

Instructions Booklet

33rd World Puzzle Championship

Version : Final
Published on : 2026-10-06



THURSDAY, 15th OCTOBER

Session 1

01 Raghu Clan	09:00 - 10:00	60m	750 points	Individual
02 Vishwamitra	10:15 - 11:10	55m	650 points	Individual
03 Sita	11:25 - 12:00	35m	400 points	Individual

Session 2

04 Dasharatha's Dilemma	13:45 - 14:20	35m	400 points	Individual
05 Urmila	14:30 - 15:10	40m	450 points	Individual
06 Agastya	15:20 - 16:10	50m	600 points	Individual
07 Shoorpanakha	16:25 - 17:25	60m	1000 points	Individual
08 Bharata's Resolve	17:40 - 18:25	45m	1600+ points	Team

FRIDAY, 16th OCTOBER

Session 3

09 Janasthana	09:00 - 09:45	45m	600 points	Individual
10 Laxman Rekha	09:55 - 10:35	40m	400 points	Individual
11 Shabri	10:50 - 11:30	40m	450 points	Individual
12 Hanuman	11:40 - 12:15	35m	300 points	Individual

Session 4

13 Vali and Sugriva	14:00 - 14:50	50m	550 points	Individual
14 Squirrel	15:00 - 15:20	20m	200 points	Individual
15 Kumbhakarna	15:35 - 16:55	80m	1200 points	Individual
16 Vanaras Assemble	17:20 - 17:55	35m	1200 points	Team
17 Search for Sita	18:05 - 18:50	45m	2000 points	Team

SATURDAY, 17th OCTOBER

Session 5

18 Indrajit	09:00 - 09:55	55m	650 points	Individual
19 Vibhishana	10:10 - 10:45	35m	1200 points	Team
20 Bridge to Lanka	11:00 - 12:00	60m	2400 points	Team

Session 6

21 Sanjeevani	13:45 - 14:55	70m	2400 points	Team
22 Ravana	15:30 - 16:30	60m	800 points	Playoffs



Change Log (changes in v3)

R05 : Sutuna Loop : Example changed
R16 : Deshon : Rule and example changed
R19 : Loop Set : Example changed
R19 : Shading Set : Example changed
R19 : Number Placement Set : Example changed

Change Log (changes in v2)

R3 : Sea Battle : Rule and example changed
R5 : Catloop : Example changed
R6 : Urumi Spirals : Example changed
R7 : Round rule added
R7 : Double Statue Park : Rule updated and divider line drawn between shapes
R7 : Double Country Road : Rule and example changed
R7 : Double Ripple Effect : Rule changed
R7 : Double Rassi Silai : Rule changed
R10 : Laxman Rekha : Rule changed for Line Of Sight, notation changed for Kurarin Grey Dots
R12 : Hanuman : Rule and example changed
R13 : Vertex Slitherlink renamed to Turning Slitherlink
R14 : Round rule added
R18 : Round rule added

Rules for team rounds added

Rules of some puzzles have been changed across rounds to take care of minor typos / grammatical errors / rule inconsistencies / lack of clarity.

Competition Hall Rules

1. Each competitor has to sit at any of the pre-allocated desks of their respective teams in individual rounds. Teams have to work at their pre-allocated desks for team rounds.
2. Prior to the start of each round, competitors must ensure they are at their desks ready for the start of the round. Late arrivals may not be permitted to enter the competition hall to take part in a round at the discretion of the organizers.
3. Prior to the start of each round, competitors must clearly write their name, team and registration number on the front page of their competition booklet into the allocated space. If this information is not complete, then the organizers reserve the right not to award any points to that competitor for that round.
4. Competitors must not open their booklets before the official start of the round. When the signal for the start of the round has been given, competitors may open their booklets and begin solving the puzzles.
5. During each individual round, competitors have to remain silent, unless declaring completion of a round.
6. During team rounds, team members may talk to each other, unless it is stated otherwise in the round's note, but should do this with respect to other teams.
7. To declare a round complete, a competitor must close the competition booklet, clearly state 'finished' and raise an arm with the booklet. The competitor's arm must be raised until the booklet is collected. The same rules apply for the team rounds.
8. Competitors or teams who complete a round more than five minutes in advance, are allowed to leave the competition hall quietly. Competitors or teams who complete a round with five minutes or less left are not allowed to leave their desks to not cause unnecessary disruption to fellow competitors.
9. Competitors who leave the competition hall for any reason will be not allowed to continue in that round.
10. When the signal to finish a round is given, competitors have to stop solving immediately, close their booklets, put their pens/pencils down and their hands up with their booklets for collecting.
11. At the end of a round, competitors have to remain seated until all booklets have been collected.
12. Mobile phones and electronic devices are not permitted to be used in the competition hall during the rounds. The devices have to be turned off and must not be placed on the competitor's desk.
13. Only team captains and official observers equipped with a name tag are allowed to enter the competition hall while either individual or team rounds are taking place. Other non-competing participants may enter the competition hall at the discretion of the organizers.
14. Competitors may not use cameras or other recording devices during rounds. Only observers may do so, at the discretion of the organizers. They have to respect the competitors and not use flash photography or cameras with excessive sounds.
15. When a competitor believes that there is a problem with a puzzle, they must clearly state that puzzle is wrong by writing 'Wrong puzzle' next to it. The competitor must not notify the organizers during the round. This will be investigated upon completion of the round.
16. Puzzles can be completed in any order within a round, unless it is stated otherwise in the round's note. The points' value of a puzzle is an indication of its expected difficulty, although individual solving experience may differ. The difficulty of an example puzzle does not necessarily reflect the difficulty of the corresponding competition puzzle.
17. The boxes above each puzzle are reserved for markers' notes. Competitors must not write in the boxes.
18. Permitted items which can be used in the competition hall, unless stated otherwise, are: pens, pencils, pencil sharpeners, erasers, rulers, scales, blank papers and instruction booklets annotated with notes regarding puzzle instructions and preparation notes.
19. Drinks and snacks are permitted as long as they do not disturb other competitors with a strong smell or rustling packet.
20. It is strictly forbidden to use electronic devices such as music players or headphones or any type of calculator. Use of such equipment may lead to the disqualification of the competitor.
21. Any other items brought into the hall must be kept in a bag on the floor and placed under the competitor's desk, so as not to block the aisles.

22. When a round has been evaluated, fully marked booklets are returned to a team member of the respective country.
23. In case of any query after a booklet has been returned to a competitor, the query must be raised within the specified time. The booklet should be left with the organizers for investigation.
24. Puzzles may be photographed during the marking phase in order to prevent subsequent interventions.
25. Team captains are responsible for ensuring that any information given to them related to the competition is effectively relayed to their team.
26. In case of a major mistake in one of the rounds, organisers reserve the right to cancel the round, either by removing it from the schedule, or by not rewarding any points for it to any of the competitors.
27. The official competition booklets will not contain examples given in the instruction booklet. Therefore, we recommend to bring the Instruction Booklet, which contains an example of every puzzles that will be part of the championship.
28. In the team rounds, the official competition booklets may not contain the instructions of puzzles, only the names. It is advised to bring at least one Instruction Booklet for a team for these rounds.
29. In any case of inconsistency between the instruction booklet and the official competition booklets, e.g. instructions or points, the information in the final version of the instruction booklet will be considered valid.
30. In the competition hall, a timer counting down to the end of the round will be visible for all the competitors.

Scoring and Bonuses

1. Points will be awarded only for fully and correctly solved puzzles. In general, there is no partial points unless it is stated otherwise in the round's note.
2. In individual rounds, the bonus points for a round for each full remaining minute will be awarded to any competitor who correctly solves all the puzzles in the round.
3. In team rounds, the bonus points for a round for each full remaining minute will be awarded to any team who correctly solves all the puzzles in the round.
4. At the judge's discretion, 0.8x bonus, rounded to the closest integer, will be awarded in the case of a single minor mistake in no more than one Puzzle. A minor mistake is considered as at most two incorrectly represented cells in at most one of the Puzzles. Any variance from this is noted in individual round notes.

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

The decision of the tournament directors is final.

For puzzles with partial points, the points will be awarded only if it is part of the overall solution.

Acknowledgements

All the examples in the instructions booklet were made by the organizing team with certain examples sourced from:

1. Past WPC Instruction booklets
2. Past LMI Contests
3. Puzzle Innovation contest
4. Puzzle blogs of organizing team

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Most images in the championship are drawn using Penpa+. We would like to thank:

1. The original creator opt-pan for penpa edit - <https://opt-pan.github.io/penpa-edit/>
2. Swaroop Guggilam for his recent efforts in adding features to Penpa-edit - <https://swaroopg92.github.io/penpa-edit/>

Parts of the Competition Rules above are reused from Instructions Booklets of previous WPCs.

We would also like to thank Gunasundhari D. for her extensive efforts in writing the theme text as well as thorough review of the booklet.

Authors & Test Solvers

We would like to thank the puzzles authors and testers for their contribution to the championship.

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- Jeffrey Bardon
- Mark Sweep
- Matej Uher
- Nikola Zivanovic
- Rakesh Rai
- Ramesh Swarnakar
- Sonal Agarwal
- Tejal Phatak
- Yogitha B M

Glossary

Odd and Even

Odd digits are 1, 3, 5, 7, 9.

Even digits are 2, 4, 6, 8.

Parity

Even and odd are different parities. Two digits have the same parity if they are both even or both odd.

Prime

Prime digits are 2, 3, 5, 7

Adjacent and Neighbouring

Cells sharing an edge are adjacent. A cell can have a maximum of four adjacent cells.

Cells sharing an edge or a corner are neighbouring. A cell can have a maximum of eight neighbouring cells.

MxN region/grid

A MxN region/grid is a region/grid with 'M' rows and 'N' columns.

Touching

Cells that share an edge or a corner touch each other, and this applies to any contents placed in those cells.

Queens

A Queen, as in chess, can move in a straight line in any of the eight directions, Top, Top-Right, Right, Bottom-Right, Bottom, Bottom Left, Left and Top-Left, in a straight line of cells, starting from the first cell touching the queen cell in that direction.

Queens can move for any length unless certain things mentioned in the rules block the movement.

Single connected area

This phrase is used repeatedly in puzzles with either shading or white cells that must adhere to the phrase. The phrase means that from any cell in the group described, it must be possible to visit any other cell in the group just by travelling along grid edges through other cells in the group.

Loops

In most loops, the following line is used – ‘Draw a closed loop passing through the centres of cells horizontally and vertically’. In all such cases the loop passes through grid-edges via the centres of cells. Unless explicitly mentioned, the following rules are inclusive of a loop that does not cross, overlap or intersect itself. In general, if these behaviours are not mentioned, they are not allowed. A slight variation to the above has ‘Draw a closed loop passing through the centres of all cells horizontally and vertically’, and this means all cells the loop can visit within the rules provided, must be visited. This is not necessarily the case when the word ‘all’ is not given, but it can happen then too as part of solving.

Consecutive

Two digits are consecutive if their difference is 1. If the word is used in the context of cells, it is a series of cells in the same row or column sharing grid edges at all points across the series.

2x2 group/area of cells

This phrase is used to describe the four cells immediately touching any given point in a typical square grid. If there are substitutions for the same in irregular grids, they are explicitly explained in individual puzzles.

Checkerboard

A checkerboard pattern is a 2x2 area of cells where the top-left and bottom-right cells are of one type and the top-right and bottom-left cells are of another type.

Dividing the grid into regions

Unless explicitly mentioned, wherever this kind of phrasing comes up, the regions must contain full cells within them, and not partial cells. Also, there will not be a requirement for any unnecessary bold lines that do not connect to close up a region.

Rotation and reflection are allowed

This phrase is usually used in puzzles where a given list of shapes or objects including words and numbers are required to be placed into the grid. It means that even the rotated version or the reflected version of the given shape is considered to be the shape itself replicated in the grid, so it satisfies the instance of that shape appearing in the bank.

Across or down

This phrase is used generally in word puzzles and it means that a word must only be placed in such a way that it can be read, as it is read in the given list, from left to right or top to bottom. For instance, a word ‘Puzzle’ cannot be placed in the grid as ‘elzzuP’ if this phrase is used.

Corresponding row or column

This phrase is generally used in puzzles with outside clues. For a clue outside the left of the grid, the row must be used to satisfy it, and if order/direction is specified then it has to be satisfied from left to right, if not, it can be satisfied from right to left too. Similarly, for a clue outside the top (or bottom) of the grid, the column must be used to satisfy it.

Visibility/looking/etc.

A lot of puzzles have a characteristic of ‘visibility’, and the rules may say that certain conditions must be met when ‘looking from’ a point, or some other variation of this phrase. In all cases, it means that if an observer was viewing the cells in that direction in a straight line (row and/or column), the observer’s vision would capture the given conditions. In some cases where counting is involved, this comes with the phrase ‘including the cell itself’, and in such cases the observer is placed in a cell and can observe in horizontal and vertical directions till the specified vision blockers, and can of course observe their own cell too, so all such cells get added to the count for the observer.



01

Raghu Clan

750 Points

60 Minutes

10x Bonus

Individual

1. Simple Loop	15	7. Diagramless Crossword	200
2. Criss Cross	45	8. Chronological Order	60
3. Letter Weights	90	9. Counting	15
4. Word Search	80	10. Long Division	105
5. Find Pairs	30	11. Mastermind	40
6. Nonogram	45	12. Arukone	25

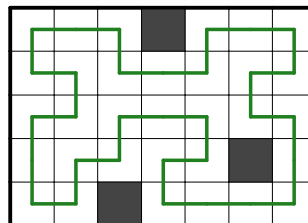
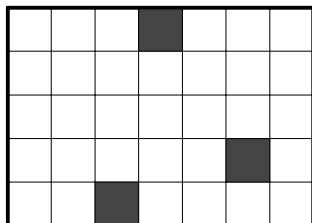
Raghu Clan delves into the lineage and ancestry of Rama, the prince of Ayodhya and his brothers, who serve as the central figures of Ramayana.

Mirroring this theme of origins, this round serves as an introduction to the inaugural few World Puzzle championships which had their origins in crosswords and language-based puzzles. Additionally, this segment features a collection of logic puzzles, which are now fondly referred to as casual puzzles and were prominent in the early years.

1. Simple Loop

15 points

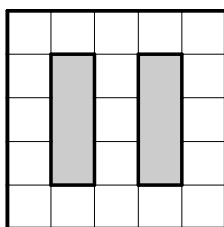
Draw a single non-intersecting loop of horizontal and vertical segments that passes through all of the white cells exactly once.



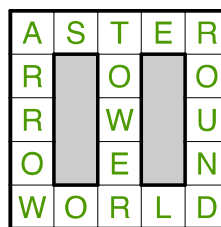
2. Criss Cross

45 points

Place all the listed words in the given grid going across or down.



ARROW
ASTER
ROUND
TOWER
WORLD



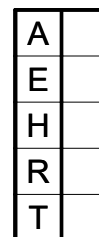
3. Letter Weights

90 points

Write a number next to each letter (in each cell) so that the numbers corresponding to the letters in each given word have the given sum. Different letters must have different numbers. The range of numbers is given.

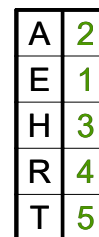
{1~5}

RAT 11
TEAR 12
ATE 8
THE 9
HAT 10



{1~5}

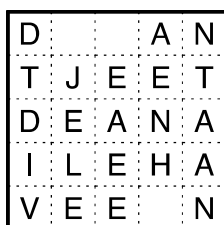
RAT 11
TEAR 12
ATE 8
THE 9
HAT 10



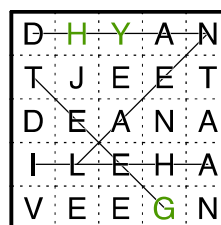
4. Word Search

80 points

Find all the given words in the grid in any of the eight. Some cells have been left blank and can be filled with exactly one letter each to help find all the words.



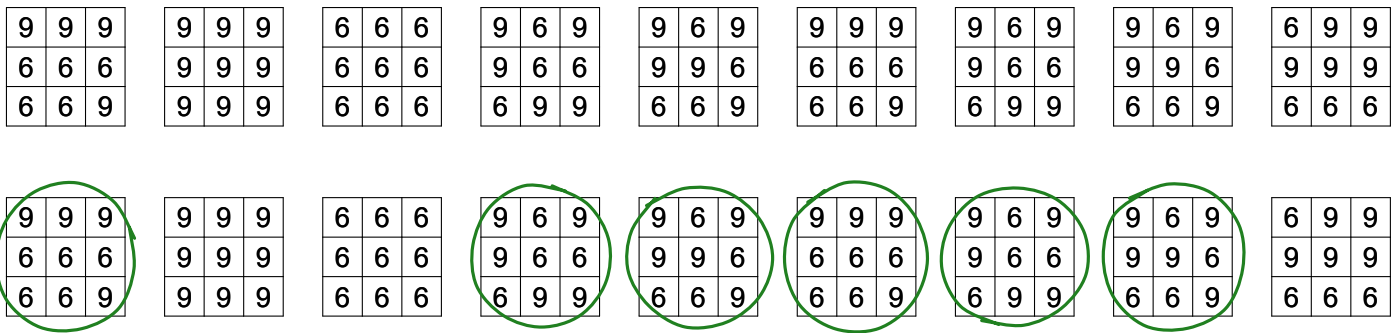
AHELI
DHYAN
GEET
NEAL



5. Find Pairs

30 points

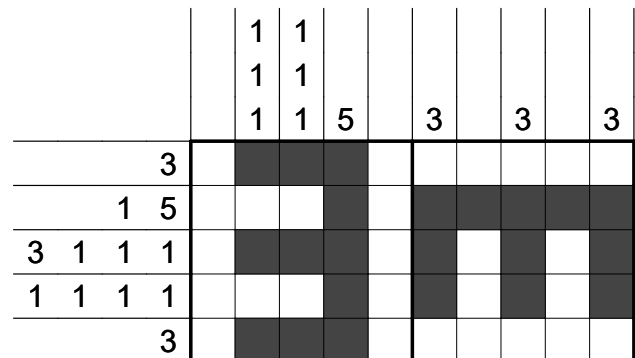
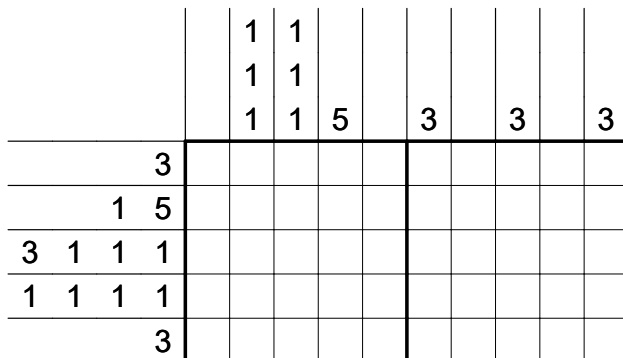
Find and mark three identical pairs among the given images. Rotated / reflected images are not considered as identical.



6. Nonogram

45 points

Shade some cells so that the numbers outside the grid indicate the groups of consecutive black cells which are in that row/column in order, either from left to right or from top to bottom. There must be at least one white cell between any consecutive shaded groups. Rows and columns without outside clues can have any pattern of shaded and unshaded cells.



7. Diagramless Crossword

200 points

Place the given set of words in the grid such that all words must be connected to each other and no additional words (even of two letters) can be formed except for the given words. The given Across and Down clues indicate the length of the word. Clues are numbered sequentially in the grid in reading order from left to right and top to bottom. The final diagram formed must have rotational symmetry. The numbers inside the grid indicate the positions of those across / down clues.

ACROSS

1 4

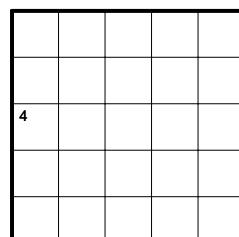
4 5

5 4

DOWN

2 5

3 5



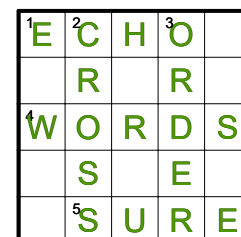
ECHO

SURE

CROSS

ORDER

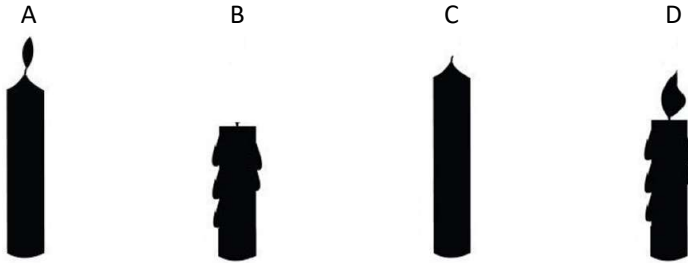
WORDS



8. Chronological Order

60 points

Arrange the images in a chronological order. Enter the letter above the image in the corresponding box given below the puzzle.



C	A	D	B
1	2	3	4

9. Counting

15 points

Count the number of rectangles (including squares) in the figure.



5

10. Long Division

105 points

Identify which letter stands for which digit such that it forms a correct long division computation. Each letter stands for one digit (0–9) and no two different letters can represent the same digit. The first digit of any multi-digit number, divisor, quotient, dividend, or intermediate step cannot be zero.

$$\begin{array}{r}
 \text{O N E} \\
 \text{S I X} \overline{) \text{E I G H T}} \\
 \underline{- \text{S I X}} \\
 \text{I X G H} \\
 \underline{- \text{T R T X}} \\
 \text{R S H T} \\
 \underline{- \text{R S H X}} \\
 \text{T}
 \end{array}$$

$$\begin{array}{r}
 \text{O N E} \\
 \text{S I X} \overline{) \text{E I G H T}} \\
 \underline{- \text{S I X}} \\
 \text{I X G H} \\
 \underline{- \text{T R T X}} \\
 \text{R S H T} \\
 \underline{- \text{R S H X}} \\
 \text{T}
 \end{array}$$

E	G	H	I	N	O	R	S	T	X

E	G	H	I	N	O	R	S	T	X
9	8	7	3	4	1	5	6	2	0

11. Mastermind

40 points

Find out the correct series of letters with the help of the information given by the black and white dots. Black dots imply correct letters in the correct position while white dots imply correct letters in the wrong position. Letters are not repeated in the clues or in the solution.

A E I O U ○○
 L Y R I C ○
 V O C A L ●●●
 V O I C E ●●○
 L O W E R ●●●○

--	--	--	--	--

●●●●●

A E I O U ○○
 L Y R I C ○
 V O C A L ●●●
 V O I C E ●●○
 L O W E R ●●●○

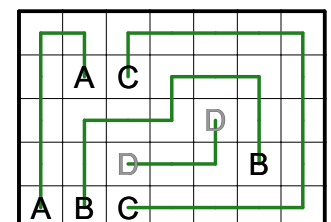
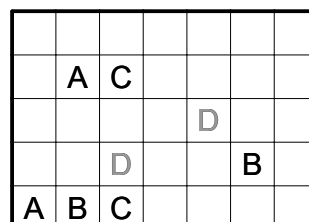
V	O	W	E	L
---	---	---	---	---

●●●●●

12. Arukone

25 points

Connect every pair of letters through horizontal and vertical paths so that the paths cover all cells and no two paths cross or overlap each other.





02

Vishwamitra

650 Points

55 Minutes

10x Bonus

Individual

1. Slitherlink	20	10. Fillomino	15
2. Slitherlink	25	11. Fillomino	35
3. Slitherlink	65	12. Fillomino	65
4. Nurikabe	15	13. Easy as ABC	10
5. Nurikabe	20	14. Easy as ABC	30
6. Nurikabe	40	15. Easy as ABC	30
7. Battleships	15	16. Kakuro	30
8. Battleships	35	17. Kakuro	75
9. Battleships	45	18. Kakuro	80

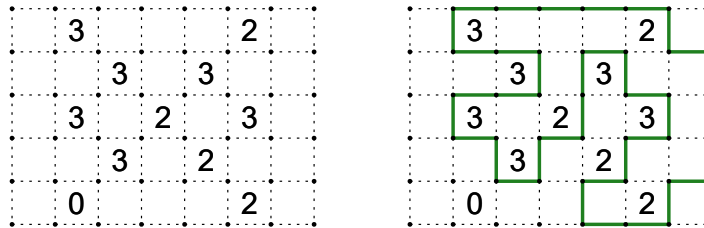
Prince Rama and his three brothers were raised under the tutelage of Sage Vasishta, the counselor to their father King Dasharatha. Later, Vishwamitra mentored Rama, transitioning him from a sheltered prince into a formidable warrior. He taught him archery and military strategy, instilling vital principles of righteousness.

Comprising 18 puzzles across a range of easy, medium, and hard difficulty, this round showcases 6 distinct classic puzzle categories that have remained an integral part of WPCs over the years.

1, 2, 3. Slitherlink

20 + 25 + 65 points

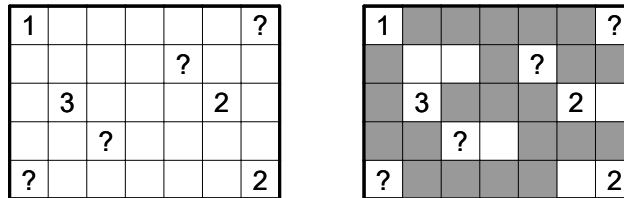
Connect some pairs of orthogonally adjacent dots to form a single non-intersecting loop. Clues represent the number of edges drawn surrounding the clue (up to four).



4, 5, 6. Nurikabe

15 + 20 + 40 points

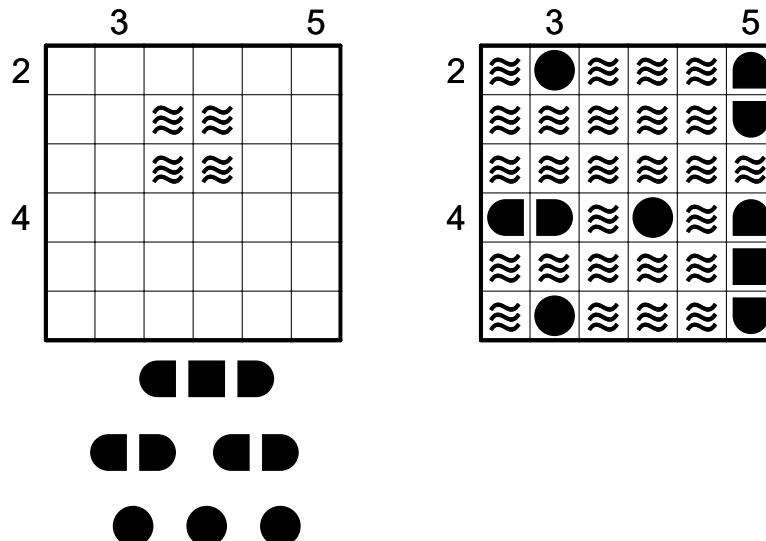
Shade some cells so that all shaded cells form one orthogonally connected area and no 2x2 region is entirely shaded. Clues cannot be shaded, and every orthogonally connected area of unshaded cells contains exactly one clue, the value of which represents the size of the area. A question mark "?" as a clue can represent any positive number.



7, 8, 9. Battleships

15 + 35 + 45 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 a ship segment in that row or column. Ships cannot touch each other, even diagonally. Some cells are known to be water unoccupied by ships, and are indicated by waves.



15 + 35 + 65 points

10				
8				
6				
4	8			3
				10
				4

10	10	10	10	10	1
8	8	8	8	10	3
6	6	8	8	10	3
4	6	8	8	10	3
4	6	6	4	10	10
4	4	6	4	4	4

10 + 30 + 30 points

(A, B, C)

	A	B	C	
A	A	C	B	
		A	B	C
	B			C
	C	B		A
A		A	C	
				B
	A	A		

30 + 75 + 80 points

		17	13	26	27
	10				
23					
8					
17					
23					

		17	13	26	27
	10	1	4	2	3
23	1	2	9	3	8
8	3	5		8	9
17	2	3	1	4	7
23	5	6	3	9	



03

Sita

400 Points

35 Minutes

10x Bonus

Individual

1. Star Battle	15	7. Kurotto	65
2. Battleships	25	8. Kurarin	25
3. Sea Battle	30	9. Kurarin Kurotto	35
4. Masyu	25	10. Yin Yang	25
5. Maxi Loop	40	11. Alphabet Link	20
6. Maxi Masyu	30	12. Yin Yang Link	65

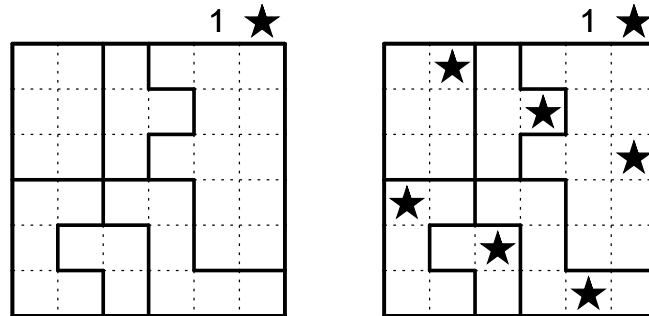
Upon finishing his education, Rama was guided by Vishwamitra to Mithila, ruled by King Janaka, to participate in his daughter Sita's Swayamvara- a ceremony where the bride chooses her spouse from assembled suitors. Rama successfully performed the onerous task of stringing Lord Shiva's bow, thereby earning Sita's hand in marriage. In a grand ceremony, Rama's three brothers were also wed to Sita's three sisters.

To honor the marriage of these four couples, this round presents four pairs of puzzles spanning different categories, alongside four hybrid puzzles combining the puzzles in each pair.

1. Star Battle

15 points

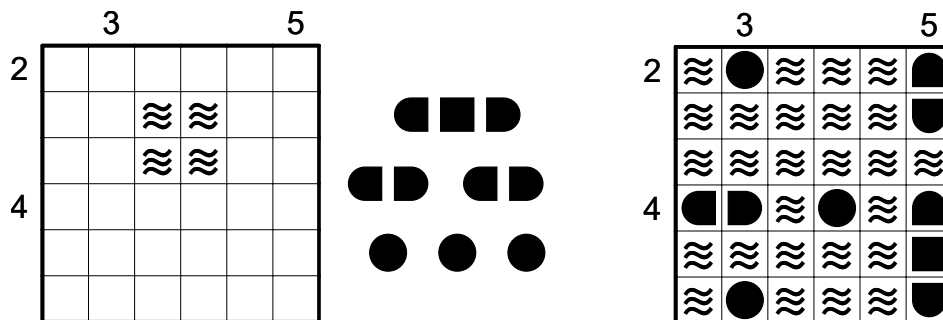
Place stars into some cells such that each row, column, and outlined region contains given number of stars. Stars may not touch one another, even diagonally.



2. Battleships

25 points

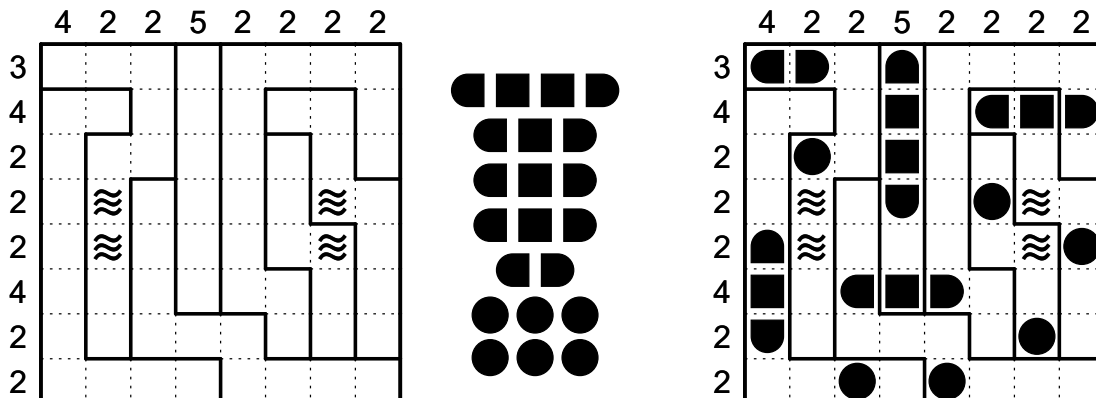
Place the given fleet of ships with the shapes of the ships as shown. The numbers outside the grid indicate the number of cells occupied by a ship segment in that row or column. Ships cannot touch each other, even diagonally. Some cells are known to be water unoccupied by ships, and are indicated by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



3. Sea Battle

30 points

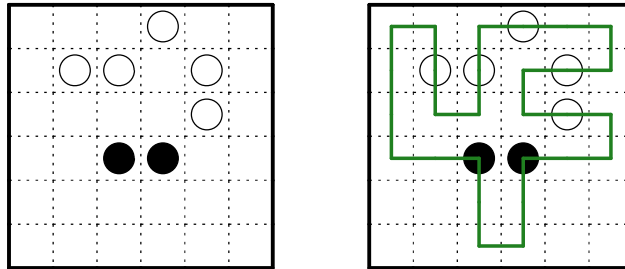
Place the given fleet in the grid so that every row, column and boldly marked area contain parts of exactly two different ships. Ships don't touch each other, even diagonally. Ships may cross over bold lines. A clue outside the grid indicates the number of cells in the corresponding row or column that are occupied by ship segments. Some cells are known to be water unoccupied by ships, and are indicated by waves.



4. Masyu

25 points

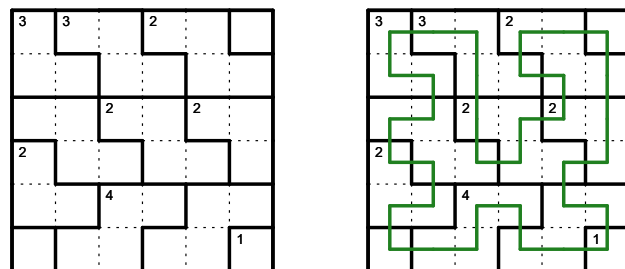
Draw a non-intersecting loop travelling horizontally and vertically through the centers of some cells that passes through every circle. The loop must turn on black circles and travel straight through the cells on either side. The loop must go straight through white circles, and turn in at least one of the cells on either side.



5. Maxi Loop

40 points

Draw a non-intersecting loop travelling horizontally and vertically through the centers of all cells. A number in a region represents the number of cells occupied by the largest continuous loop segment within the region. The largest continuous loop segment can be achieved multiple times.

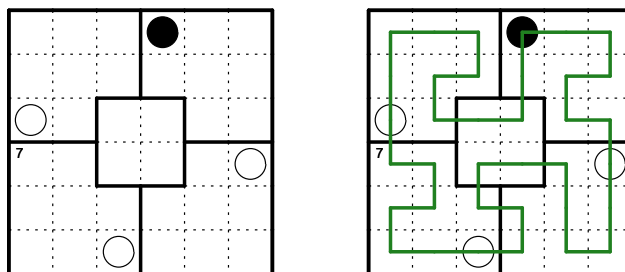


6. Maxi Masyu

30 points

Draw a non-intersecting loop travelling horizontally and vertically through the centers of all cells. The loop must turn on black circles and travel straight through the cells on either side. The loop must go straight through white circles, and turn in at least one of the cells on either side.

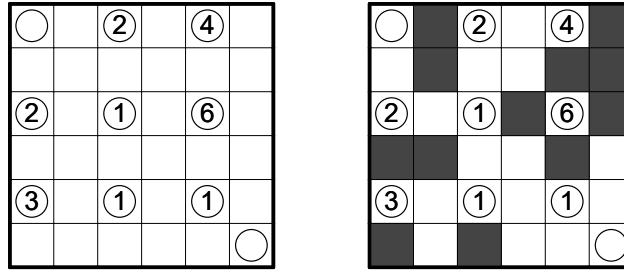
A number in a region represents the number of cells occupied by the largest continuous loop segment within the region. The largest continuous loop segment can be achieved multiple times.



7. Kurotto

65 points

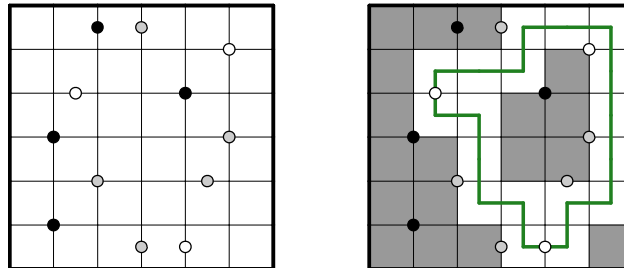
Shade some cells so that clues represent the total size of the orthogonally connected areas of shaded cells that share an edge with the clue. Circled cells cannot be shaded.



8. Kurarin

25 points

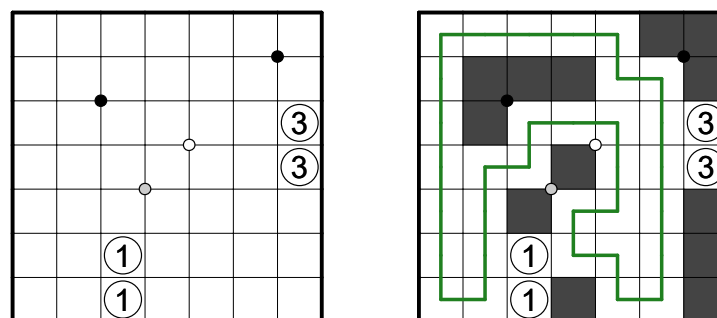
Shade some cells and draw a single non-intersecting loop through the centers of all remaining cells. A black dot must touch more shaded cells than unshaded ones. A white dot must touch more unshaded cells than shaded ones. A grey dot must touch an equal amount of each.



9. Kurarin Kurotto

35 points

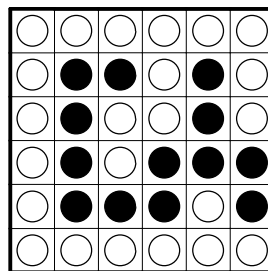
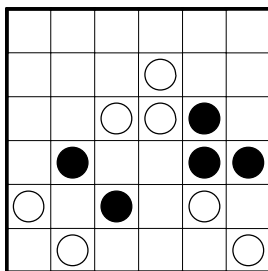
Shade some cells and draw a single non-intersecting loop through the centers of all remaining white cells without a number. A black dot must touch more shaded cells than unshaded ones. A white dot must touch more unshaded cells than shaded ones. A grey dot must touch an equal amount of each. Number clues represent the total size of the orthogonally connected areas of shaded cells that share an edge with the clue (there can be shaded groups other than these too). Numbered cells cannot be shaded.



10. Yin Yang

25 points

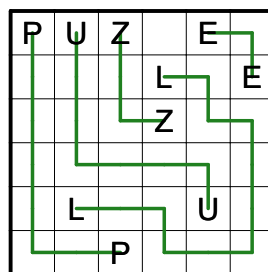
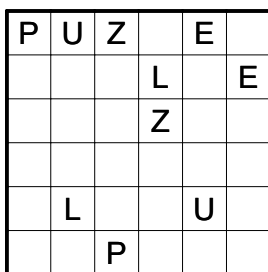
Place a circle into each cell of the grid - some white and some black - such that all circles of the same type must lie in cells forming one orthogonally connected area. No 2x2 region may contain just one type of circle.



11. Alphabet Link

20 points

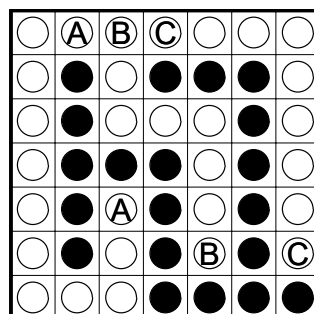
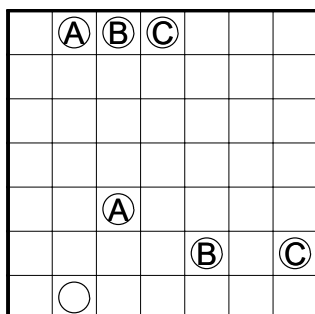
Draw non-intersecting paths through the centers of some cells, each connecting one clue to its equal counterpart.



12. Yin Yang Link

65 points

Place a circle into each cell of the grid - some white and some black - such that all circles of the same type must lie in cells forming one orthogonally connected area. No 2x2 region may contain just one type of circle. Draw paths through the centre of all the white circles, each connecting one clue to its equal counterpart.





04

Dasharatha's Dilemma

400 Points

35 Minutes

10x Bonus

Individual

1. Clone Wars / Aqre	70
2. Bhai Bahan / Ringring	50
3. Heavy Dots / Araf	70
4. Candy Crush / Summon	60
5. Dosun Fuwari / Tents	30
6. Tangled Words / Criss Cross	70
7. Transporter / Darts	50

King Dasharatha intended to coronate the virtuous Rama as the king of Ayodhya. However, Kaikeyi, his third wife, invoked two boons granted to her in the past - to banish Rama and crown her own son Bharata instead. Deeply attached to both sons, Dasharatha faced an agonizing conflict of whether to choose Rama out of his paternal affection or uphold his promise by selecting Bharata. This round mirrors that profound choice, presenting you with a dilemma: will you tackle slightly complex puzzles governed by simple rules, or opt for somewhat simpler puzzles bound by complex rules?

Round Rules

In this round, there are 7 pairs of puzzles from different puzzle categories. In each pair participants will get credit for only one of the two puzzles. In each pair, both the puzzles have been assigned equal points.

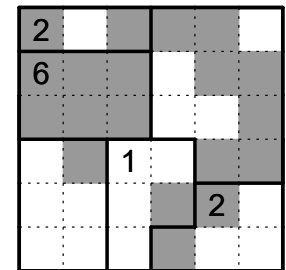
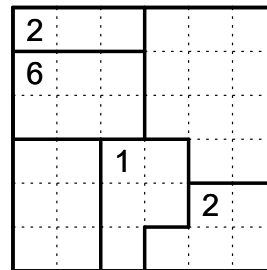
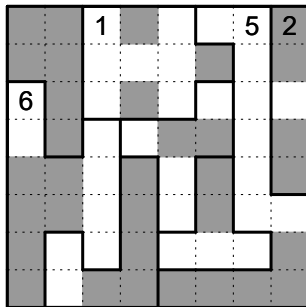
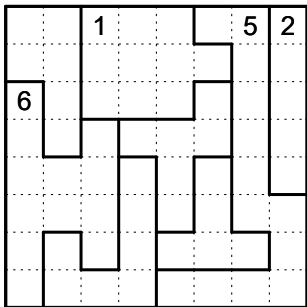
1. Clone Wars

70 points

1. Aqre

Shade some cells, such that there is no 2x2 area of unshaded cells. Numbers give the size of shaded group/s in the region. There are two possibilities for each region. If a region has only one shaded group, it orthogonally touches with exactly one other group of the same shape from a different region. Or if there are multiple groups of the same shape within the region, they do not orthogonally touch shaded groups in any other region. Rotations and reflections count as same shape.

OR Shade some cells so that all shaded cells form one orthogonally connected area. Regions with numbers must contain the indicated number of shaded cells. There may not exist a run of more than three consecutive shaded or unshaded cells horizontally or vertically anywhere in the grid.



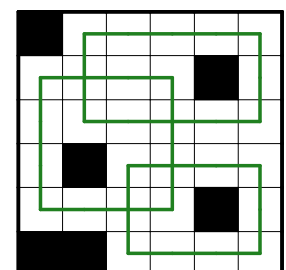
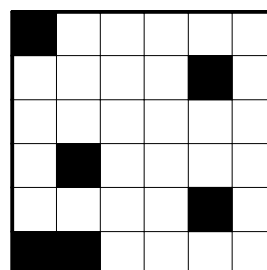
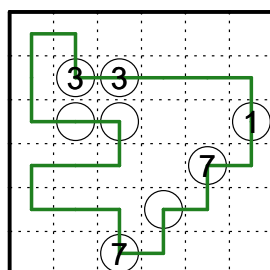
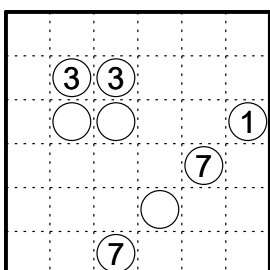
2. Bhai Bahan

50 points

2. Ringring

Draw a non-intersecting loop through the centers of some cells that passes through every circle. Consider the loop split into segments, such that within a segment, it either turns in each cell or goes straight in each cell, and segment types alternate along the path. When two circles are orthogonally adjacent, they belong to different types of segments (even if they are not directly connected along the loop). Numbered circles indicate the length of the current segment.

OR Draw rectangular loops through the centers of empty cells so that every empty cell gets used. The sides of different rectangles may intersect each other, but not turn at their intersection or otherwise overlap.



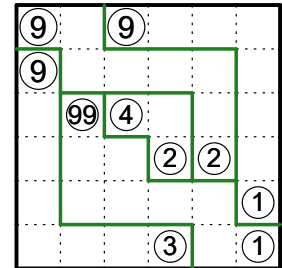
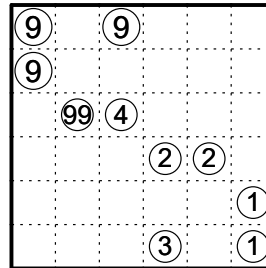
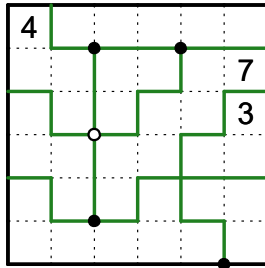
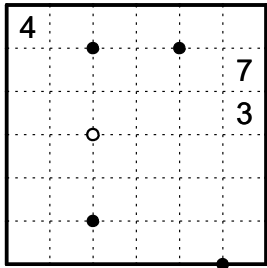
3. Heavy Dots

70 points

3. Araf

Draw vertical/horizontal lines between dots to divide the grid into regions. A region may contain at most one number, equal to the area of the region. No region may cover a 2×2 area. Some dots are “heavy” and have 3 or 4 lines connected to them. Black circles indicate heavy dots with exactly three lines; white circles indicate heavy dots with four lines. Not all heavy dots are given, but there can be no heavy dots orthogonally adjacent to the indicated ones.

OR Divide the grid into regions of orthogonally connected cells. Each region must contain exactly two circles and have an area that lies strictly between the two numbers in the circles.



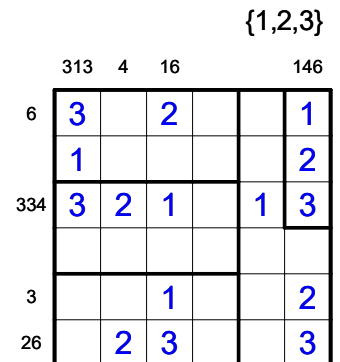
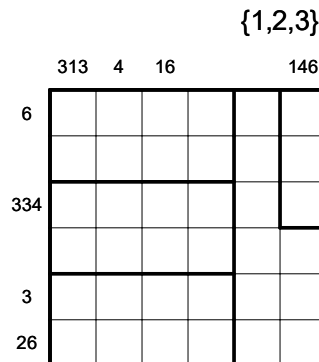
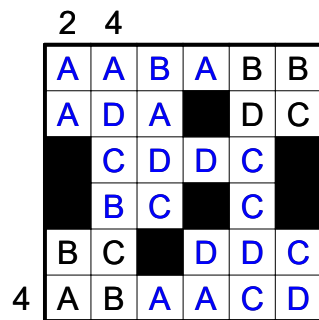
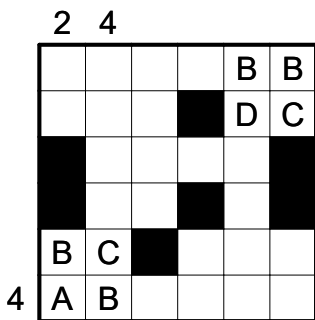
4. Candy Crush

60 points

4. Summon

Place a letter from A-D into each white cell such that there exist no horizontal or vertical runs of three or more consecutive cells containing the same letter. It must be possible to make any cell with a letter become part of such a run by making only one swap of two orthogonally adjacent letters. Numbers outside the grid indicate the number of distinct alphabets in the respective row/column.

OR Place numbers into some cells such that cells with the same digit don't touch, even diagonally, and each region contains exactly the range of digits outside the grid. Groups of consecutive cells containing digits in a row or column form numbers by reading the digits left to right or top to bottom, respectively. Clues outside the grid indicate the sum of such numbers in the corresponding row or column.

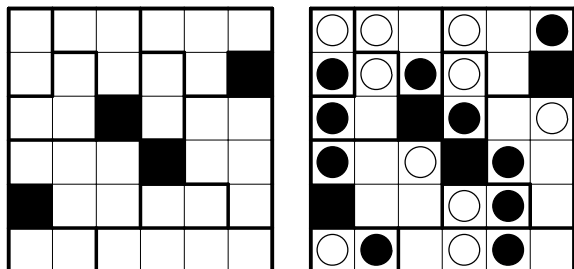


5. Dosun Fuwari

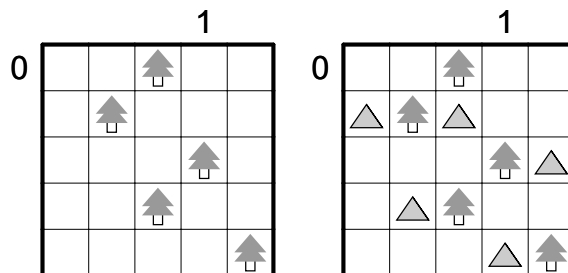
30 points

5. Tents

Place one iron ball (black circle) and one balloon (white circle) in each region. Iron balls are heavy and sink, so they must only be placed directly above the bottom edge of the grid, a black cell, or another iron ball. Balloons are light and float, so they must only be placed directly below the top edge of the grid, a black cell, or another balloon.



OR For each tree in the grid, place a tent in an empty orthogonally adjacent cell, connecting to it. Tents may not touch one another, even diagonally. A clue given outside the grid represents the number of tents in the corresponding row or column.



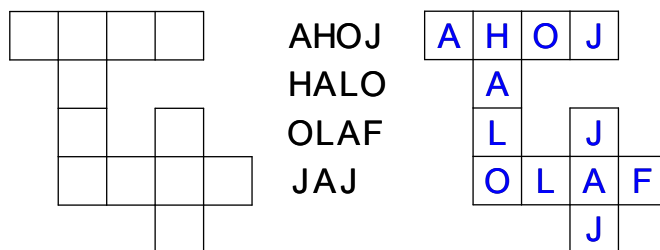
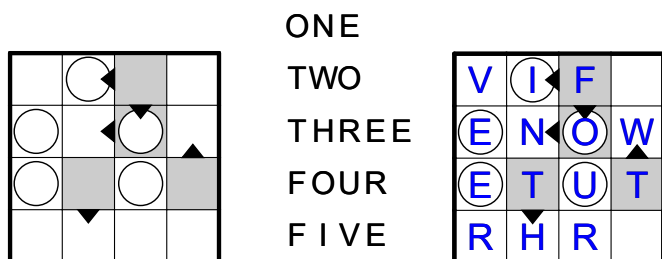
6. Tangled Words

70 points

6. Criss Cross

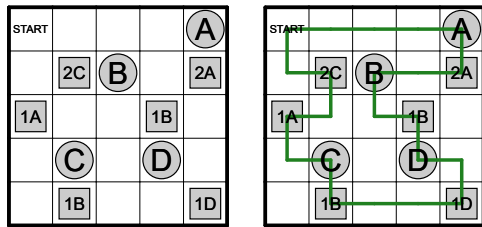
Place the given words into the grid, according to the following rules: For any word each letter must be placed horizontally or vertically adjacent to the preceding letter. Each word starts in a grey cell and the next letter must be placed in the direction of the arrow. Words may use the same cell more than once; however, if a word contains a double letter (the same letter twice in a row), it has to use two different cells for these. Multiple words can start in the same grey cell. A letter in a grey cell must be the starting letter for at least one word. Cells with circles contain vowels (A, E, I, O, U), and vowels must be placed only in cells with circles. Cells may remain empty. Each letter must be used by at least one word.

OR Place all the listed words in the given grid going across or down.



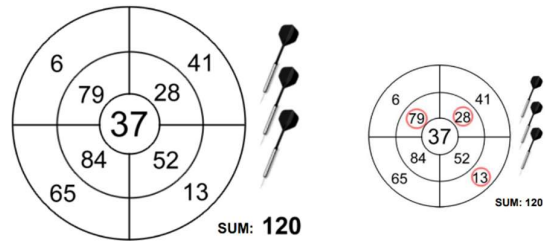
Find the path of the transporter so they can deliver all the transport orders. The path must begin in the cell marked **START**, run horizontally and vertically and finish in the starting cell again, without using any cell more than once. The squares represent objects that have to be delivered to their respective destinations, namely the grey circles. The letters indicate where the object have to be delivered. Whenever the transporter reaches a cell with a square, they pick up an object; Whenever they reach a destination, they unload all the objects with the matching letter. On their path, the transporter has to pick up all the objects and deliver as well.

The numbers inside the square indicates the size of the object. The transporter has a limited capacity that cannot be exceeded at any time. The capacity of the transporter is given below the grid. It is sufficient to draw the path without the direction.



Capacity = 3

OR Use all the darts / arrows to score the given target exactly. No section of the board may be hit more than once.





05

Urmila

450 Points

40 Minutes

10x Bonus

Individual

1. Juosan	90
2. It's Yours	35
3. Common Letters	60
4. Catloop	40
5. Land and Sea	15
6. Largest Number	55
7. Mintonette	40
8. Recto	65
9. Mine Field	30
10. Sutuna Loop	20

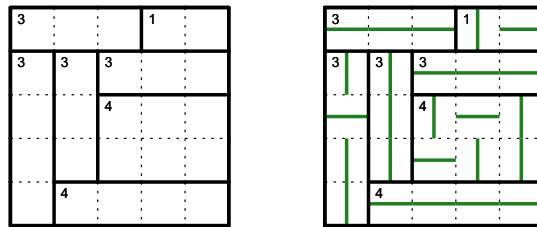
When Laxman left for the forest with Rama and Sita, his wife stayed back at his request, prioritizing her husband's duty. She traded her wakefulness with Laxman, sleeping continuously for 14 years of exile to allow him to stay awake and serve his brother Rama day and night without distraction.

In the spirit of Urmila's silent sacrifice, this round honors puzzles that the authors regard as unsung heroes—elegant designs that failed to receive the attention they truly deserved.

1. Juosan

90 points

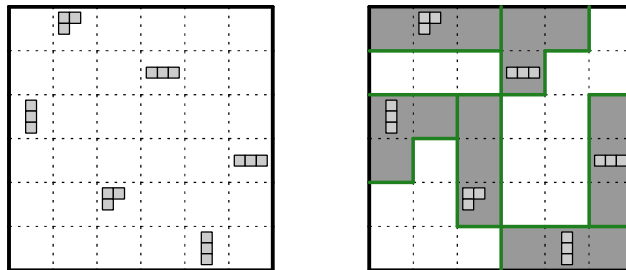
Place a horizontal or vertical line segment into each cell, connecting the centers of two opposite edges of the cell. A number in a region represents how many horizontal or vertical line segments it contains - whichever there's more of. There may not exist a run of three or more consecutive cells containing distinct parallel line segments anywhere in the grid.



2. It's Yours

35 points

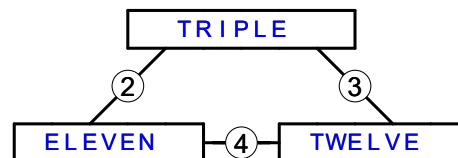
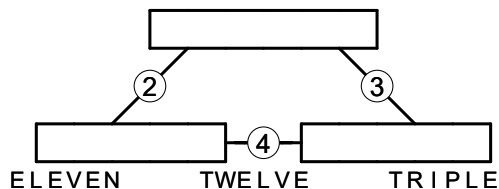
Place polyominoes into the grid such that each polyomino contains exactly one clue and touches exactly one other polyomino orthogonally. The clue inside a polyomino shows the exact shape of the polyomino it touches, without rotations or reflections.



3. Common Letters

60 points

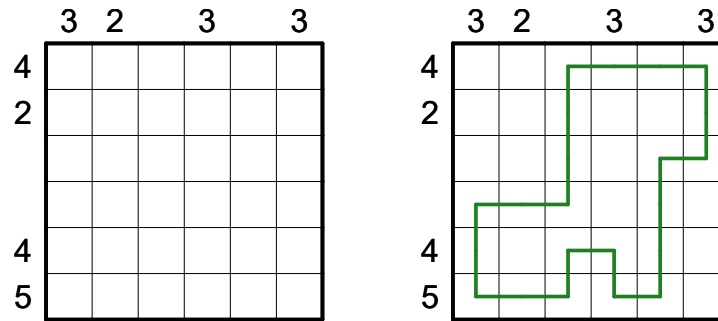
Place each word into a different box such that the number between two boxes indicates the number of letters those words have in common. Duplicate letters are counted separately.



4. Catloop

40 points

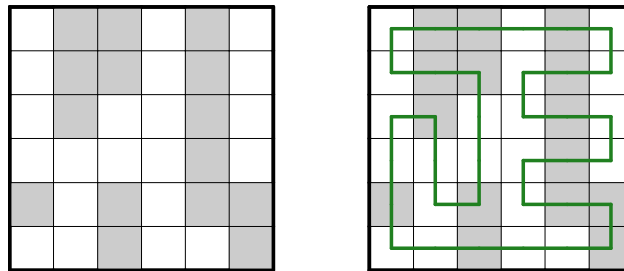
Draw a non-intersecting loop travelling horizontally and vertically through the centers of some cells. The numbers outside the grid show how many squares are used in that row or column by the loop.



5. Land and Sea

15 points

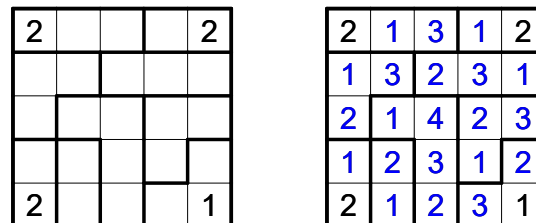
Draw a non-intersecting loop travelling horizontally and vertically through the centers of all cells. The loop can't run through more than 2 white cells consecutively.



6. Largest Number

55 points

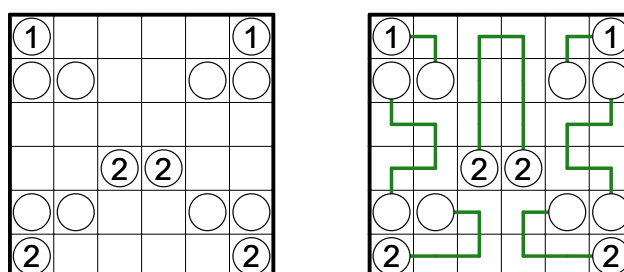
Place a number into each cell so that each region contains the numbers from 1 to N with no repeats, where N is the number of cells in the region. Numbers of the same value may not touch one another orthogonally. Two orthogonally adjacent numbers may not both be the largest number of their respective regions.



7. Mintonette

40 points

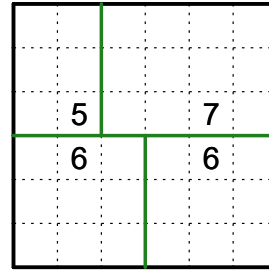
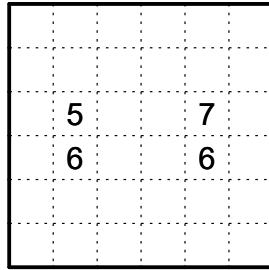
Connect circles in pairs by drawing a line that goes horizontally and vertically through the centers of cells. Lines cannot touch or cross themselves or each other. If a circle contains a number, it represents the number of turns for the line between two circles. If two circles have no number, a line may make any number of turns between those two circles. All cells must be used by the lines, and each circle must be connected to another circle.



8. Recto

65 points

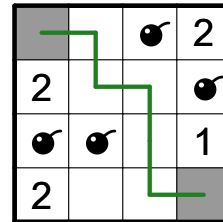
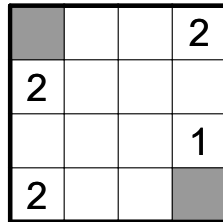
Divide the grid into rectangular regions of orthogonally connected cells. Each region must contain exactly one clue, which indicates the sum of the width and height of its rectangle.



9. Mine Field

30 points

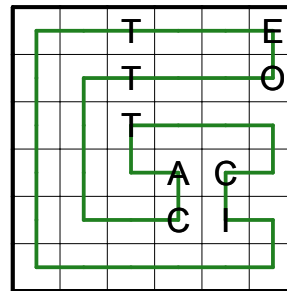
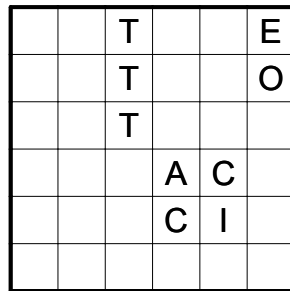
Draw a non-intersecting path connecting the two shaded cells, travelling horizontally and vertically through the centers of some cells. Numbers show how many mines are present in the surrounding (up to) 8 cells. The path cannot visit cells containing mines or numbers, and it does not need to visit all cells without mines.



10. Sutuna Loop

20 points

Draw a non-intersecting loop travelling horizontally and vertically through the centers of all cells. All words from the given list must be read along the loop only in a single direction in the given order.



TIC TAC TOE



06

Agastya

600 Points

50 Minutes

10x Bonus

Individual

1. Nagastra	20
2. Nagastra	55
3. Box and Blob	25
4. Box and Blob	55
5. Square Chain	20
6. Square Chain	30
7. X-Sandwich	80
8. X-Sandwich	105
9. Khanda Thrust	35
10. Khanda Thrust	25
11. Physarum	30
12. Physarum	40
13. Urumi Spirals	30
14. Urumi Spirals	50

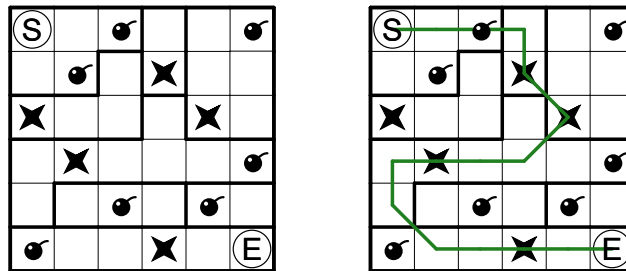
During his travels in the forests Rama stayed in the hermitage of Sage Agastya. Agastya bestowed Rama with several divine weapons like the sword and bow of Lord Vishnu, inexhaustible quivers, an impenetrable armor and Lord Brahma's mighty weapon.

This round features innovative puzzle types that represent the celestial weapons acquired by Rama.

1, 2. Nagastra

20 + 55 points

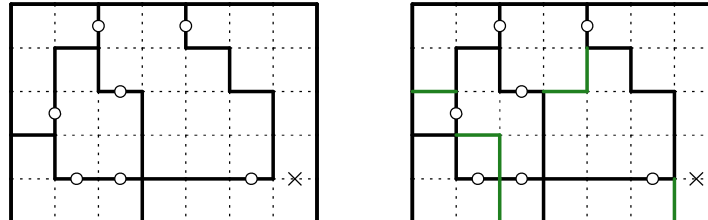
Draw a non-overlapping and non-intersecting path from cell 'S' to cell 'E' passing through cell centers without forming acute angles or touching itself orthogonally or diagonally. The path passes through weapons (mines and stars) along the way so that a weapon must be used exactly once before passing through another one. The path can only pass through the edge of a region using a mine. The path can only pass through a vertex of any cell (irrespective of regions) using a star. The path may end with an unused weapon.



3, 4. Box and Blob

25 + 55 points

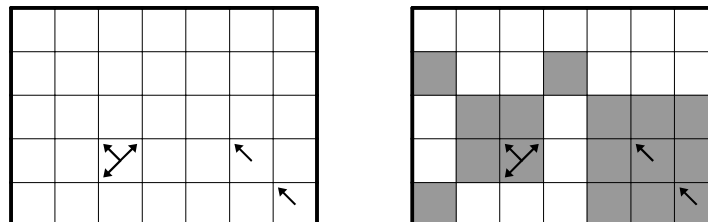
Divide each outlined region into exactly two connected parts: one rectangular and the other of non rectangular shape. A circle on an edge must touch exactly one rectangle. Borders can not be drawn over crosses on edges.



5, 6. Square Chain

20 + 30 points

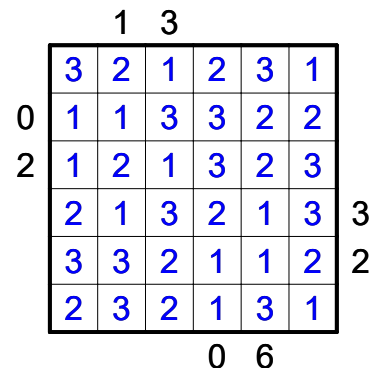
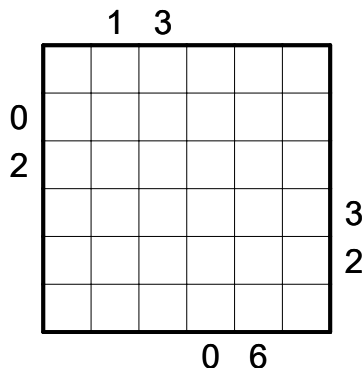
Shade some cells so that every group of orthogonally connected shaded cells must form a filled square. Squares may only ever touch each other at their corners, never along an edge. Certain cells contain a clue in the form of diagonal arrows. A clue cell must be shaded, and its arrows indicate exactly the directions in which the square covering that clue has a diagonally adjacent neighbouring square touching it at a corner. A square may cover no clues or several. Two squares of the same size may not be diagonally adjacent to each other. All shaded cells together must form a single diagonally contiguous area.



7, 8. X-Sandwich

80 + 105 points

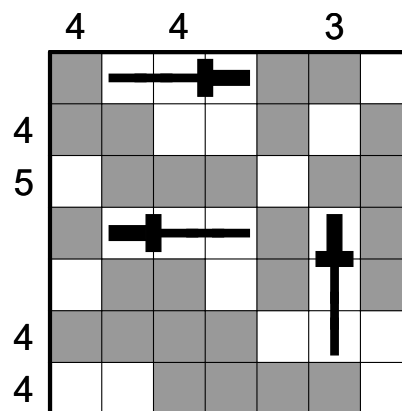
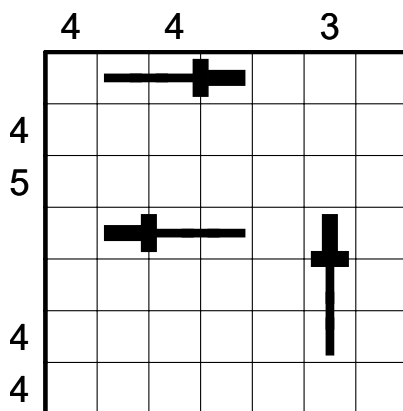
Place a number from 1 to $N/2$ into each cell so that each row and column contains every number from that range exactly twice, where N is the side length of the grid. A clue outside the grid indicates the sum of all numbers between two Xs in the corresponding row or column from the direction of the clue, where X is the first number in that row or column from the direction of the clue.



9, 10. Khanda Thrust

35 + 25 points

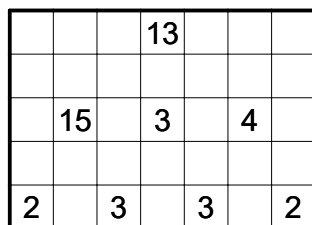
Shade some cells on the board/grid. There is a block of one or more shaded cells immediately next to both ends of the sword. The number of cells in the block pointed to by long pointer is twice the number of cells in the block pointed by short pointer. Every block is pointed at by only one sword. Numbers outside the grid, if given, indicate the number of shaded cells.



11, 12. Physarum

30 + 40 points

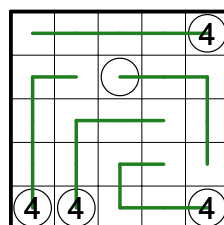
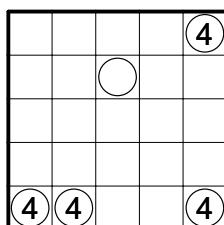
Shade some cells so that shaded cells form orthogonally connected blocks. All shaded blocks must together form a single diagonally connected area, with no isolated block. Every numbered cell must be shaded, and its number equals the count of shaded cells in its (up to) eight-cell neighbourhood plus the size of its own shaded block.



13, 14. Urumi Spirals

30 + 50 points

Draw an orthogonal line moving out from each circle that can only travel straight or turn right (i.e. no left turns). Line segments between each corner can only reduce in length or stand the same (i.e. they can never be longer than the previous segment). When finished, every cell will be entered by exactly one line (i.e. the lines cannot intersect themselves or each other). If there is a number in a circle, it indicates the total length of the joined line (i.e. the number of other cells the line visits).





07

Shoorpanakha

1000 Points

60 Minutes

10x Bonus

Individual

1. Double Crossword	160
2. Double Yin Yang	120
3. Double Statue Park	175
4. Double Rassi Silai	115
5. Double Country Road	160
6. Double Ripple Effect	70
7. Double Fillomino	200

During their stay in the forest Ravana's sister Shoorpanakha approached Rama and Laxman infatuated by their stature. Infuriated by their dismissals, the humiliated and envious Shoorpanakha attacked Sita. Laxman quickly intervened to save Sita by cutting off her nose and ears. Reflecting the act, this round presents eight puzzles that must be split into two parts, with each part solving as the same puzzle type.

Round Rule

Each grid in this round contains two separate puzzles of same type. Each puzzle touches the edge of the grid, and neither puzzle is completely enclosed within the other. It is not necessary to indicate the separation of the two grids for receiving full credit.

1. Double Crossword

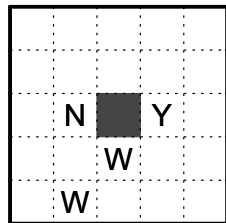
160 points

Crossword Rule:

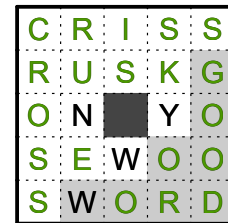
Fill each of the white cells in the grid going across and down as in crosswords with the given words. All instances of the letters, V and Y (N, W and Y in the example) are already provided in the grid.

Double Rule:

The grid contains two separate puzzles of this type. Each puzzle touches the edge of the grid, and neither puzzle is completely enclosed within the other.



IS	SEW	RUSK
ON	SKY	WORD
OO	GOOD	CRIS
OR	RUNE	CROSS



2. Double Yin Yang

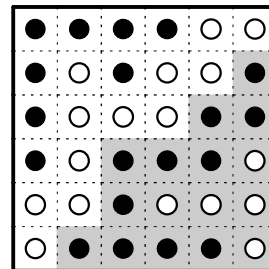
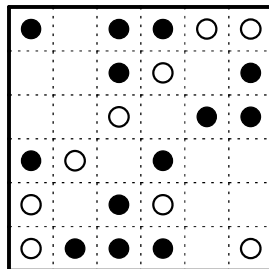
120 points

Yin Yang Rule:

Place a circle into each cell of the grid - some white and some black - such that all circles of the same type must lie in cells forming one orthogonally connected area. No 2x2 region may contain just one type of circle.

Double Rule:

The grid contains two separate puzzles of this type. Each puzzle touches the edge of the grid, and neither puzzle is completely enclosed within the other.



3. Double Statue Park

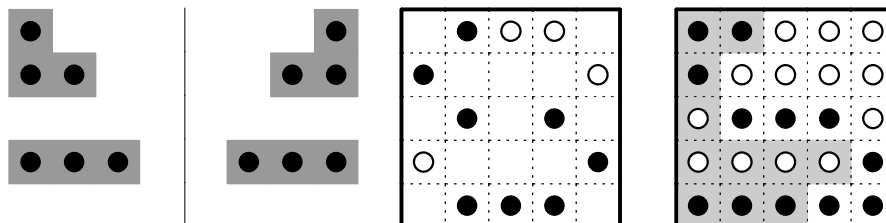
175 points

Statue Park Rule:

Place each shape from the bank given outside the grid into the grid so that no two shapes share an edge and all unused cells form one orthogonally connected area. Rotating and reflecting shapes is allowed. Cells with black circles must be used by a shape, and cells with white circles must not be used by a shape.

Double Rule:

The grid contains two separate puzzles of this type. Each puzzle touches the edge of the grid, and neither puzzle is completely enclosed within the other. The two banks used by the puzzles are separated by a line as shown.



4. Double Rassi Silai

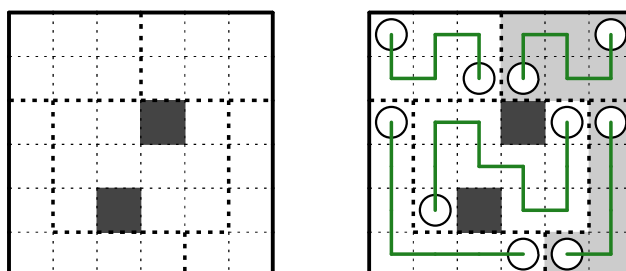
115 points

Rassi Silai Rule:

Within each region, draw a non-intersecting path through the centers of all cells. Paths may not cross over bold borders. No two cells in the grid containing endpoints of paths may be touching one another, even diagonally. Black cells are not part of any region.

Double Rule:

The grid contains two separate puzzles of this type. Each puzzle touches the edge of the grid, and neither puzzle is completely enclosed within the other. Each given region belongs to exactly one puzzle.



5. Double Country Road

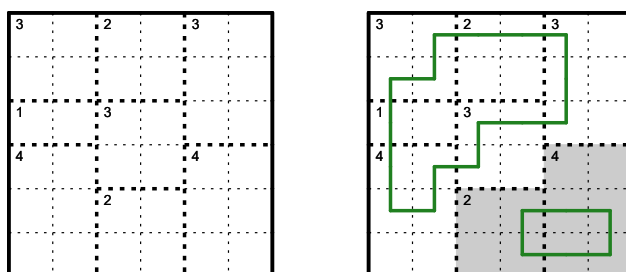
160 points

Country Road Rule:

Draw a non-intersecting loop through the centers of some cells which passes through each region exactly once. A number in a region represents how many cells in the region are visited by the loop. Orthogonally adjacent cells across a region border may not both be unused.

Double Rule:

The grid contains two separate puzzles of this type. Each puzzle touches the edge of the grid, and neither puzzle is completely enclosed within the other. Each given region belongs to exactly one puzzle.



6. Double Ripple Effect

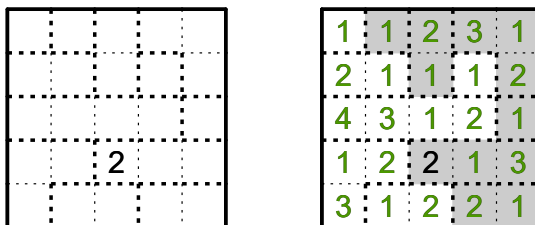
70 points

Ripple Effect Rule:

Place a number into each cell so that each region contains the numbers from 1 to N with no repeats, where N is the number of cells in the region. Two instances of the same number in the same row or column must have at least as many cells between them as the value of the number.

Double Rule:

The grid contains two separate puzzles of this type. Each puzzle touches the edge of the grid, and neither puzzle is completely enclosed within the other. Each given region belongs to exactly one puzzle.



7. Double Fillomino

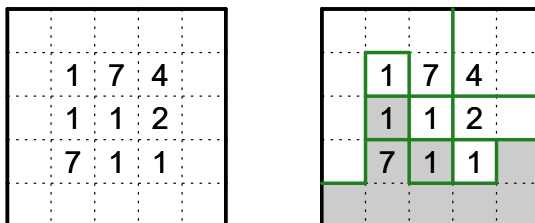
200 points

Fillomino Rule:

Divide the grid into regions of orthogonally connected cells. Two regions of the same size may not share an edge. Clued cells must belong to a region containing the indicated number of cells.

Double Rule:

The grid contains two separate puzzles of this type. Each puzzle touches the edge of the grid, and neither puzzle is completely enclosed within the other.





08

Bharata's Resolve

1600+ Points

45 Minutes

20x Bonus

Team

Dotted Wall 700

12 X Clues Solved

20 X Count of Transfer (Max 16) 320

A. Coral 35

N. Coral 45

B. Cave 75

M. Cave 40

C. Lakes 30

L. Lakes 25

D. Oasis 20

K. Oasis 70

E. Islands 40

J. Islands 15

F. Cross the Streams 45

P. Cross the Streams 40

G. Creek 15

Q. Creek 15

H. Snake 45

R. Snake 25

A1. Dotted Tapa 55

A2. Dotted Chained Block 70

A3. Dotted Windows 100

A4. Dotted Dominion 75

Following his banishment from the kingdom, Rama retreated to a forest hermitage, accompanied by his wife Sita and brother Laxman. Upon returning to Ayodhya, Bharata immediately journeyed into the forest to locate Rama and requested him to reclaim the throne. However, Rama refused to break his vow made to their father. In response, Bharata requested Rama's wooden sandals to place upon the throne of Ayodhya, symbolizing Rama as the rightful monarch while he ruled as a dedicated regent. Reflecting this story, this team round divides the four participants into two pairs: Bharata and Shatrughna managing the kingdom in Ayodhya, and Rama and Laxman spending their time in the forest. At one point during this period, one of the participants can make a trip to the forest to gather essential clues that will help their team rule the kingdom effectively.

Round Rules

In this team round, each team will be split into two pairs, one pair of participants in the Capital section will solve a large Dotted Wall puzzle and the other pair of participants in Exile solving 16 forest themed puzzles. The Dotted Wall puzzle cannot be solved uniquely and will need inputs from the forest themed puzzles. Only once during the entire round one participant from the Capital can make a trip to the Forest section and carry the transfer information back to the Capital. During this trip the participant can spend as much time in the Forest as they desire, and can help in solving as well. However, once they return to the Capital they cannot return to the Forest.

There are 4 additional puzzles (A1-A4) in the Capital section, which also use the dotted rule. These need not be completed to gain bonus by submitting this section, but can be used to gain additional points if submitted along with the large puzzle.

It is necessary to mark dots for receiving full credit for the dotted puzzles.

15 minutes into the round, till the end of it, the participants in the capital section have an option to submit the transfer grid obtained from the forest section to receive the complete solution of the transfer grid.

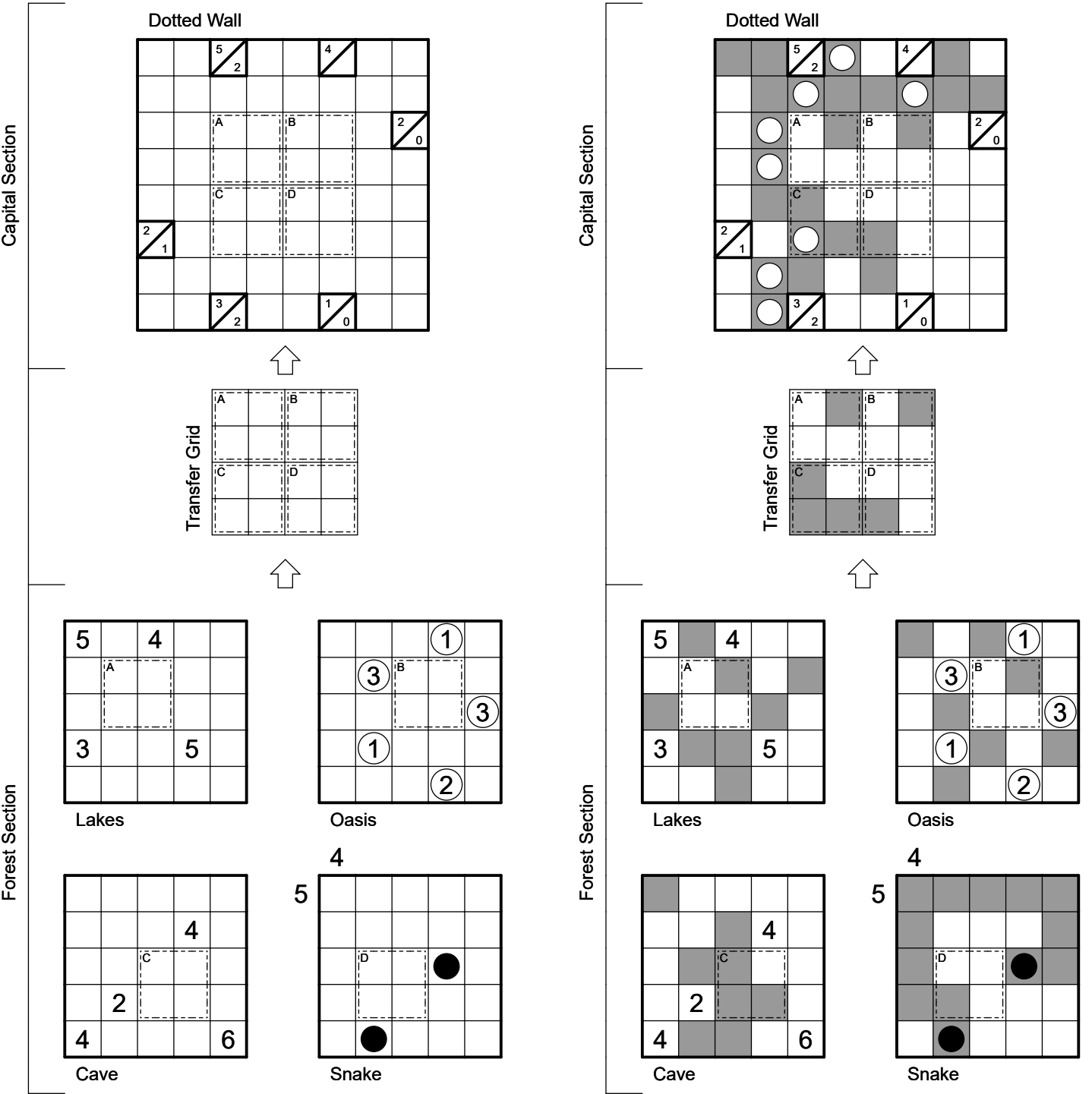
Points Structure

20 points will be awarded for each correctly transferred section in the transfer grid.

12 points will be awarded for correctly solving each clue cell in the Dotted Wall puzzle. Each clue is considered correct if the shaded cells and dots in the (up to) eight surrounding cells match the overall solution.

160 bonus points will be awarded for solving the Dotted Wall puzzle completely.

There will be two sets of bonus points available in this round, one for completing each section, independent of each other. Incorrect or incomplete transfer grids do not have any impact on the bonus points in either the Forest or the Capital section. Similarly, incorrect or incomplete additional puzzles do not have any impact on the bonus points in the Capital section.



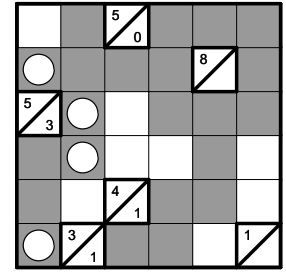
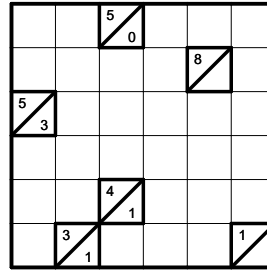
Individual Puzzle Rules

The Capital section will have one Dotted Wall puzzle and the forest section will have 16 puzzles of 8 different types.

Dotted Wall

700 points

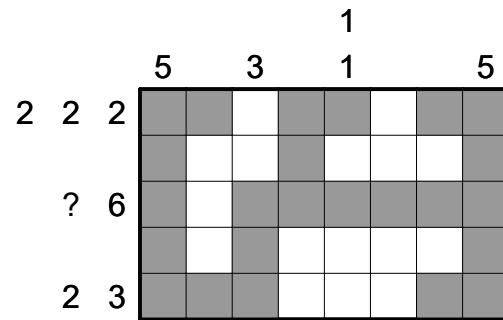
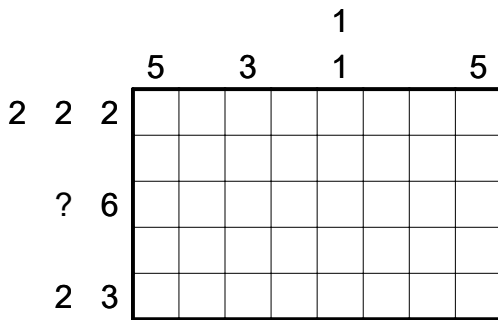
Shade some cells to form a single connected area, i.e. the wall. Clue cells cannot be shaded. No 2x2 group of cells can be entirely shaded. Reading from left to right, top to bottom, every N^{th} shaded cell is marked by a dot. N is a constant value that needs to be determined while solving. The number at the top-left of the clue gives the number of shaded cells in the (up to) eight surrounding cells, and the number at the bottom-right gives the number of dots in the (up to) eight surrounding cells.



A, N. Coral

35 + 45 points

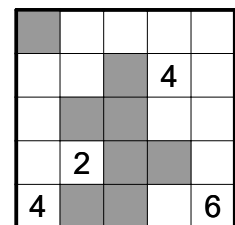
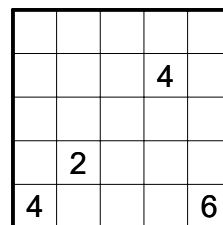
Shade some cells to form a single connected group — the Coral. No 2x2 area may be fully covered by the coral. All empty cells must be connected horizontally or vertically through other empty cells to an edge of the grid. Numbers outside the grid indicate the lengths of consecutive parts of the coral in the corresponding row or column. Numbers belonging to the same row or column are in increasing order and not necessarily in the order they appear. A question mark “?” as a clue can represent any positive number.



B, M. Cave

75 + 40 points

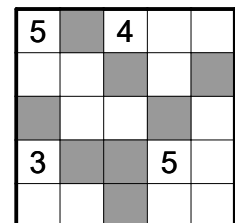
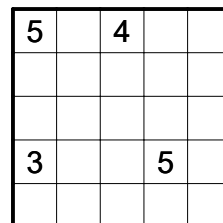
Shade some cells to leave behind a single connected group, known as the cave. There should not be any shaded cells enclosed within the cave. All numbered cells must be a part of the cave, with each number indicating the total count of cells connected vertically and horizontally to the numbered cell including the cell itself.



C, L. Lakes

30 + 25 points

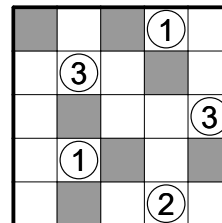
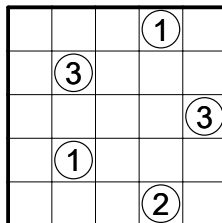
Shade some of the cells so that the grid is divided into white areas. Each unshaded area must contain exactly one number and that number must be the size of the unshaded area it is included in. Cells with numbers cannot be shaded.



D, K. Oasis

20 + 70 points

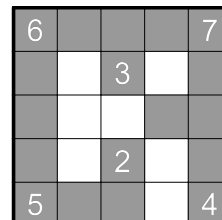
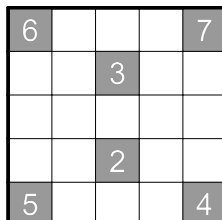
Shade some cells so that no two shaded cells are orthogonally adjacent and the remaining unshaded cells form one orthogonally connected area. No 2x2 area may be entirely unshaded. Cells with circles cannot be shaded. A number in a circle indicates how many other circles it could reach by travelling only through empty, unshaded cells.



E, J. Islands

40 + 15 points

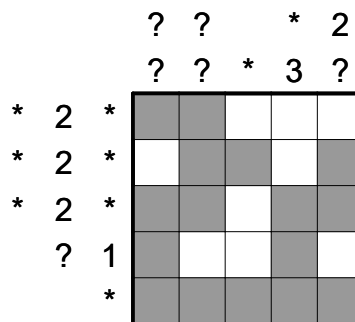
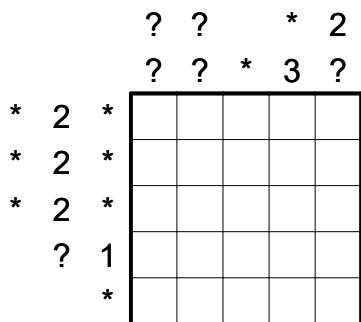
Shade some cells to form a single island. The cells with numbers are part of this island. The numbers indicate how many shaded cells without numbers can be reached from that cell by moving horizontally or vertically without passing through other numbered cells.



F, P. Cross the Streams

45 + 40 points

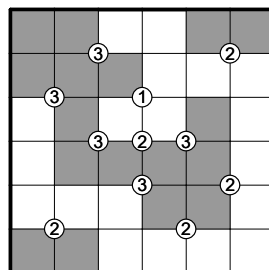
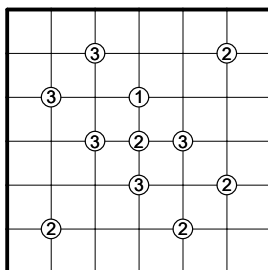
Shade some empty cells black to create a single group of black cells that are all connected to each other through their edges. No 2x2 cell area within the grid contains all black cells. Numbers to the left/top of the grid represent the groups of consecutive black cells which are in that row/column in order, either from left to right or from top to bottom. A question mark (?) represents a group of consecutive black cells whose size is unknown; an asterisk (*) represents any number of unknown groups of black cells, including none at all.



G, Q. Creek

15 + 15 points

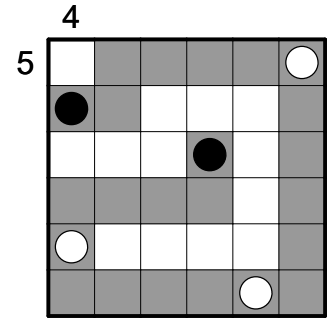
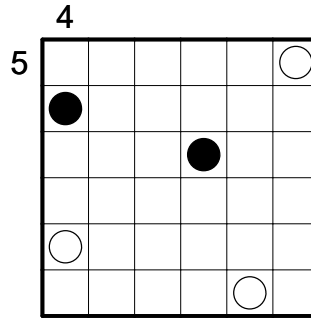
Shade some cells in the grid in such a way that all the unshaded cells must form a single orthogonally connected group. A number at an intersection indicates the count of shaded cells adjacent to that number.



H, R. Snake

45 + 25 points

Locate a snake (a 1-cell wide path) of unknown length in the grid, whose head and tail are marked by black circles. The snake does not touch itself, even diagonally. Numbers outside the grid indicate the number of snake cells in that row/column. White circles are part of the snake.



Additional Puzzles

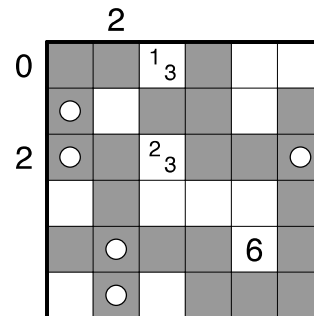
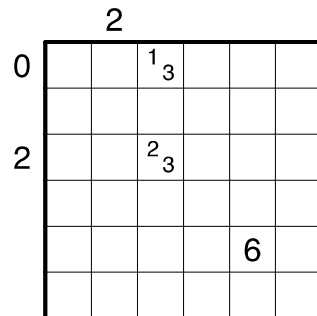
The Capital section will also have four additional puzzles.

A1. Dotted Tapa

55 points

Shade some cells so that all shaded cells form one orthogonally connected area. Clues cannot be shaded, and represent the lengths of the blocks of consecutive shaded cells in the (up to) eight cells surrounding the clue. If there is more than one number in a cell, then there must be at least one white (unshaded) cell between the shaded blocks. No 2x2 region may be entirely shaded.

Dots Rule: Reading from left to right, top to bottom, every N^{th} shaded cell is marked by a dot. N is a constant value that needs to be determined while solving. Each number outside the grid gives the number of dots in that row or column.

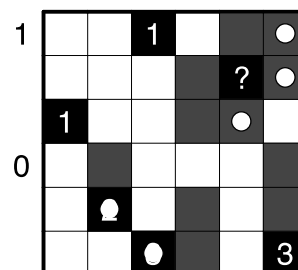
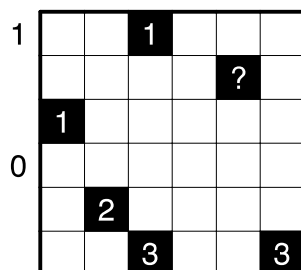


A2. Dotted Chained Block

70 points

Shade some cells such that each connected group of shaded cells contains exactly one clue. Clues must be shaded, and indicate the size of their group of shaded cells. Each group of shaded cells must be connected by a corner to at least one other, forming networks. Two shaded groups belonging to the same network may not have the same shape and size, counting rotations and reflections as the same. A '?' counts as any positive number.

Dots Rule: Reading from left to right, top to bottom, every N^{th} shaded cell is marked by a dot. N is a constant value that needs to be determined while solving. Each number outside the grid gives the number of dots in that row or column.

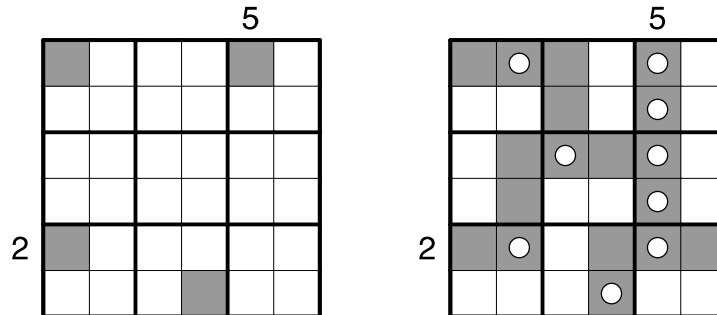


A3. Dotted Windows

100 points

Shade some cells so that all shaded cells form one orthogonally connected area, and the remaining unshaded cells are all connected orthogonally by other unshaded cells to the edge of the grid. Each outlined 2x2 region must contain exactly two shaded cells. No 2x2 area may be entirely shaded or unshaded.

Dots Rule: Reading from left to right, top to bottom, every N^{th} shaded cell is marked by a dot. N is a constant value that needs to be determined while solving. Each number outside the grid gives the number of dots in that row or column.

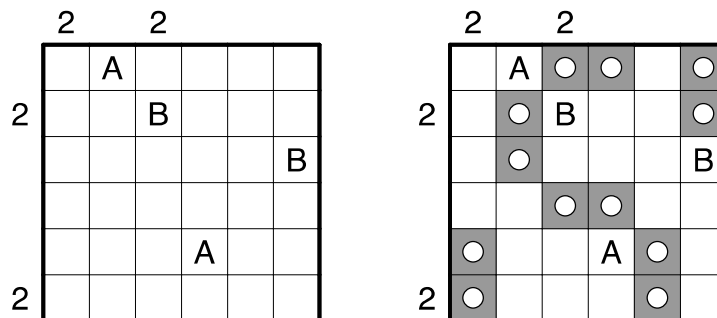


A4. Dotted Dominion

75 points

Shade some dominoes of cells to divide the grid into unshaded areas. Shaded dominoes may not touch orthogonally. Letters cannot be shaded, and each orthogonally connected area of unshaded cells contains exactly one letter, and all instances of it.

Dots Rule: Reading from left to right, top to bottom, every N^{th} shaded cell is marked by a dot. N is a constant value that needs to be determined while solving. Each number outside the grid gives the number of dots in that row or column.





09

Janasthana

600 Points

45 Minutes

10x Bonus

Individual

1. Hitori	5	17. Minesweeper	10	33. Curve Data	10
2. Hitori	15	18. Minesweeper	15	34. Curve Data	15
3. Hitori	5	19. Doppelblock	10	35. Curve Data	15
4. Hitori	10	20. Doppelblock	10	36. Curve Data	20
5. Hitori	5	21. Doppelblock	15	37. Sukoro	10
6. Hitori	5	22. Doppelblock	15	38. Sukoro	10
7. Square Jam	5	23. Doppelblock	15	39. Sukoro	10
8. Square Jam	5	24. Doppelblock	15	40. Sukoro	15
9. Square Jam	5	25. Achtelwenden	10	41. Sukoro	10
10. Square Jam	5	26. Achtelwenden	10	42. Sukoro	30
11. Square Jam	5	27. Achtelwenden	15	43. Boggle	15
12. Square Jam	5	28. Achtelwenden	15	44. Boggle	20
13. Minesweeper	5	29. Achtelwenden	10	45. Boggle	30
14. Minesweeper	5	30. Achtelwenden	25	46. Boggle	40
15. Minesweeper	5	31. Curve Data	5	47. Boggle	25
16. Minesweeper	10	32. Curve Data	5	48. Boggle	25

A humiliated Shoorpanakha fled to the forest demon colony of Janasthana to seek her brother Khara. In response, Khara dispatched an army of fourteen thousand demons to eliminate Rama and Laxman, but Rama single-handedly vanquished them all.

Mirroring this legend, this chapter is structured as a Sprint round comprising 48 puzzles, featuring six easy puzzles across eight distinct puzzle categories.

1, 2, 3, 4, 5, 6. Hitori

5 + 15 + 5 + 10 + 5 + 5 points

Shade some cells so that unshaded cells do not have repeated symbols in any row or column. Shaded cells do not share an edge and unshaded cells form one orthogonally connected area.

1	1			4	1
3	5	5		3	2
		4		6	5
9	8		9		
4	8		7	7	8
4	5			3	3

1	1			4	1
3	5	5		3	2
		4		6	5
9	8		9		
4	8		7	7	8
4	5			3	3

7, 8, 9, 10, 11, 12. Square Jam

5 + 5 + 5 + 5 + 5 + 5 points

Divide the grid into square regions of orthogonally connected cells. A number indicates the side length of the square it's in. Region borders may not form any four-way intersections.

	1			
				1
	2			
				3

	1			
				1
	2			
				3

13, 14, 15, 16, 17, 18. Minesweeper

5 + 5 + 5 + 10 + 10 + 15 points

Place mines into some empty cells so that each clue has the indicated number of mines in the (up to) eight surrounding cells.

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

2	☹	1		3	☹	2
☹				☹	☹	
2		1		4		1
☹			☹	☹		
1		2	☹	4	☹	1

10 + 10 + 15 + 15 + 15 + 15 points

Figure 1 shows two 6x6 grids. The left grid is the initial state with columns 4, 5, and 6 highlighted. The right grid shows a possible solution with queens placed at (1,4), (2,5), (3,6), (4,1), (5,2), and (6,3).

10 + 10 + 15 + 15 + 10 + 25 points

Figure 1 shows two 5x5 grids representing the 15-puzzle. The left grid shows the initial state, and the right grid shows the goal state. The tiles are numbered 1 through 14, and the empty space is represented by a circle with no number. The goal state is reached by moving the tiles from the initial state, as indicated by the green lines connecting the tiles in the goal state to their positions in the initial state.

5 + 5 + 10 + 15 + 15 + 20 points

10 + 10 + 10 + 15 + 10 + 30 points

	3			
	1		4	
		3		1
		4		

15 + 20 + 30 + 40 + 25 + 25 points

ONE		N	
TWO	W		E
THREES		S	



10

Laxman Rekha

400 Points

40 Minutes

7x Bonus

Individual

Loop Mashup

400

Count of 5x5 regions X 15

Rama went chasing a golden deer (which is actually the demon Maricha in disguise) and does not return for a long time. At Sita's behest, Laxman set out to search for Rama. However, before leaving he used his divine powers and drew a protective boundary (Laxman Rekha) around the cottage and instructed Sita not to cross it. Following Laxman's departure, Ravana arrived disguised as a mendicant, tricked Sita into crossing the line to offer alms, and abducted her to Lanka. This round features a single loop puzzle with different constraints that change their nature depending on whether they are inside or outside the loop.

Loop Mashup

Draw a single, non-intersecting loop that consists of horizontal and vertical segments along the edges of cells. All clues have a different behaviour based on whether they are inside the loop or outside it. The rules for each type, in terms of these differing behaviours, are mentioned below. Clues inside the loop follow classic rules, while those outside follow a contrasting behaviour.

Myopia: The arrow clues, if inside the loop, indicate all the directions (up, down, left, and right) where the nearest loop segments are located when looking from that cell. However, if the clue is outside the loop, the arrows indicate the locations of the farthest loop segments instead. All arrows must point toward at least one segment.

Line of Sight: The clues with numbered arrows, if inside the loop, indicate the length of the loop segment first seen in the direction of the arrow. However, if the clue is outside the loop, the clue becomes a Knapp Daneben clue with the actual number being +/-1 of the given number. All Line of Sight clues need to point to at least one loop segment.

Polygraph: The numbered clues, if inside the loop, indicate the number of the cell's edges used by the loop. However, if the clue is outside the loop, the clue indicates the number of the cell's edges not used by the loop.

Parallel Counts: Squares placed on an edge between two cells indicate whether the number of unused edges till the next loop segment in that direction (or edge of the grid if no segment) on both sides parallel to that edge are balanced or not. If the square is inside the loop, the counts of unused edges on both sides are equal (balanced). If the square is outside the loop, the counts of unused edges on both sides are unequal (unbalanced). A number inside a square indicates the total number of such unused edges. The loop cannot pass through the squares.

Sheep and Wolf: Sheep marked with S are inside the loop and Wolves marked with W are outside the loop.

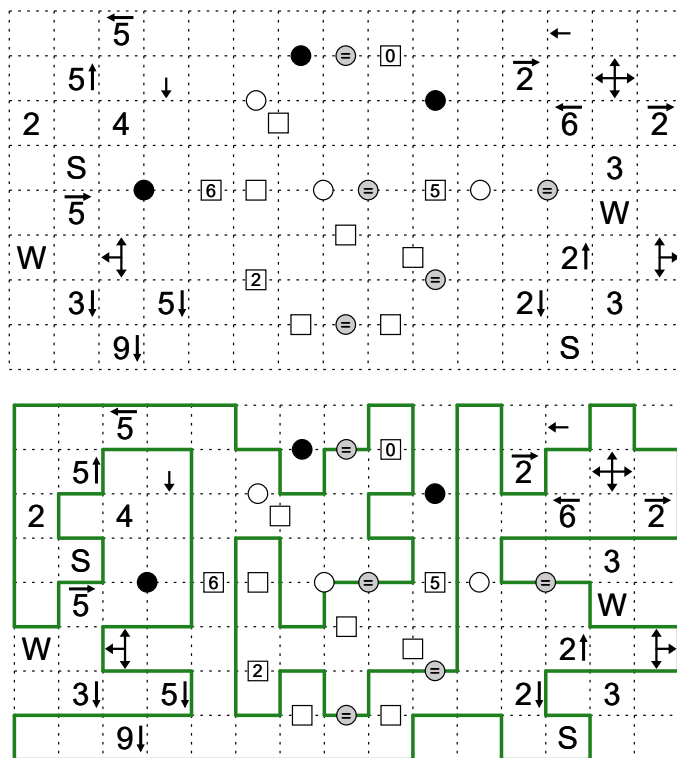
Kurarin: A black dot must touch more cells outside the loop than inside. A white dot must touch more cells inside the loop than outside. A grey dot (with = sign inside) must touch an equal amount of each. Dots on cell edges touch 2 cells. Dots on cell corners touch 4 cells. The loop can pass through these dots.

	Clue	Inside	Outside
Myopia		Nearest	Farthest
Line of Sight		Correct length	Off by one
Polygraph	1	Edges Used	Edges Unused
Parallel Counts		Balanced	Unbalanced
Sheep/Wolf	S / W	Sheep	Wolf
Kurarin		More cells inside	
		Equal cells inside and outside	
		More cells outside	

The rule summary table above will be available in puzzle booklet.

The competition puzzle grid size is 25x25 cells. If the entire puzzle is not completely correct, while checking, the grid will be divided into 25 areas of 5x5 cells. 15 points will be given for each correctly solved 5x5 area of the puzzle. The partial solution must be part of the overall solution.

400 points





11

Shabri

450 Points

40 Minutes

10x Bonus

Individual

1. Maximal Archipelago [2017]	120
2. Point to Numbers [2018]	55
3. Permaculture (Shingoki (Full) + Balance Loop) [2019]	40
4. Go [2021]	40
5. Knight Hidato [2022]	25
6. Niagara Falls – Gapped Skyscraper [2023]	75
7. Quadruple Happiness [2024]	55
8. Hexa Hungary [2025]	40

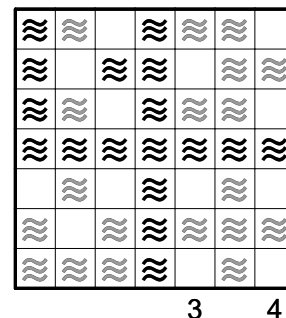
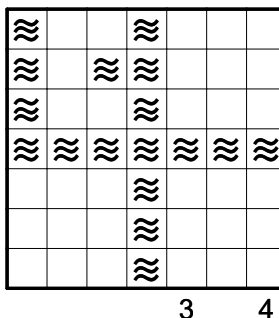
During the search for Sita, Rama and Laxman arrived at Shabri's cottage, where she had been eagerly anticipating their visit for days. Driven by deep devotion and care, she tasted each berry first to ensure only the sweetest and ripest ones were given to Rama.

This round is a curated anthology of creative concepts handpicked by the author team from the past eight WPCs, starting from the previous WPC in India in 2017.

1. Maximal Archipelago [2017]

120 points

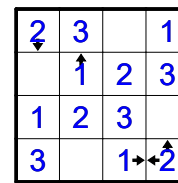
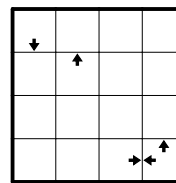
Squares with waves are sea and all other squares are initially land. Turn some land squares into sea such that, a) all sea squares are connected to each other through other sea squares orthogonally, b) no two land squares are adjacent orthogonally and c) it is impossible to turn a sea square to land while still satisfying the above two conditions. A number outside the grid indicates the number of land squares remaining in the corresponding row/column.



2. Point to Numbers [2018]

55 points

Place numbers 1-5 (1-3 in the example) in the grid so that each number appears exactly once in each row and column. Some cells will remain empty. If there is an arrow pointing from the cell, the number in the cell equals the count of numbers in the direction of the arrow. All possible arrows are not necessarily given.



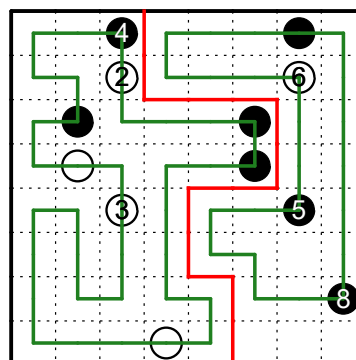
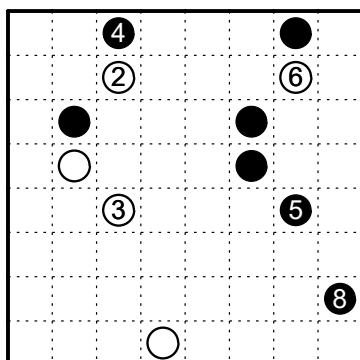
3. Permaculture (Shingoki (Full) + Balance Loop) [2019]

40 points

Divide the grid into two parts, so that one part is solved as Shingoki (Full) and the other part as Balance Loop. Within each part all cells must be connected, and each cell must belong to exactly one part. It is possible that one part completely surrounds the other. Aside from this division, the parts are completely independent and do not interact with each other. It is not necessary to draw the borders dividing the two parts.

Shingoki (Full): Draw a non-intersecting loop travelling horizontally and vertically through the centers of all cells. The loop must turn on black circles. The loop must go straight through white circles. Numbers indicate the sum of the segment lengths on both sides of the circle.

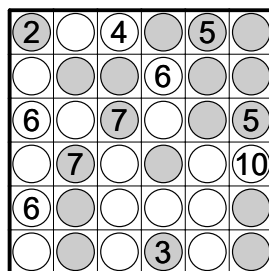
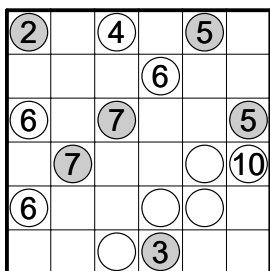
Balance Loop: Draw a non-intersecting loop travelling horizontally and vertically through the centers of some cells that passes through every circle. All white circles must have equal segment lengths on both sides of the circle before turning. All black circles must have unequal segment lengths on both sides of the circle before turning. Numbers indicate the sum of the segment lengths on both sides of the circle.



4. Go [2021]

40 points

Shade some of the empty cells by placing black go stones. All remaining cells are considered white go stones. Cells of the same colour that are orthogonally adjacent form a region. A number shown in a region indicates how many opposite-coloured go stones are orthogonally adjacent to the entire region. Existing go stones cannot change colour.

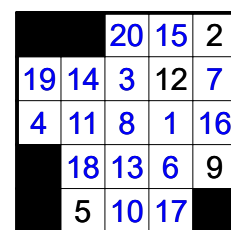
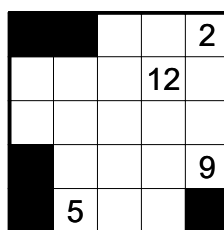


5. Knight Hidato [2022]

25 points

Place a number from 1 to N into each white cell so that every number appears once. Every number must be a knight's move away from all numbers in the grid that are consecutive with it.

N = 20



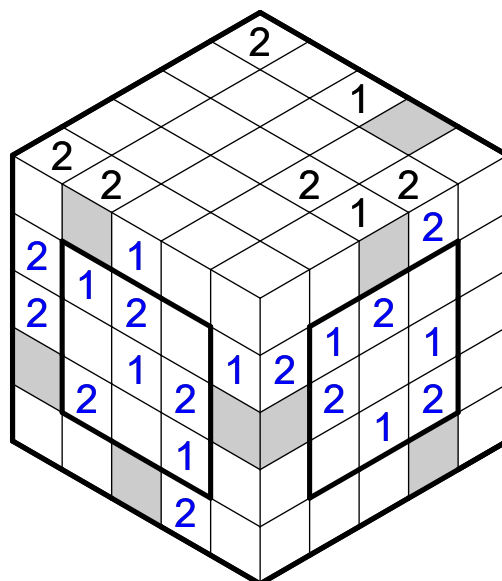
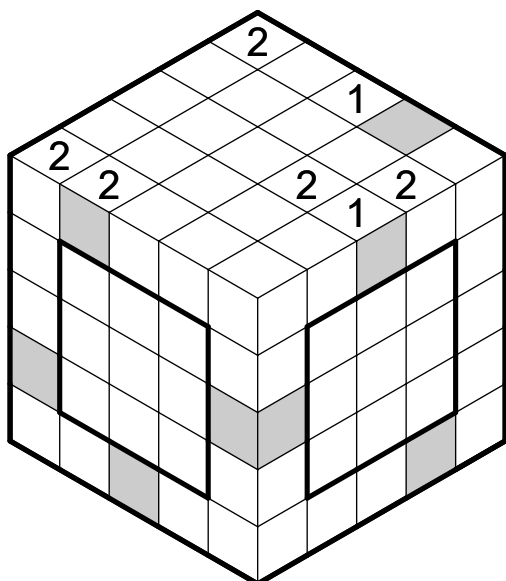
6. Niagara Falls – Gapped Skyscraper [2023]

75 points

Every number at the top of the waterfall must drop onto either its left or right side and land at any open cell outside the central grids ie 4x4 box (3x3 box in example). Numbers cannot pass through or be placed on the stones (shaded cells). The falling numbers cannot be placed in the cells inside the 4x4 box on both sides. These numbers do not block each other and must serve as outside clues for the left and right central grids.

Only one number can be placed in any cell. Two or more numbers can fall in the same direction provided there are enough open cells in that direction.

A Gapped Skyscraper puzzle is created in both left and right grids as each number on the waterfall drops and lands in the open cells as the outside clues. Fill every row and column with numbers 1-3 (1-2 in the example) exactly once, leaving one cell blank. Numbers inside represent building heights, while outer clues show visible buildings from that direction. Taller buildings block shorter ones.



7. Quadruple Happiness [2024]

55 points

Shade some cells (marked by X in the example) and draw a non-intersecting loop travelling horizontally and vertically through the centers of all remaining unclued cells. Shaded cells cannot share an edge with each other. The given clues cannot be part of the loop. Each of the following four types of clues must be satisfied.

Yajilin: Gray cells with arrow

Numbered arrows in such cells indicate the number of shaded cells in the given direction.

Castle Wall: Black/White cells with arrow

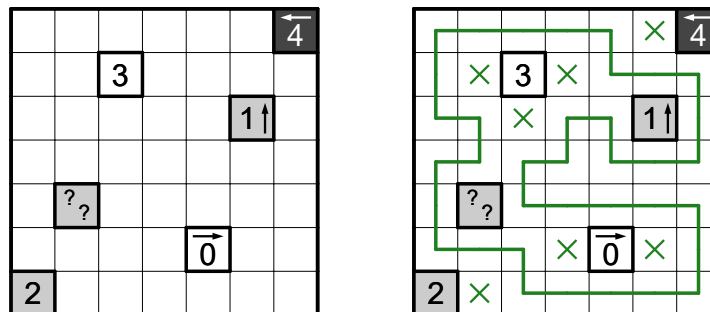
Black cells must be outside the loop. White cells must be inside the loop. Numbered arrows indicate the total sum of the lengths of loop segments in the given direction.

Tapa Like Loop : Gray cells without arrow

Clues inside such cells indicate the number of neighboring cells visited by the loop. If there is more than one number in a cell, each number should be represented with a separate loop segment. A question mark "?" as a clue can represent any positive number.

Koburin : White cells without arrow

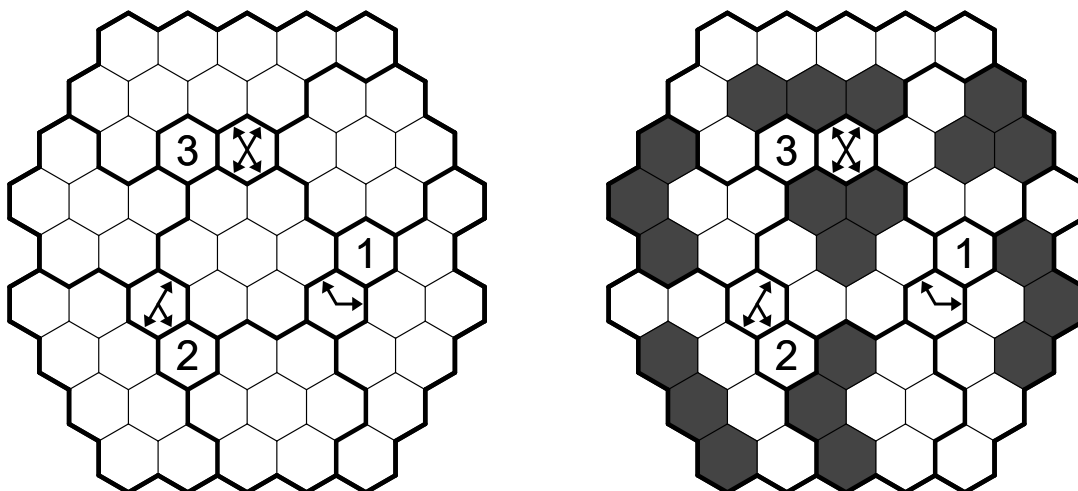
Numbers indicate the count of orthogonally adjacent shaded cells.



8. Hexa Hungary [2025]

40 points

Shade some cells in the grid so that there are exactly six connected shaded cells in every region (three in the example). If two adjacent cells belong to different regions, they cannot both be shaded. Number clues indicate the number of the adjacent cells (up to six) that are shaded. Arrow clues indicate all directions (up to six) where shaded cells appear closest. The arrows' range of visibility is not blocked by clue cells, region or puzzle boundaries. Cells with number clues or arrow clues are unshaded.





12

Hanuman

300 Points

35 Minutes

7x Bonus

Individual

1. Slitherlink	25
2. Five Cells	50
3. Star Battle	50
4. Tents	50
5. Golem Grad	50
6. Mochikoro	75

Led by Vali's son Angada and Sugriva's minister Hanuman, the search party journeyed toward the South. Reaching the edge of the ocean with no sign of Sita, they were filled with despair. Hanuman however, leaped across the ocean, overcoming numerous obstacles along the way before making his way to Lanka. Following various encounters with the demons there, he successfully delivered Rama's message to Sita and fulfilled his mission. This round has six linked puzzles from different categories, where clues are shared between consecutive puzzles.

1. Slitherlink

25 points

Connect some pairs of orthogonally adjacent dots to form a single non-intersecting loop. Clues represent the number of edges drawn surrounding the clue (up to four).

A shaded cell is a valid Slitherlink clue and is also a valid Five Cell clue with the same value in the cage at the corresponding place.

2. Five Cells

50 points

A cell with a cage is a valid Five Cells clue and is also a valid Slitherlink clue with the same value in the shaded cell at the corresponding place.

Divide the grid into regions of exactly five cells. The number inside a cell represents how many of its four sides are segments of region borders (including the border of the grid).

This grid and Star Battle have exactly same regions.

3. Star Battle

50 points

This grid and Five Cells have exactly same regions.

Place stars into some cells such that outlined region contains exactly 1 star. Each row and column contain exactly 2 stars (1 star in the example). Stars cannot touch one another, even diagonally. Some edges are already marked.

The positions of the stars in this grid are same as the positions of the trees in the Tents puzzle.

4. Tents

50 points

The positions of the trees in this grid are same as the positions of the stars in the Star Battle puzzle.

For each tree in the grid, place a tent in an empty orthogonally adjacent cell, connecting to it. Tents may not touch one another, even diagonally. A clue given outside the grid represents the number of tents in the corresponding row or column.

The positions of the tents in this grid are same as the positions of the circles in the Golem Grad puzzle.

5. Golem Grad

50 points

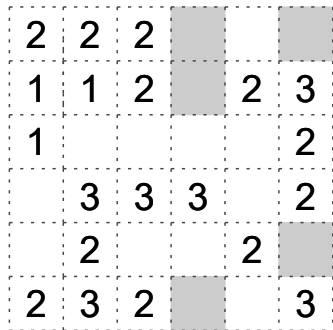
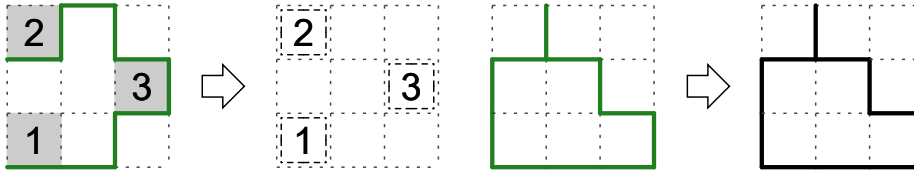
The positions of the circles in this grid are same as the positions of the tents in the Tents puzzle.

Draw paths through the centers of cells connecting each circle to exactly one other. Paths may not cross each other, themselves, or through cells containing numbers. All cells used by paths (including the cells with circles) must form one orthogonally connected area each containing at most one number. Each number represents the size of the area of cells not used by paths that the number is in. No 2x2 region may be entirely used by paths. Each shaded cell must be part of a path.

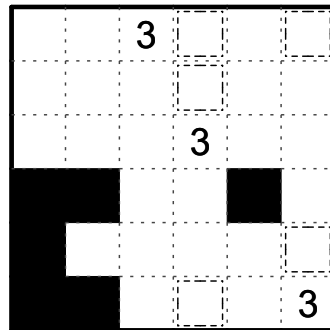
The length of the path passing through the shaded cell in this grid is a valid Mochikoro clue in the cell with the cage at the corresponding place.

Shade some cells so that all areas of orthogonally connected unshaded cells are rectangular. The unshaded rectangles must all be connected diagonally. Clues cannot be shaded, and represent the number of cells in the unshaded area they belong to. An unshaded area of cells cannot contain more than one clue. No 2x2 region may be entirely shaded.

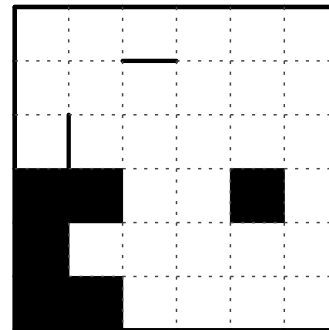
Here is an example with all the six puzzle types. The small 3x3 grids are not part of the puzzle, they illustrate the clue transfers between grids. The competition puzzle will have identical layout.



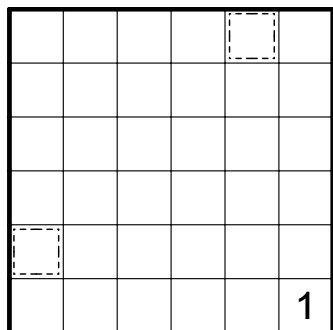
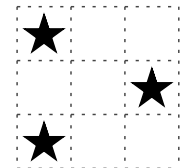
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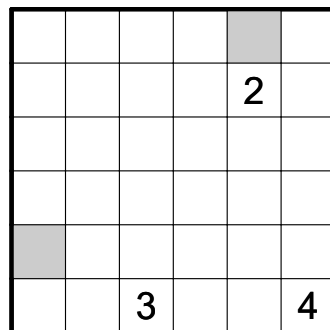
2. Five Cells



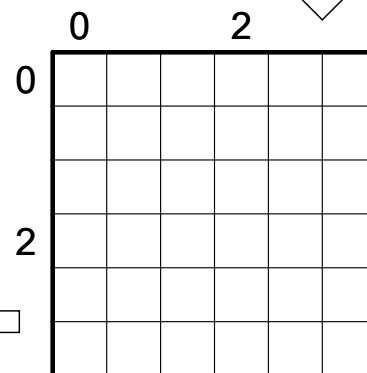
3. Star Battle



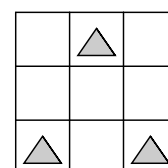
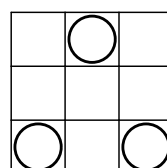
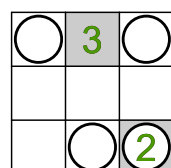
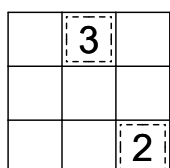
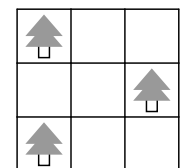
6. Mochikoro



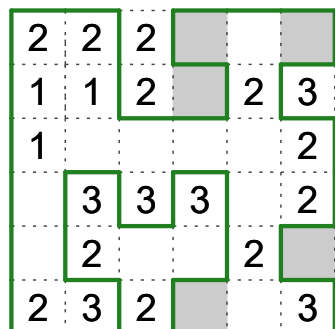
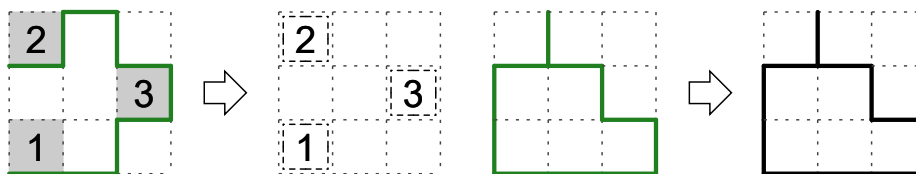
5. Golem Grad



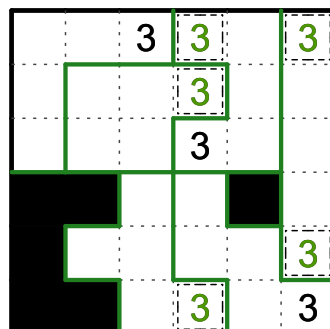
4. Tents



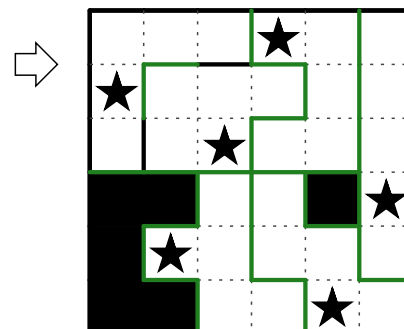
Instructions Booklet



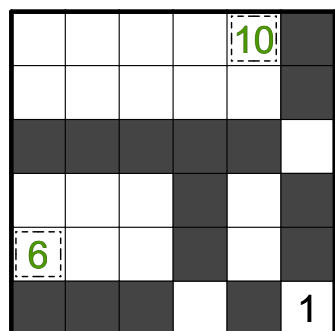
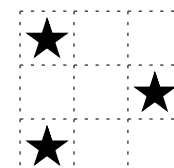
1. Slitherlink



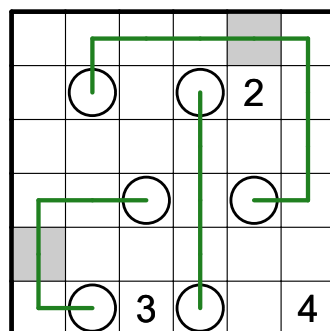
2. Five Cells



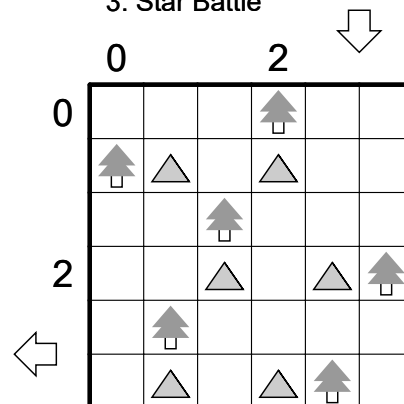
3. Star Battle



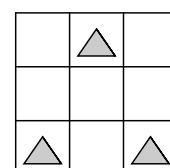
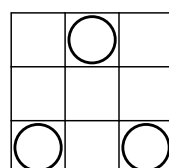
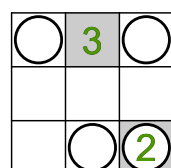
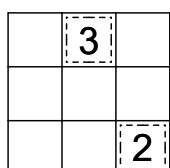
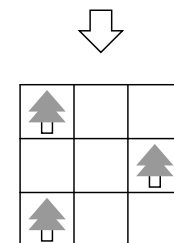
6. Mochikoro



5. Golem Grad



4. Tents





13

Vali and Sugriva

550 Points

50 Minutes

10x Bonus

Individual

1. Kropki Loop + Kropki Scrabble	60 (20)
2. Battleships Minesweeper + Battleships Lighthouse	85 (30)
3. Minesweeper + Linesweeper	25 (10)
4. Overlapping Squares + Overlapping Rectangles	85 (30)
5. Sashigane + Sashikabe	75 (25)
6. Slitherlink + Turning Slitherlink	50 (15)
7. Pentasight + Tetrasight	105 (35)
8. Gemini Loop + Gemini Regions	65 (25)

Following Shabri's advice, Rama and Laxman journeyed to Kishkinda, the monkey kingdom's capital, and allied with Sugriva, who was persecuted by his evil twin brother, King Vali. Rama promised to defeat Vali, and Sugriva in exchange pledged to help find Sita. During their duel, Rama hid behind a tree and shot Vali, distinguishing them only because Sugriva wore a garland. Echoing this legend, this round features eight pairs of visually identical puzzles. However, only one puzzle in each pair possesses a unique solution, while the other becomes solvable only after being adorned with a garland.

Round Rule

This round consists of 8 pairs of puzzles. Within each pair, one puzzle has a unique solution, while the other is non-unique with multiple solutions. The non-unique puzzle yields a unique solution only when the given Garland shape is placed into the grid. The Garland cannot overlap any given numbers, letters, dots (even partially), sea cells and arrows. The Garland cannot be rotated or reflected.

Partial points (given within brackets) will be awarded if one of the two puzzles in the pair is solved correctly and the solution is part of the overall solution.

This instruction booklet provides 2 example pairs with Garlands included, while the remaining puzzles appear in their native form.

1. Kropki Loop + Kropki Scrabble

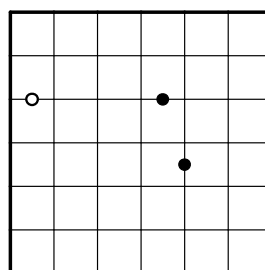
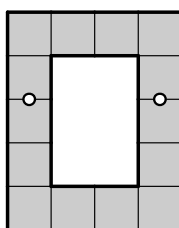
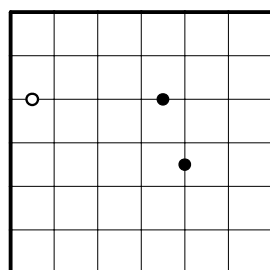
60 (20) points

Kropki Loop

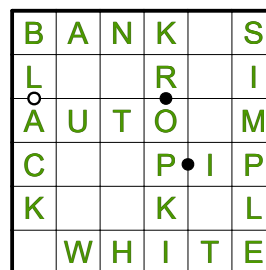
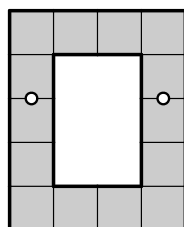
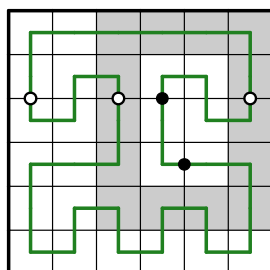
Draw a closed loop that passes vertically and horizontally through all cells. The loop must go through all of the given dots. When passing through a white dot, the number of cells on one side of the dot before turning must differ by 1 from the number of cells on the other side before turning. When passing through a black dot, the number of cells on one side of the dot before turning must be twice the number of cells on the other side before turning.

Kropki Scrabble

Place all words from the given list into the grid so that each word can be read from left to right or from top to bottom exactly once. All words must be orthogonally connected. Words that are not on the list cannot appear in the grid (not even two-letter words). The dots in the grid provide information about the lengths of word segments divided by the dot. If there is a white dot between a pair of word segments, then the difference of the lengths of these segments is exactly one. If there is a black dot between a pair of word segments, then the quotient of the lengths of these segments is exactly two. There can be either black or white dot between word segments of lengths 1 and 2. There must be a word passing through each of the given dots. Not all possible dots have been given, but all the given dots must be part of the words.

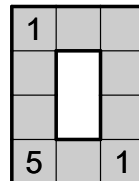
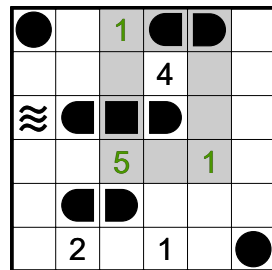
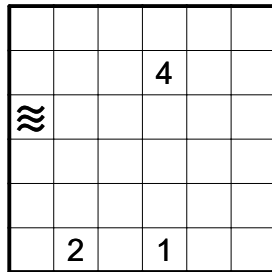


AUTO KROPKI
BANK SIMPLE
BLACK WHITE
PIP



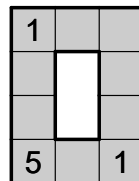
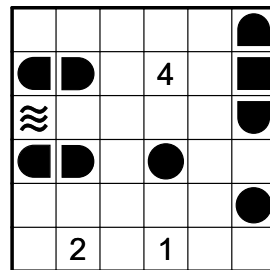
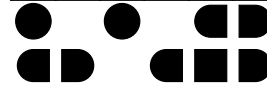
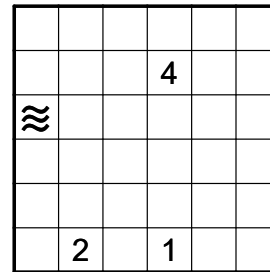
Battleships Minesweeper

Place the given fleet of ships into the grid so that ships cannot touch each other, even diagonally. Cells with waves cannot be occupied by a ship. A cell with a number is not part of any ship, it indicates the total number of ship segments in the (up to) 8 neighboring cells.



Battleships Lighthouse

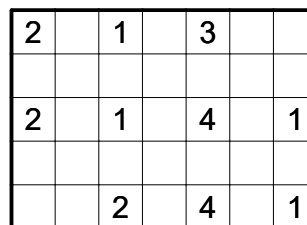
Place the given fleet of ships into the grid so that ships cannot touch each other, even diagonally. Cells with waves cannot be occupied by a ship. A cell with a number is a lighthouse and is not part of any ship, it indicates the total number of ship segments in its row and column combined. Ships cannot touch a lighthouse, even diagonally.



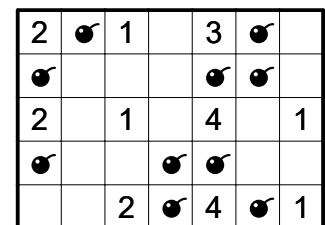
3. Minesweeper + Linesweeper

Minesweeper

Place the number of mines given below the grid into some empty cells so that each clue has the indicated number of mines in the (up to) eight surrounding cells.



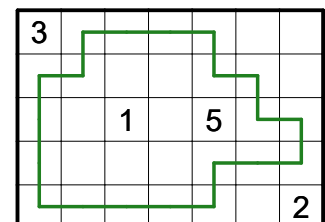
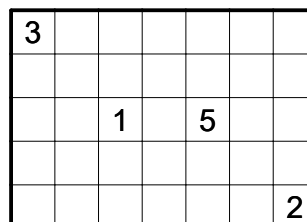
10



10

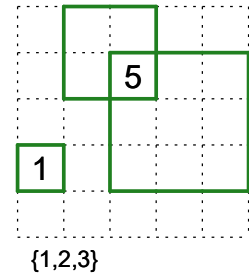
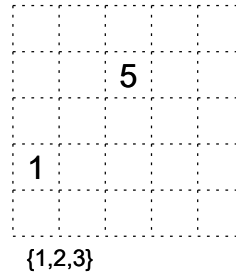
Linesweeper

Draw a non-intersecting loop travelling horizontally and vertically through the centers of some cells. Numbers in the grid show the number of cells used by the loop in the surrounding (up to) 8-cell area. The loop cannot pass through cells with numbers.



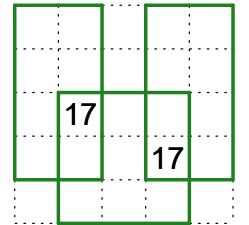
Overlapping Squares

Draw squares with side lengths in the specified list along the dotted grid lines. Each side length must be used exactly as many times as it appears in the list. Squares cannot share any part of their edges or corners, but may intersect each other. Each number given in a cell indicates the sum of the side lengths of the squares that contain that cell. It is possible for a square to contain multiple numbers or no numbers at all.



Overlapping Rectangles

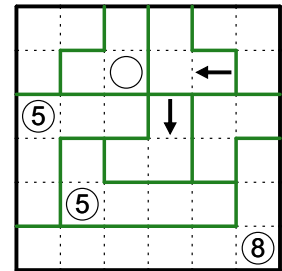
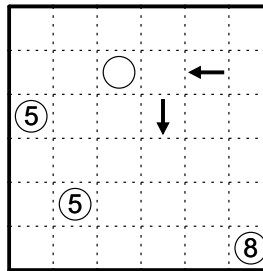
Draw rectangles with each side being at least 2 units along the dotted gridlines. Rectangles cannot share any part of their edges or corners, but may intersect each other. Each number given in a cell indicates the sum of the areas of the rectangles that contain that cell.



5. Sashigane + Sashikabe

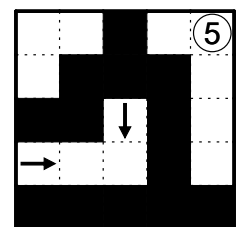
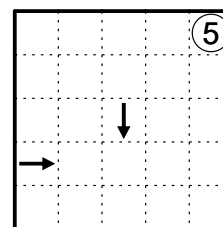
Sashigane

Divide the grid into L-shaped blocks, each one cell wide. Every cell belongs to exactly one block. A circle marks the cell at the corner of its block, and a number in a circle indicates the number of cells in that block. An arrow marks a cell at one end of its block and points towards the corner.



Sashikabe

Shade some cells so that the remaining white cells form one-cell wide L-shaped blocks that are not orthogonally adjacent to each other. The shaded cells form a single orthogonally connected area. Clues cannot be shaded and no 2x2 region may be entirely shaded. A circle marks the cell at the corner of its block, and a number in a circle indicates the number of cells in that block. An arrow marks a cell in one end of the block and points towards its corner.

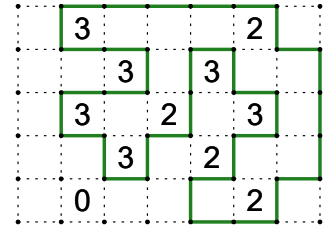
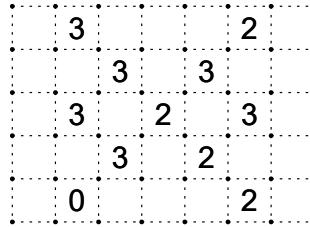


6. Slitherlink + Turning Slitherlink

50 (15) points

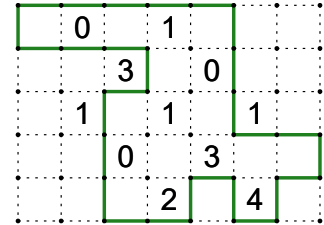
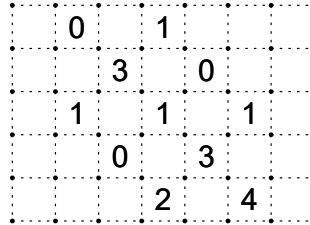
Slitherlink

Connect some pairs of orthogonally adjacent dots to form a single non-intersecting loop. Clues represent the number of edges drawn surrounding the clue (up to four).



Turning Slitherlink

Connect some pairs of orthogonally adjacent dots to form a single non-intersecting loop. Clues represent the number of turns the loop makes on the four surrounding vertices.

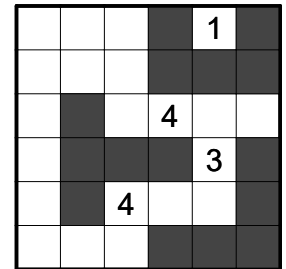
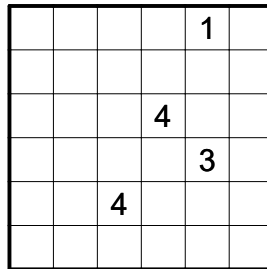


7. Pentasight + Tetrasight

105 (35) points

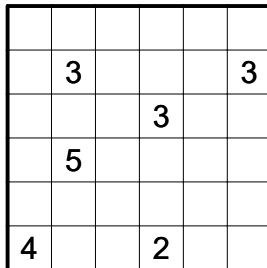
Pentasight

Place unique pentominoes (rotations and reflections count as the same shape) in the grid so they do not touch, even diagonally. Grid numbers show the total horizontally and vertically visible white cells from that cell, including itself, with pentominoes blocking the line of sight.



Tetrasight

Place unique tetrominoes (rotations and reflections count as the same shape) in the grid so they do not touch, even diagonally. Grid numbers show the total horizontally and vertically visible white cells from that cell, including itself, with tetrominoes blocking the line of sight.

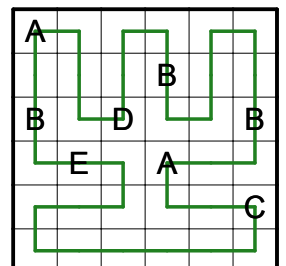
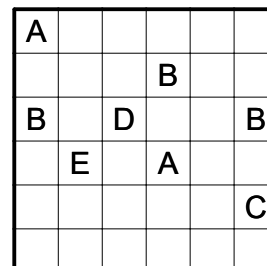


8. Gemini Loop + Gemini Regions

65 (25) points

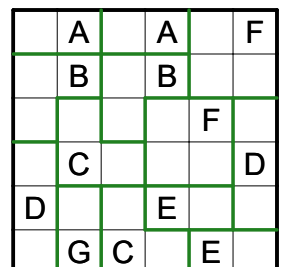
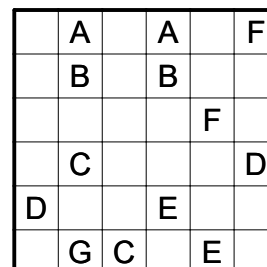
Gemini Loop

Draw a non-intersecting loop travelling horizontally and vertically through the centers of some cells. Cells with the same letter all have the same appearance as to how the loop enters and exits the cell. Cells with different letters have different appearances.



Gemini Regions

Divide the grid into regions with minimum two cells such that each region has exactly one letter. The regions with the same letter have the same shape and the letter is placed in the same position within the region. Regions with different letters either have different shapes or different position of the letter within the shape. Rotations and reflections are not



counted as same shape.



14

Squirrel

200 Points

20 Minutes

7x Bonus

Individual

1. Slitherlink	5
2. Tapa	35
3. Akari	15
4. Regional Yajilin	10
5. Skyscraper	5
6. Star Battle	20
7. Crazy Pavement	35
8. Minesweeper	15
9. Retrograde Battleships	30
10. Hitori	15
11. Sudoku	15

14 Squirrel

200 points

20 Minutes

7x Bonus

Individual

While the mighty monkeys hauled huge boulders and logs to build the bridge, a tiny squirrel, equally determined to help, would wet its body, roll in shore sand, and shake it into the crevices between the giant rocks. Though the monkey army mocked the squirrel, Rama observed that the sand bound the stones, making the bridge stronger. He explained that every effort, however small, contributes to the fulfillment of the overall task and is vital to completing the collective mission. Drawing inspiration from this tale where every effort matters, this round calls for participants to solve just one element for each puzzle from varying categories.

Round Rules

Solve just one element for each puzzle, which is specified in that puzzle's rules. If there are any other pencilmarks / notations, participants should clearly mark / differentiate the final solution with a circle.

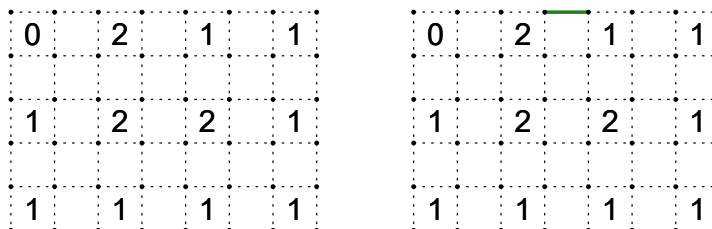
There is no partial (0.8x) bonus points for this round.

1. Slitherlink

5 points

Connect some pairs of orthogonally adjacent dots to form a single non-intersecting loop. Clues represent the number of edges drawn surrounding the clue (up to four).

Squirrel Rule: There is exactly one loop segment that can be drawn logically.

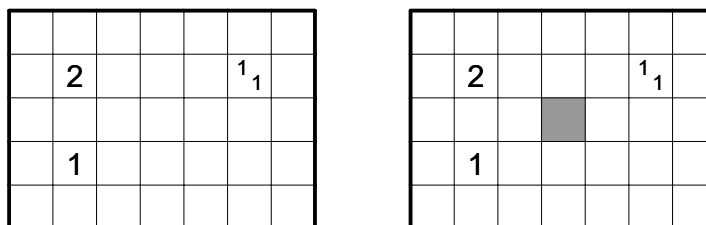


2. Tapa

35 points

Shade some cells so that all shaded cells form one orthogonally connected area. Clues cannot be shaded, and represent the lengths of the blocks of consecutive shaded cells in the (up to) eight cells surrounding the clue. If there is more than one number in a cell, then there must be at least one white (unshaded) cell between the shaded blocks. No 2x2 region may be entirely shaded.

Squirrel Rule: There is exactly one cell that can be shaded logically.

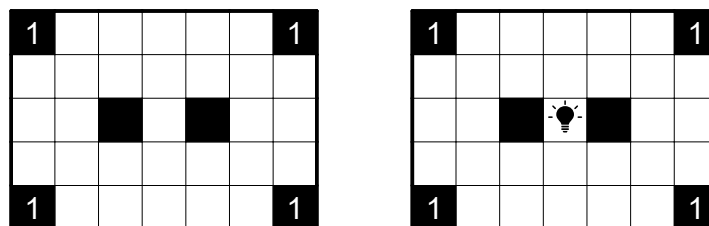


3. Akari

15 points

Place light bulbs in some empty cells so that every cell is illuminated. A light bulb illuminates the cell it is in and all cells seen in a straight line horizontally or vertically, not obstructed by a black cell. No light bulb may illuminate another. Clues represent the number of light bulbs in the (up to) four cells surrounding the clue.

Squirrel Rule: There is exactly one cell in which a light bulb can be placed logically.

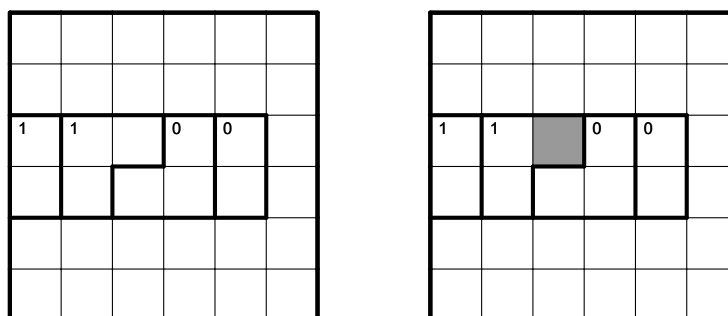


4. Regional Yajilin

10 points

Shade some cells and draw a non-intersecting loop travelling horizontally and vertically through the centers of all remaining cells. Shaded cells cannot share an edge with each other. A number in a region indicates how many cells must be shaded in that region. Cells with number clues may be shaded.

Squirrel Rule: There is exactly one cell that can be shaded logically.

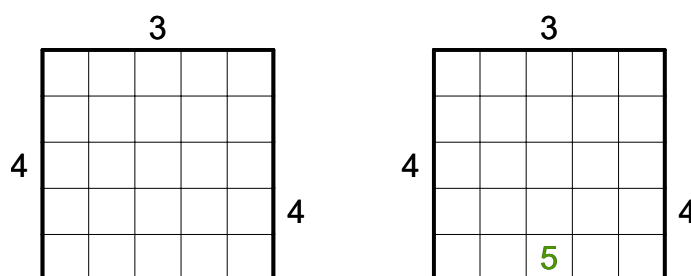


5. Skyscraper

5 points

Place a number from 1 to N into each cell so that each row and each column contains every number from that range with no repeats, where N is the side length of the grid. Each number inside the grid represents the height of the skyscraper in that cell. Each number outside the grid represents the number of skyscrapers that can be seen in the corresponding row or column. Taller skyscrapers hide shorter ones.

Squirrel Rule: There is exactly one cell in which a number can be placed logically.

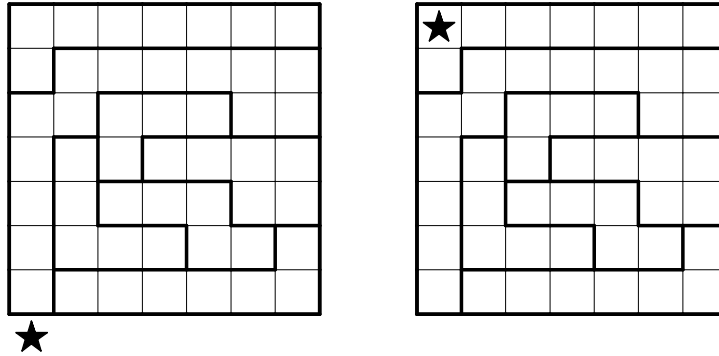


6. Star Battle

20 points

Place stars into some cells such that each row, column, and outlined region contains given number of stars. Stars may not touch one another, even diagonally.

Squirrel Rule: There is exactly one cell in which a star can be placed logically.

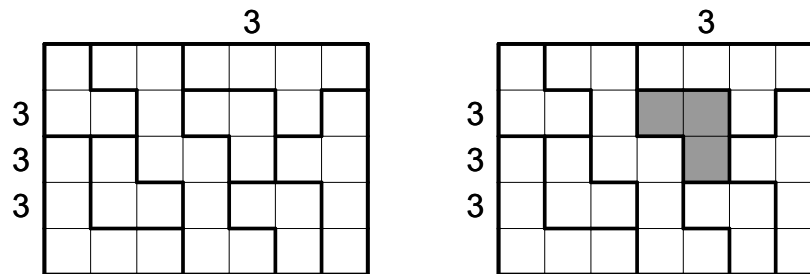


7. Crazy Pavement

35 points

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

Squirrel Rule: There is exactly one region that can be shaded logically.

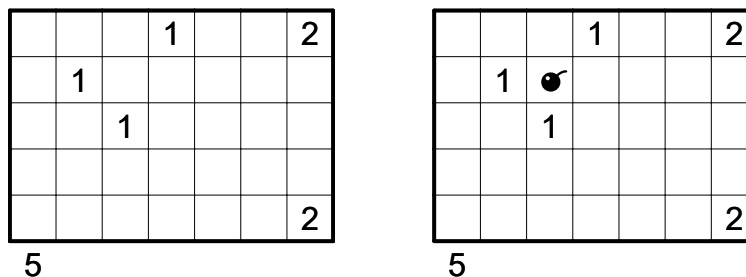


8. Minesweeper

15 points

Place the number of mines given below the grid into some empty cells so that each clue has the indicated number of mines in the (up to) eight surrounding cells.

Squirrel Rule: There is exactly one cell in which a mine can be placed logically.

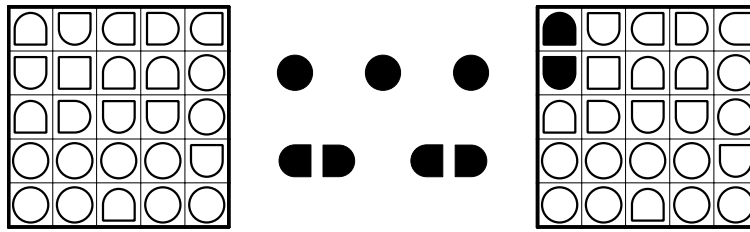


9. Retrograde Battleships

30 points

Place the given fleet of ships with the shapes of the ships as shown. Ships cannot touch each other, even diagonally. Possible outlines of ship segments are given in the grid. If a cell is used, it must be of that given segment.

Squirrel Rule: There is exactly one full ship that can be placed logically.

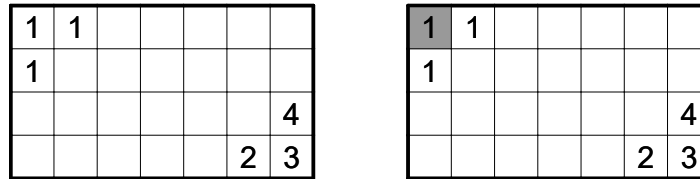


10. Hitori

15 points

Shade some cells so that unshaded cells do not have repeated symbols in any row or column. Shaded cells do not share an edge and unshaded cells form one orthogonally connected area.

Squirrel Rule: There is exactly one cell that can be shaded logically.

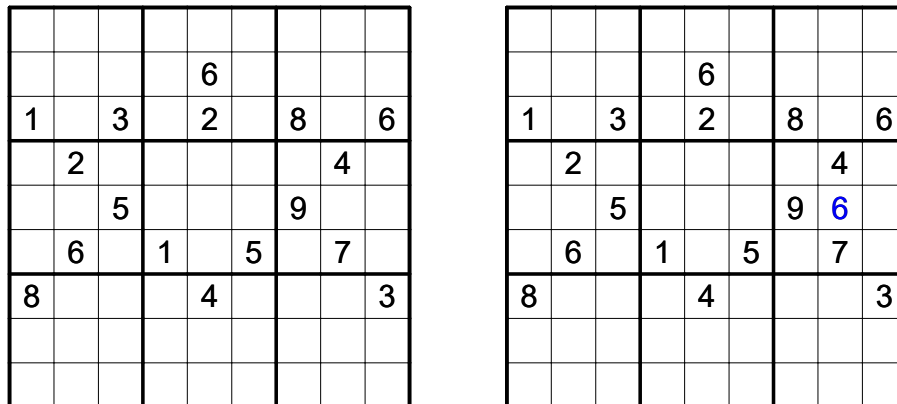


11. Sudoku

15 points

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3X3 region.

Squirrel Rule: There is exactly one cell in which a digit can be placed logically.





15

Kumbhakarna

1200 Points

80 Minutes

10x Bonus

Individual

1. Rail Pool	150 (75)
2. Nurikabe	140 (70)
3. Tents	140 (70)
4. Five Cells	150 (75)
5. Multi Sum Skyscrapers	200 (100)
6. Skip Word Search	180 (90)
7. Double Cross	240 (120)

As the battle took heavy casualties and Ravana faced imminent defeat, he ordered the awakening of his mighty brother, Kumbhakarna. Kumbhakarna was famous for his immense size, huge appetite, and long periods of sleep. Cursed by Brahma to sleep for six months and wake for only one day, the giant was roused using loud drums, trumpets, and elephants. Kumbhakarna then led a massive army, slaughtering the monkeys until Rama killed him in battle using divine arrows. This Marathon round features seven Kumbhakarna-sized puzzles from different categories.

Partial Points

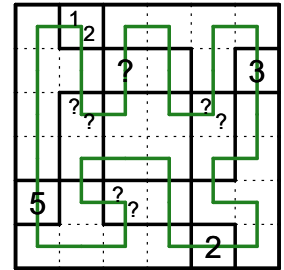
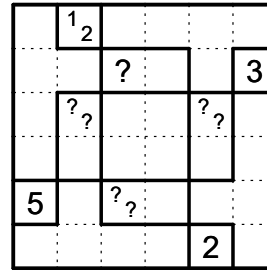
Partial points are available for partly solved puzzles based on the criterion shown on the right. If the specific criterion is met, 50% of the points will be awarded for the puzzle. Here a 'quadrant' is a 10x10 sub-grid starting from one of the corners of the larger grid. It may overlap other such sub-grids. In the example, consider 3x3 sub-grids for this purpose.

Puzzle Name	Criterion
1. Rail Pool	At least 2 of 4 quadrants solved correctly
2. Nurikabe	At least 2 of 4 quadrants solved correctly
3. Tents	At least 2 of 4 quadrants solved correctly
4. Five Cells	At least 2 of 4 quadrants solved correctly
5. Multi Sum Skyscrapers	At least 5 of 9 grids solved correctly
6. Skip Word Search	At least 11 of 21 words found correctly
7. Double Cross	At least 6 of 12 word pairs found correctly

1. Rail Pool

150 points

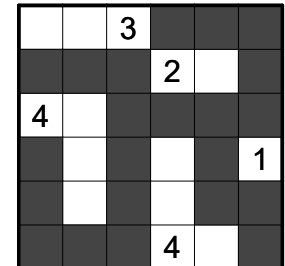
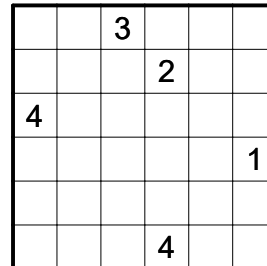
Draw a single, non-intersecting loop that passes through the centers of all cells, including clue cells. Clues represent all of the different lengths of the straight line segments that pass through all cells within the region, either partially or fully contained by that region. Each number within a region must be represented by at least one line segment. Each "?" represents a positive integer; if a clue cell has more than one "?", all numbers and "?"s in that clue must be different from each other.



2. Nurikabe

140 points

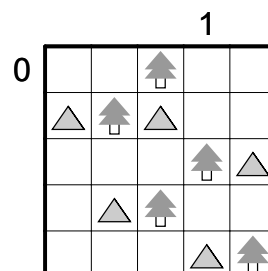
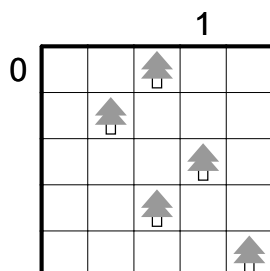
Shade some cells so that all shaded cells form one orthogonally connected area and no 2x2 region is entirely shaded. Clues cannot be shaded, and every orthogonally connected area of unshaded cells contains exactly one clue, the value of which represents the size of the area.



3. Tents

140 points

For each tree in the grid, place a tent in an empty orthogonally adjacent cell, connecting to it. Tents may not touch one another, even diagonally. A clue given outside the grid represents the number of tents in the corresponding row or column.



4. Five Cells

150 points

Divide the grid into regions of exactly five cells. The number inside a cell represents how many of its four sides are segments of region borders (including the border of the grid).

3		2		2
2		3		3
2				2
3		3		2
3		1		3

3		2		2
2		3		3
2				2
3		3		2
3		1		3

5. Multi Sum Skyscrapers

200 points

Place a digit from 1 to 5 (1 to 3 in the example) into each empty cell of every 5x5 grid (3x3 grid in the example) so that no digit repeats in any row or column inside the grid. Each number inside the grid represents the height of a building. The clues on the shaded cells outside the grid indicate sum of the heights of the buildings that can be "seen" when looking from that direction. Taller buildings block the view of smaller buildings.

A shaded cell that lies between two grids is a clue for both and its clue must hold for each of grids. This is valid even if the clue is not given initially.

5									

	5	6	3		3	6	5		
5	2	1	3	3	3	1	2	5	
3	3	2	1	6	1	2	3	3	
4	1	3	2	5	2	3	1	4	
	4	3	5		5	3	4		
4	1	3	2	5	2	3	1	4	
3	3	2	1	6	1	2	3	3	
5	2	1	3	3	3	1	2	5	
	5	6	3		3	6	5		

6. Skip Word Search

180 points

Find all the given words in the grid in any of the eight directions such that there is exactly one skipped cell between every consecutive pair of letters.

A	X	T	W	O	T	ALL
F	A	N	B	O	X	TWO
B	L	A	O	N	E	FIT
I	L	F	L	W	I	IN
N	I	E	X	E	B	ONE
T	F	W	T	O	L	BOX

A	X	T	W	O	T
F	A	N	B	O	X
B	L	A	O	N	E
I	L	F	L	W	I
N	I	E	X	E	B
T	F	W	T	O	L

7. Double Cross

240 points

Place the given pairs of words in the grid. Each pair consists of two words: one written horizontally from left to right, and the other written vertically from top to bottom. These two words intersect at exactly one shared letter, and the locations of these shared letters are marked on the grid. Additionally, letters belonging to different word pairs cannot touch one another, even diagonally.

UNO--ONE
DOS--TWO
TRES--THREE

T	R	E	S		T
H					W
R		U		D	O
E		N			
E		O	N	E	



16

Vanaras Assemble

1200 Points

35 Minutes

40x Bonus

Team

Deshon	600
1. Pentominous (Deshon)	25
2. Sashigane (Deshon)	30
3. Double Choco (Deshon)	40
4. Five Cells (Deshon)	25
5. Pentominous (Deshon)	40
6. Sashigane (Deshon)	35
7. Double Choco (Deshon)	35
8. Five Cells (Deshon)	30
9. Pentominous (Deshon)	45
10. Sashigane (Deshon)	30
11. Double Choco (Deshon)	50
12. Five Cells (Deshon)	35
13. Pentominous (Deshon)	50
14. Sashigane (Deshon)	45
15. Double Choco (Deshon)	40
16. Five Cells (Deshon)	45

Following his ascension to the throne of Kishkinda, Sugriva honoured his promise to assist Rama by summoning Vanaras (monkeys) from all four corners of the earth. Bearing gifts, they gathered to map out a strategic plan to locate Sita. This is a team round based on the weakest link format. Participants begin their journey in four different corners of the earth, and upon completing their individual tasks, they come bearing clues to the team table to solve a large region division puzzle.

Round Rules

Each team member starts at the individual table to solve four puzzles with Deshon variant. They receive coded value clues on submitting their puzzles which they take to the team table to solve the team Deshon puzzle.

The team tables are located at the centre of the competition hall, the four individual tables are located at four sections of the hall and are marked N, E, W and S.

The round has 17 puzzles in total: 4 puzzles with Deshon variant at each of the four individual tables and one Deshon puzzle at the team table.

The 16 individual puzzles are divided by difficulty into four sets, with Set N being the easiest, then Set E, then Set W and Set S being the hardest. It is up to the team members to decide which member will solve which set.

When a team member submits their individual puzzle sheet, they will receive two coded value clues in a separate sheet that they need to take to the team table and transfer them to the team Deshon puzzle.

Set N submission provides coded values of A and B.

Set E submission provides coded values of C and D.

Set W submission provides coded values of E and F.

Set S submission provides coded values of G and H.

The provided coded values of A-H need to be transferred to the team Deshon puzzle at the corresponding positions. Each coded value is a two-digit number.

A team member may choose to submit their individual puzzle sheet at any point, irrespective of whether all the 4 puzzles have been solved or not. The coded value clues received will always be correct. Once the individual puzzle sheet is submitted, a team member cannot go back to the individual table.

The team Deshon puzzle has a single unique solution after all 8 coded value clues have been transferred.

The round is considered finished when the team Deshon puzzle is completed and any time bonus is calculated from that point. Leaving any individual puzzle unsolved or incorrect forfeits the round's time bonus.

Points Structure

The team Deshon puzzle is worth 600 points. Partial points of $600 / (\text{number of regions})$ will be awarded for every correctly marked region.

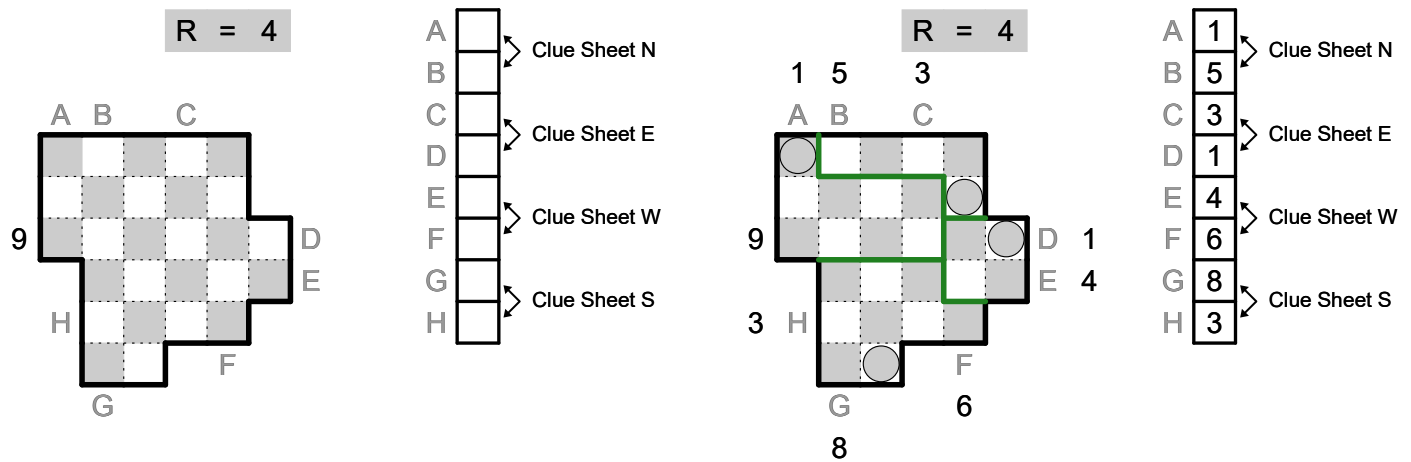
The points for individual table puzzles are as listed below.

	Set N	Set E	Set W	Set S
Pentominous	25	40	45	50
Sashigane	30	35	30	45
Double Choco	40	35	50	40
Five Cells	25	30	35	45
Total	120	140	160	180

Divide the grid into R regions, where R is given. Each region is orthogonally connected and contains exactly one epicentre, marked with a grey circle. Each number given outside the grid indicates there must be at least one path of non-overlapping adjacent cells of that length from the number to the epicentre of the region its first cell is in. Paths of different numbers to the epicentre may overlap one another but must lie within the region. It is not required to mark the epicentres, as long as the regions are correctly identified and marked, full points will be awarded.

Coded clues from A to H have to be replaced with their coded value provided in the clue sheet. Each value is a two-digit number representing a Deshon outside clue. The example below uses single-digit numbers.

The checkerboard pattern is used to aid in solving and has no bearing on the solution.



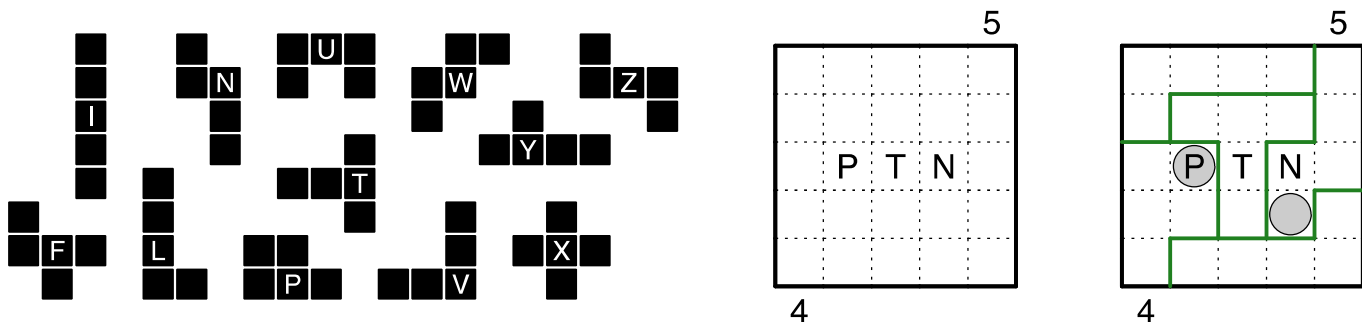
Individual Table Puzzles

Following Deshon variant rule applies to each of the 4 puzzle types to appear at individual tables.

Some of the regions have exactly one epicentre to satisfy the Deshon rule. Each number given outside the grid indicates there must be at least one path of non-overlapping adjacent cells of that length from the number to the epicentre of the region its first cell is in. Paths of different numbers to the epicentre may overlap one another but must lie within the region. The epicentre can be on any cell of the region, including any given clues of the puzzle. It is only required to identify the epicentres for regions having Deshon clues. It is not necessary to mark any epicentres for receiving full credit for the puzzle.

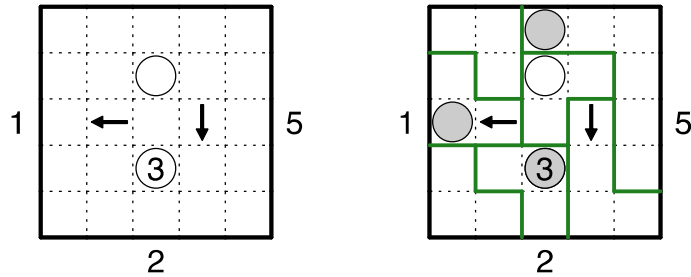
1. Pentominous (Deshon)

Divide the grid into pentominoes so that no two pentominoes of the same shape share an edge, where rotations and reflections count as the same shape. A cell with a letter must belong to a pentomino of that letter's shape. Shapes may be used any number of times, including not at all. The shapes and their letter names are shown next to the grid.



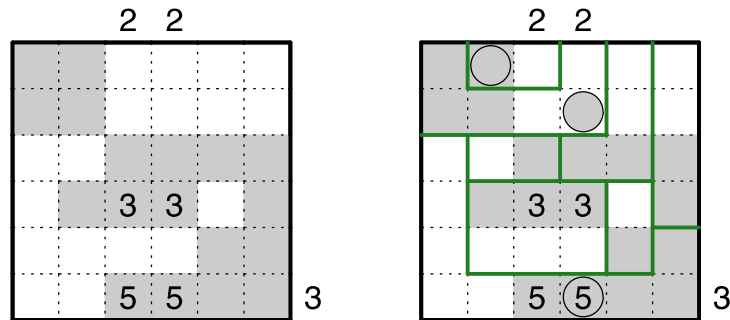
2. Sashigane (Deshon)

Divide the grid into L-shaped blocks, each one cell wide. Every cell belongs to exactly one block. A circle marks the cell at the corner of its block, and a number in a circle indicates the number of cells in that block. An arrow marks a cell at one end of its block and points towards the corner.



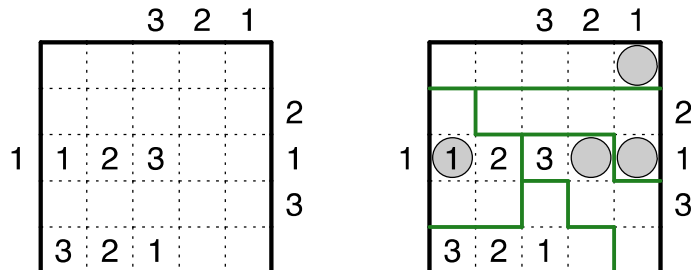
3. Double Choco (Deshon)

Divide the grid into blocks along the dotted lines. Cells are coloured white or grey (given). Each block must hold a white area and a grey area of identical size and shape, one possibly rotated or reflected. A number counts the cells of its own colour in its block. A block may contain any number of clues, including none.



4. Five Cells (Deshon)

Divide the grid into regions of exactly five cells. The number inside a cell represents how many of its four sides are segments of region borders (including the border of the grid).





17

Search for Sita

2000 Points

45 Minutes

40x Bonus

Team

N. Cloned Canal View (Coded)	100
E. Tapa Guard (Coded)	120
W. Retsurin (Coded)	125
S. Sentinels (Coded)	210
1. Cave	90
2. Compass	55
3. Doors	70
4. Easy as Clue Pool	165
5. Four Winds	20
6. Hashi	20
7. Kuromasu	90
8. Light Houses	20
9. LITS Guard	230
10. Mukonn Enn	85
11. Myopia	30
12. Pentopia	45
13. Tetrasight	170
14. Total Akari	45
15. Wall	200
16. Walls	110

Once the Vanaras have assembled and the search plans have been identified, Sugriva organizes them into four groups. He assigns a leader to each group and sends them off in all four directions with a one-month deadline to find Sita. This team round is based on the Divide and Conquer format, where the entire team starts at the team table to crack four coded puzzles that provide clues about the surrounding terrain (puzzles placed on each 'individual' table in the four corners). The participants can then split from the main team to solve the puzzles on one of the individual tables.

Round Rules

In this round, each team starts at its team table and then works its way to four separate individual tables. The team tables are located at the centre of the competition hall; the four individual tables are located at the four sections of the hall and are marked N, E, W, and S (North (N), East (E), West (W) and South (S)).

The round has 20 puzzles: 4 'coded' puzzles at the team table and 4 puzzles at each of the four individual tables.

The 16 individual puzzles will be divided into 4 sets, Set 1, Set 2, Set 3 and Set 4 as listed below.

Set 1		Set 2		Set 3		Set 4	
Four Winds	20	Hashi	20	Pentopia	45	Mukonn Enn	85
Light Houses	20	Total Akari	45	Cave	90	Kuromasu	90
Myopia	30	Compass	55	Easy as Clue Pool	165	Tetrasight	170
Doors	70	Walls	110	Wall	200	LITS Guard	230
Total	140	Total	230	Total	500	Total	575

Which of the four sets (1, 2, 3, 4) is placed on which individual table (N, E, W, S) is not given in advance, it is determined by the team table puzzles.

The team table has 4 'coded' puzzles, each on a separate A4 sheet marked with N, E, W, or S; one each corresponding to the individual tables. In each coded puzzle the clues are given as letters rather than numbers, and solving the puzzle reveals the number each letter represents. Below each team puzzle is a word made up of these letters. A small tabulation below the word maps 4 possible sums of the word to one of the 4 sets. The correct value of the sum indicates the set which is placed at that table.

A player may move to an individual table at any point in the round, even without solving the team-table puzzles. Once a player moves from the team table to an individual table, they cannot return to the team table or move to any other individual table.

The round is considered finished when all individual solvers have completed their individual sets, and any time bonus is calculated from that point. Leaving any team-table puzzle unsolved or incorrect forfeits the round's time bonus.

Mapping Example

In the example shown on right, one of the team table puzzles, E. Tapa Guard is solved with the letters having different values. The word given below the puzzle is evaluated to be 8. It means Table E has Set 3.

A	P	T
2	3	1

	A					P	
				T	T		
				T	T		
	P					P	

TAPA =	6	7	8	9
Table E	Set 1	Set 2	Set 3	Set 4

Team Table Puzzle Rules

Here are the 4 puzzle types appearing at the team table.

N. Cloned Canal View (Coded)

100 points

Shade some cells so that all shaded cells form one orthogonally connected area and no 2x2 region is entirely shaded. Numbered cells cannot be shaded. Each numbered cell indicates the total number of shaded cells connected to it in a straight line vertically and horizontally, counting in all four directions until a unshaded cell or the grid edge is reached. The corresponding cells in the regions marked by cages will be identical considering shading.

Coded Rule:

Each distinct number is replaced by a distinct letter throughout the grid.

A	B	C	D	E

A	B	C	D	E
4	0	3	5	1

	D				
C		A			E
	A				B
				B	B
			B	B	

	D				
C		A			E
	A				B
				B	B
			B	B	

E. Tapa Guard (Coded)

120 points

Shade some cells so that all shaded cells form one orthogonally connected area. Clues cannot be shaded, and represent the lengths of the blocks of consecutive shaded cells in the (up to) eight cells surrounding the clue. If there is more than one number in a cell, then there must be at least one white (unshaded) cell between the shaded blocks. No 2x2 region may be entirely shaded. Additionally, each digit clue also represents a guard. The digit's value indicates the number of shaded cells in the corresponding direction. A digit in the undivided cell must satisfy the count constraint in at least one of the four directions.

Coded Rule:

Each distinct number is replaced by a distinct letter throughout the grid.

A	P	T

A	P	T
2	3	1

	A				P
			T	T	
P					P

	A				P
			T	T	
P					P

W. Retsurin (Coded)

125 points

Shade some cells so that no two shaded cells are orthogonally adjacent, and draw a single non-intersecting loop travelling horizontally and vertically through the centres of all remaining cells except those containing clues. Clues cannot be shaded. Each clue gives the number of shaded cells in either its row or its column, but not both. A "?" stands for any number, including 0.

Coded Rule:

Each distinct number is replaced by a distinct letter throughout the grid.

A	B	C

A	B	C
1	0	2

			C			A
B						
			A			
						B
				A		
		?				A

				C			A
B							
				A			
							B
				A			
		?					A

S. Sentinels (Coded)

210 points

Draw a 1-cell wide single loop passing through some of the non-shaded cells. The loop does not touch itself, even diagonally. Some shaded cells contain a number, which counts the total number of loop cells visible from that cell in the four orthogonal directions, looking outward in each direction until a shaded cell or the grid edge is reached.

Coded Rule:

Each distinct non-zero number is replaced by a distinct letter throughout the grid.

A	B	C	D	E

A	B	C	D	E
8	7	2	3	5

A						A
	D		C		C	
	E				E	
			B			

A						A
	D		C		C	
	E				E	
			B			

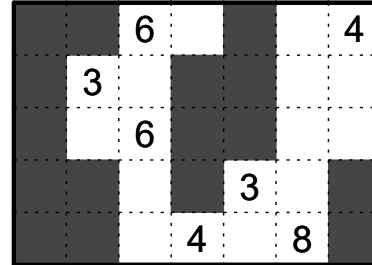
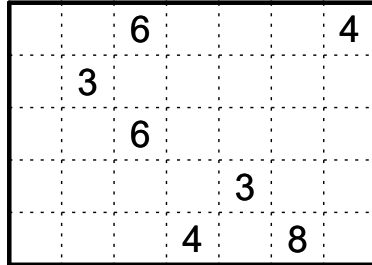
Individual Table Puzzle rules

Here are the 16 puzzle types appearing at the individual tables. These are sorted alphabetically below.

1. Cave

90 points

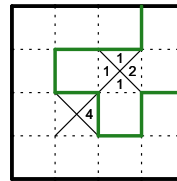
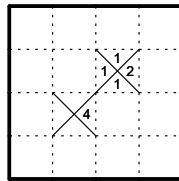
Shade some cells to leave behind a single connected group, known as the cave. There should not be any shaded cells enclosed within the cave. All numbered cells must be a part of the cave, with each number indicating the total count of cells connected vertically and horizontally to the numbered cell including the cell itself.



2. Compass

55 points

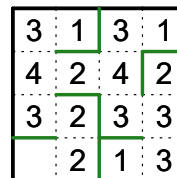
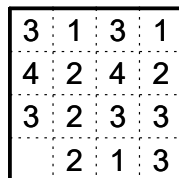
Divide the grid into regions of orthogonally connected cells, each containing exactly one compass. A number in a compass indicates how many cells belong to its region that are further in the indicated direction than the compass itself.



3. Doors

70 points

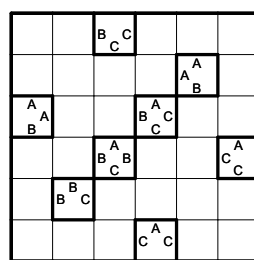
Draw closed doors along the borders between adjacent rooms (cells) so that all rooms stay connected through remaining open doors. A number in a room indicates how many rooms can be seen from it, looking through open doors in the four orthogonal directions, excluding itself.



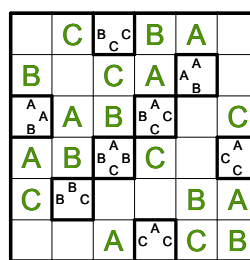
4. Easy as Clue Pool

165 points

Place a letter from the indicated list into some empty cells so that each letter in the list appears exactly once in each row and column. Clue cells indicate all of the first letters that can be seen in four orthogonal directions, not necessarily in order.



{A,B,C}

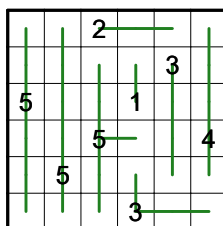
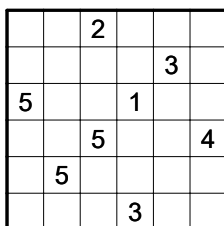


{A,B,C}

5. Four Winds

20 points

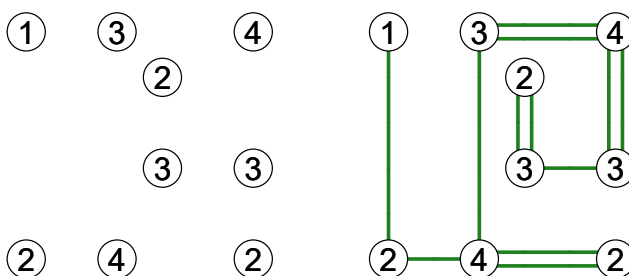
Draw one or more horizontal or vertical lines from each numbered cell. The lines cannot cross other numbered cells. A number in a cell indicates the total number of cells connected by its lines, excluding itself. No lines overlap or intersect each other. Each empty cell is visited by exactly one line.



6. Hashi

20 points

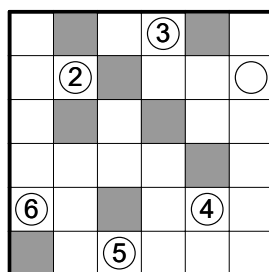
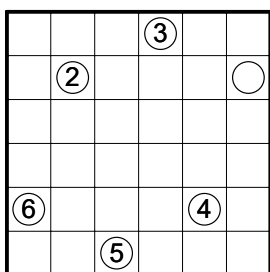
Connect each of the numbered islands in the grid via horizontal and vertical bridges. Bridges are not allowed to cross each other. Each numbered island has that many bridges leading away from it, and at most two bridges are allowed to connect a pair of islands. All islands must be connected to each other.



7. Kuromasu

90 points

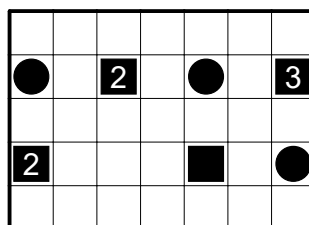
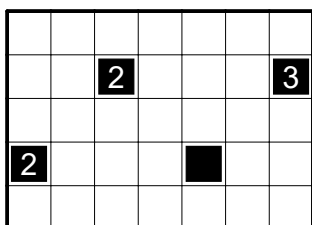
Shade some cells so that no two shaded cells are orthogonally adjacent and the remaining unshaded cells form one orthogonally connected area. Circled clues cannot be shaded, and if they contain a number, it represents the total number of unshaded cells that can be seen in a straight line vertically or horizontally, including itself.



8. Light Houses

20 points

Place ships in some of the empty white cells, at most one ship per cell, so that no two ships touch each other and no ship touches a black cell, even diagonally. The black cells are lighthouses. A number in a lighthouse gives the total number of ships in its row and column combined. Black cells do not block the view of lighthouses.

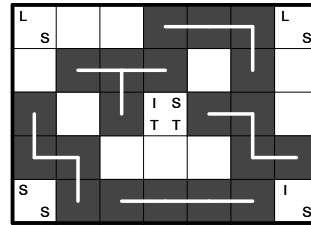
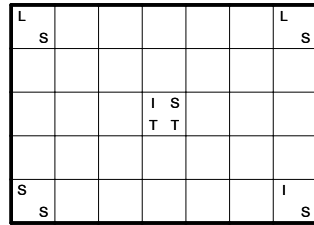


9. LITS Guard

230 points

Shade some cells so that all shaded cells form one orthogonally connected area containing no 2×2 fully shaded region. The shaded cells divide into tetrominoes, each shaped like an L, I, T, or S (rotations and reflections allowed). Two tetrominoes of the same shape can not be orthogonally adjacent.

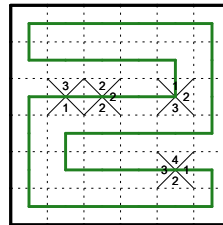
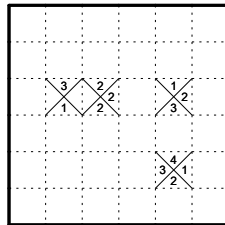
Some cells contain clues and cannot be shaded. The letters in a clue cell are the shapes of the first tetromino seen when looking outward from that cell in each of the four directions, in no particular order.



10. Mukonn Enn

85 points

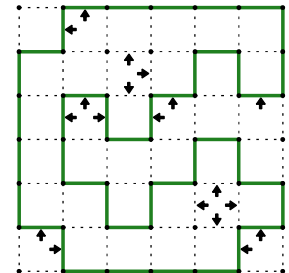
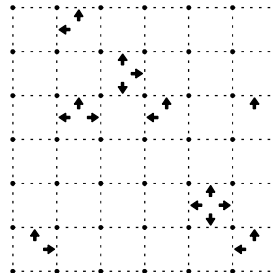
Draw a non-intersecting loop through the centers of all cells. If the loop visits a numbered section of a cell, it must travel in a straight line before turning on the Nth cell, where N is the value of the clue.



11. Myopia

30 points

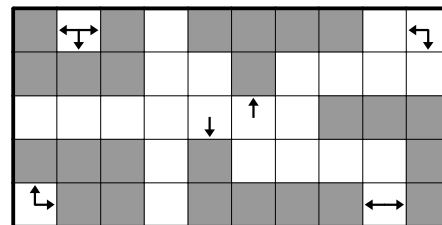
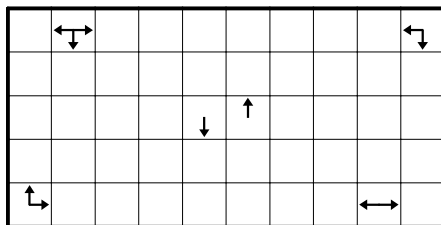
Connect some pairs of orthogonally adjacent dots to form a single non-intersecting loop. The arrows in the grid indicate the direction(s) in which the loop is closest when looking from that cell.



12. Pentopia

45 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.



13. Tetrasight

170 points

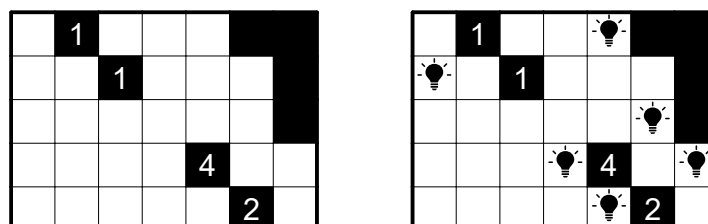
Place unique tetrominoes (rotations and reflections count as the same shape) in the grid so they do not touch, even diagonally. Grid numbers show the total horizontally and vertically visible white cells from that cell, including itself, with tetrominoes blocking the line of sight.



14. Total Akari

45 points

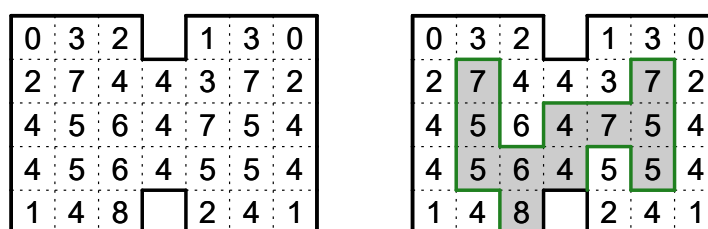
Place light bulbs in some empty cells so that every cell is illuminated. A light bulb illuminates the cell it is in and all cells seen in a straight line horizontally or vertically, not obstructed by a black cell. No light bulb may illuminate another. A number in a cell indicates the total number of light bulbs in that cell's row and column combined.



15. Wall

200 points

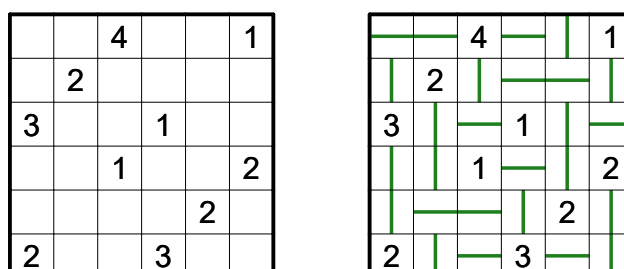
Draw a wall that separates the grid into exactly two orthogonally connected areas. The wall runs along the grid lines and may lie along the grid's outer edge. Numbers indicate the count of cells on the opposite side of the wall in the same row or column as that cell. The wall does not block this count.



16. Walls

110 points

Place a horizontal or a vertical line in every blank cell. A number indicates the total lengths of the segments connected to that cell.





18

Indrajit

650 Points

55 Minutes

10x Bonus

Individual

1. Invisible Tapa	110
2. Invisible Yajilin	95
3. Invisible Skyscraper	70
4. Invisible Mathrax	140
5. Invisible Hitori	115
6. Invisible Kropki	35
7. Invisible Slitherlink	30
8. Invisible Magnets	55

Following Kumbhakarna's defeat, Ravana ordered his son Indrajit, a master of illusion warfare, to re-enter the battle. Vanishing into the clouds, Indrajit rained lethal arrows upon the bewildered monkey army. Vibhishana disclosed that Indrajit attained invincibility through a secret ritual, leaving him vulnerable only while performing it. Armed with this knowledge, Laxman and Vibhishana attacked the temple and, after a fierce battle, Laxman struck Indrajit down using the powerful Indrastra weapon. Mirroring Indrajit's deceptive abilities, his illusory magic has been cast over this round's puzzles, rendering some of the puzzle elements invisible.

Round Rule

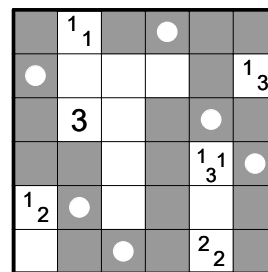
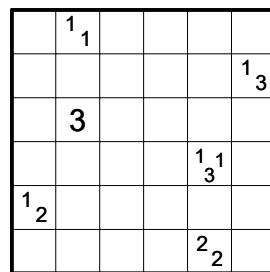
In each of the standard puzzle types, an "invisible" rule also applies, which is specified in that puzzle's rules. It is not necessary to mark any cells/dots/digits as "invisible" for receiving full credit for the puzzle.

1. Invisible Tapa

110 points

Shade some cells so that all shaded cells form one orthogonally connected area. Clues cannot be shaded, and represent the lengths of the blocks of consecutive shaded cells in the (up to) eight cells surrounding the clue. If there is more than one number in a cell, then there must be at least one white (unshaded) cell between the shaded blocks. No 2x2 region may be entirely shaded.

Invisible Rule: There is one shaded cell in each row and column that is invisible to the clues. These shaded cells count for connectivity and the 2x2 restriction.

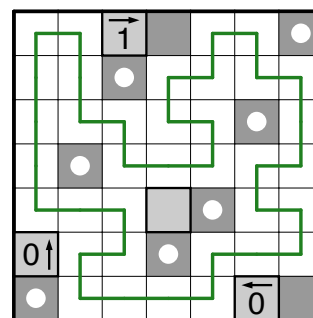
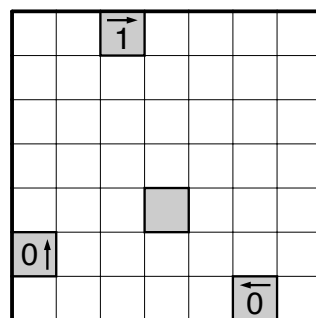


2. Invisible Yajilin

95 points

Shade some cells and draw a non-intersecting loop travelling horizontally and vertically through the centers of all remaining white cells. Shaded cells cannot share an edge with each other. Some cells are outlined and in gray and cannot be part of the loop. Numbered arrows in such cells indicate the number of shaded cells in that direction.

Invisible Rule: There is one shaded cell in each row and column that is invisible to the clues. These shaded cells still cannot share an edge with other shaded cells.

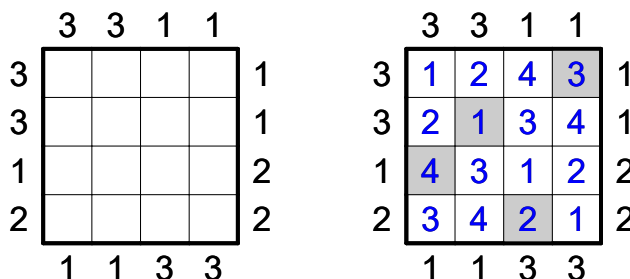


3. Invisible Skyscraper

70 points

Place a number from 1 to N into each cell so that each row and each column contains every number from that range with no repeats, where N is the side length of the grid. Each number inside the grid represents the height of the skyscraper in that cell. Each number outside the grid represents the number of skyscrapers that can be seen in the corresponding row or column. Taller skyscrapers hide shorter ones.

Invisible Rule: There is one invisible skyscraper in each row and column. There is exactly one invisible skyscraper of each number. The height of each invisible skyscraper is 0.

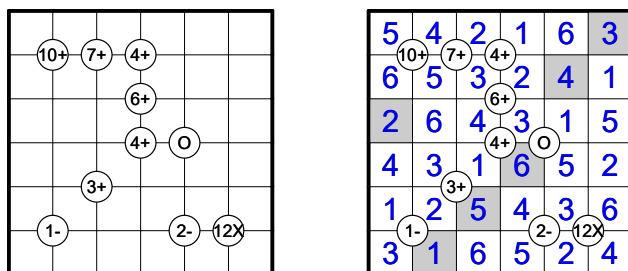


4. Invisible Mathrax

140 points

Place a number from 1 to N into each cell so that each row and each column contains every number from that range with no repeats, where N is the side length of the grid. Clues are given at the intersection of four cells. A number paired with a sign (+, -, x, /) indicates that the result of the operation on both diagonal pairs of cells around the circle equals that number. For subtraction and division, the smaller number is subtracted from or divided from the larger number. Clue "O" or "E" indicates that all four adjacent cells touching the circle must contain odd or even numbers, respectively.

Invisible Rule: There is one invisible number in each row and column. The invisible numbers are all different. If a clue with a sign (+, -, x, /) encounters an invisible number, it is counted as 'blank' so the other number will be counted as the answer. An invisible number can be considered as odd or as even.

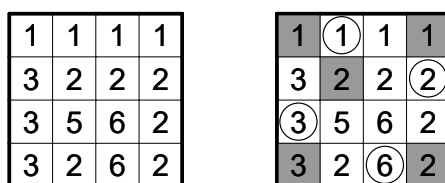


5. Invisible Hitori

115 points

Shade some cells so that unshaded cells do not have repeated numbers in any row or column. Shaded cells do not share an edge and unshaded cells form one orthogonally connected area.

Invisible Rule: There is one invisible number in each row and column. The invisible numbers are all different. An invisible cell's number is ignored when checking for repeated numbers in unshaded cells. The invisible cells count for connectivity.

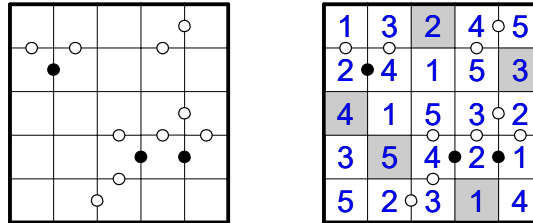


6. Invisible Kropki

35 points

Place a number from 1 to N into each cell so that each row and each column contains every number from that range with no repeats, where N is the side length of the grid. Adjacent cells marked with a white circle contain consecutive numbers. Adjacent cells marked with a black circle contains numbers where one number is double of the other number. The circle between 1 and 2 can be of either colour. All possible circles are marked.

Invisible Rule: There is one invisible number in each row and column. The invisible numbers are all different. Every circle touching an invisible number has been removed.

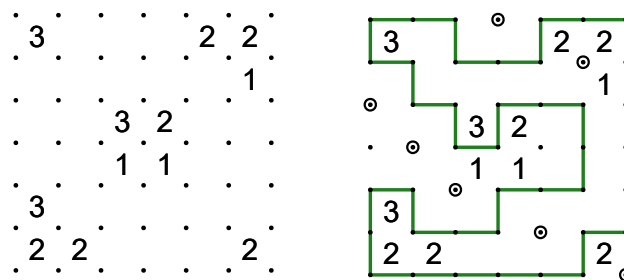


7. Invisible Slitherlink

30 points

Connect some pairs of orthogonally adjacent dots to form a single non-intersecting loop. Clues represent the number of edges drawn surrounding the clue (up to four).

Invisible Rule: There is one invisible dot in each row and column. The loop cannot visit the invisible dots.

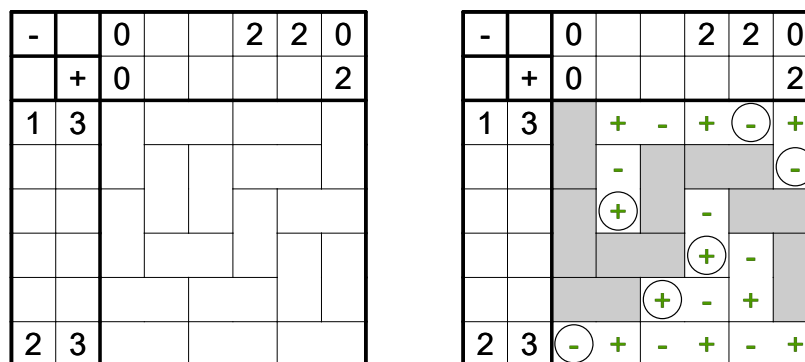


8. Invisible Magnets

55 points

Place a plus sign and a minus sign in some two-cell regions (one sign per cell) of the main grid, so that no two adjacent cells contain the same sign. Number clues outside the grid indicate the number of plus signs or minus signs in the row or column.

Invisible Rule: There is one symbol in each row and column that is invisible to the outside clues. The symbol must still be consistent for magnet polarity adjacency rules.





19

Vibhishana

1200 Points

35 Minutes

40x Bonus

Team

1. Loop	60	9. Number Placement	105
2. Loop	60	10. Number Placement	105
3. Loop	60	11. Number Placement	105
4. Loop	60	12. Number Placement	105
5. Shading	60	13. Object Placement	75
6. Shading	60	14. Object Placement	75
7. Shading	60	15. Object Placement	75
8. Shading	60	16. Object Placement	75

Vibhishana, the pious brother of Ravana, sympathized with Rama and urged Ravana to release his wife, Sita and save the kingdom. Disregarding his counsel, Ravana condemned him as a venomous serpent who favored the enemy. Vibhishana subsequently departed Lanka and allied with Rama's forces, playing a crucial role in battle preparations by divulging/revealing vital secrets about Ravana's army. Despite choosing the path of righteousness, he is historically remembered as a traitor, "The one who betrayed his kingdom Lanka". Featuring the concept of betrayal, this team round introduces a traitor mechanism with 16 puzzles, each having a pool of 4 rules. Within every puzzle, one rule acts as the traitor, and the puzzle does not adhere to it.

Round Rules

In this team round, each team will be given 4 sets of puzzles, with 4 puzzles each. Each set will have base rules which apply to all the puzzles in that set and 4 additional rules. For each puzzle within the set exactly one of the additional rules will be a traitor and will not apply to that puzzle. That puzzle can be solved uniquely using the base rules and the other 3 additional rules in the set. Within the set each of the four puzzles will have a different additional rule as a traitor and hence each of the additional rules will be a traitor exactly once. It's up to the team to identify which rule is a traitor for which puzzle.

Set 1 : Loops

60 + 60 + 60 + 60 points

Base Rule

Draw a single closed loop that passes through some of the white cells. Loop cannot intersect or branch at any point. The loop must pass through all the black and white circles. The loop cannot pass through a shaded cell (with or without numbers).

Rule#1

Loop passes through all white cells.

Rule#2

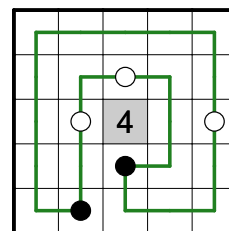
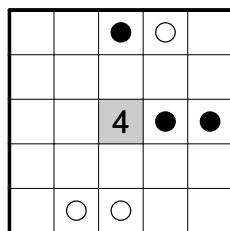
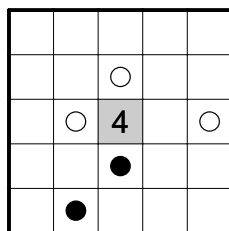
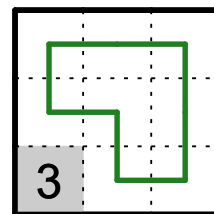
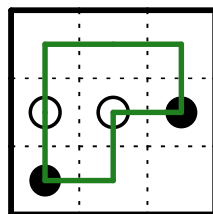
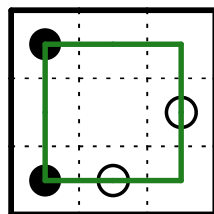
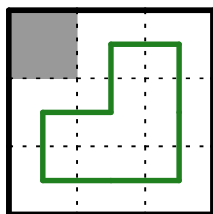
Loop turns at black circle and goes straight through white.

Rule#3

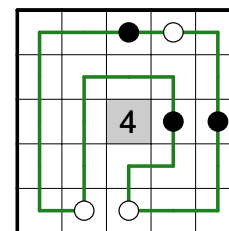
Loop alternates between white and black circles.

Rule#4

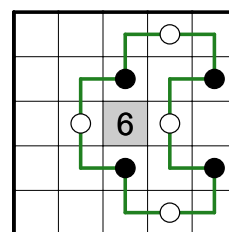
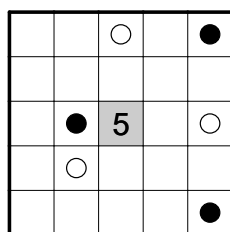
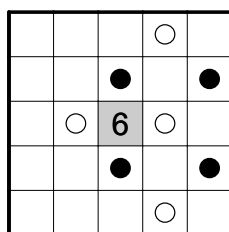
Numbers in the shaded cells represent number of turns by the loop in the neighboring 8 cells.



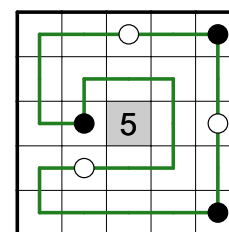
Rule#3 X



Rule#2 X



Rule#1 X



Rule#4 X

Base Rule

Shade some cells in the grid such that all the shaded cells are connected in the grid. Circle cells cannot be shaded.

Rule#1

A large number in a white circled cell indicates the number of cells shaded in the (up to) 8 surrounding cells.

Rule#2

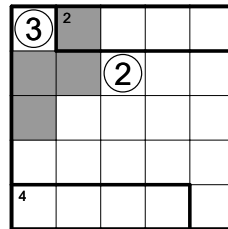
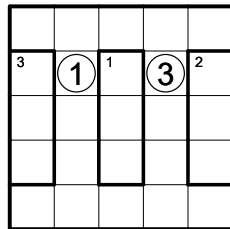
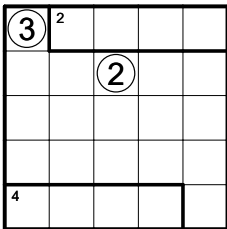
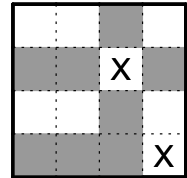
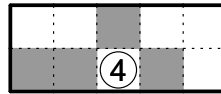
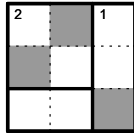
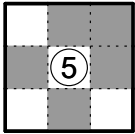
A small number inside a region indicates the number of shaded cells in that region.

Rule#3

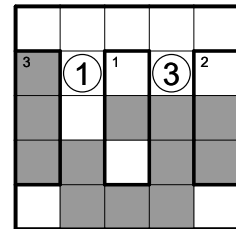
A large number in a circle indicates total number of shaded cells connected vertically and horizontally to that numbered cell, in a straight line till the next unshaded cell, or the edge of the grid.

Rule#4

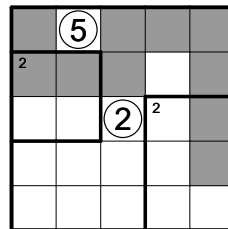
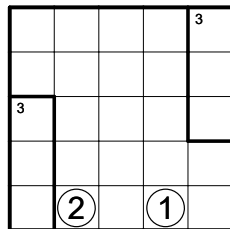
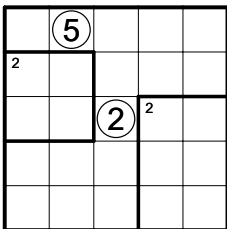
There cannot be more than 3 consecutive shaded cells in any row or column.



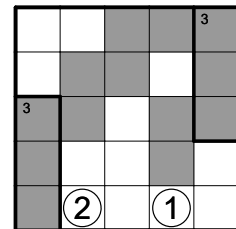
Rule#2 X



Rule#1 X



Rule#4 X



Rule#3 X

Base Rule

Place the given fleet into the grid so that no two ships are touching orthogonally. Rotating ships is permitted. Ship segments cannot be placed in numbers present inside the grid.

Rule#1

The number inside the grid indicates the number of ship cells touching the number (orthogonally and diagonally).

Rule#2

The number outside the grid indicates number of ship cells in the corresponding row/column.

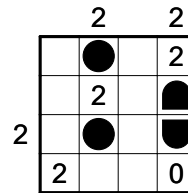
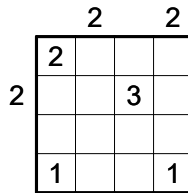
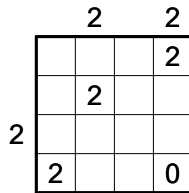
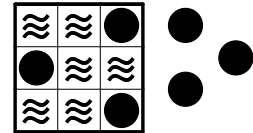
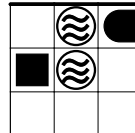
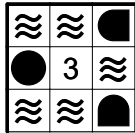
Rule#3

Ships cannot touch diagonally.

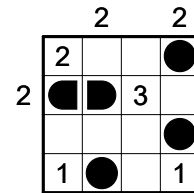
touch

Rule#4

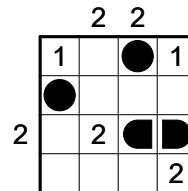
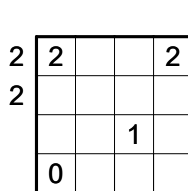
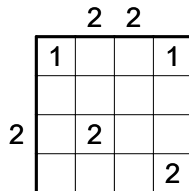
Ships from the given fleet will be placed in the grid. (In the puzzle where this rule is broken one extra ship of unknown size from the given sizes will be placed)



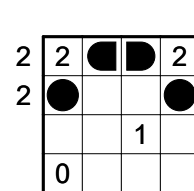
Rule#1 X



Rule#4 X



Rule#2 X



Rule#3 X





20

Bridge to Lanka

2400 Points

60 Minutes

40x Bonus

Team

Hashi 1200

50 X Correct placements

Any 1 puzzle	40	Any 12 puzzles	540
Any 2 puzzles	80	Any 13 puzzles	600
Any 3 puzzles	120	Any 14 puzzles	660
Any 4 puzzles	160	Any 15 puzzles	720
Any 5 puzzles	200	Any 16 puzzles	780
Any 6 puzzles	240	Any 17 puzzles	840
Any 7 puzzles	290	Any 18 puzzles	900
Any 8 puzzles	340	Any 19 puzzles	970
Any 9 puzzles	390	Any 20 puzzles	1040
Any 10 puzzles	440	Any 21 puzzles	1120
Any 11 puzzles	490	All 22 puzzles	1200

Gathered on the ocean shore, Rama's army faced the challenge of crossing over to Ravana's capital on the island of Lanka. Sagara, the deity of the ocean, advised Rama to build a bridge. Under the guidance of Nala, a monkey architect, the army of monkeys and bears constructed it by throwing massive pumice boulders into the sea and connecting them together with tree logs to form a path. In a similar fashion, this team round requires participants to solve a Hashi (Bridges) puzzle, with the islands acting as the boulders and the connections serving as the logs to cross over to Lanka.

Round Rules

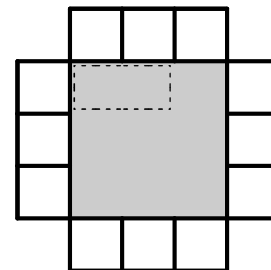
This round consists of 22 small puzzles (7x7 Grid) to be placed on a Giant Hashi Grid which has 22 islands in it. Each of the 22 small puzzles corresponds to one island. The center digit of each small grid (shaded grey) indicates the number of bridges that connect from that grid.

Two grids can be connected by bridges only if the numbers match in the corresponding rows/columns. If two grids connect using 1 bridge, then the grid's edges which are facing each other will have only the central digit of that edges matching. No other digits can match. If two grids connect using 2 bridges, the 2 matching numbers have to be symmetric about the center of the grid. For example, if a left grid connects to the right grid using 2 bridges, either the digits from the 1st and the 7th rows, or the 2nd and the 6th rows, or the 3rd and the 5th rows will match. No other digits along these edges from these grids can match.

There is no restriction on digits for the grids which are not connected.

For ease of solving, the islands of the Hashi puzzle are represented by a puzzle grid with a large central cell surrounded by 3 cells in all four directions.

The center digit of each of the 22 small puzzles corresponds to the large center cell of each island. This digit indicates the number of bridges that connect from that island. The 3 smaller cells on all four sides of the island are for indicating the matching digits while connecting adjacent puzzles. If the puzzles are connected by one bridge, then only the central number in that direction must be identical with the central number in the connected grid. If the puzzles are connected by two bridges, then the numbers in the 2 extreme cells (not the central) in that direction must be identical with the corresponding numbers in the connected grid.



The cage at the top-left of the shared area is for indicating the grid number of the small puzzle which will be placed at that location.

Each individual puzzle may have multiple solutions but has a unique solution once linked to the other puzzles through the Hashi grid. Points will be awarded for each of the 22 small grids only if the solution for the grid matches the overall solution. Points for the Hashi puzzle will be awarded if all the bridges are marked correctly. Partial points will be awarded if the Hashi puzzle is incorrect or incomplete for identifying the correct position of each small puzzle in the Hashi grid. The correct position needs to be identified by marking the correct number of connections in the large central cell and the correct matching digits on the edges where the puzzle connects with other puzzles.

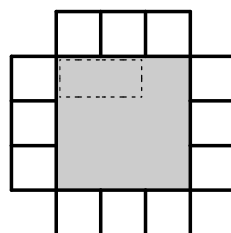
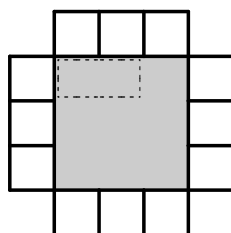
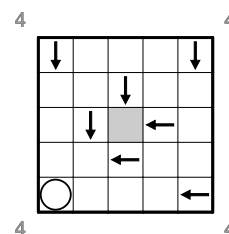
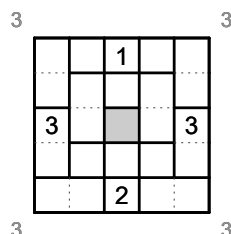
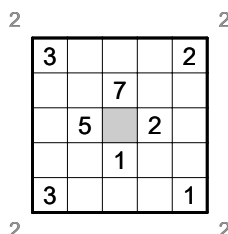
Points Structure

Points will be awarded for the count of correctly solved small puzzles (irrespective of the small puzzle number) based on the table below.

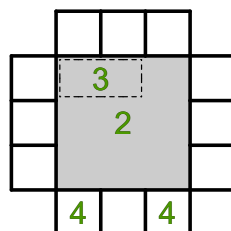
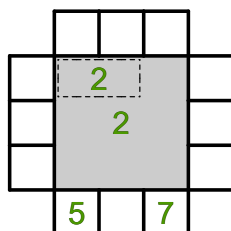
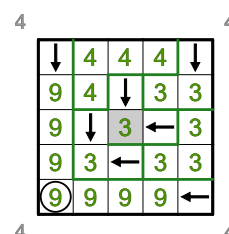
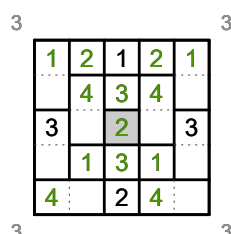
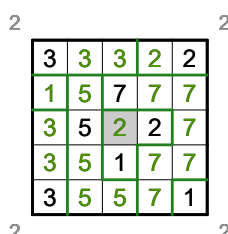
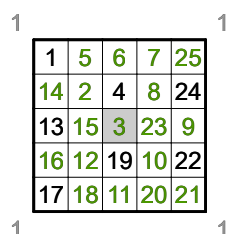
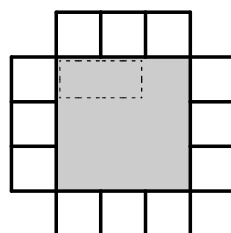
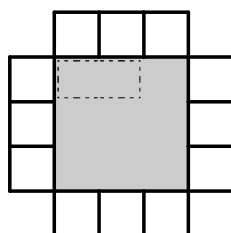
Count of correctly solved small puzzles	Points per puzzle
1 st to 6 th puzzle	40 points
7 th to 12 th puzzle	50 points
13 th to 18 th puzzle	60 points
19 th and 20 th puzzle	70 points
21 st and 22 nd puzzle	80 points
Total	1200 points

Example Puzzle

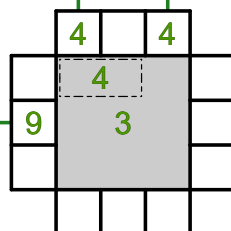
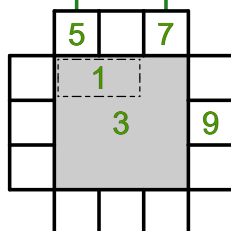
1				
		4		24
13				
		19		22
17				



1	Hidato
2	Fillomino
3	Different Neighbours
4	Sashigane



1	Hidato
2	Fillomino
3	Different Neighbours
4	Sashigane



7, 8. Ripple Effect

Place a number into each cell so that each region contains the numbers from 1 to N with no repeats, where N is the number of cells in the region. Two instances of the same number in the same row or column must have at least as many cells between them as the value of the number.

		3		

2	1	3	2	1
1	2	1	3	2
3	1	2	1	3
2	3	1	2	1
1	2	3	1	2

9, 10. Futoshiki

Place a number from 1 to N into each cell so that each row and column contains every number from that range with no repeats, where N is the side length of the grid. Numbers in cells with an inequality sign between them must satisfy the inequality.

	>	
<		
	>	

2	>	1	3
3		2	1
1	3	>	2

11, 12. Fillomino

Divide the grid into regions of orthogonally connected cells. Two regions of the same size may not share an edge. Clued cells must belong to a region containing the indicated number of cells.

10				
8				
6				
4	8			3
				10
				4

10	10	10	10	10	1
8	8	8	8	10	3
6	6	8	8	10	3
4	6	8	8	10	3
4	6	6	4	10	10
4	4	6	4	4	4

13, 14. Hidato

Place a number from 1 to N into each cell so that every number appears once, where N is the total number of cells in the grid. Every number must be adjacent (orthogonally or diagonally) to all numbers in the grid that are consecutive with it.

5			8
	12		
15			2

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

15, 16. Bricks

Place a number from 1 to N into each cell so that each row and column contains every number from that range with no repeats, where N is the side length of the grid. Bricks may not contain multiple odd numbers or multiple even numbers.

1				
	3			
		2		
			5	
				1

1	4	5	2	3
5	3	4	1	2
4	1	2	3	5
3	2	1	5	4
2	5	3	4	1

17, 18. Different Neighbours

Place a number from 1 to 4 into each region so that no two regions which touch each other, even diagonally, contain the same number.

1	2			2
1			3	4

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

19, 20. Snake Pit

Draw non-intersecting paths through the centers of cells so that all cells are used by exactly one path. A path may not visit cells which are adjacent to cells the path previously used, even diagonally (unless the path just moved out of that cell). Two paths of the same length may not use orthogonally adjacent cells. Circles must be at the end of a path, and numbers must lie on paths occupying the indicated number of cells. Cross marks must not be at the end of path.

	○			○
		○		
③		5	10	⑩
	3			2
	3		×	

3	⑤	2	10	⑩	3
3	5	②	10	3	3
③	5	5	10	2	⑩
2	3	5	10	2	10
2	3	3	10	10	10

21, 22. Arrow Maze

Place a number from 1 to N into each cell so that every number appears once, where N is the total number of arrows. Each arrow must point in the direction of the number one more than its own.

8	↖		↗
	→	↘	↖
	↖		↗
↑		↖	2

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



21

Sanjeevani

2400 Points

70 Minutes

40x Bonus

Team

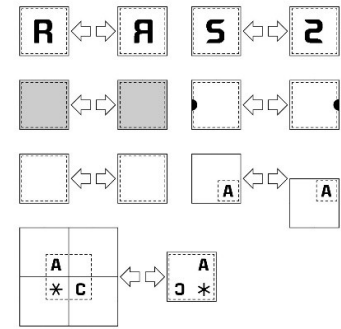
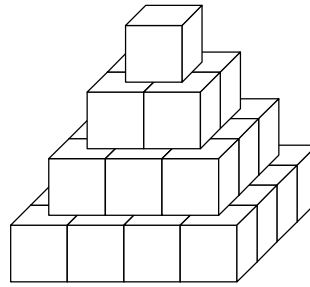
3D Pyramid	1600
5 X Top View Cells	
20 X Bottom View Cells	
20 X Side View Cells	
1. Magic Snail	150
2. Word Labyrinth	95
3. Cave	35
4. Linesweeper	15
5. Kropki Pairs	120
6. Vowel Letter Pairs	30
7. Battleships	20
8. Tawamurenga	20
9. Hitori	20
10. Pyramid Climbers	45
11. Pyramid	125
12. Balanced Parity	125

As the battle between Rama's monkey army and Ravana's demon army ensued, Laxman fought fiercely with Indrajit, who wielded magical powers. During the battle, Indrajit hurled the mighty Brahmastra weapon and fatally wounded Laxman, leaving him with only until sunrise to live. The physician Sushena identified the Sanjeevani herb, located on Mount Dronagiri in the Himalayas, as the sole cure to save his life. Unable to recognize the herb, Hanuman carried the entire mountain peak back to Lanka, enabling Sushena to successfully restore Laxman and revive Rama's army.

This team round is a mechanical round where participants need to assemble cubes into a pyramid representing Mount Dronagiri. Different views of the pyramid must then be utilized to heal 12 broken puzzles across different categories.

Round Rules

Assemble the 30 cubes (5 cubes in example) in the shape of a 3D pyramid such that every cube in the upper level is placed, centered on the 4 cubes in the lower level. **During assembly the internal surfaces of any cubes which touch each other should match exactly.** The only exception is that the * symbol is considered to be rotationally symmetric and matches with *. Some of the cubes can be assembled in multiple orientations giving the same solution.



Double sided tape will be provided to each team to assist with assembly of the 3D pyramid.

Once the 3D pyramid is assembled different views (top, bottom and 4 sides) of the 3D pyramid will help complete the 12 base puzzles.

All letters and digits must point in the same direction in the top and bottom views and should be upright in the side views. For Kropki Pairs and Vowel Letter Pairs semicircles must align with semicircles of the same colour.

The table below describes the different kind of clues which can appear in the different views of the 3D pyramid. The table also specifies the puzzles which are completed using that view of the 3D pyramid.

View of the 3D pyramid	Clues in this view of the 3D pyramid	Puzzles for which the givens apply	Count of transferred cells in Base grid
Top View	Small letters, *	1. Magic Snail 2. Word Labyrinth	64
Bottom View	Numbers	3. Cave 4. Linesweeper	16
Side View	Black and White dots	5. Kropki Pairs 6. Vowel Letter Pairs	10
Side View	Numbers	7. Battleships 8. Tawamurenga	10
Side View	Letters	9. Hitori 10. Pyramid Climbers	10
Side View	Shaded Cells	11. Pyramid 12. Balanced Parity	10

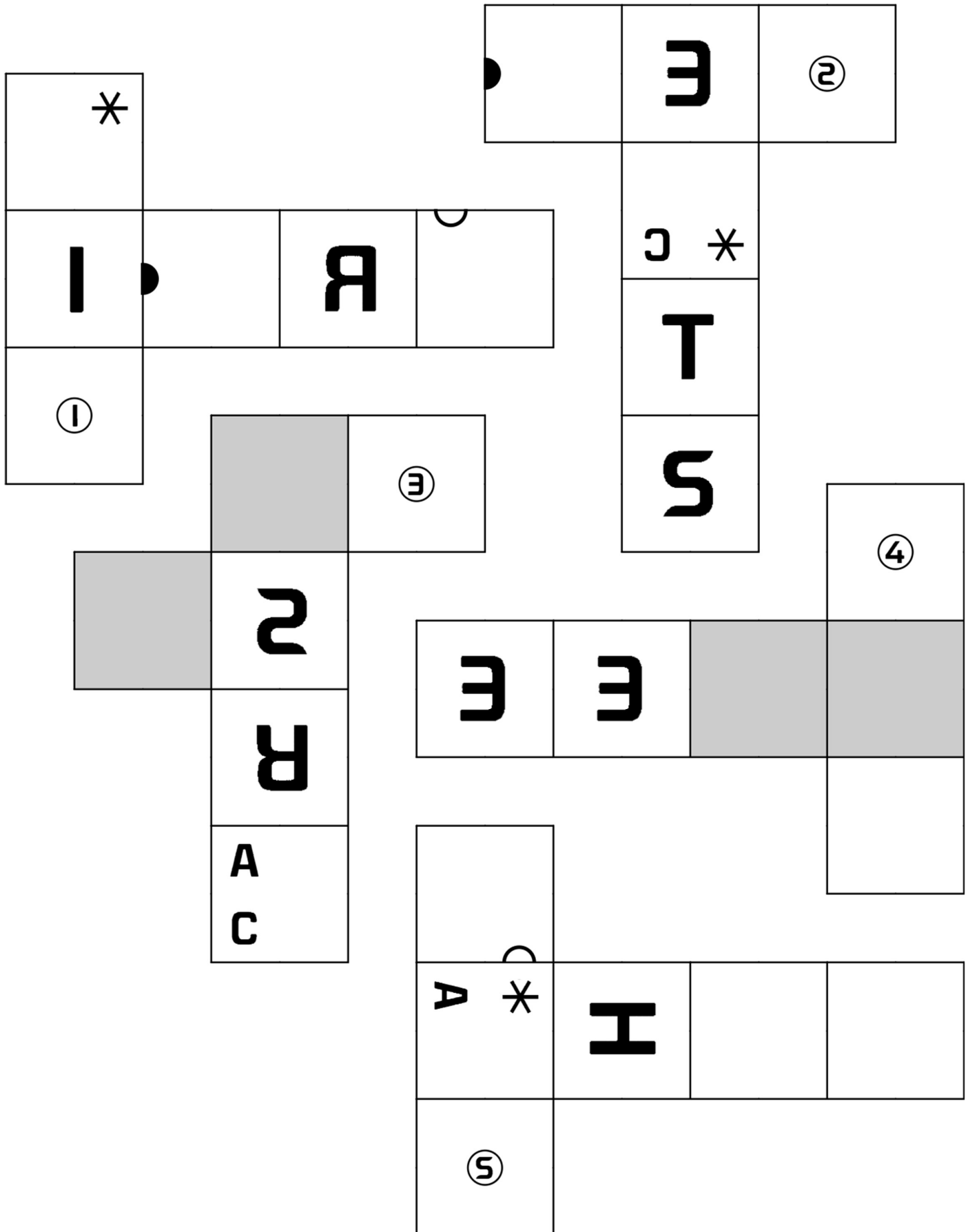
Font used in the round

The font used for all the characters used in both 3D pyramid and base puzzles is given in the image.

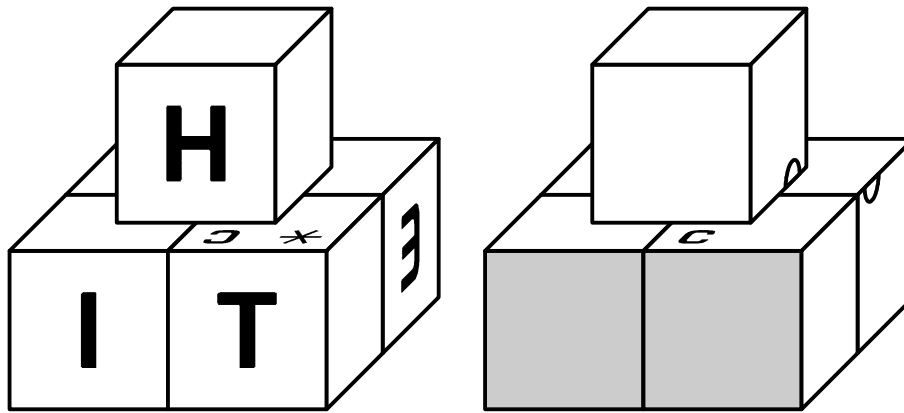
A B C D E F G H I J
K L M N O P Q R S T
U V W X Y Z
* ?
0 1 2 3 4 5 6 7 8 9

Nets of the 3D Cubes

In the competition puzzle, 3D printed cubes (2cm x 2cm x 2cm) will be provided along with the nets of the cubes. In this Instructions Booklet, only the nets are provided below which can be cut and assembled to form the 3D cubes. The small circled numbers on the cubes/nets are only for identifying the cubes and are to be ignored while solving.



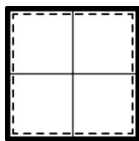
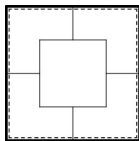
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Transfer Grids

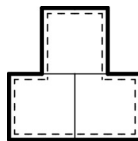
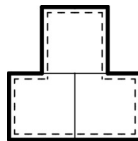
These empty transfer grids will be provided to note down the clues from the 3D pyramid to the base puzzles.

1. Magic Snail
2. Word Labyrinth



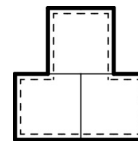
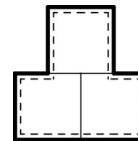
3. Cave
4. Linesweeper

5. Kropki Pairs
6. Vowel Letter Pairs



7. Battleships
8. Tawamurenga

9. Hitori
10. Pyramid Climbers

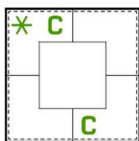


11. Pyramid
12. Balanced Parity

Transfer Grid Solutions

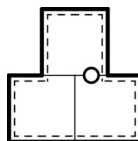
At any point in the round, teams can decide to submit their transfer grids. Volunteers will collect the submitted transfer grids and handover the complete solutions of the six transfer grids to the team. Points for the 3D pyramid puzzles will be awarded based on the correctness of each of the six transfer grids. The 3D pyramid cubes will not be collected and checked separately.

1. Magic Snail
2. Word Labyrinth



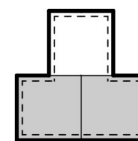
3. Cave
4. Linesweeper

5. Kropki Pairs
6. Vowel Letter Pairs



7. Battleships
8. Tawamurenga

9. Hitori
10. Pyramid Climbers



11. Pyramid
12. Balanced Parity

Helper grids with the layers of pyramid (1x1, 2x2, 3x3 and 4x4) will be provide for noting the position of the cube numbers. These Helper grids will not be collected or checked.

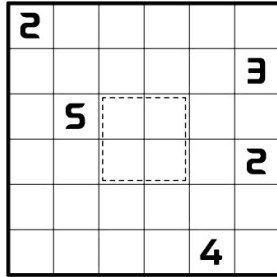
Bottom View Puzzles

The bottom view of the 3D pyramid which transfers clues to these two puzzles can only contain numbers.

3. Cave

35 points

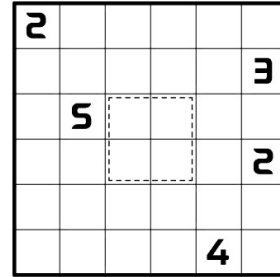
Shade some cells to leave behind a single connected group, known as the cave. There should not be any shaded cells enclosed within the cave. All numbered cells must be a part of the cave, with each number indicating the total count of cells connected vertically and horizontally to the numbered cell including the cell itself.



4. Linesweeper

15 points

Draw a non-intersecting loop travelling horizontally and vertically through the centers of some cells. Numbers in the grid show the number of cells used by the loop in the surrounding (up to) 8-cell area. The loop cannot pass through cells with numbers.



Side View Puzzles

The 8 side view puzzles are categorized based on elements used in the pyramid faces of the 3D cubes.

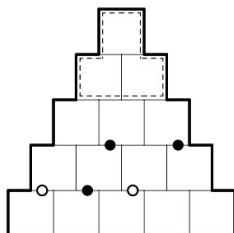
Dots

The side view of the 3D pyramid which transfers clues to these two puzzles can only contain black or white dots.

5. Kropki Pairs

120 points

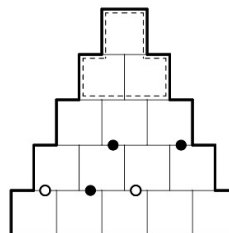
Fill digit with 1 to 9 (1 to 5 in example) in each cell such that no two same digits repeat in 3 directions. If an edge between neighbouring cells is marked with a white dot, the cells contain consecutive numbers. If it is marked with a black dot, one number is double the other number.



6. Vowel Letter Pairs

30 points

Fill at most one letter into each cell so that the given words can be read in any of the 6 directions in consecutive cells in the grid. Each letter is used by exactly one word (the words do not cross or overlap each other). If a black dot is given between two cells, it means that both cells contain the same vowel (A, E, I, O, U) and if there is a white dot between two cells then both cells contain the same consonant (letter other than A, E, I, O, U). If a dot is not given between two cells, it means that both cells do not contain the same letter (and either or both might be left empty). The placement of palindromic words (words reading same both ways) can be interchanged resulting in same solution.



DO
ADD
A
LOT
DOTS

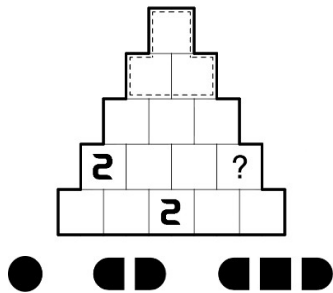
Numbers

The side view of the 3D pyramid which transfers clues to these two puzzles can only contain numbers.

7. Battleships

20 points

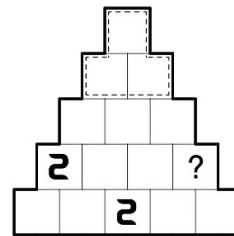
Place the given fleet of ships with the shapes of the ships as shown. Ships cannot touch each other, even diagonally. Some cells are known to be water and are indicated by waves. Numbers inside the grid represent the number of cells that contain ship segments surrounding that cell.



8. Tawamurenga

20 points

Shade several cells in the grid. Cells with numbers cannot be shaded and indicate the number of shaded cells adjacent to it (up to 6). There can not be a horizontal run of 3 or more shaded cells. Each shaded cell must have at least one shaded cell below it (unless it's on the bottom row).



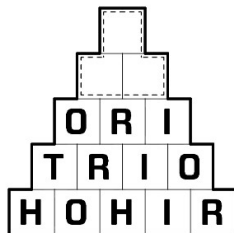
Letters

The side view of the 3D pyramid which transfers clues to these two puzzles can only contain letters.

9. Hitori

20 points

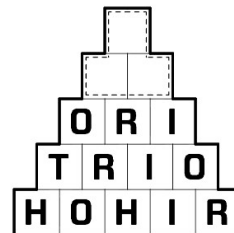
Shade some cells so that no two shaded cells are orthogonally adjacent and the remaining unshaded cells form one orthogonally connected area. No two cells containing the same letter in any of the 3 directions can be unshaded.



10. Pyramid Climbers

45 points

Each cell at the bottom of the pyramid has a "climber" associated with it. Each climber climbs up (not sideways) a path of adjacent cells. For each path, all the letters in that path's cells are distinct. Each cell is reached by exactly one climber. Determine the paths of all climbers.



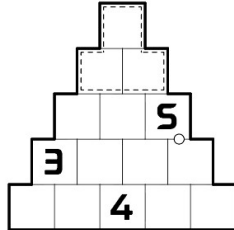
Shading

The side view of the 3D pyramid which transfers clues to these two puzzles can only contain shaded cells.

11. Pyramid

125 points

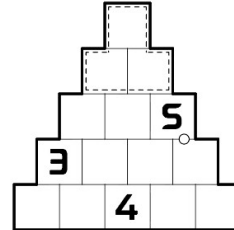
Enter a digit from 1 to 9 (1 to 5 in example) in each cell of the pyramid in such a way that each cell contains the sum or the difference of the two digits below it. In unshaded rows, no digit may be duplicated, and in grey-shaded rows, at least one digit must be duplicated. Cells with a white dot between them must contain consecutive digits.



12. Balanced Parity

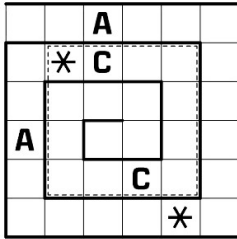
125 points

Fill the digits from 1-9 (1 to 5 in example) so that they do not repeat in any of the three directions. Shaded cells can contain only even digits. Cells with a white dot between them should contain consecutive digits. Each digit appears an equal number of times in the grid.

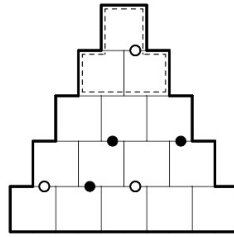


Assembled Grids

The assembled grids below are obtained by transferring the appropriate clues in the cages of the base puzzles.



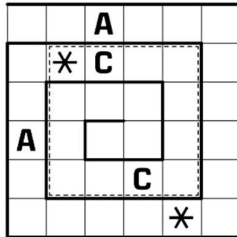
1. Magic Snail



5. Kropki Pairs

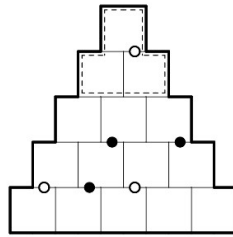


9. Hitori



WORD
CURL
CHECK
ALPHABETS
REPEAT

2. Word Labyrinth

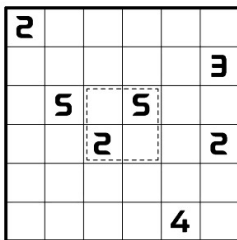


6. Vowel Letter Pairs

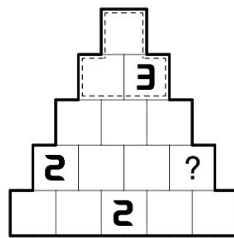
DO
ADD
A
LOT
DOTS



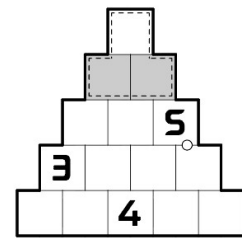
10. Pyramid Climbers



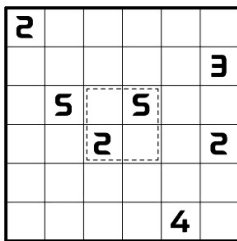
3. Cave



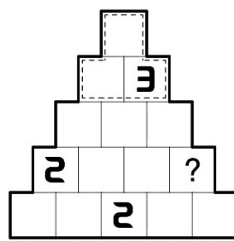
7. Battleships



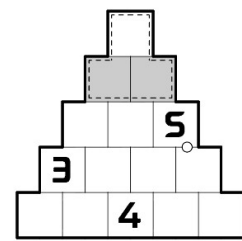
11. Pyramid



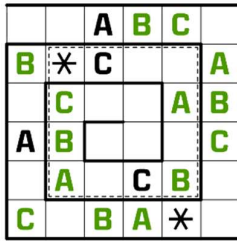
4. Linesweeper



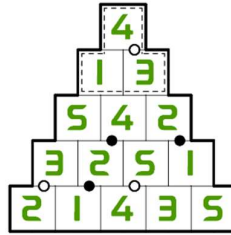
8. Tawamurenga



12. Balanced Parity



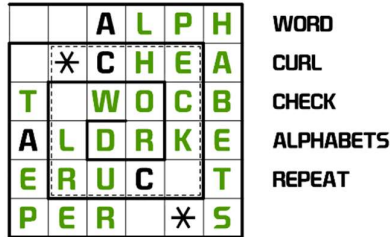
1. Magic Snail



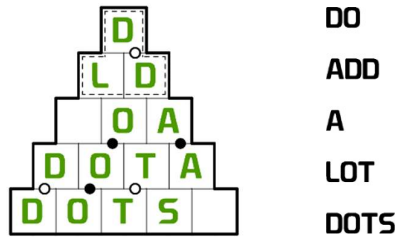
5. Kropki Pairs



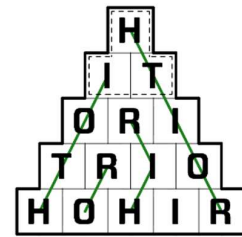
9. Hitori



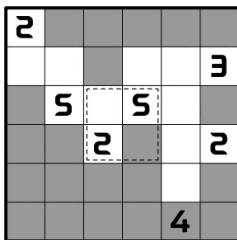
2. Word Labyrinth



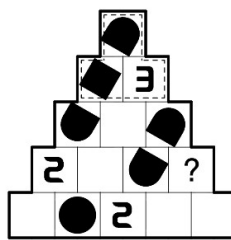
6. Vowel Letter Pairs



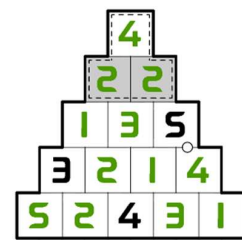
10. Pyramid Climbers



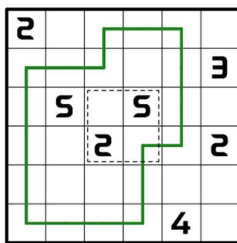
3. Cave



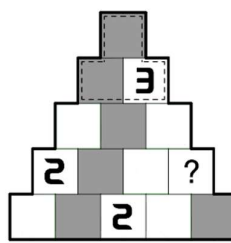
7. Battleships



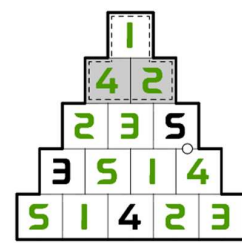
11. Pyramid



4. Linesweeper



8. Tawamurenga



12. Balanced Parity

Having witnessed the demise of all his trusted warriors, Ravana prepared for the final battle with Rama and Laxman, setting forth with his generals and entire army to kill Rama. In the intense battle that followed, Rama's arrows shattered Ravana's flag-staff, and Rama finally shot an arrow that severed Ravana's head. To his astonishment, however, a new head immediately appeared in its place, a cycle that repeated with every subsequent strike. Vibhishana disclosed the secret of Ravana's nectar of immortality, which was stored in his belly. Armed with this knowledge, Rama used a powerful celestial arrow from Sage Agastya to strike Ravana's navel, finally killing the ten-headed demon king.

To commemorate this legendary victory, the final playoffs will see eleven contenders race through 10 puzzles, with each puzzle representing one of Ravana's ten heads. One competitor will be eliminated at every puzzle, and the ultimate survivor will be crowned the "Puzzle Playoff Champion".

Playoffs Format

This final round is the individual playoffs which will be in a knock out horse race format between the top 11 participants from the individual rounds. The top 11 seeds will be determined based on the total points in the individual rounds. In case of a tie, the sum of ranks in individual rounds will be used to determine the seeds. In case there is still a tie, a randomizer will be used to determine the seeds.

There will be a total of 10 stages in the playoffs, with one puzzle in each stage. All 11 participants will start the first stage with a time advantage for the higher seeded participants. The top 3 seeds will start the playoffs, with seeds 4 to 7 starting 30 seconds later and seeds 8 to 11 a further 30 seconds later.

After finishing the puzzle participants will submit to the invigilators who will check the puzzle within a checking window of 30 seconds. If the puzzle is incorrect, the sheet will be handed back to the participant after the checking window is over and can be submitted again after correction. If the puzzle is correct the participant will transfer to the next stage and can start solving the puzzle after a transfer window of 30 seconds. The table that participant vacates will be not accessible for rest of the participants.

In each subsequent stage, there will be one less table than the previous stage and hence the last participant to arrive at that stage will be eliminated.

For clearing each stage participants will be awarded bonus points according to the following table

Stages 1-4	50 points each
Stages 5-7	75 points each
Stage 8	100 points
Stage 9	125 points
Stage 10	150 points

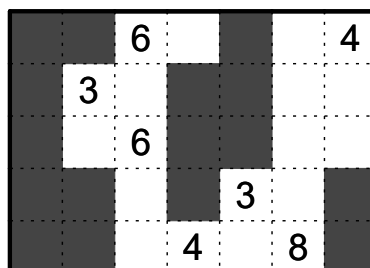
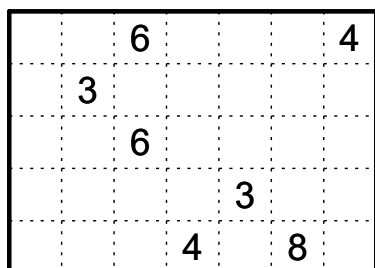
The playoffs will be completed either when the playoff duration of 60 minutes is over or once 10 of the 11 participants are eliminated from the race.

The points earned by the participants across the playoff rounds will be added to their base points from the individual rounds to crown the World Puzzle Champion.

1. Cave X 4

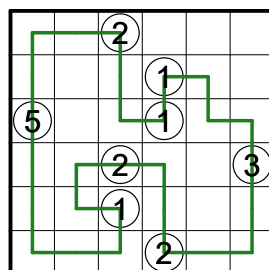
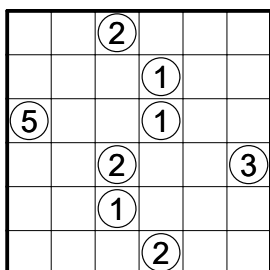
Shade some cells to leave behind a single connected group, known as the cave. There should not be any shaded cells enclosed within the cave. All numbered cells must be a part of the cave, with each number indicating the total count of cells connected vertically and horizontally to the numbered cell including the cell itself.

There will be 4 independent Cave puzzles.



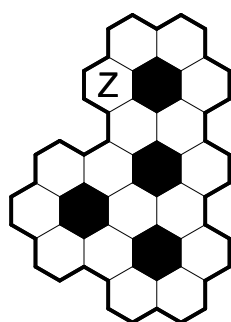
2. Geradeweg

Draw a non-intersecting loop travelling horizontally and vertically through the centers of some cells that passes through every circle. If the loop goes straight through a circle, the number on that circle indicates the length of the straight segment. If the loop turns at a circle, the number on that circle indicates the length of both loop segments extending from that circle.

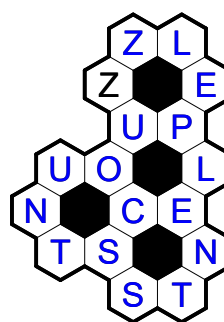


3. Hexa Words

Fill in the whole grid with letters. The six hexagonal cells around each shaded cell must contain one of the words from the given list. The word may start from any cell and can be read either clockwise or counter-clockwise. Each word should be used exactly once.



COUNTS
COUPLE
PUZZLE
SCENTS



4. TomTom

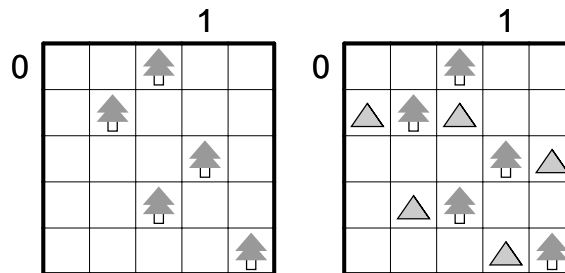
Place a number from 1 to N into each cell so that each row and column contains every number from that range with no repeats, where N is the side length of the grid. A clue represents the value obtained by applying an operation iteratively on the numbers in the region the clue is in. If no operation is given, it may be any of +, -, x, or /. Subtraction and division in regions with more than two numbers are handled by taking the largest number and subtracting/dividing all the others.

16		8	2	
	8			
			60	
0	1			1

16	1	4	8	3	2	5
	4	8	5	2	3	1
	2	1	4	60	5	3
0	5	1	3	1	4	1
	3	2	5	1	4	

5. Tents

For each tree in the grid, place a tent in an empty orthogonally adjacent cell, connecting to it. Tents may not touch one another, even diagonally. A clue given outside the grid represents the number of tents in the corresponding row or column.



6. Knight Hidato

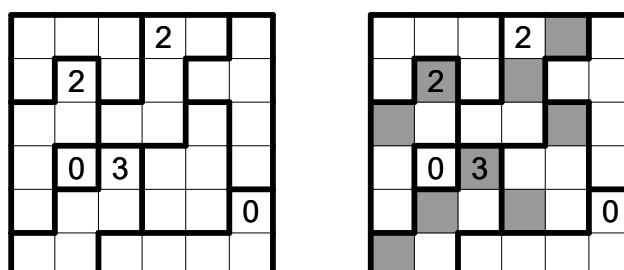
Place a number from 1 to N into each cell so that every number appears once. Every number must be a knight's move away from all numbers in the grid that are consecutive with it.

N = 20				
				2
			12	
				9
5				

		20	15	2	
19	14	3	12	7	
4	11	8	1	16	
	18	13	6	9	
	5	10	17		

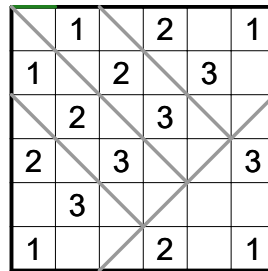
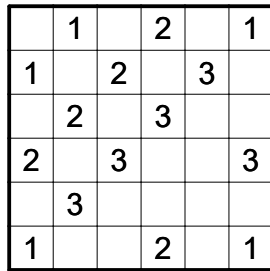
7. Heyawake

Shade some cells black so that all remaining white cells are connected as part of a single connected group; shaded cells cannot share an edge. No unbroken sequence of white cells in any row or column can cross two region boundaries. A number in a region indicates the number of shaded cells in that region. Regions with no number may have any number of shaded cells. Cells with numbers can be shaded over.



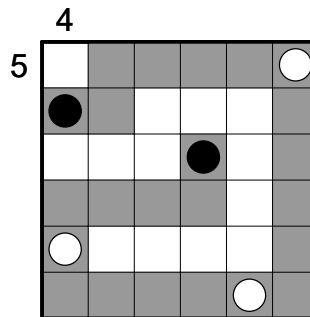
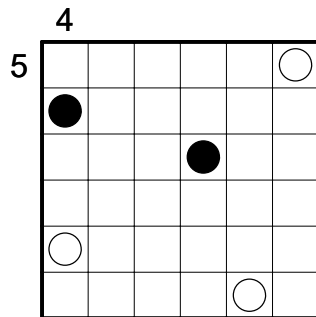
8. Slash Pack

Divide the grid into regions by adding diagonals into empty cells. Two diagonals cannot cross in one cell, and there can be no loose ends. Each region must contain the numbers 1 to N exactly once (where N is the largest number in the grid.)



9. Snake

Locate a snake (a 1-cell wide path) of unknown length in the grid, whose head and tail are marked by black circles. The snake does not touch itself, even diagonally. Numbers outside the grid indicate the number of snake cells in that row/column. White circles are part of the snake.



10. Araf

Divide the grid into regions of orthogonally connected cells. Each region must contain exactly two circles and have an area that lies strictly between the two numbers in the circles.

