

Instructions booklet
for
Puzzle Ramayan 2019 Finals
&
Indian Puzzle Championship 2019



20th July 2019
The Big Boss Hotel, Kolkata

Offline Finals: Starts at 9:00 AM	Round 1 – The Known Enemy	40 min: 400 Points
Total Solving Time: 210 minutes	Round 2 – The Great Escape	40 min: 400 Points
+ PR Playoff	Round 3 – Normal is boring	65 min: 650 Points
+ Recreation	Round 4 – Just Chill	65 min: 650 Points
Total Points: 2100 + Bonus		

About this document:

These are the instructions for the 2019 Puzzle Ramayan and Indian Puzzle Championship finals, organised by Logic Masters India. Any questions related to these instructions should be raised and discussed at

<http://logicmastersindia.com/forum/forums/thread-view.asp?tid=2679>

Approximate Schedule on 20th July 2019

09:00 to 09:30 Registration

09:30 to 10:15 Q&A

10:30 to 11:10 Round 1 – The Known Enemy

11:20 to 12:00 Round 2 – The Great Escape

12:10 to 13:15 Round 3 – Normal is boring

13:15 to 13:45 Evaluation Protests, if any (Round 1 and Round 2)

13:15 to 14:00 Lunch break

14:00 to 15:05 Round 4 – Just Chill

15:05 to 16:05 Recreation Event (More details will be explained at the event)

16:05 to 16:45 Evaluation Protests, if any (Round 3 and Round 4)

16:45 to 17:00 Tie Breaker, if required

17:00 to 17:45 PR Playoff

17:45 to 18:00 Awards and Prizes

Authors & Testers:

LMI thanks the authors and testers below for their contributions to IPC 2019:

- Bram De Laat (The Netherlands) - Author
- Tawan Sunathvanichkul (Thailand) - Author
- Walker Anderson (USA) – Author + Test-solving
- Nikola Zivanovic (Serbia) – Test-solving
- Ken Endo (Japan) – Test-solving
- Yanzhe Qiu (China) – Test-solving
- Yuhei Kusui (Japan) – Test-solving
- Ashish Kumar (India) - Author + Test-solving
- Rakesh Rai (India) - Author + Test-solving

General Structure of the finals

There will be 4 rounds in the finals, of varying lengths and of varying points. Scores from each round, along with bonus if any, will be added up to determine the final score of the player. This score will be used for ranking in Indian Puzzle Championship 2019.

There will be a separate playoff after these rounds to determine the Puzzle Ramayan winner. There will be eligibility criteria for this playoff, (see details at <http://logicmastersindia.com/PR/2019pr.asp>), to preserve the essence of Puzzle Ramayan.

Scoring and Bonus

WPC style checking will be followed. Points will be awarded only if the solved puzzle clearly matches the intended solution. Participants may use their own notations and symbols, but must be consistent across the puzzle so that it is clear to be interpreted by the checkers (e.g. you can draw a circle/triangle/star to signify a star in Star Battle, but pick one of these for displaying a star throughout the puzzle). There will be no partial credit for any Puzzle, unless explicitly mentioned otherwise. Puzzles which do not have vital information matching the solution will be awarded with 0 points.

It is possible that some players may finish all Puzzles in a round before the time allocated. A bonus of **10** points for each full minute remaining will be awarded to any competitor who correctly solves every Puzzle in a round. In the case of a

single minor mistake in the whole round, **8** points for each full minute will be awarded. "A single minor mistake" is defined as at most two incorrect or blank cells in at most one Puzzle in the whole round.

Ties will be broken using following rules:

- i) Maximum points in Round 3 (including bonus points in Round 3)
- ii) Maximum points in Round 2 (including bonus points in Round 2)
- iii) Maximum points in Round 1 (including bonus points in Round 1)
- iv) Maximum points in Round 4 (including bonus points in Round 4)

If there is still a tie to determine the first three positions, tie-breaker Puzzles will be used.

PR Playoff Rules:

The top 5 inexperienced players will participate in the Puzzle Ramayan playoffs. The playoffs will be divided into two stages.

Stage 1: The first stage will be between 3rd, 4th and 5th placed contestants. There will be two Puzzles in this stage. 3rd placed contestant will start first. 4th placed contestant will start after 30 seconds. 5th placed contestant will start after 60 seconds. The first player to finish both Puzzles correctly will be declared the winner of this stage. The winner will advance to the second stage.

Stage 2: The second stage will be used to determine the top 3 of Puzzle Ramayan. There will be two Puzzles to solve in this stage. 1st placed contestant will start first. 2nd placed contestant will start after 30 seconds. Winner from Stage 1 will start after 60 seconds. The playoff will go on till two players finish all two Puzzles correctly.

Based on order of finishing, they will be 1st and 2nd and the player who did not finish will be 3rd.

There will be a 1-minute checking period. If the Puzzle is correct, the player will solve the next grid when the minute is done, or will have finished the stage. If the Puzzle is wrong, the player will have to find the error and resolve it before re-submitting.

More about Recreation Event

This will be a team event. Scores from this event will not be added to Puzzle Ramayan / Indian Puzzle Championship. More details will be shared at the venue.

Competition Hall Rules

- Competitors should ensure that they are ready at their desk for the start of each round. Each round will start strictly on time. **Those arriving late for the round will lose solving time.**
- Prior to the start of each round competitors will be handed over the Puzzle booklet for that round. They should clearly write their name and contact number on the front of their competition booklet. Competitors must not open their booklet at this stage. Only once the signal to start a round is given, competitors may open their booklet and begin solving the Puzzles.
- During rounds, competitors must remain silent, unless declaring completion of around.
- If you finish solving all Puzzles in a round and want to claim bonus points, close your booklet, clearly state 'finished' and raise your arm. Keep your arm raised until your paper has been collected. Once your paper is collected, it will not be returned to you for any more changes. Competitors that complete a round are expected to remain seated so as not to cause unnecessary disruption to fellow competitors.
- Once the signal to finish a round is given, competitors must immediately stop solving, close their booklet and put their pen/pencil down and be ready to hand over their booklet.

- You must remain seated until all Puzzle booklets have been collected. You will be told when you can get up and leave.
- Mobile phones are not permitted to be used in the competition hall and must be turned off or put in silent mode.
- If you believe that there is a problem with any Puzzle, leave that Puzzle and continue with another. This will be investigated upon completion of the round.
- Puzzles can be completed in any order. The point value of a Puzzle is an indication of its anticipated difficulty, although your solving experience may differ.

Permitted Items

- The permitted items which may be taken into the competition hall and used are: Pens, pencils, erasers, rulers, other stationery like highlighters, white ink, etc., and instruction booklets (optionally annotated with notes regarding instructions and preparation notes) and blank paper.
- **Players are expected to carry a copy of this instructions booklet. It will not be provided at the finals.**
- Drinks and snacks will be allowed so long as they don't disturb other competitors (e.g. rustling a crisp packet, or a very strong smell).
- Participants may choose to use any pens or pencils in any colour except red colour in all rounds.
- Electronic devices (including but not limited to cell phones, laptops, tablets, calculators, and headphones) are not allowed to be used during the competition.
- Any other items brought into the hall must be left in a bag on the floor or nearby, so as not to block the aisles.

Evaluation

- Once a round has been fully evaluated, the booklets will be returned to you.
- If you have a concern about the evaluation, you need to raise it with the organizers during the Evaluation Protests sessions. The organizers will re-evaluate your paper; however, **the decision of the organizers will be final.**
- Your paper may be photographed during the evaluation phase.

Breach of Rules

Any breach of these rules may lead to a competitor being disqualified from the competition.

Practice Materials

The online rounds of Puzzle Ramayan will serve as great practice materials for the finals. You can access the Puzzles at

<http://logicmastersindia.com/lmitests/downloads.asp?testFilter=PR>

Puzzle rules and examples

The remaining pages in this booklet explain the rules of the types that will appear in the finals, along with an example. The formatting of the examples and the competition Puzzles are same, except that the competition Puzzles will appear at a significantly larger size – one or two per page. The difficulty of an example is not necessarily reflective of the difficulty of the corresponding competition Puzzle.

Round and Types at a Glance:

Round 1: The Known Enemy 40 min 400 points	Tents 35 points Four Winds 30 points Area Division 40 points Nurikabe 20 points Simple Loop 15 points Rassi Silai 60 points Spiral Galaxy 80 points Skyscrapers 30 points Star Battle 50 points Battleships 40 points
Round 2: The Great Escape 40 min 400 points	Hashi 60 points Easy as ABC 55 points Heyawake 35 points Yin Yang 35 points Yajilin 50 points Masyu 15 points Reachability 20 points Fillomino 35 points Kakuro 25 points Statue Park 70 points
Round 3: Normal is boring 65 min 650 points	Lonely Tapa 85 points Liar Slitherlink 65 points Domino Search 25 points Compass 105 points Slalom 35 points Pentopia 55 points Straight Hidato 25 points Oases 65 points Yagit 55 points Wrong Products 135 points
Round 4: Just Chill 65 min 650 points	Maze 20 points Sausage Stand 50 points Brandenburg Gate 20 points Autobahn 20 points Brewster 45 points Sweet Tooth 10 points Snacking 30 points Pretzels 90 points Double Crisscross 70 points Wordfinder 10 points Letter Pairs 60 points Word Packs 130 points Curve Data 95 points
All Rounds – Bonus of 10 points for every 1 min remaining	

Full Participation List with Playoff Eligibility and Base Points:

Name	ID	Base points	PR playoff eligibility
Aarti Bansal*		0	Yes
Aashay Patil	aashay	0	Yes
Amit Sowani	amitsowani	84	No
Anubhav Balodhi	abcdexter	27	Yes
Devarajan D	devarajand	19	Yes
Gaurav Kumar Jain	gaurav.kjain	17	Yes
Harmeet Singh	harmeet	43	No
Jaipal Reddy Mogiligundla	mjaipal	47	No
Kishore Kumar	kishy72	63	No
Lenson Andrade	lenson	33	Yes
M. Ezhilarasi	ezhilmathu.advo	0	Yes
Pooja Bansal	Bansalpooja.b	0	Yes
Pranav Kamesh S	pranavmanu	44	Yes
Prasanna Seshadri	prasanna16391	97	No
Priyam Bhushan	priyambhushan	58	Yes
R K Swarnakar	RameshLMI	5	Yes
Rajesh Kumar	rajeshk	21	No
Rajib R. Borah	rrb	23	No
Rohan Rao	vopani	98	No
Swaroop Guggilam	swaroop2011	71	No
Varun R	rvarun	26	Yes
Vishal	Vishal	24	Yes
Vivek Jain	vjain9	10	Yes

puzzle Ramayan

40 min

400 points

Round 1

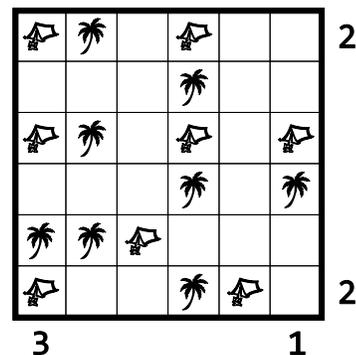
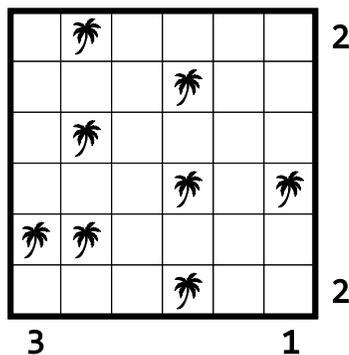
The Known Enemy

This round contains ten puzzle types from some of the categories that appeared in online rounds of Puzzle Ramayan 2019. These puzzle types were part of the online PR rounds.

Category	Variant	Points
Classics	Tents	35 points
Classics	Four Winds	30 points
Evergreens	Area Division	40 points
Shading	Nurikabe	20 points
Loops	Simple Loop	15 points
MII	Rassi Silai	60 points
Regions	Spiral Galaxy	80 points
Number Placement	Skyscrapers	30 points
Object Placement	Star Battle	50 points
Object Placement	Battleships	40 points

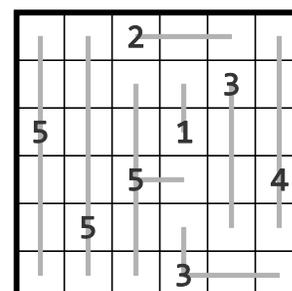
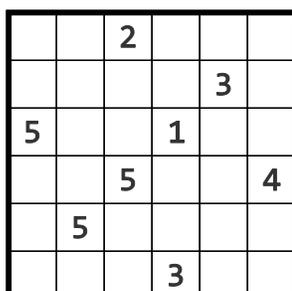
1. Tents (35 points)

Place one tent horizontally or vertically next to each tree. Tents do not touch each other, not even diagonally. The numbers outside the grid indicate the number of tents in that row or column.



2. Four Winds (30 points)

Draw one or more lines from each numbered cell, so that each number indicates the total length of the line that are drawn from that cell. Lines are either horizontal or vertical and connected the centres of adjacent cells without crossing or overlapping each other and the give numbers.



40 min

400 points

The Known Enemy

3. Area division (40 points)

Divide the grid into several regions along the gridlines. Each region has ALL the letters of the given range exactly once. Each letter on the grid must be part of exactly one region.

A	C	C	B
A	B	D	D
C	C	D	A
D	B	A	A
B	B	C	D
B	A	C	D

(Range: ABCD)

A	C	C	B
A	B	D	D
C	C	D	A
D	B	A	A
B	B	C	D
B	A	C	D

4. Nurikabe (20 points)

Shade some cells so that each area of unshaded cells contains only one number in it and they are separated by shaded cells. Cells containing numbers cannot be shaded. A number tells the number of continuous white cells (size of the unshaded area). All shaded cells must be orthogonally connected. Shaded cells cannot form a 2x2 square.

		2		
3				1
		4		

		2		
3				1
		4		

5. Simple loop (15 points)

Draw a single closed loop (without intersections or crossings) that travels horizontally and vertically from cell center to cell center, does not visit any black cells, and visits every white cell exactly once.

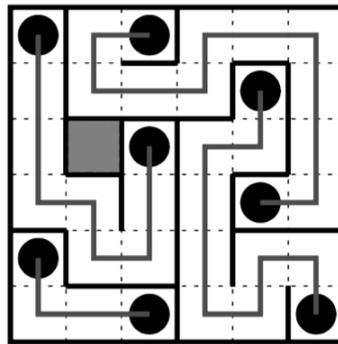
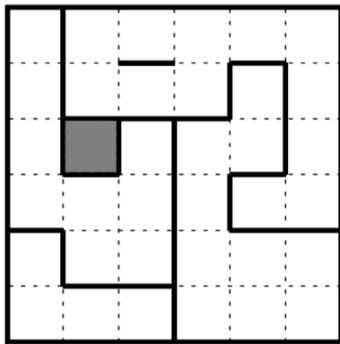
40 min

400 points

The Known Enemy

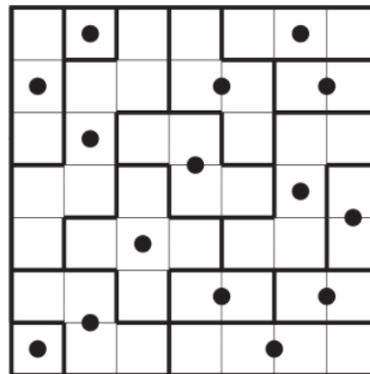
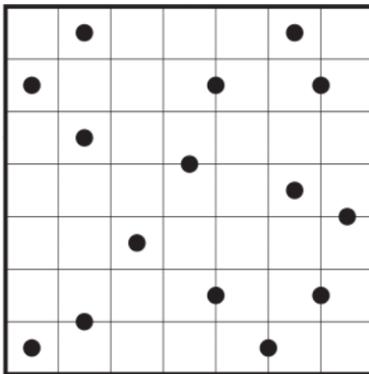
6. Rassi silai: (60 points)

Thread a rope in each region. A rope is a path that passes through all cells of the region, between two cells that are end-points. End-points do not touch each other, even diagonally, even across regions. Some bars may be given within some regions; there cannot be a path between the two cells on both sides of the bar. Ignore any shaded regions – there cannot be a rope in a shaded region.



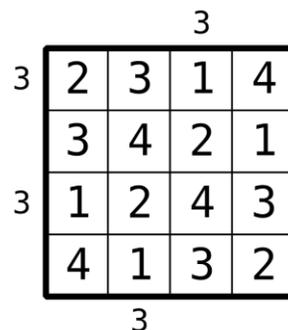
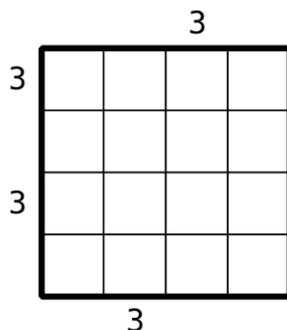
7. Spiral galaxies (80 points)

Divide the grid into 180 degree symmetrical regions along the gridlines, so that each cell is part of exactly one region. Each region must contain exactly one circle, which represents the central symmetry point of the region. All circles are given.



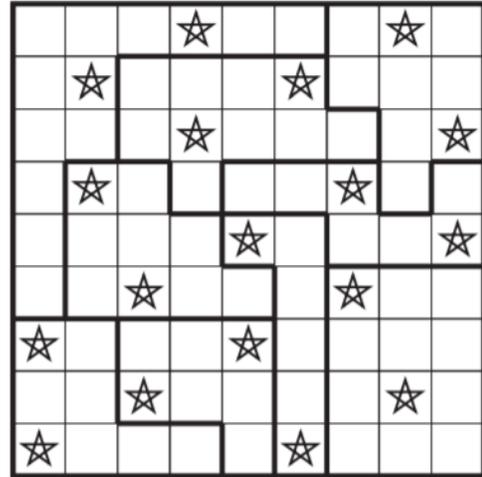
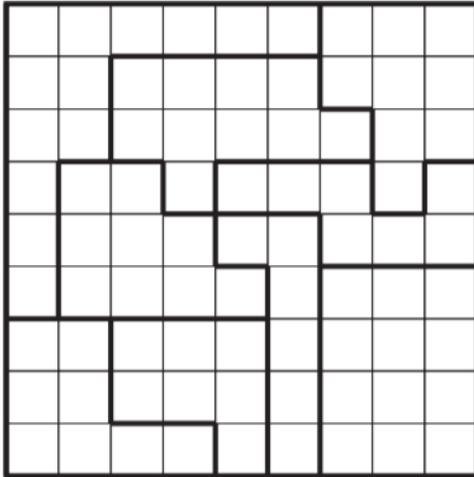
8. Skyscrapers (30 points)

Fill in the grid with digits 1–N where N is the size of the grid. Each row and column contains each digit exactly once. Each number inside the grid represents the height of a building. The clues outside of the grid indicate how many buildings can be seen when looking from that direction. Taller buildings block the view of smaller buildings.



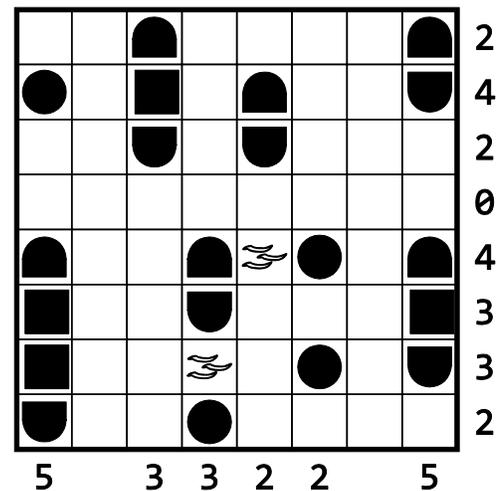
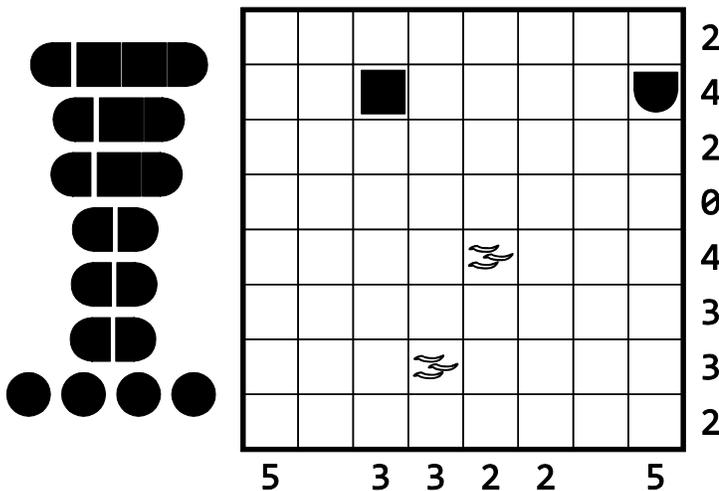
9. Star battle (50 points)

Place some stars in the grid so that each row, each column and each outlined region contains exactly two stars. Stars do not touch each other, not even diagonally.



10. Battleships (40 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.



This round contains ten puzzle types from some of the categories that appeared in online rounds of Puzzle Ramayan 2019. These puzzle types couldn't make it to the online PR rounds.

Category	Variant	Points
Classics	Hashi	60 points
Evergreens	Easy as ABC	55 points
Shading	Heyawake	35 points
Shading	Yin Yang	35 points
Loops	Yajilin	50 points
Loops	Masyu	15 points
MII	Reachability	20 points
Regions	Fillomino	35 points
Number Placement	Kakuro	25 points
Object Placement	Statue Park	70 points

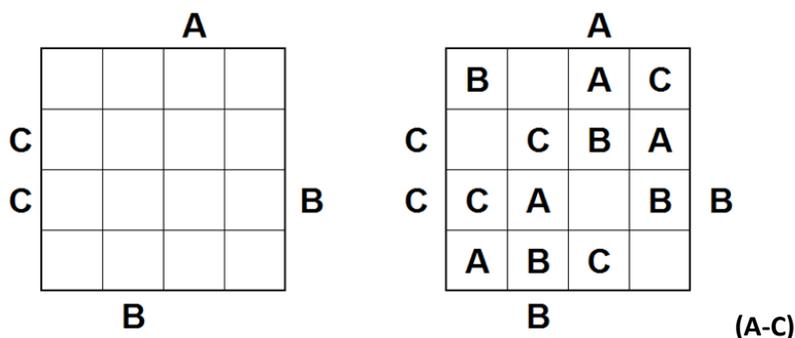
1. Hashi (60 points)

Connect islands (the circles with numbers) with as many bridges as the number in the island. There can be no more than two bridges between two islands. Bridges cannot go across islands or other bridges. The bridges will form a continuous link between all the islands.



2. Easy as ABC (55 points)

Enter the given set of letters into the grid such that each letter is exactly once, in all of the rows and columns. One or more cells will remain empty in each row and column. The letters outside the grid show which letter is seen first from that direction.



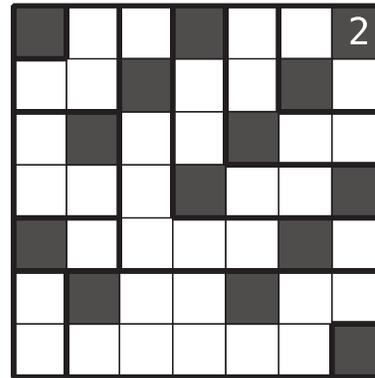
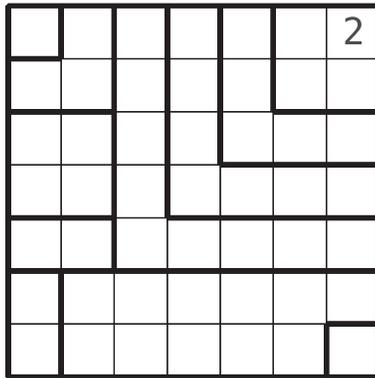
40 min

400 points

The Great Escape

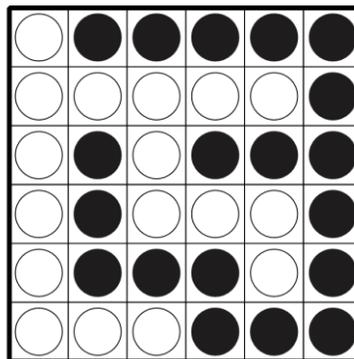
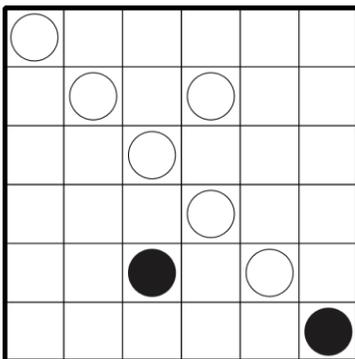
3. Heyawake (35 points)

Shade some cells so that the remaining white area forms a single orthogonally connected shape. Shaded cells may not touch by a side. The white area may not stretch over two or more consecutive black borders anywhere within a single row or column. Numbers in regions indicate how many cells must be shaded in that region.



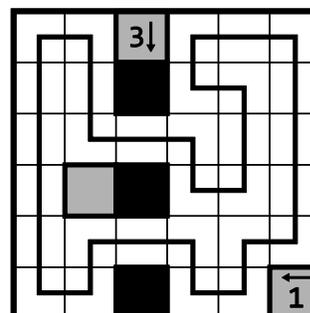
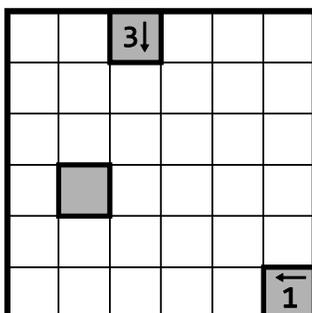
4. Yinyang (35 points)

Fill in the grid with white and black circles such that all white circles and all black circles form a single connected area. No 2x2 region can contain circles of the same colour.



5. Yajilin (50 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.



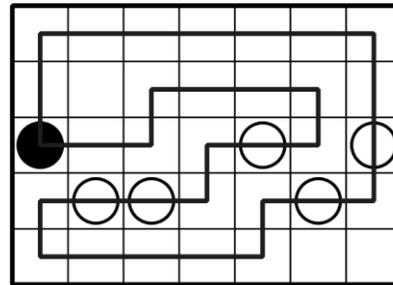
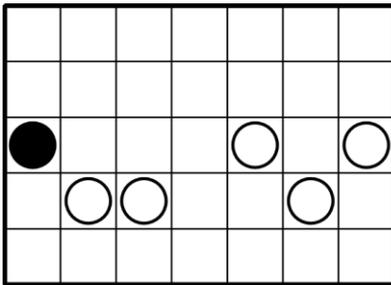
40 min

400 points

The Great Escape

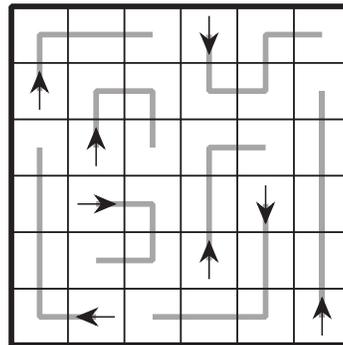
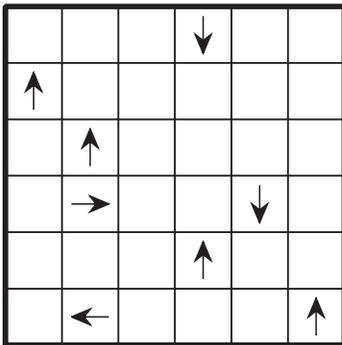
6. Masyu (15 points)

Draw a single, non-intersecting loop that passes through all circled cells. The loop must go straight through the cells with white circles, with a turn in at least one of the cells immediately before/after each white circle. The loop must make a turn in all the black circles, but must go straight in both cells immediately before/after each black circle.



7. Reachability (20 points)

Draw paths from each arrow such that all cells of the grid are visited by paths. A path can move only into the cell that is pointed at by the arrow, and then moving through the centres of cells horizontally or vertically. A path can visit either four or five cells including the cell with the arrow.



8. Fillomino (35 points)

Divide the grid along the dotted lines into polyominoes so that no two polyominoes with the same area share an edge. Each given number must represent the area of the polyomino it belongs to. A polyomino may contain zero, one, or more of the given numbers.

7			1	
2				
1		7		3
				7
	7			1

7	7	7	1	3
2	2	7	7	3
1	7	7	1	3
7	2	2	7	7
7	7	7	7	1

40 min

400 points

The Great Escape

9. Kakuro (25 points)

Enter a number from 1 to 9 into each white cell so that the sum of digits in each "Across" entry equals the value given to the left of the entry, and the sum of digits in each "Down" entry equals the value given above the entry. No digit may be repeated within a single entry (group of white cells connected horizontally or vertically without any black cells in between).

	34		14	7	30
15					
		17			
		12			
7			11		
			5		
10					
32					

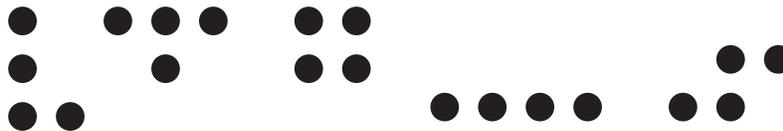
	34		14	7	30
15	4	2	5	1	3
	9		17	9	2
		12			6
7	6	1		11	4
			5		7
10	7	2	1		9
32	8	9	4	6	5

10. Statue Park (70 points)

Place each of the shapes from the given bank into the grid, with rotations and reflections allowed. Shapes must be placed exactly as many times as they appear in the bank. No two shapes can overlap or touch each other by a side, and all of the space not occupied by shapes must form a single connected area. Black circles in the grid indicate cells that must be contained in one of the shapes, and white circles represent cells that must not be contained in a shape.

●	○		●	●					
				○				○	
	●				●				
					○	○		○	○

●	○	○	●	●	●	●	○	○	○
●	●	○	○	○	○	○	○	○	●
●	○	○	●	○	●	●	○	●	●
○	●	●	●	○	●	●	○	●	○
○	○	○	○	○	○	○	○	○	○

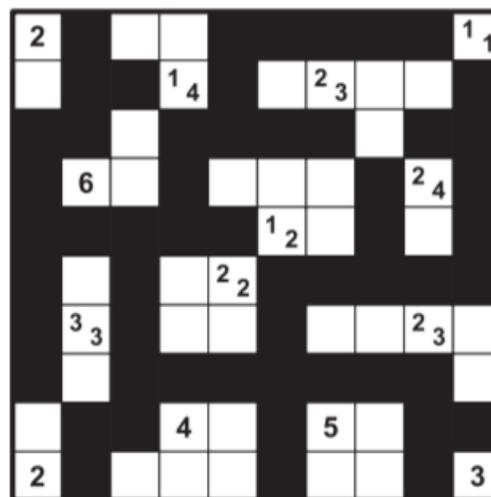
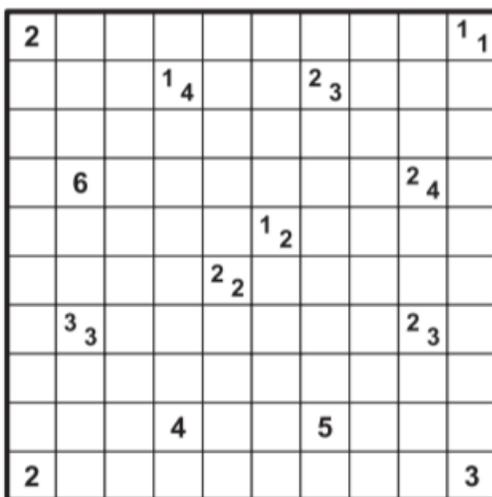


This round contains ten assorted puzzle types, some of which are either well-known puzzle types or their variants, a few others have been encountered frequently in last one year, and there are some that have occurred very rarely in competitive contests.

Variant	Points
Lonely Tapa	85 points
Liar Slitherlink	65 points
Domino Search	25 points
Compass	105 points
Slalom	35 points
Pentopia	55 points
Straight Hidato	25 points
Oases	65 points
Yagit	55 points
Wrong Products	135 points

1. Lonely Tapa (85 points)

Shade some cells to create a single orthogonally connected wall. This wall may not cover a 2x2 area anywhere. Clues in the grid indicate how many consecutive cells must be shaded around it. If there is more than one clue in a clue cell, these sections of consecutive cells must be separated by at least one empty cell. Additionally, orthogonally connected unshaded areas may contain at most one clue cell.



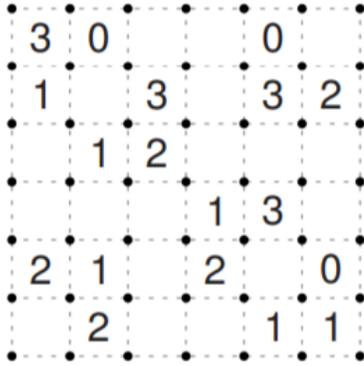
65 min

650 points

Normal is boring

2. Liar Slitherlink (65 points)

Draw single close loop by connecting dots horizontally and vertically. The loop may not touch or cross itself. Numbers in the grid indicate how many line segments must be drawn around it. Additionally, every row and column contains exactly one wrong clue.



3. Domino Search (25 points)

The grid contains a set of dominos, using all pairing combinations of 0~6 from 0-0 to 6-6. The layout is shown with domino edges removed. Reconstruct the missing edges. Any shading may be only for decorative purpose and can be ignored while solving. The example uses dominos from 0-0 to 4-4.

0	0	4	2	2	3
0	1	2	3	4	4
1	2	1	3	2	1
3	0	0	2	3	4
0	3	1	1	4	4

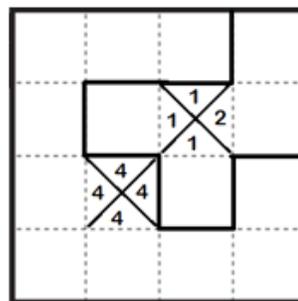
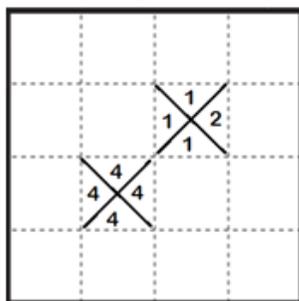
0	0	1	1	2	3
0	1	1	2	2	4
0	2	1	3	3	3
0	3	1	4	3	4
0	4	2	2	4	4

0	0	4	2	2	3
0	1	2	3	4	4
1	2	1	3	2	1
3	0	0	2	3	4
0	3	1	1	4	4

4. Compass (105 points)

Divide the grid along the dotted lines into regions (groups of cells connected orthogonally). Each cell must be in exactly one region, and each region must contain exactly one clue.

A clue cell is of the form as shown here. The number T denotes the number of cells of that clue's region located above the clue cell. The number B denotes the number of cells of that clue's region located below the clue cell. The number R denotes the number of cells of that clue's region located to the right the clue cell. The number L denotes the number of cells of that clue's region located to the left of the clue cell. Not all clues may be given for each clue cell.



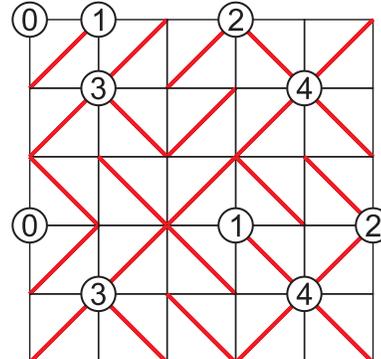
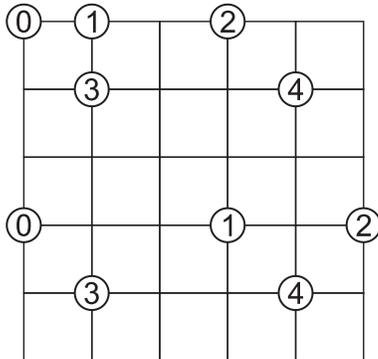
65 min

650 points

Normal is boring

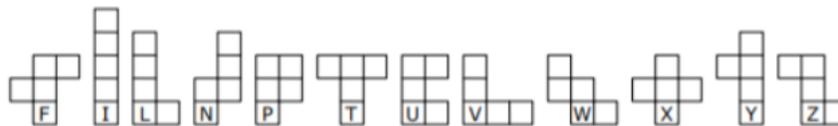
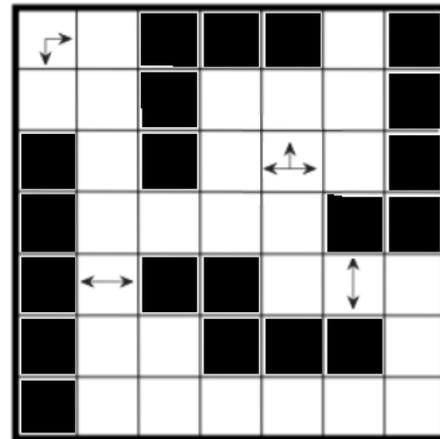
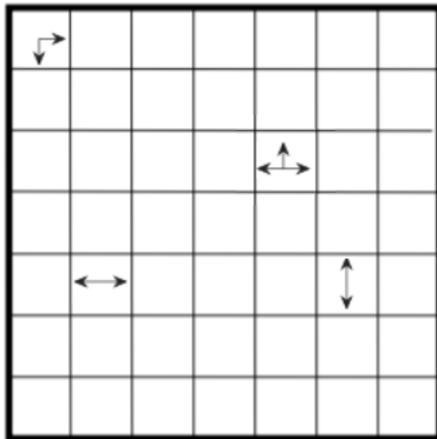
5. Slalom (35 points)

Draw a diagonal line in every cell in the grid such that numbered intersections have the given number of lines extending from that intersection. Lines do not form a closed loop.



6. Pentopia (55 points)

Place some pentominoes in the grid without repeating any shape. Rotations and reflections are considered the same shape. The pentominoes are not allowed to touch, not even at the corners. The arrows point in the direction(s) in which the pentomino(es) is (are) closest when looking from that cell.



7. Straight Hidato (25 points)

Enter the numbers 1 to 100, one per cell such that consecutive numbers are placed in cells that share a side (horizontally or vertically).

3			
			7
13			
			9

3	4	5	6
2	1	16	7
13	14	15	8
12	11	10	9

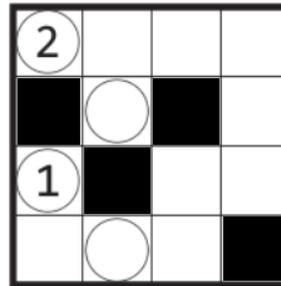
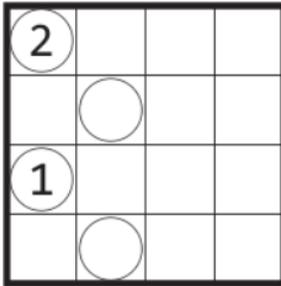
65 min

650 points

Normal is boring

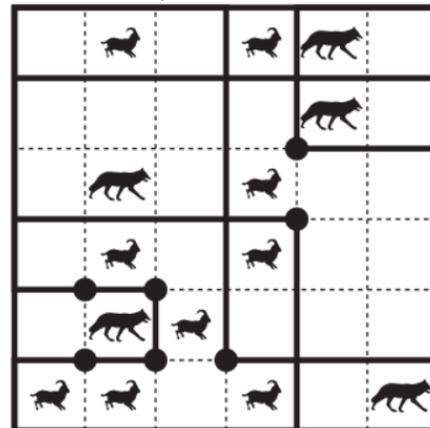
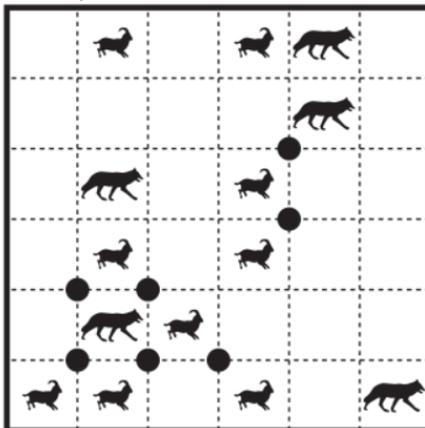
8. Oasis (65 points)

Shade some cells in the grid. Shaded cells cannot touch each other orthogonally. All unshaded cells must be orthogonally interconnected. Unshaded cells cannot form a 2x2 square. Cells with circles cannot be shaded. A number indicates how many other numbers or circles can be reached from that cell by passing only orthogonally through empty unshaded cells (it cannot pass a shaded cell nor a cell with a number / circle).



9. Yagit (55 points)

Draw vertical and horizontal lines along the gridlines, going from one grid edge to any other grid edge, i.e. no loops within the grid. The lines can make 90° turns only where black dots are located. Divide the grid into regions where each region contains only sheep or only wolves, i.e. not both, and not empty. Lines may cross each other anywhere except at the black dots. All black dots need not necessarily be used.



10. Wrong Products (135 points)

Place numbers from the given range into some cells so that each number is in exactly one cell, and no cell has more than one number. Most cells will remain empty. Each row and each column must contain exactly two numbers. Given clues outside the grid are 1 more or 1 less than the product of the two numbers in that row or column. All clues may not be given.

	21	35	41	25	
19					
5					
81					
26					
15					

Range: (1-10)

	21	35	41	25	
19		4			5
5			6		1
81	10			8	
26		9		3	
15	2		7		

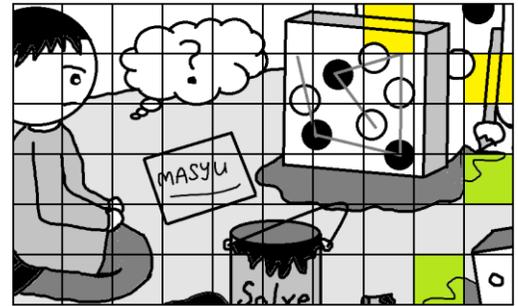
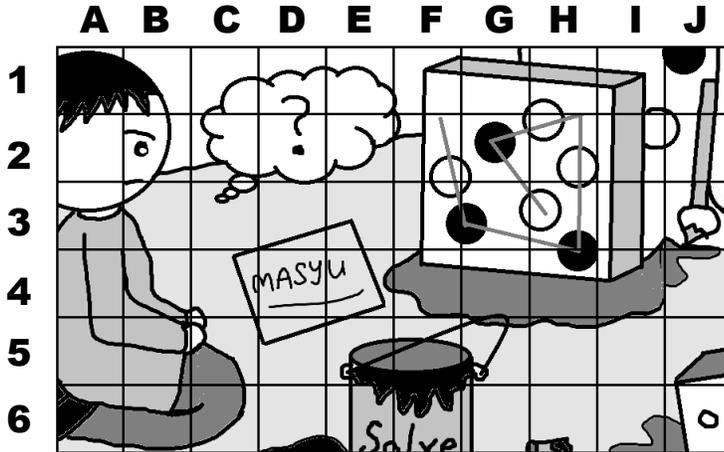
65 min

650 points

Just Chill

2. Sausage Stand (50 points)

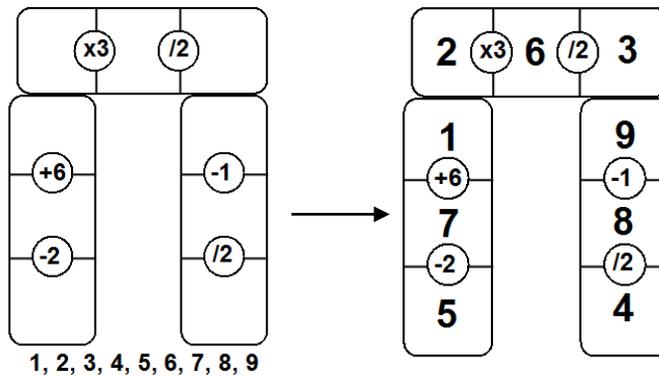
Find 2 pairs of cells that are identical to each other in the diagram below. Cells may be rotated, but not reflected. Ignore any minor pixelations.



Answer: H1-J2 and J4-I6

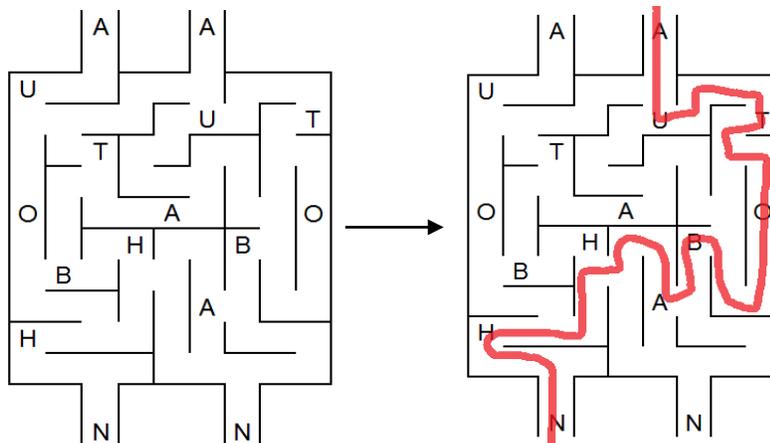
3. Brandenburg Gate (20 points)

Enter all the listed numbers once only each into the boxes. Reading "left to right" or "top to bottom", each number must be the result of the previous number after the given operation.



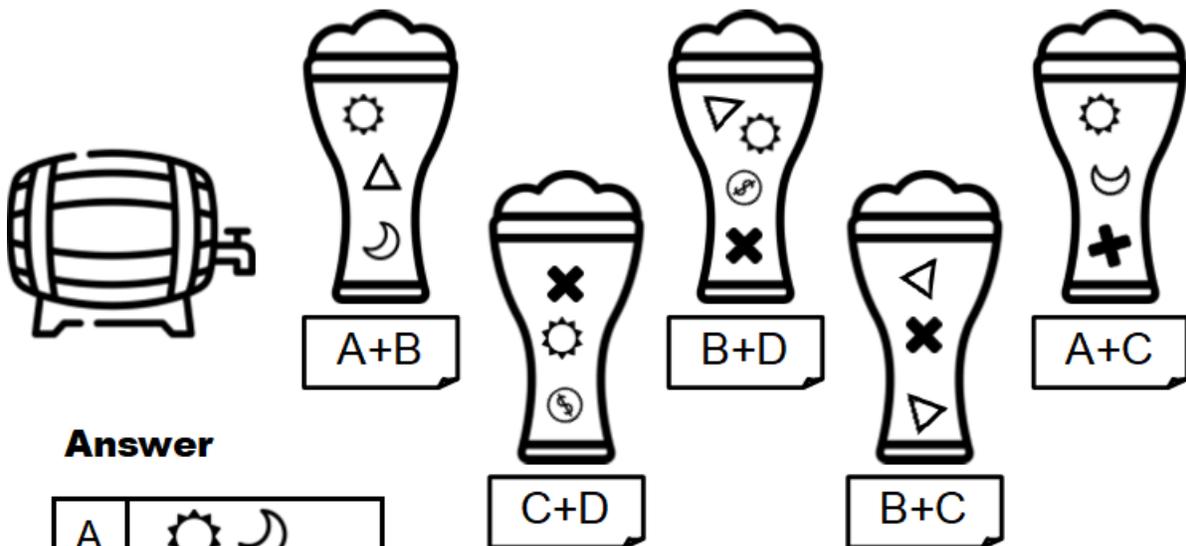
4. Autobahn (20 points)

Starting from any entrance at the top (A), travel along the maze to finish at one of the end points (N). The trail must spell out A-U-T-O-B-A-H-N in that order. You may not cross your own paths.



5. Brewster (45 points)

By looking at the contents of each glass, determine the symbols that appear in each beer barrel (labeled A-E). A symbol may appear in more than one barrel. The number of the same symbols in a glass has no meaning in regards to possible duplicates of that symbol in a barrel. In other words; if a glass takes beer from two barrels with the same symbol—it does not necessarily increase the frequency of that symbol appearing in the glass. Each barrel must have at least one symbol.

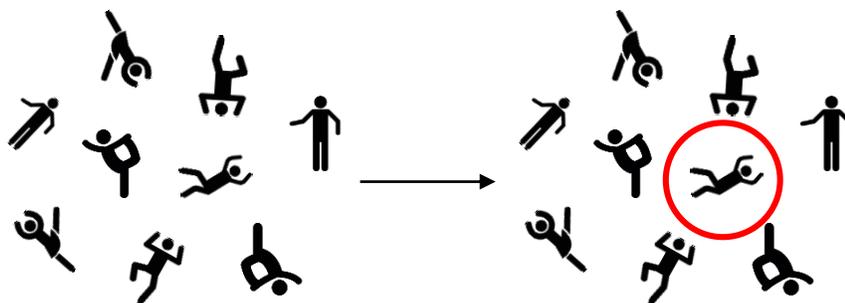


Answer

A	☀️ 🌙
B	△
C	✖️
D	☀️ ✖️ 💰

6. Sweet Tooth (10 points)

Which picture has no identical partner? Identical pictures may be rotated.



puzzle kalayah

65 min

650 points

Round 4

Just Chill

7. Snacking (30 points)

Using the totals given, calculate the price of each item. All prices are whole numbers.

		₹ 4	→		₹ 2
		₹ 6			₹ 4
		₹ 10			₹ 3

8. Pretzels (90 points)

Find the listed words hidden in the grid. Words can be found in any of the eight straight directions. The missing letters in the grid are for you to determine.

E	M	R	F	X	S
P	A	V	E	U	U
L	H			T	N
A	T			R	A
R	V	E	N	H	R
M	A	R	S	V	U

EARTH
MARS
URANUS
VENUS

E	M	R	F	X	S
P	A	V	E	U	U
L	H	R	N	T	N
A	T	E	T	R	A
R	V	E	N	N	R
M	A	R	S	V	U

9. Double Criss-Cross (70 points)

Insert the listed words, one letter per square, into the grid so that they read from left-right or top-bottom. Listed words will come in pairs. For each pair; one word will appear in one grid while the other word must appear in the other grid. All words are used exactly once.

				H	
				O	
L		C	A	T	
A		L			
R		O			
G		S			
E	V	E	N		

			C		
			O	D	D
S	M	A	L	L	
			D	O	G
				P	
				E	
				N	

- | | | |
|-------|--|-------|
| CAT | | DOG |
| HOT | | COLD |
| LARGE | | SMALL |
| ODD | | EVEN |
| OPEN | | CLOSE |

puzzle kalayan

2 Stages

4 Puzzles

PR
Playoff

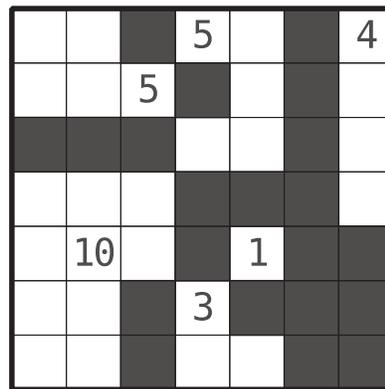
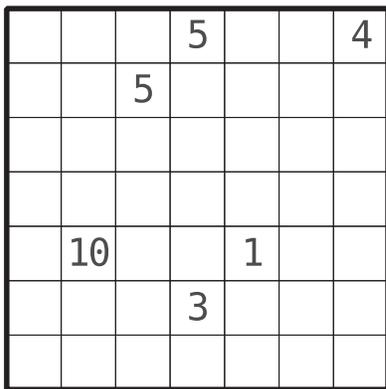
The below puzzle types shall be used in **Stage 1**.

1. Simple Loop

Refer Round 1 for example.

2. Lakes

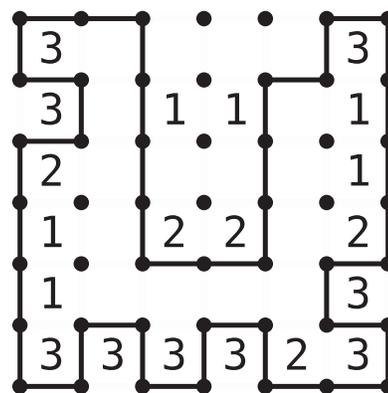
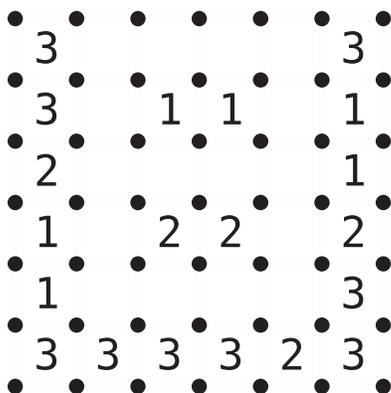
Shade some of the cells so that the grid is divided into white areas. Each white area must contain exactly one number and that number must be the size of the white area it is included in. Cells with numbers cannot be shaded.



The below puzzle types shall be used in **Stage 2**.

3. Slitherlink

Draw a single, non-intersecting loop that only consists of horizontal and vertical segments between the dots. Numbers inside a cell indicate how many of the edges of that cell are part of the loop.



4. Star Battle

Refer Round 1 for example.