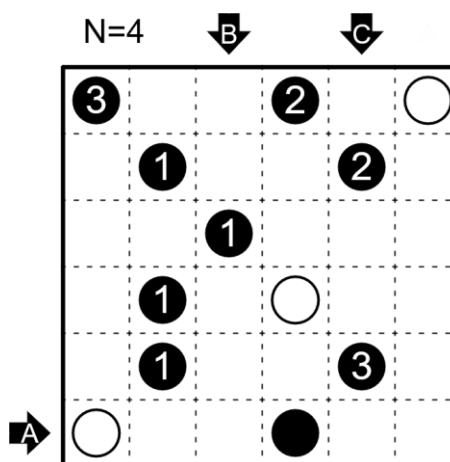
Apply regular 'Water Walk' rules, but the water cells are not given.

Solve an 'Isowatari' puzzle where all unshaded cells become the water cells. All number clues belong to the ground cell groups.

[The puzzles in the contest will be of sizes 6x6 and 9x9. This example is 6x6.]

Penpa for example:

<http://logicmastersindia.com/s/7ia-whi-hns>



Solutions

For this round, all answer keys will NOT be the same for all puzzles.

The keys are given section by section.

Choco Banana, Isowatari, Guide Arrow, Guide Arrow [Loop] – For each marked row/column, enter the number of consecutive shaded and unshaded cells in the direction of the arrow. Enter only the unit's digit for double-digit numbers.

Mukkonn Enn, Pento Loop, Water Walk, Water Walk [Isowatari] – For each marked row/column, enter the lengths of separate loop segments in the direction of the arrow. Enter 0 if there are no segments.

Choco Banana

Key: 2211, 33, 312

Isowatari
N=4

Key: 321, 213, 42

Guide Arrow

Key: 6, 2121, 1311

Guide Arrow [Loop]

Key: 111111, 11211, 411

Mukkonn Enn

Key: 4, 1, 31

Pento Loop

Key: 6, 5, 3

