

Mind The GAPP Vol. 38

Genuinely Approachable Pencil Puzzles from the CtC Discord
December 1, 2024 - December 31, 2024

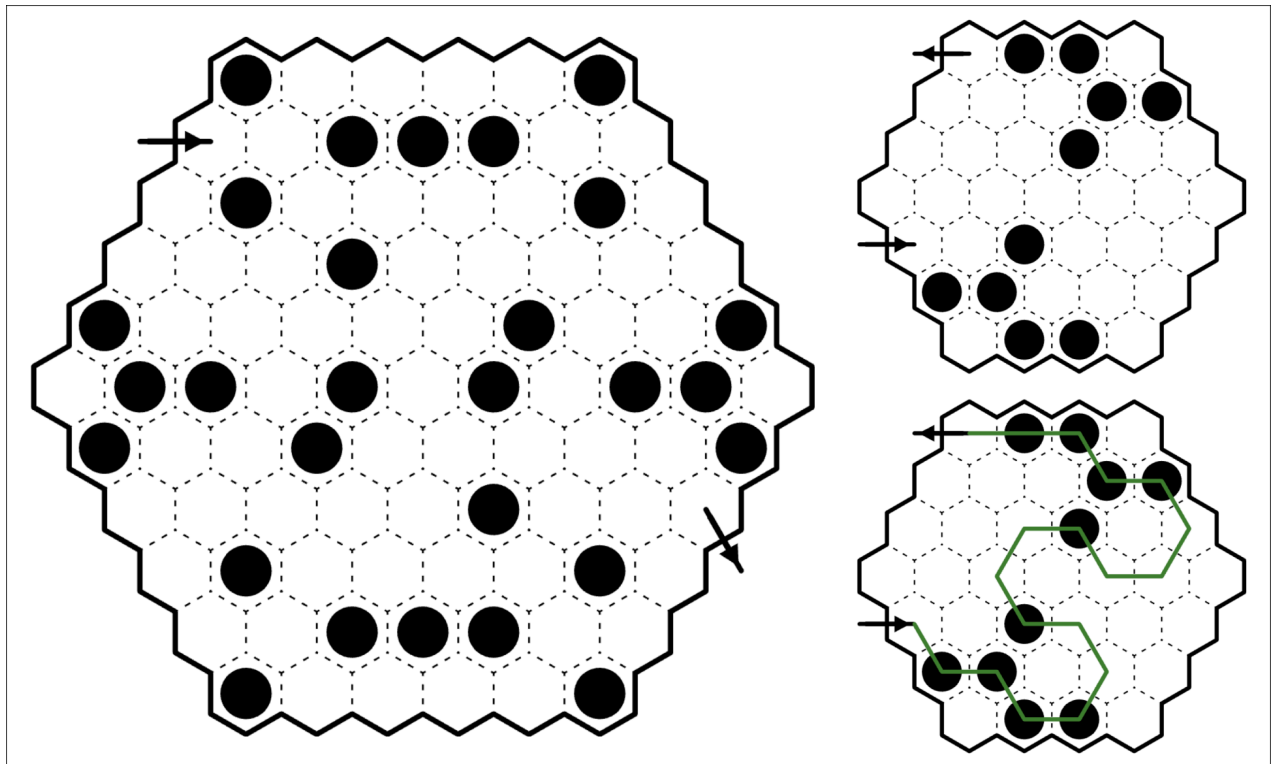
Merry Christmas and Happy New Year! Let's have a good 2025. Sorry for the delayed release, it's been a busy month. This time we have five bonus puzzles. Enjoy!

December 1, 2024: Crystal Mine | Walker

The Puzzle Square advent calendar (<https://puzsq.logicpuzzle.app/campaign/advent-calendar/2024>) is back again this year! 🧩📅 Each day, there is a featured genre (or set of related genres), and many authors post puzzles in the genre. We're planning to cover some of the ones that haven't been featured on GAPP yet! Today's featured genre is Akari, and I'll certainly need some light to get around this hexagonal **Crystal Mine**! 💡🔨

Rules: Draw a non-intersecting path through the centers of some cells connecting the two arrows. The path must collect every crystal, but must not occupy all three cells surrounding a vertex.

Here's a **GAPP 101**: (ROT13) Gur ab-iregrk ehvr vf irel pbafigenvavat! Va cnegvphyne, gur ybbc pna'g znxr n fvkgl qrterr ghea.



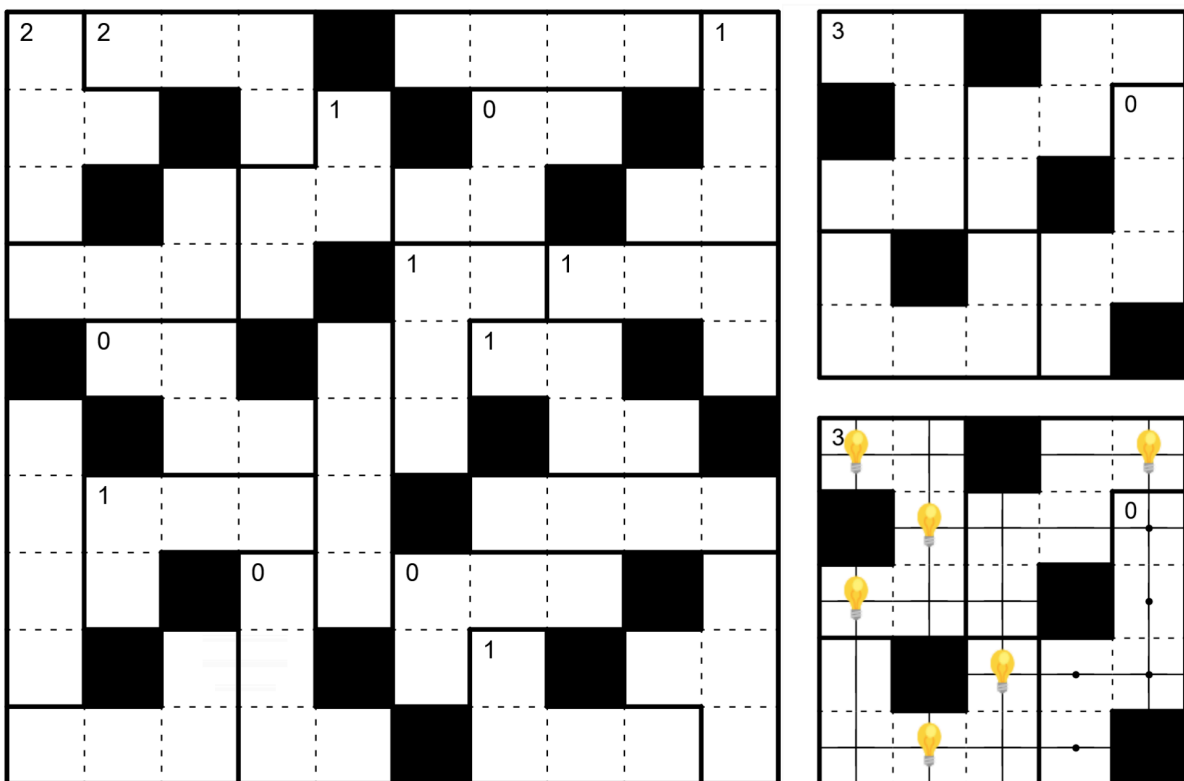
Example (Penpa+): <https://tinyurl.com/238bcmg4>
Puzzle (Penpa+): <https://tinyurl.com/2dg7skf9>

December 2, 2024: Regional Akari | Lavaloid

I was going to make a puzzle based on the Day 2 genre in the advent calendar, but it's Sudoku so I can't really do that. Here's a **Regional Akari** instead.

Rules:

- Place lights into some empty cells so that every cell is illuminated.
- Lights illuminate the cell they're in as well as all cells seen in a straight line horizontally or vertically, not obstructed by a black cell. Lights may not illuminate each other.
- Numbers in a region count how many lights are contained in that region.



Example (Kudamono): <https://tinyurl.com/2abszw7t>

Example (Penpa+): <https://tinyurl.com/2625gzgd>

Puzzle (Kudamono): <https://tinyurl.com/ycyhuxf5>

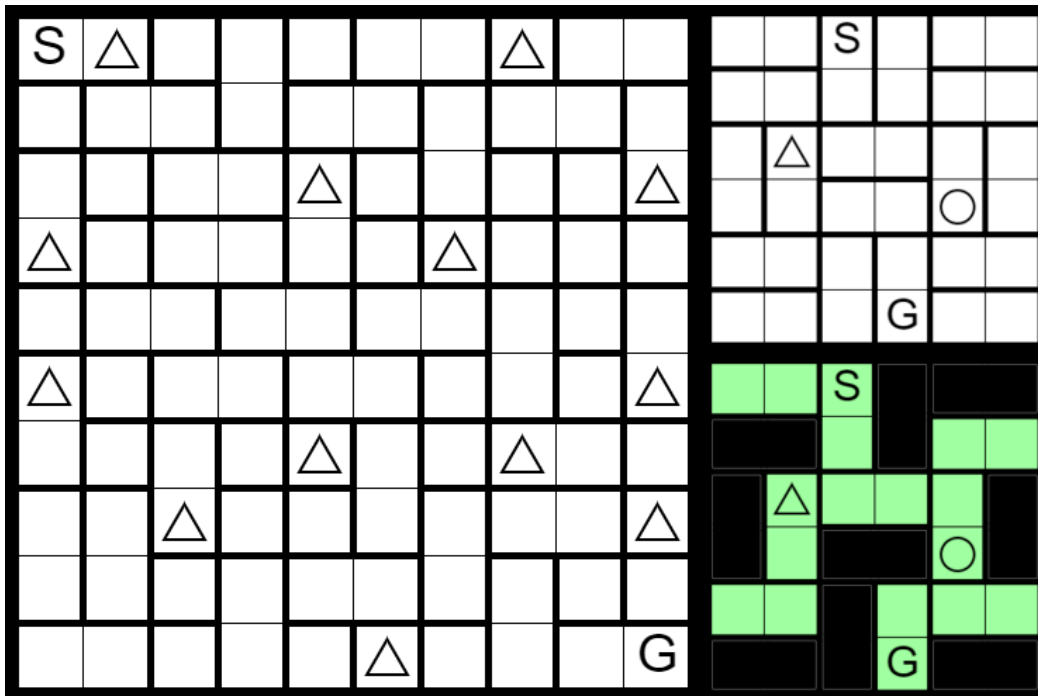
Puzzle (Penpa+): <https://tinyurl.com/2dngpjzq>

December 4, 2024: Nuri-Maze | Menderbug

Today's Puzzle Square Advent Calendar genre is **Nuri-Maze** (which happens to be another classic I had never constructed before). If you enjoy today's puzzle, you can find [many more of these on PuzSq](#).

Rules:

- Shade some cells so that each region is either fully shaded or fully unshaded and all unshaded cells form one orthogonally connected area with no loops. No 2x2 area may be entirely shaded or unshaded. Clues must be unshaded.
- All circles must lie on the shortest path from the S (start) to the G (goal) (i.e. the only possible path which does not visit any square twice), while triangles must not. (This means that triangles must lie somewhere along a dead end.)



Example (pzprxs) by Eric: <https://tinyurl.com/ycxxtntd>
Puzzle (pzprxs): <https://tinyurl.com/mumw76k5>

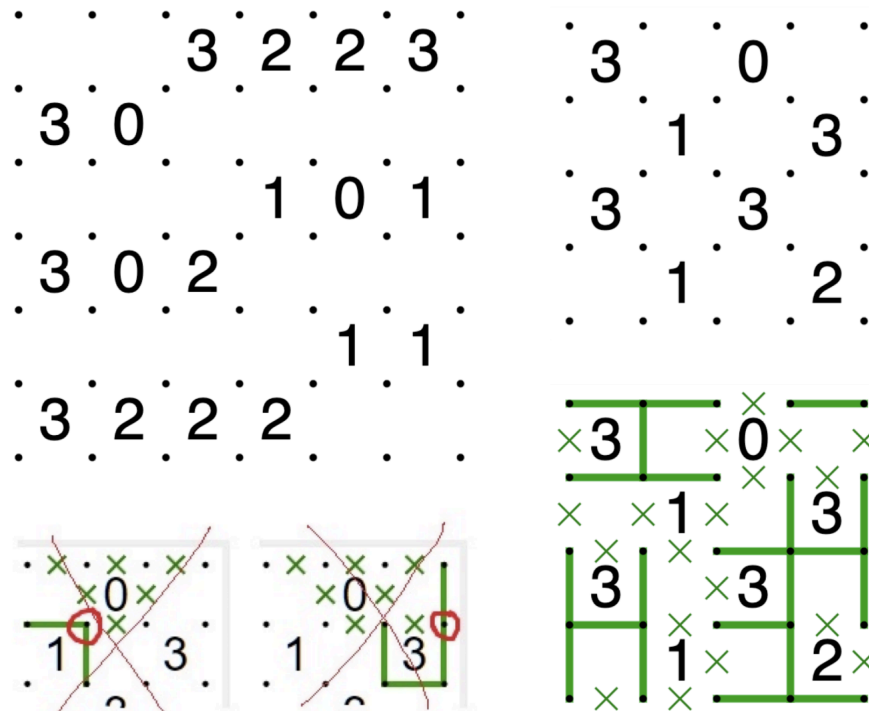
December 6, 2024: LITHERSLINK | Walker

After posting Syuma, I received another genre from the parallel universe, a **LITHERSLINK**. (Very conveniently, it's also today's Advent Calendar genre.) This genre can be tricky - I'd highly recommend checking out the example / previous one in GAPP!

Rules: Draw lines along the edges of some cells to form trees.

1. There must be more than one tree.
2. A tree must branch or terminate at every grid vertex. In other words, each grid vertex must have 1, 3, or 4 connected edges.
3. Trees must not contain loops.
4. A number indicates the number of edges of that cell that are included in a tree.

Here's a **GAPP 101**: (ROT13) Gur pbearf bs 1 naq 3 pyhrf ner cnegvphyneyl hfrshy jvgu gur iregrk ehvr. Vs lbh unir 0 be 1 frtzagf va gur 2 rqrtr pbaarpgvat gb gur iregrk, lbh pna cynpr fbzr frtzagf be Kf nebhaq gur 3 be 1. Purpx gur qvntenzf ba gur chmmyr vzntnr!



Example (puzz.link) on puzzlink rules page: <https://tinyurl.com/bd2u8ppc>
 Puzzle (puzz.link): <https://tinyurl.com/mvta5efj>

December 7, 2024: Square Jam | Lavaloid

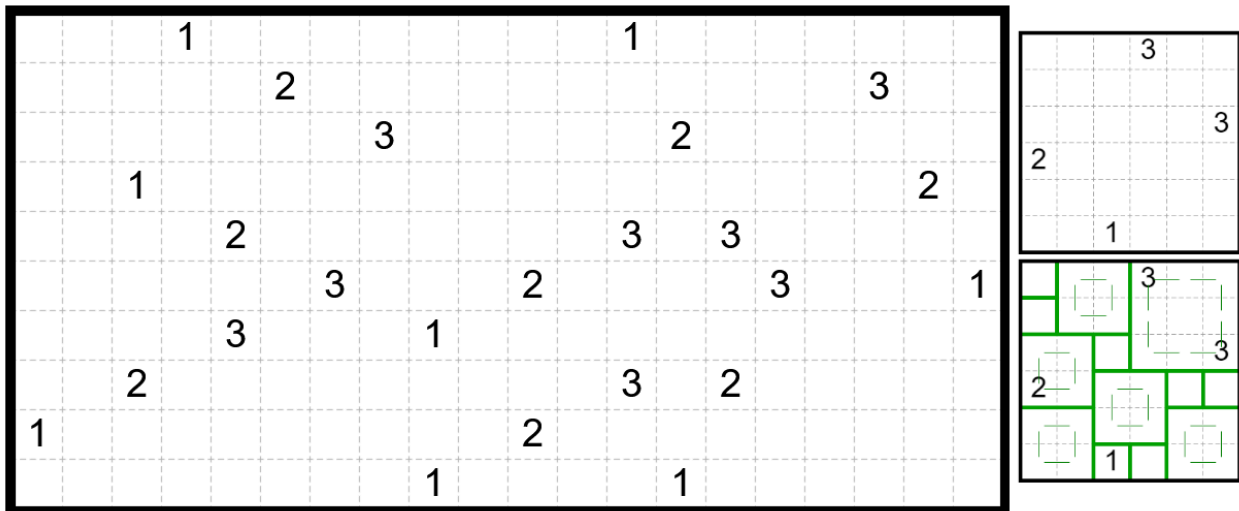
(**Editor's note:** Originally, Lavaloid posted a Coffee Milk for December 7, but it was discovered to be non-unique.)

Apologies everyone! The Coffee Milk was discovered to be non-unique. Thanks to @Rowan and @Lorem for spotting the error. Here's a backup puzzle for today's ✨ *Supersized Saturday* ✨ -- a **Square Jam!**

While we're in an advent mood, let's shout out a different advent calendar. The World Puzzle Federation Facebook page is also doing an advent calendar, where each day is a different puzzle from the WPC archive. Check them out here:

<https://web.facebook.com/profile.php?id=100064903771506>

Rules: 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.



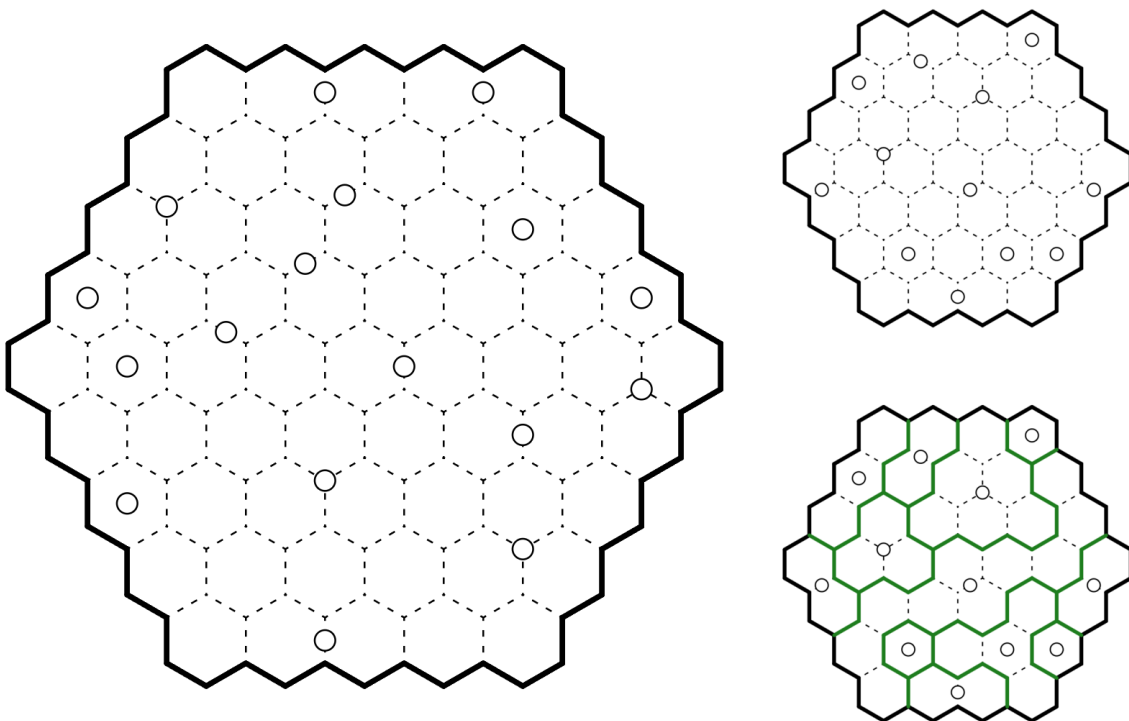
Example (puzz.link), by Eric: <https://tinyurl.com/y284zd7b>
Puzzle (puzz.link, landscape): <https://tinyurl.com/3yuahnap>
Puzzle (puzz.link, portrait): <https://tinyurl.com/yc5nfxyy>

December 8, 2024: Spiral Galaxies (Hexagonal) | bakpao

I don't really have anything interesting to talk about today and my list of chores for today is enormous - enjoy your Sunday!

Today's puzzle is a **Spiral Galaxies (Hexagonal)**!

Rules: Divide the grid into regions of orthogonally connected cells. Each region must contain exactly one circle and have 120° or 180° rotational symmetry about its centre. *Clarification: The circle must always be in the centre of the region.*

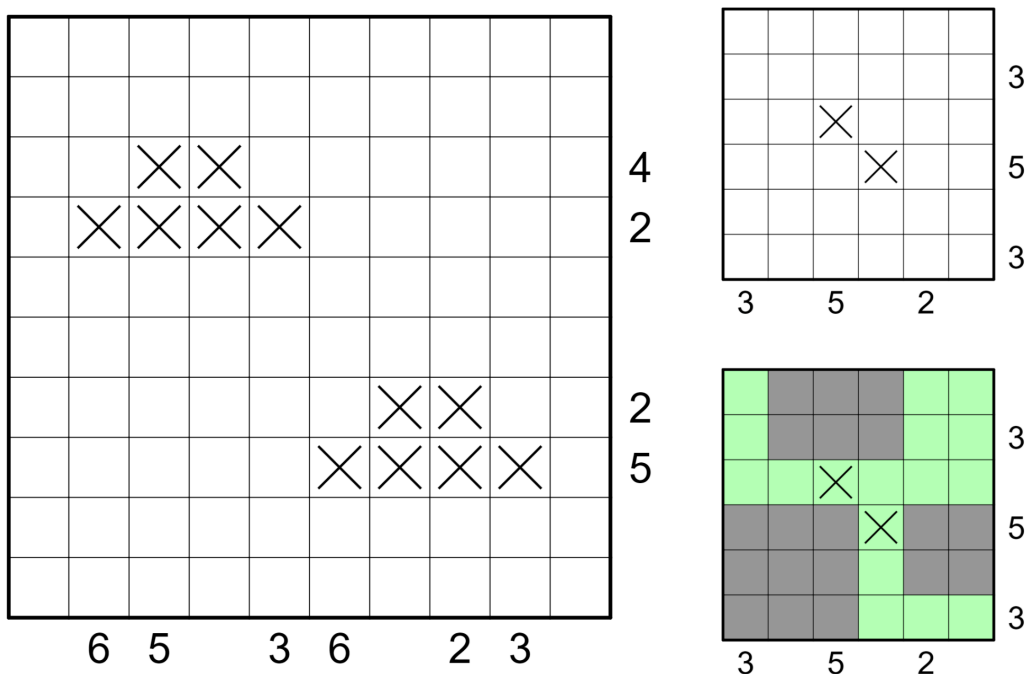


Example (Penpa+): <https://tinyurl.com/2a768q3g>
Example (Kudamono): <https://tinyurl.com/apyc83y>
Puzzle (Penpa+): <https://tinyurl.com/2ylokahf>
Puzzle (Kudamono): <https://tinyurl.com/3d46wbh3>

December 9, 2024: Clouds | Menderbug

Clouds is a very old genre that still shows up with some regularity in various contests. It's got a very nice and simple ruleset. The main reason that it has never appeared on GAPP is that most Clouds in the wild use only outside clues, which makes it pretty much impossible to construct a GAPP-level break-in for the puzzle. But we can cheat a little. For other similar genres it's reasonably common to specify some cells which cannot be shaded, so let's do the same here.

Rules: Shade some cells so that each orthogonally connected area of shaded cells is in the shape of a rectangle at least two cells wide and at least two cells tall. Rectangles may not touch one another, not even diagonally. A clue outside the grid indicates the number of shaded cells in the corresponding row or column. Cells containing an X cannot be shaded.



Example (Penpa+): <https://tinyurl.com/26kwwago>

Puzzle (Penpa+): <https://tinyurl.com/22svhaz2>

December 10, 2024: Yajirushi 2 | Freddie Hand

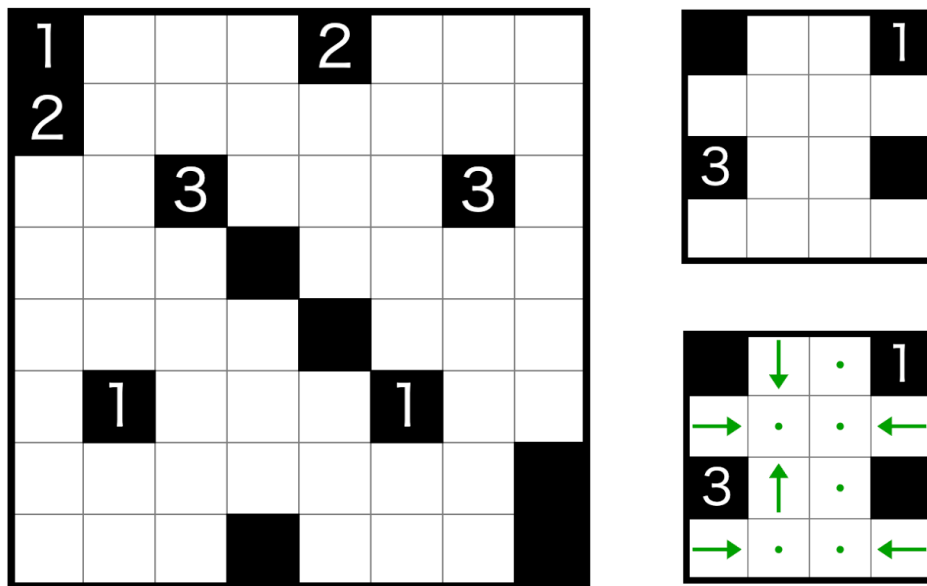
Solving today's puzzle is, unlike playing Rush E 2, something within the realm of human possibility. It's a **Yajirushi 2!**

I'm sure some people have tried to play versions of it adapted for 2 hands. No offence, but they're probably mediocre.

(My version is still in progress)

Rules: Place arrows in some of the empty cells such that the remaining empty cells form an orthogonally connected area. Two arrows which point toward each other form a pair. All arrows must be paired. Paired arrows must not be in adjacent cells, and all cells between a pair of arrows must be empty (*in particular, arrows cannot point through shaded cells*). Numbers indicate how many orthogonally adjacent cells contain an arrow.

Notation Tip: If you're on PC or a laptop, you can notate circles (indicating a cell must contain an arrow) by pressing Q/A/Z and notate a dot (indicating a cell must be empty) by pressing W/S/X.



Example (pzprxs), from pzprxs rules page: <https://tinyurl.com/mwe435ff>

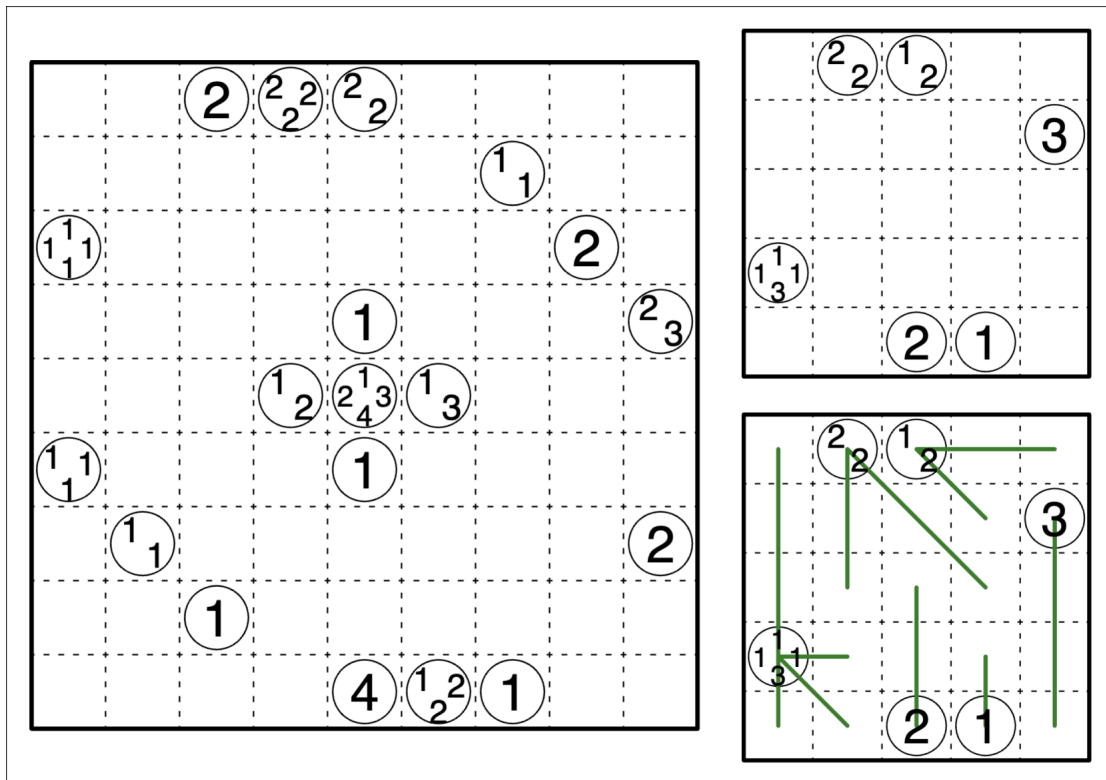
Puzzle (pzprxs): <https://tinyurl.com/nhj8d9cs>

December 11, 2024: Watches | Walker

We covered today's advent calendar genre, Spokes, just a few months ago. So here's something similar: **Watches**, a one-off genre that's stuck with me ever since I solved it in the 2013 LMI Puzzle Marathon.

Rules: Draw straight lines of the given lengths extending from each clue. Lines can extend orthogonally or diagonally. Lines can not touch each other or other circles. Each empty cell of the grid contains exactly one line.

Note: Lines can't cross in an X shape (this is counted as "touching".)



Example (Penpa+): <https://tinyurl.com/29c2zz5c>

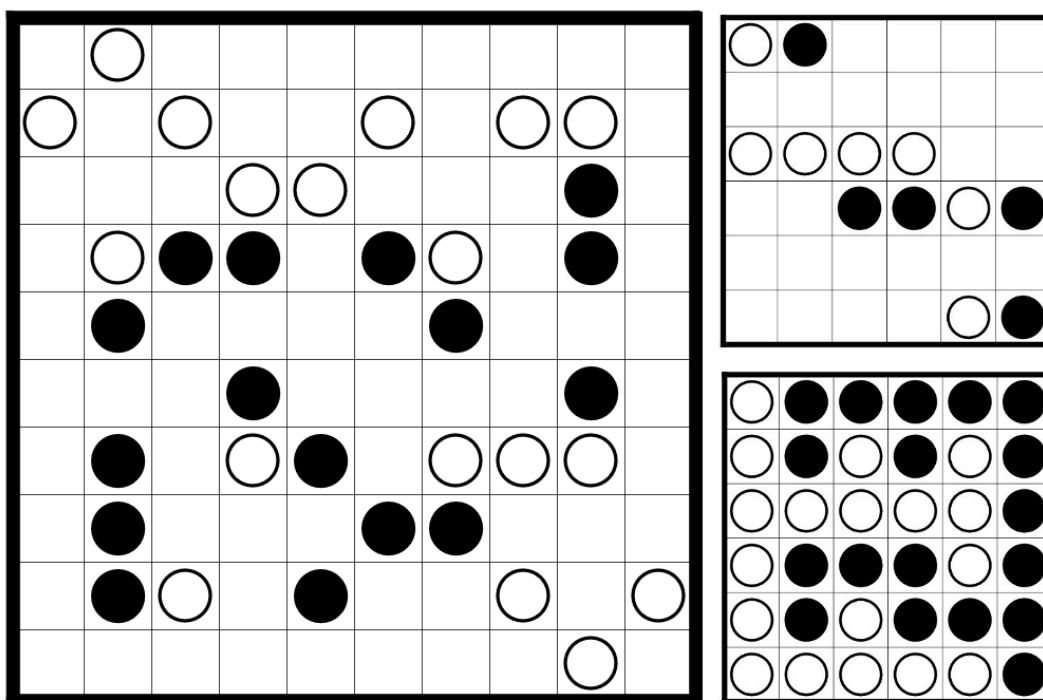
Puzzle (Penpa+): <https://tinyurl.com/2ckmpfb3>

December 12, 2024: Yin-Yang | Lavaloid

Today's GAPP uses a very important strategy for solving **Yin-Yang** puzzles! There were a few other genres featured before in GAPP that also uses the same deduction, so you may be already familiar with it. But if not, feel free to check out the **GAPP 101** in [Appendix 1](#) or figure it out yourself.

Also, I've been informed that there is another advent calendar currently running in this server-- the Snackdoku Advent Calendar is posting tiny variant sudoku daily up till Christmas, and it's running alongside Snackdoku Season 8! If there are enough advent calendars maybe we can even make an [advent calendar advent calendar](#).

Rules: 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 all one type of circle.



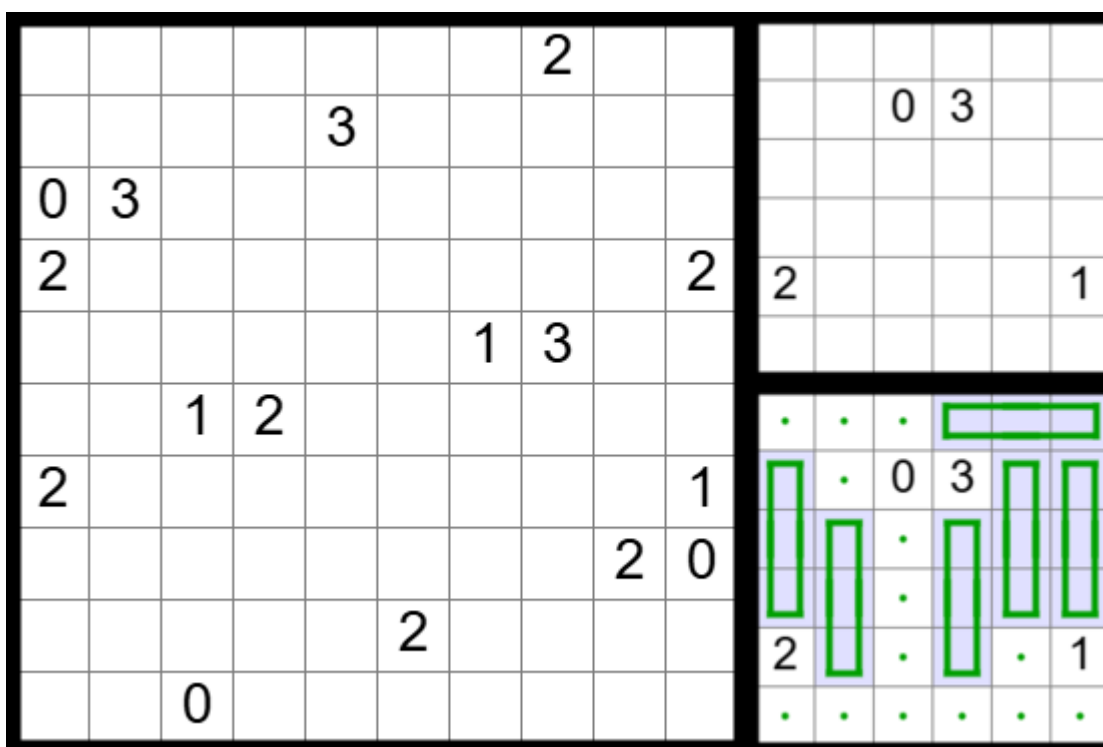
Example (puzz.link) by jovi: <https://tinyurl.com/mp83kspe>

Puzzle (puzz.link): <https://tinyurl.com/4z3kns2w>

December 13, 2024: Wittgenstein Briquet | bakpao

Today's genre on Puzzle Square's advent calendar is Kropki Pairs. It sure is a shame today isn't a Saturday - the stars almost aligned perfectly for the long-awaited supersized Kropki. Instead, I've been on a **Wittgenstein Briquet** writing spree lately. I wrote 3 of them for the upcoming [REDACTED] and it was also selected as a genre for the [REDACTED] of [REDACTED]. Perfect excuse to write one for GAPP as well while I'm at it!

Rules: Locate some 1x3 blocks in the grid which may not overlap each other or the clues. A clue represents how many of the (up to) four surrounding cells are used by blocks. All cells which aren't used by blocks must form one orthogonally connected area.



Example (puzz.link) by shye: <https://tinyurl.com/2pjde97t>

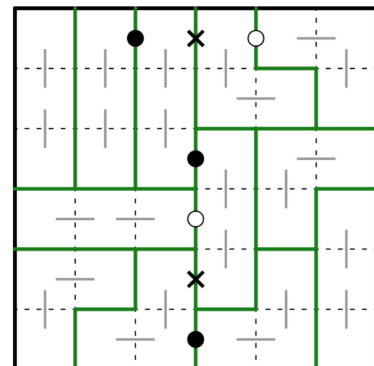
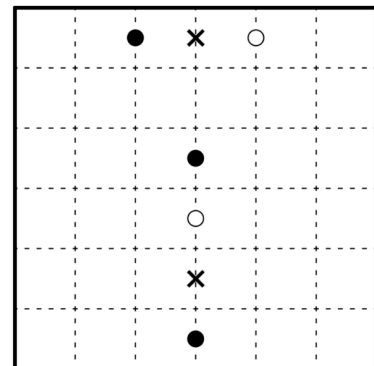
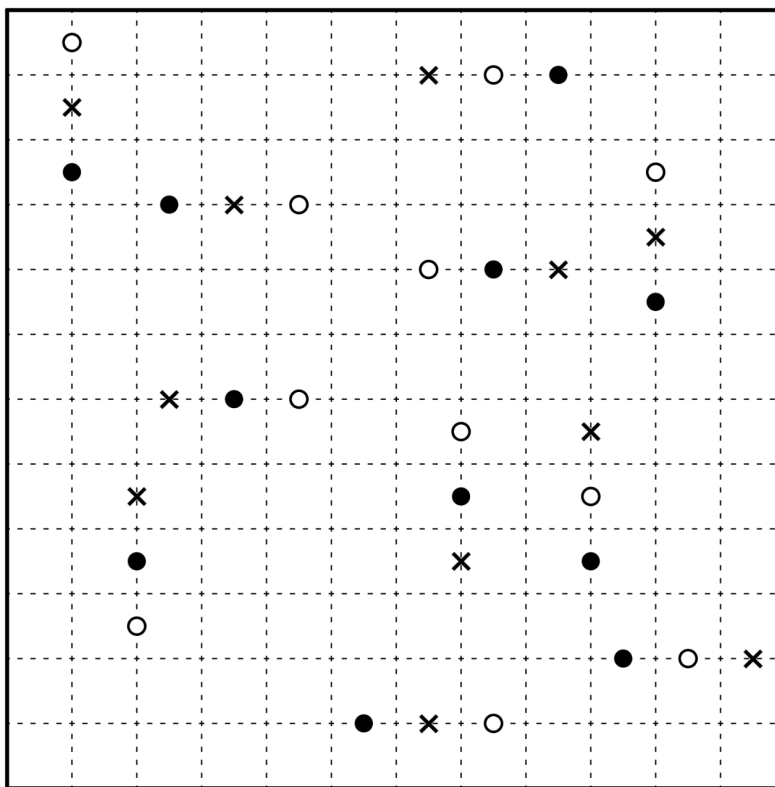
Puzzle (puzz.link): <https://tinyurl.com/2n3d88zr>

December 14, 2024: Tromino Divide | Menderbug

It is time for the epic conclusion of the **Tromino Divide** Cinematic Universe, where all your favourite characters from the series finally come together.

Rules: Divide the grid along dotted lines into regions of exactly three cells. Clues separate two different regions with the following conditions:

- A black dot separates two regions with the same shape and orientation.
- A white dot separates two regions with the same shape but different orientations.
- A cross separates two regions with different shapes.



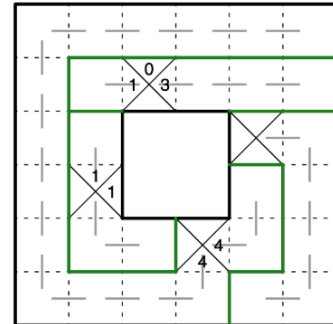
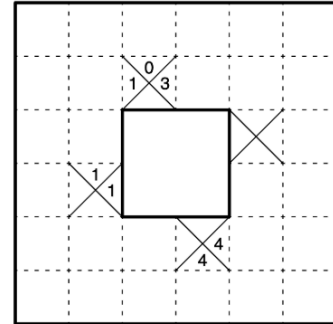
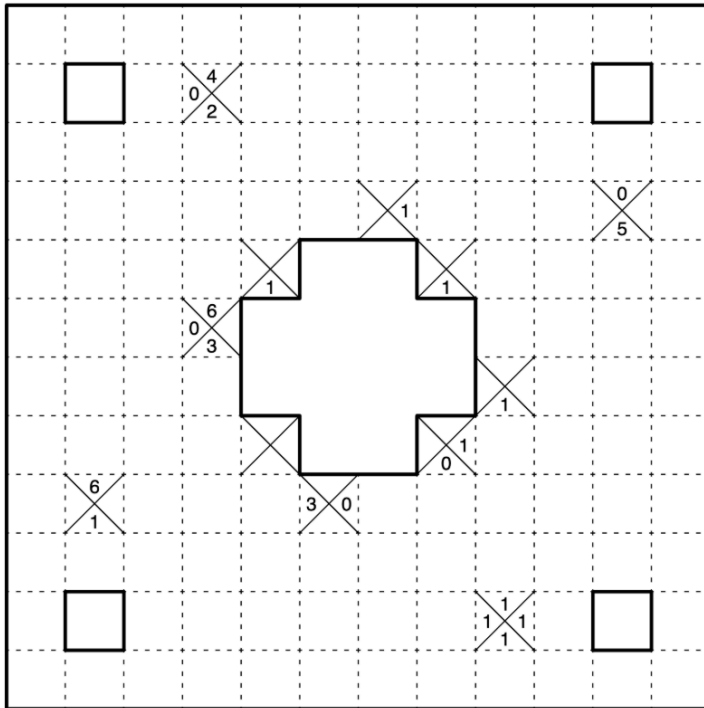
Example (Penpa+): <https://tinyurl.com/2xvcp6c2>

Puzzle (Penpa+): <https://tinyurl.com/2az39sjl>

December 15, 2024: Compass | Freddie Hand

Navigating with a **Compass** is always trickier when there are holes in the earth that you have to watch out for. And don't forget about falling off the edge!

Rules: 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.



Example (Penpa+): <https://tinyurl.com/28munmy2>

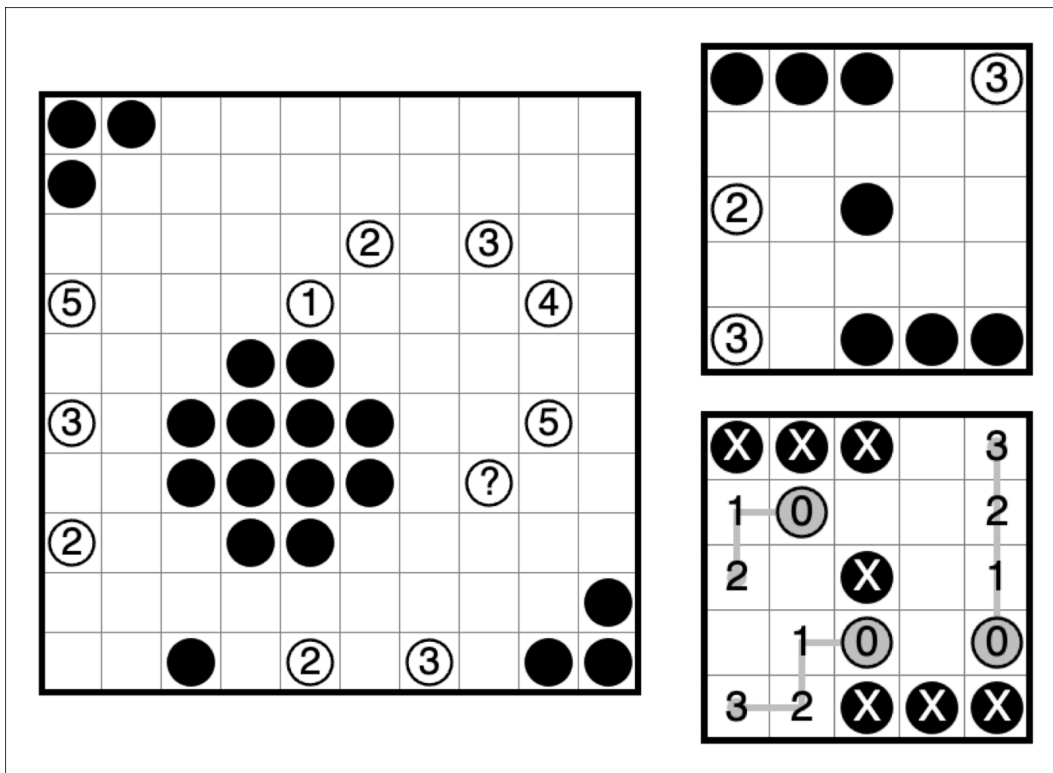
Puzzle (Penpa+): <https://tinyurl.com/24luc9o8>

December 16, 2024: Time Bomb | Walker

Time Bomb is coming up later this week on the puzsq advent calendar. I purchased this large bomb to use in the puzzle... but it looks like the fuse has just been lit 😱💣 Better solve it before it explodes! (Huge thanks to X_Sheep for building the interface in time for the advent calendar!)

Rules: Move each bomb so that every stone gets blown up. A bomb must take the indicated number of one-cell steps vertically or horizontally and then explode, destroying all stones in the 3x3 area surrounding it in its new location. Bombs may at no point along their path be orthogonally adjacent to another bomb or its path. Bombs may not pass through stones.

Notation Tip: You can mark bomb endpoints with dotted line 0s, and drag from an endpoint to a bomb! You can also mark Xs on stones to indicate that they've exploded - look at the example solution.



Example (pzprxs) from rules page: <https://tinyurl.com/2s4crjvd>
 Puzzle (pzprxs): <https://tinyurl.com/2p9p2aam>

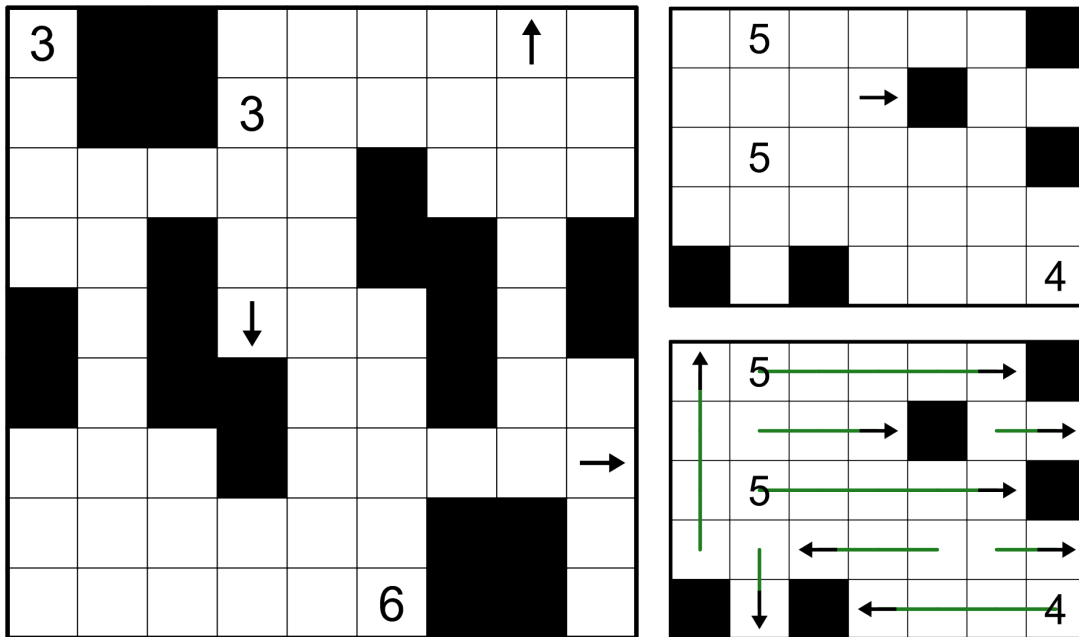
December 17, 2024: Sniping Arrow / スナイピングアロー | Lavaloid

We're back to our regularly scheduled programming with today's **Sniping Arrow / スナイピングアロー!** We have quite a lot to go through so let's keep this intro short and get on with the

Rules:

- Draw some straight, non-crossing, non-overlapping arrow shaft lines, covering all unshaded tiles. Arrows must span at least two cells.
- Each shaft has exactly one arrowhead, marking its direction. Some arrowheads may already be given.
- Numbers measure the shaft length, and must only be placed at the end that is opposite of the arrowhead.
- No two orthogonally adjacent arrows may be of the same length, and no two arrowheads may be orthogonally adjacent.
- Arrowheads cannot point at another arrowhead, unless it is blocked by a shaded cell.

Interface note: If you're using Penpa+ interface, you will need to draw in all arrow lines with Line > Normal and all arrowheads with Composite > Object > ArrowS (drag in the direction of the arrow to input). You may also use Shape > Arrow > Small and Composite > Loop > Line X if it's more convenient.



Example (Kudamono) by にしなんとか: <https://tinyurl.com/tav8x28u>

Example (Penpa+) by にしなんとか: <https://tinyurl.com/25dpxxf>

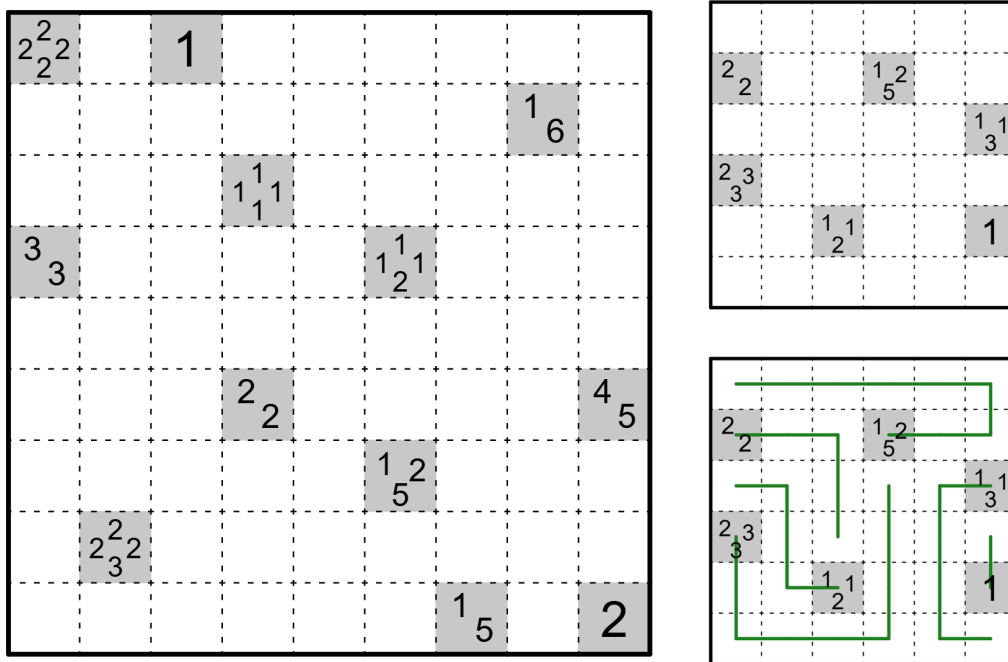
Puzzle (Kudamono): <https://tinyurl.com/tvxz8uwt>

Puzzle (Penpa+): <https://tinyurl.com/2byjvkry>

December 18, 2024: Move Data | bakpao

With today's **Move Data** we dive into the wonderful, endless world of Naoki Inaba genres once more. I don't think I've ever actually seen any puzzles of this type outside of Inaba's own website, but then again this isn't the most searchable genre name. My search did remind me of a mildly cursed spin on Curve Data that goes by the same name, which I had forgotten about. I think I'll spare you from it for now, though I have added it to my ever-growing list of genre ideas for GAPP to revisit in the future 🐱.

Rules: Draw paths through the centers of cells such that each path starts from a shaded cell and all cells are used by a path. Paths may not cross each other or themselves. Clues represent the lengths of the line segments appearing along the path, not necessarily in order. Each number is used exactly once in its path.



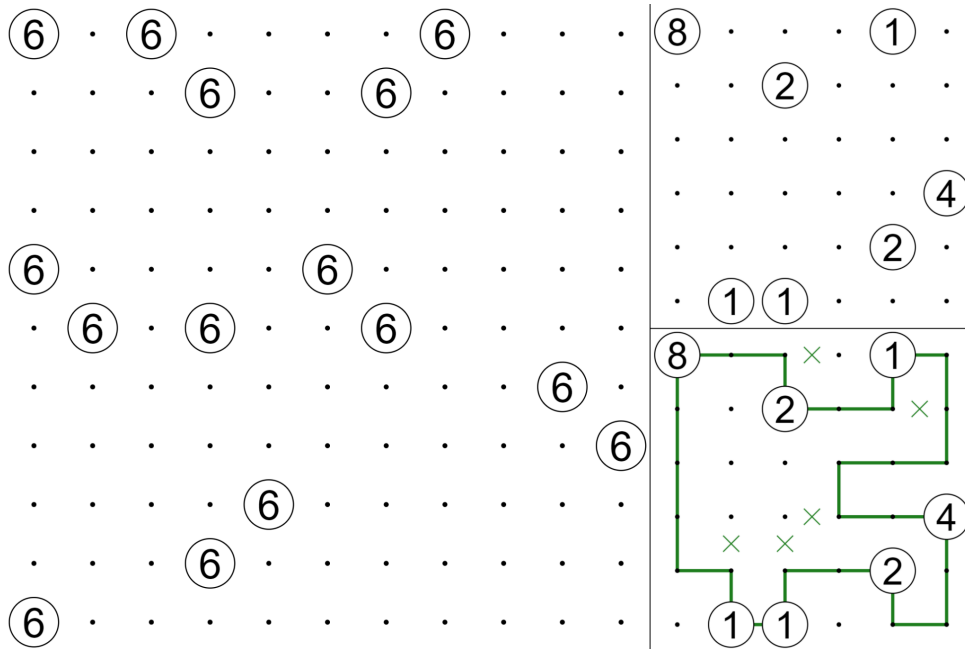
Example (Penpa+): <https://tinyurl.com/25lt6cx3>

Puzzle (Penpa+): <https://tinyurl.com/2cykp9av>

December 19, 2024: Multiplication Link | Menderbug

Returning to genre's from PuzSq's Advent Calendar, today we've got **Multiplication Link**.

Rules: Draw a single orthogonal closed loop through some of the grid vertices. The loop must turn at cells with circles, and numbers give the product of lengths extending from the clue. (*Note: in the Kudamono version, the loop travels through cell centres instead.*)



Example (Kudamono): <https://tinyurl.com/2rk5xhkt>

Example (Penpa+): <https://tinyurl.com/26dumksl>



Puzzle (Kudamono): <https://tinyurl.com/ywp3kbus>

Puzzle (Penpa+): <https://tinyurl.com/2da5ua35>

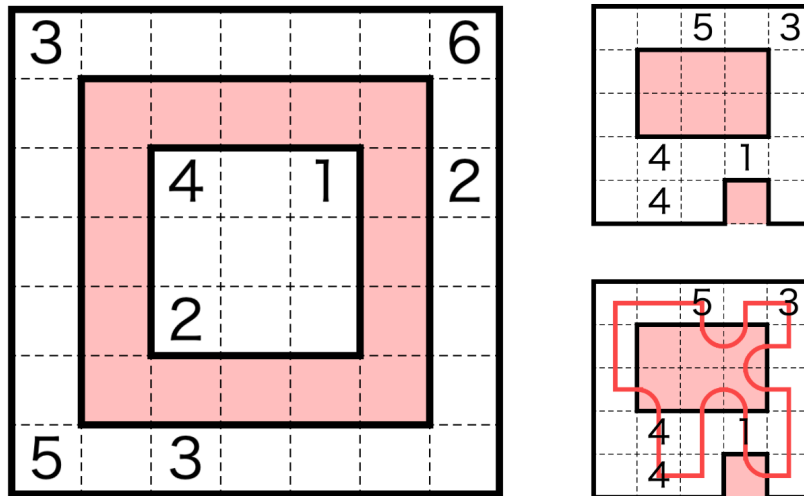
December 20, 2024: Fire Walk | Freddie Hand

Around this time of year, we tend to hear a lot of chatter about snow and the cold. This **Fire Walk** is for our Australian friends tired of the same old schtick. I carefully engineered the puzzle to not work with ice or water!

Rules: Draw a loop that passes through every numbered cell. The loop cannot branch or cross itself. Orange cells represent fire, while regular cells represent ground. The loop must turn on every orange cell it visits. The loop is allowed to visit an orange cell twice *if the centre of the cell is inside the loop*. A number indicates how many cells make up the continuous grounded section of the loop that the number is on.


 **Note/Warning**  : When you draw two perpendicular segments into a fire cell, they will automatically connect to form a turn. You can (and sometimes should!) rectify this by **clicking on the cell centre**. Clicking on the cell centre will also change the orientation of any turns in that cell.

For an illustration: look at the top right 3 in the example puzzle. If you draw the segments you deduce from this clue, you'll get a tiny premature loop, at which point you will notice R2C4 has to be a double turn. This pitfall is less obvious in some other scenarios, so be careful!



Example (pzprxs): <https://tinyurl.com/2f9fchun>
Puzzle (pzprxs): <https://tinyurl.com/2ycw3z4h>

December 21, 2024: Lohkous | Walker

This is my last post during the PuzSQ advent calendar.  I couldn't write a Supersized The Longest because we haven't covered the genre yet; so instead, here's a **Supersized Lohkous**, written at the local store. I'm looking for an extra large holiday tree - I wonder if I'll find one here?



Rules: Divide the grid into regions along dotted lines such that each region contains exactly one clued cell. When dividing a region into rows or columns, each continuous segment length must be represented by one of the numbers. Each number in the clue must be represented by at least one segment length.

Here's a **GAPP 101** to help get started: (ROT13) Nyy fvatyr-ahzorerq pyhrf zhfg or fdhnerf!

The image shows a large grid puzzle on the left and two smaller grids on the right. The large grid is a 10x10 grid with various numbers placed in cells. The numbers are: (1,3)=3, (1,4)=4, (1,8)=1, (1,9)=5, (1,10)=1; (2,1)=1, (2,2)=4, (2,3)=7, (2,8)=2; (3,1)=1, (3,2)=3, (3,3)=2, (3,4)=1, (3,8)=2, (3,9)=2, (3,10)=1; (4,1)=1, (4,2)=3, (4,3)=1, (4,4)=1, (4,5)=3, (4,10)=5; (5,1)=1, (5,2)=4, (5,10)=4; (6,1)=1, (6,8)=1, (6,9)=4, (6,10)=1; (7,3)=3, (7,4)=3, (7,8)=1, (7,9)=2, (7,10)=3; (8,3)=3, (8,10)=1; (9,1)=1, (9,2)=4, (9,6)=6, (9,8)=2, (9,9)=4, (9,10)=3, (9,11)=3, (9,12)=4.

The two smaller grids on the right are 5x5 grids. The top one has numbers: (1,1)=2, (1,4)=1, (1,5)=4; (3,3)=1, (3,4)=2, (3,5)=3; (5,4)=1, (5,5)=5. The bottom one has numbers: (1,1)=2, (1,4)=1, (1,5)=4; (3,3)=1, (3,4)=2, (3,5)=3; (5,4)=1, (5,5)=5. The bottom grid has green lines indicating a solution path.

Example (puzz.link) by Lavaloid: <https://tinyurl.com/49c75z4c>
Puzzle (puzz.link): <https://tinyurl.com/4s839z7s>

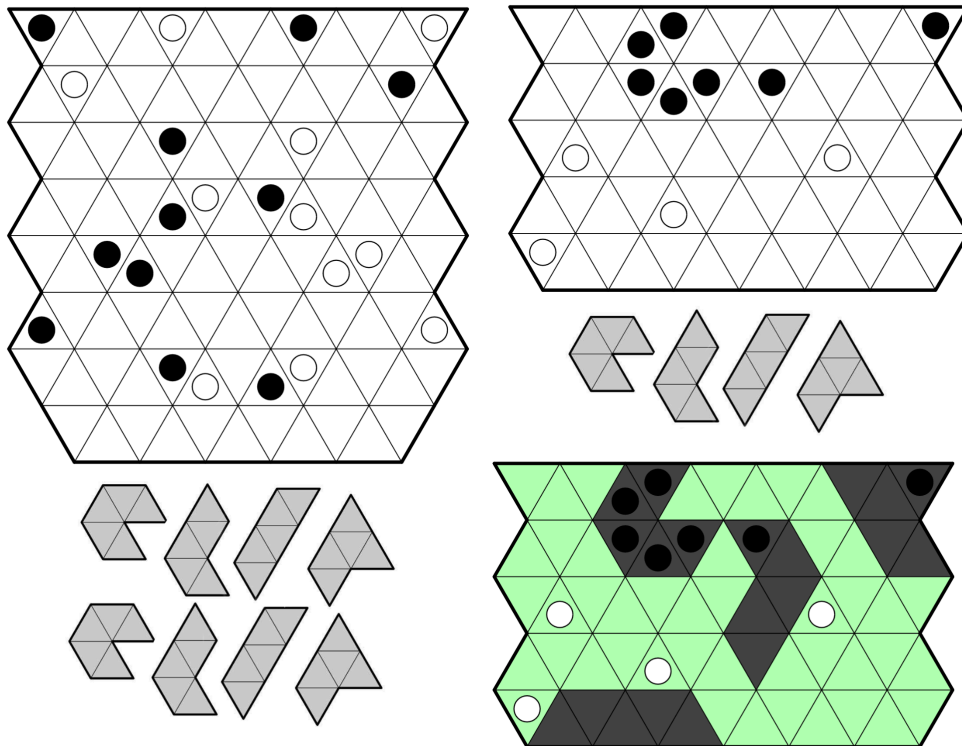
December 22, 2024: Statue Park (Triangular) | Lavaloid

Today's ✨ *Strange Shaped Sunday* ✨ is a **Statue Park (Triangular)**! I was surprised to find that there are only 4 possible shapes you can make with five orthogonally adjacent triangle cells. (pentotri? 😊) With four triangle cells, there are only 3 possible shapes.

Rules: Place each shape from the shape bank into the grid exactly once such that no two shapes share an edge, and all unused cells form one orthogonally connected area. Rotating and reflecting shapes is allowed. Cells containing a black circle must be used by a shape, and cells containing a white circle must not be used by a shape.

Interface note: If you're using shaded cells to mark used shapes, you will need to unshade them for answer check to work correctly.

GAPP 101: (ROT13) Hafunqrq pryy pbaarpgvivgl vf irel vzcbegnag va guvf chmmyr. Va fbzr cynprf, lbh znl arrq gb fcbg bar-pryy jvqr tncf gung hafunqrq pryyf arrq gb cnff guebhtu.



Example (Penpa+): <https://tinyurl.com/2dhc7eol>
Puzzle (Penpa+): <https://tinyurl.com/2bnpx2vg>

December 23, 2024: Balloon Box | bakpao

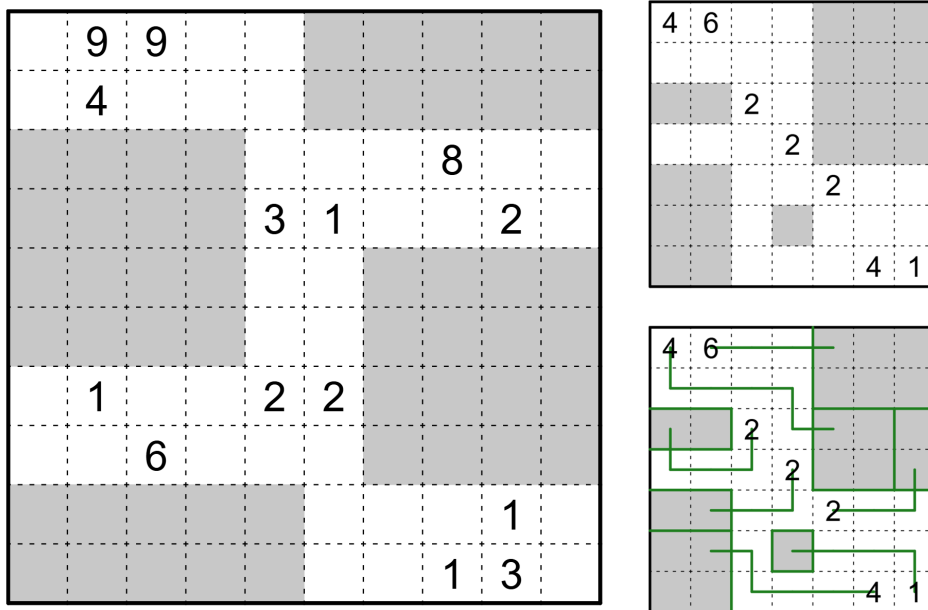
Today's puzzle is a **Balloon Box**! This is one of the Omopa genres of Nikoli's recent [Puzzle Communication Vol. 189](#). It immediately struck me as one of the most interesting and unique genres to come out of Nikoli in a while. The rules are a bit lengthy, so be sure to read them carefully. Grey regions represent balloons, while paths represent the strings attached to them!



Rules: Draw several non-intersecting paths such that each path starts at a given clue and ends at a grey cell, and divide the grey cells into rectangular regions such that the area of the region is equal to the number clue that the region is connected to via its path. Each region connects to exactly one path. All empty cells in the grid must be used by a path or connected region. Different paths and regions cannot overlap. Cells used by the same path (which are not consecutive line segments) do not touch orthogonally.

Interface note : This puzzle contains both line drawing and region division elements. Both are required for answer check to trigger. The Line and Composite -> edgesub modes are preselected; use Line to draw the paths, use Composite -> edgesub to draw regions. Make sure paths do not continue past the cell where they enter their respective regions. See the example image to familiarize with the format the answer checker expects.

The interface/answer mode isn't the most ideal. If you've solved the puzzle but have to spend some time correcting inputs to get answer check to trigger, feel free to correct your time according to your best judgement.



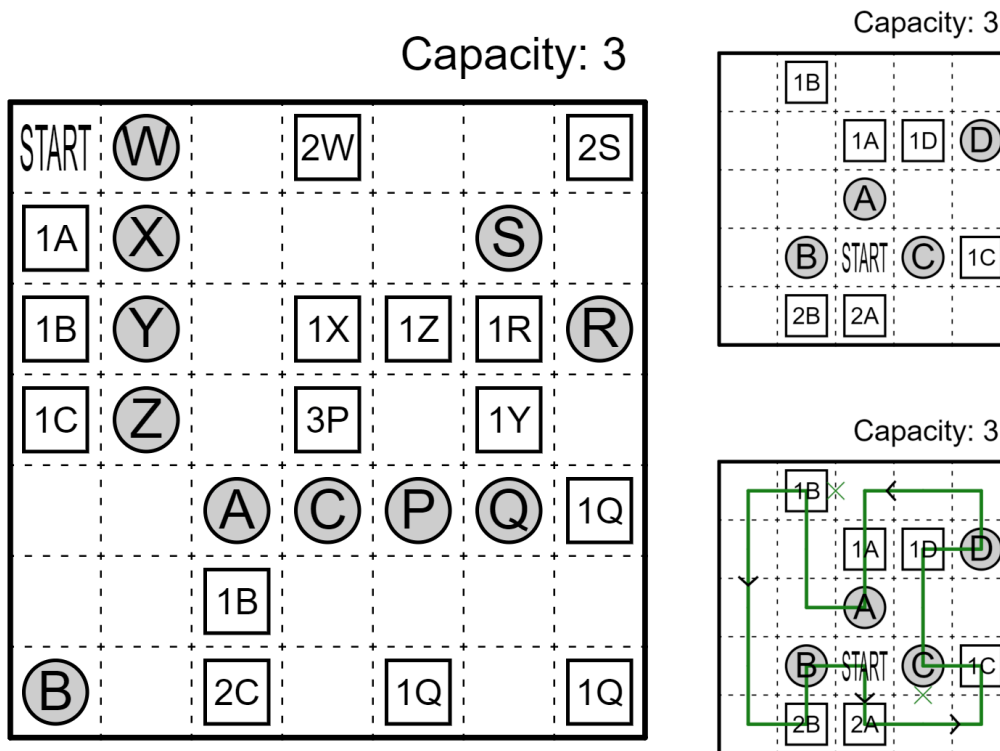
Example (Penpa+): <https://tinyurl.com/2ctgt3lu>

Puzzle (Penpa+): <https://tinyurl.com/2y2494bd>

December 24, 2024: Transporter | Menderbug

Depending on which part of the world you live in and how you celebrate, Christmas is imminent or has already begun! Which means it's time for Santa to figure out how best to deliver all the presents. It's a tricky logistical problem, but you can help him out by solving today's **Transporter** puzzle!

Rules: Plan Santa's delivery route. Santa's route starts and ends at the North Pole, marked "START", and moves from cell centre to cell centre. He doesn't have time to retrace his steps, so he will never visit any cell a second time. Santa must pick up all the presents (marked by boxes) and deliver them to their respective homes (marked by circles). The number on a present indicates its weight and the letter indicates which home it has to be delivered to. Since Santa can visit each home only once, he has to pick up all of the relevant presents beforehand (though he may already be carrying other presents if he has room to spare on his sleigh). Santa can never carry more total weight than indicated by the capacity above the grid. (*You can find the usual, non-thematic rules in the Penpa links.*)



Example (Penpa+): <https://tinyurl.com/2bwwmaje>
 Puzzle (Penpa+): <https://tinyurl.com/2daybqjs>

December 25, 2024: Christmas Mini Puzzle Pack (Guide Arrow, Double Choco, Family Photo, Ice Walk, Fire Walk) | the GAPP team, posted by Freddie Hand

A chill in the air
 puzzles on the Christmas tree
 let's get KFC

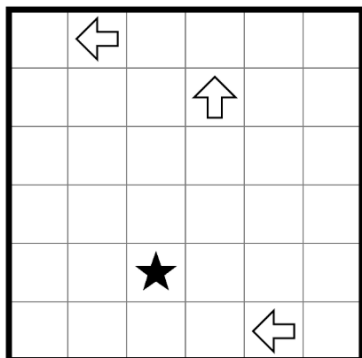
Happy Holidays from the GAPP team! Here's a few snacks to keep your socks stuffed.

As a small extra gift, here's a **GAPP 101** for the Fire Walk: (ROT13) Vs n sver pryry unfngr yrnfg
 bar pebff znex, vg pnaabg pbagnva n qbhojr ghea.

Guide Arrow | Lavaloid

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

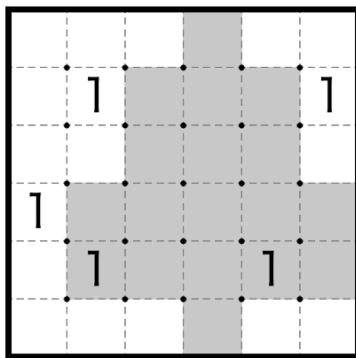
Puzzle (puzz.link):
<https://tinyurl.com/2vhxure6>



Double Choco | Menderbug

Divide the grid into regions of orthogonally connected cells, each containing a connected group of white cells and a connected group of grey cells, with the property that the shape of the white cells is identical to the shape of the grey cells, allowing rotations and reflections. Clued cells must belong to a region containing the indicated number of white cells and the indicated number of grey cells.

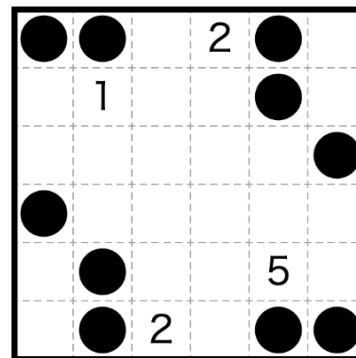
Puzzle (puzz.link):
<https://tinyurl.com/3pzhrv5b>

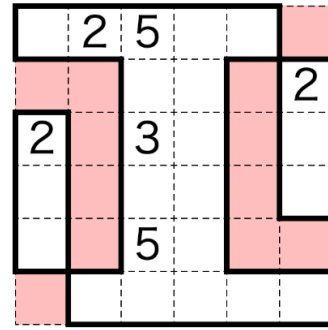
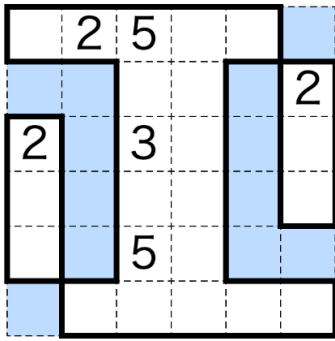


Family Photo | Walker

Divide the grid into rectangular regions of orthogonally connected cells. Each region must contain exactly one number, which indicates how many circles are in the region. Orthogonally adjacent circles must be in the same region.

Puzzle (puzz.link):
<https://tinyurl.com/37pzvd2y>





Ice Walk | Freddie Hand

Draw a loop through the centers of some cells which passes through each numbered cell. Two perpendicular line segments may intersect each other only on icy cells, but they may not turn at their intersection or otherwise overlap. The loop may not turn on icy cells. A number indicates how many cells make up the continuous non-icy section of the loop that the number is on.

Puzzle (puzz.link):

<https://tinyurl.com/45myc4x6>

Fire Walk | Freddie Hand



Draw a loop that passes through every numbered cell. The loop cannot branch or cross itself. Orange cells represent fire, while regular cells represent ground. The loop must turn on every orange cell it visits. The loop is allowed to visit an orange cell twice if the centre of the cell is inside the loop. A number indicates how many cells make up the continuous grounded section of the loop that the number is on.

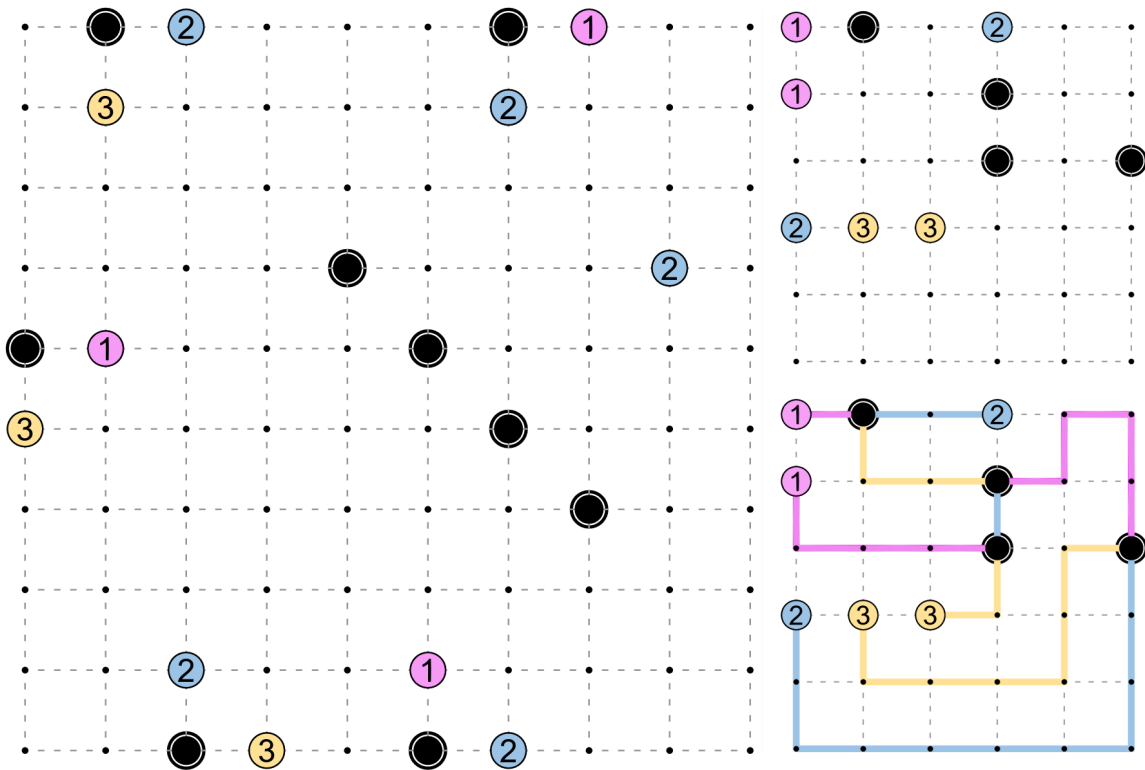
Puzzle (pzprxs): <https://tinyurl.com/wn4rycva>

December 26, 2024: Decoration Tree | Walker

The GAPP building has a beautiful **Decoration Tree** this year! 🌲 The branches are colored with yellow, magenta, and cyan tinsel to create a beautiful effect. And there's a colored ornament at the end of each branch! Mittens the Cat did such a good job decorating! 🐱

Rules: Draw a loopless tree with yellow, magenta, and cyan branches. Every three-way branch of the tree is indicated by a black dot, which must connect to one branch of each color. There are no four-way branches. Every endpoint of a branch is indicated by a yellow, magenta, or cyan dot, of the same color as the branch. The tree must visit every dot in the grid.

 **Interface Note** : I highly recommend solving in the Kudamono interface, which colors in the branches as you solve! It's useful for solving and looks beautiful when you're done. I've provided a colorblind-friendly Penpa version as well, but in that version, you'll need to number the branches manually.



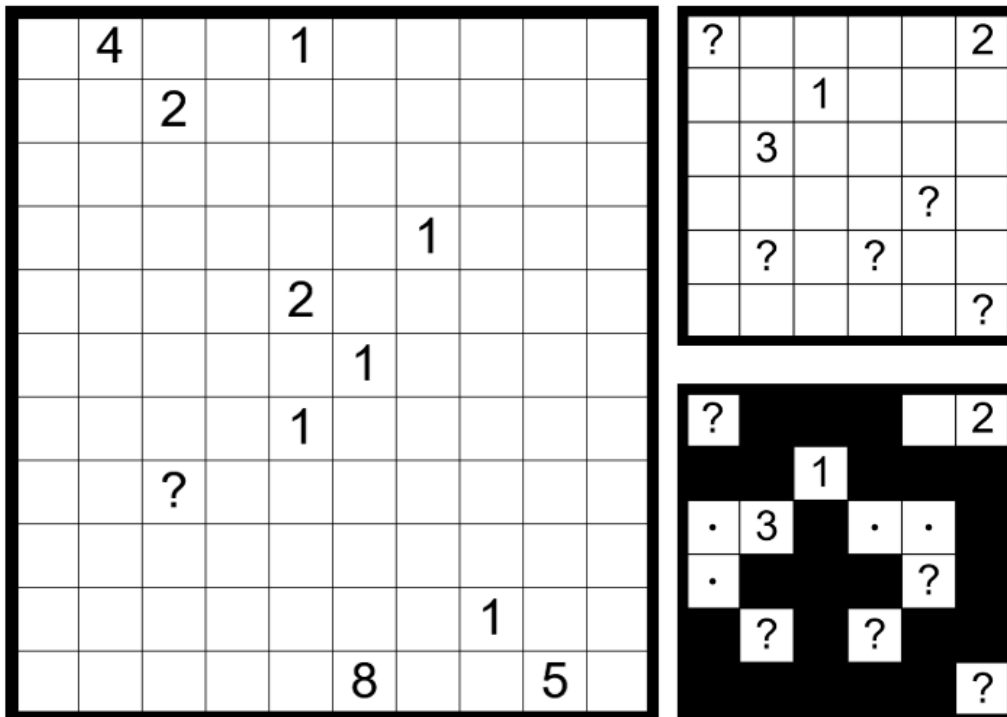
Example (Kudamono): <https://tinyurl.com/2czu9krn>
(Penpa+, color-accessible): <https://tinyurl.com/2yc6rubl>
Puzzle (Kudamono): <https://tinyurl.com/5xu3xjsz>
Puzzle (Penpa+, color-accessible): <https://tinyurl.com/2c7f2w62>

December 27, 2024: Nurikabe | Lavaloid

I hope you had a good Christmas. Today's puzzle is a completely normal **Nurikabe**.

Rules: Shade some cells so that all shaded cells form one orthogonally connected area. 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. No 2x2 region may be entirely shaded.

? clues are to be replaced by a number.



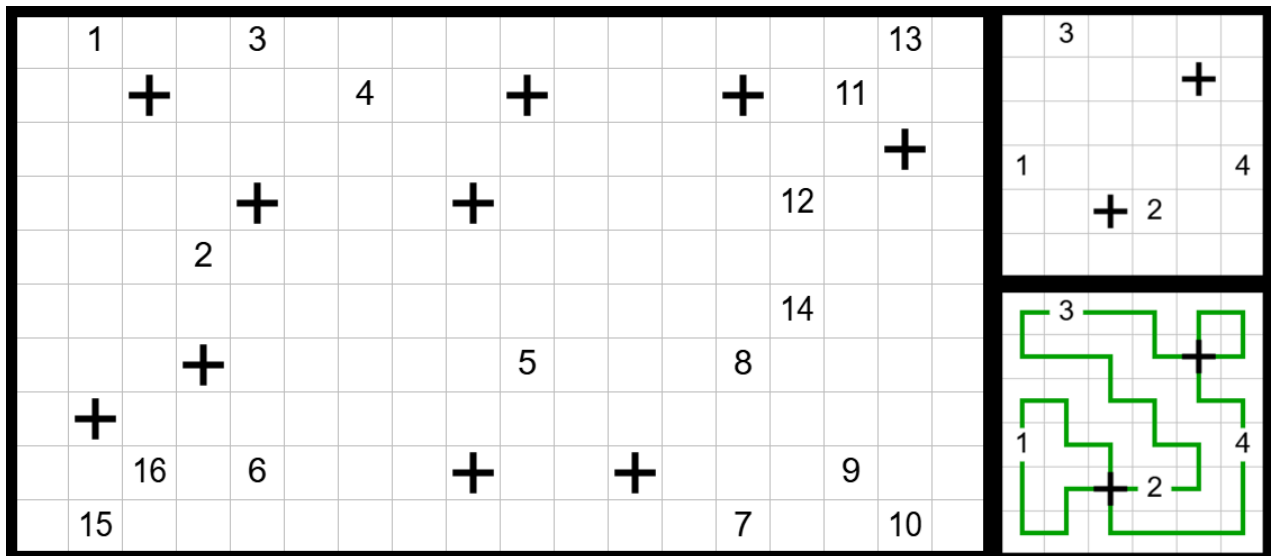
Example (puzz.link) by xoned: <https://tinyurl.com/yf3ewwzf>
 Puzzle (puzz.link): <https://tinyurl.com/3un3zcky>

December 28, 2024: Train Stations | bakpao

We're still a few days away from the new year, but as today marks my last GAPP of 2024, I want to take this moment to thank you all for being part of our community and solving our puzzles every day! I hope you are all enjoying your stay and I am looking forward to seeing you all in 2025! Happy new year!

Today's GAPP is a SUPERSIZED **Train Stations!**

Rules: Draw a loop through the centers of all cells which crosses over itself only at the given perpendicular intersections. The loop must pass straight through each cell with a number, and the numbers must be visited in ascending order.



Example (puzz.link) from puzz.link rules page: <https://tinyurl.com/jd68epc7>

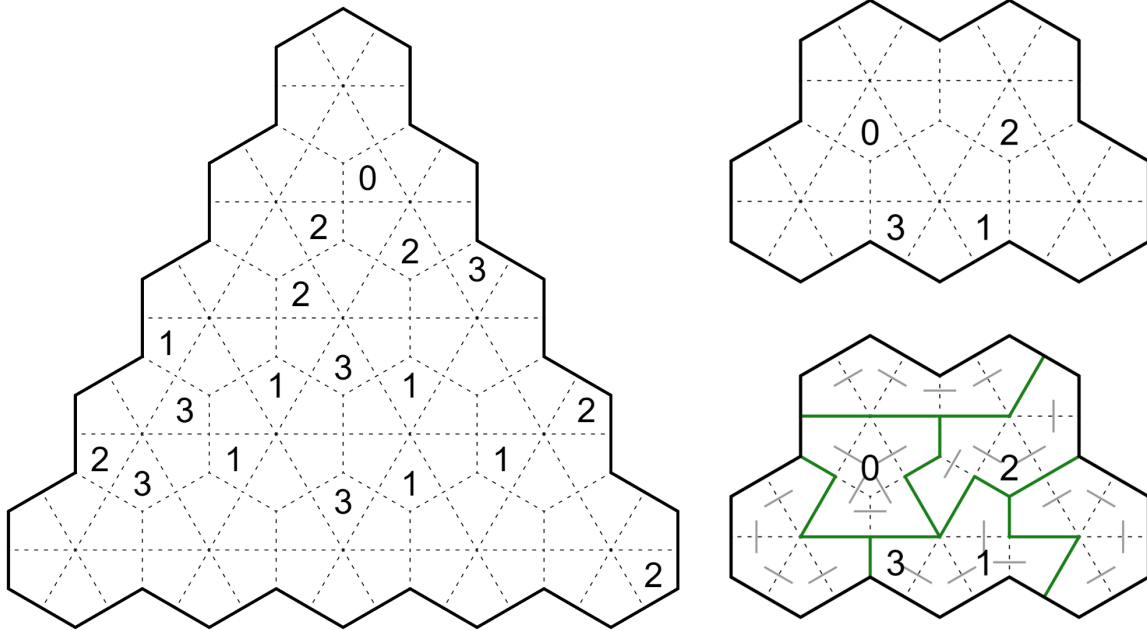
Puzzle (puzz.link, landscape): <https://tinyurl.com/2edppavy>

Puzzle (puzz.link, portrait): <https://tinyurl.com/3wbzatwh>

December 29, 2024: FiveCells (Deltoidal Trihexagonal) | Menderbug

I'm quite late today, so no special intro. Enjoy this **FiveCells** on a *Deltoidal Trihexagonal* tiling.

Rules: Divide the grid into regions of 5 cells. Clued cells must have the indicated number of region borders or grid borders surrounding them.



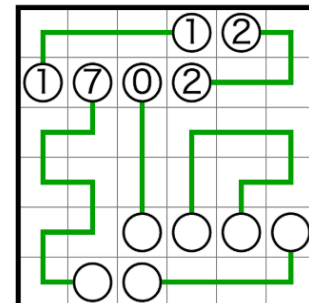
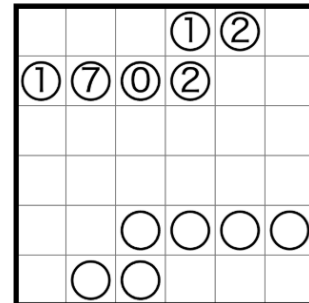
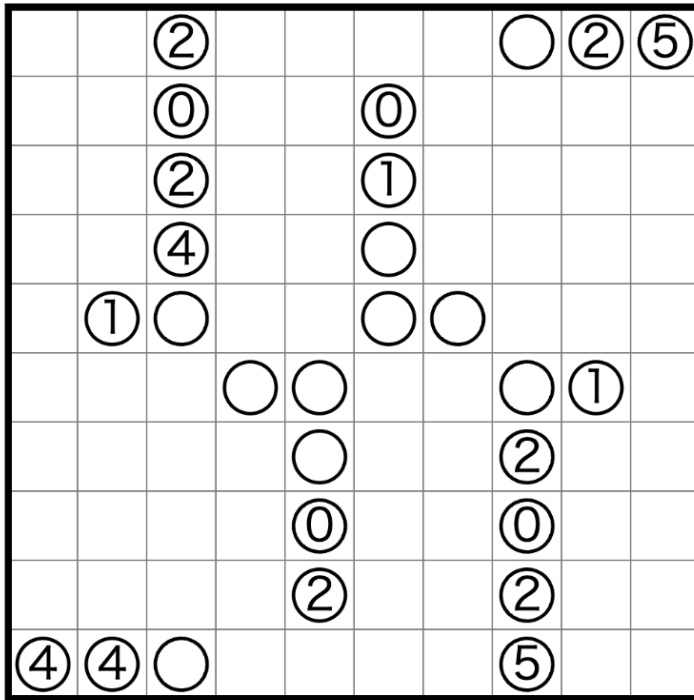
Example (Penpa+): <https://tinyurl.com/29stk8vf>

Puzzle (Penpa+): <https://tinyurl.com/25ua2s8p>

December 30, 2024: Mintonette | Freddie Hand

Here's a **Mintonette** with a freshly minted pzprxs implementation as we look forward to the new year. Maths contest writers are going to love 2025, or should I say, $1^3 + 2^3 + \dots + 9^3$.

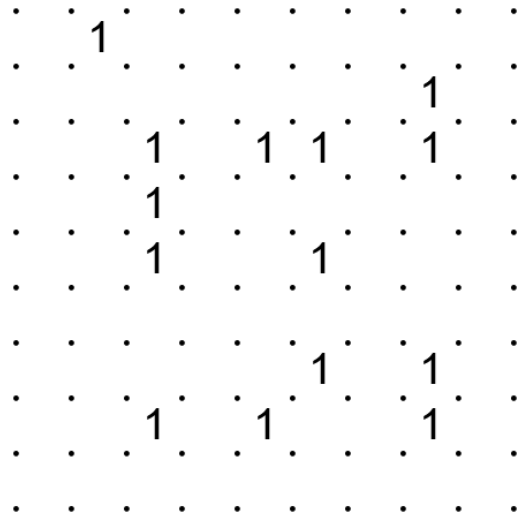
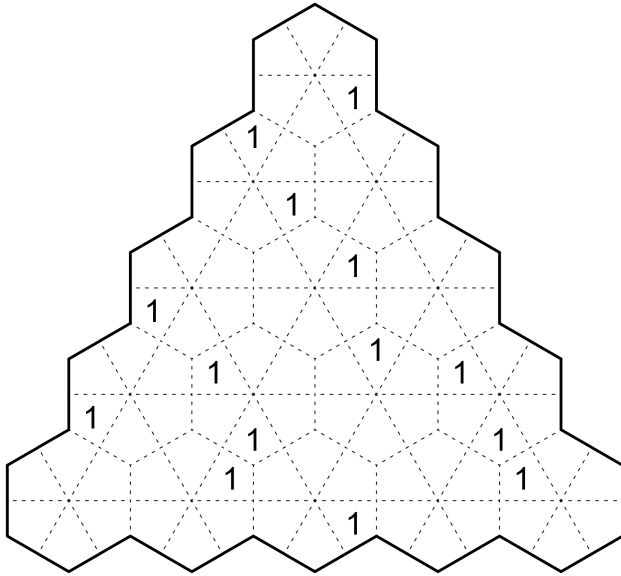
Rules: Draw paths through the centers of cells connecting each circle to exactly one other. Paths may not cross each other or themselves, and every cell must be used by a path. Numbers in circles represent the number of turns of the path that starts from that circle.



Example (pzprxs), by Walker: <https://tinyurl.com/yphk4tem>

Puzzle (pzprxs): <https://tinyurl.com/5e3jaece>

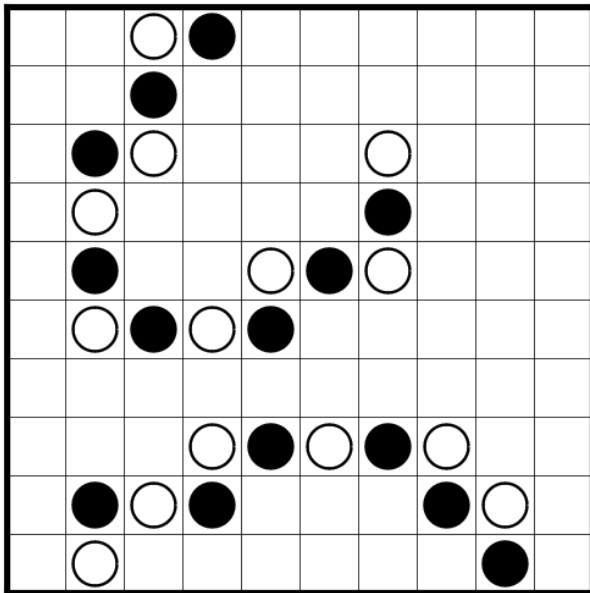
Bonus 1: FiveCells (Deltoidal Trihexagonal) | Bonus 2: Slitherlink (Full) | Freddie Hand Menderbug



Example (Penpa+): <https://tinyurl.com/29stk8vf>
 Bonus (Penpa+): <https://tinyurl.com/2yfyk4q9>

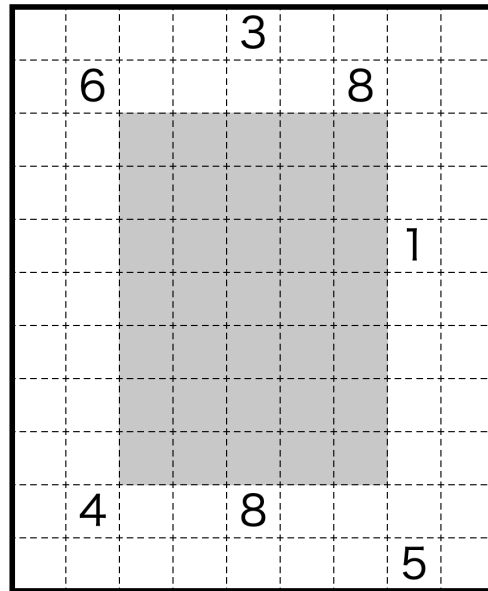
Example (Penpa+) by jovi: <https://tinyurl.com/2afzewjz>
 Bonus (puzz.link): <https://tinyurl.com/ms5nrehs>

Bonus 3: Yin-Yang | Lavaloid



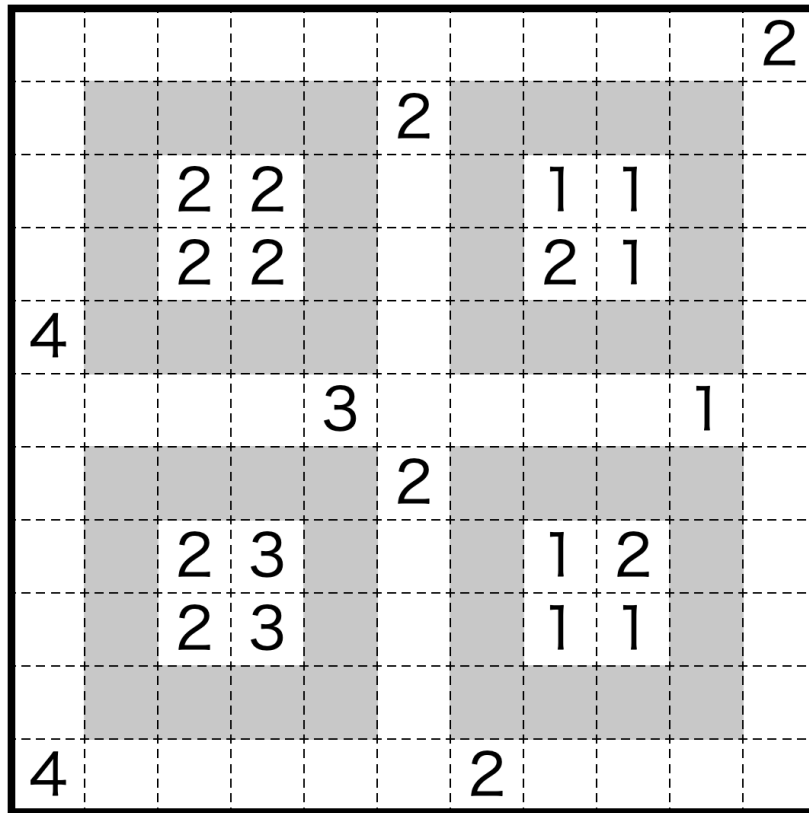
Example (puzz.link) by jovi: <https://tinyurl.com/mp83kspe>
 Bonus (puzz.link): <https://tinyurl.com/4n7wwe5a>

Bonus 4: Balloon Box | Freddie Hand



Example (pzprxs) by bakpao: <https://tinyurl.com/2psvenv2>
 Bonus (pzprxs): <https://tinyurl.com/324m74td>

Bonus 5: Balloon Box | Freddie Hand



Example (pzprxs) by bakpao:

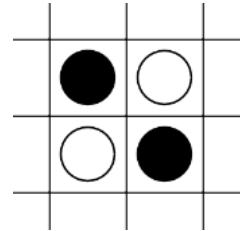
<https://tinyurl.com/2psvenv2>

Bonus (pzprxs): <https://tinyurl.com/47jwvhb2>

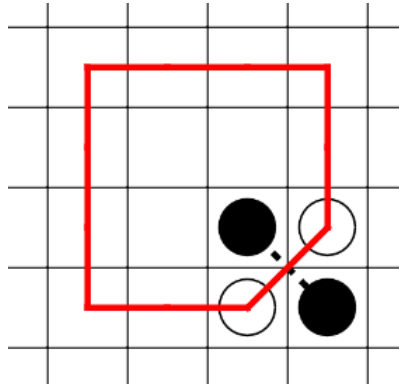
| Date | Sloth Time | Crab Time |  |
|-------------|-------------------|------------------|---|
| 01 Dec 2024 | 0:02:30 | 0:04:30 | See-In-The-Dark Sira Tanager |
| 02 Dec 2024 | 0:01:30 | 0:03:00 | Lightbulbul |
| 03 Dec 2024 | 0:02:30 | 0:05:00 | Divine Dove |
| 04 Dec 2024 | 0:01:45 | 0:03:30 | Advent Adjutant |
| 05 Dec 2024 | 0:02:30 | 0:04:30 | Complete Compact Weaver |
| 06 Dec 2024 | 0:02:30 | 0:05:15 | Unfinished Uncrowded Weaver |
| 07 Dec 2024 | 0:03:21 | 0:06:54 | Backup Bateleur |
| 08 Dec 2024 | 0:02:30 | 0:05:00 | Sunny Sunda Bulbul |
| 09 Dec 2024 | 0:01:30 | 0:03:00 | Cloud Cisticola |
| 10 Dec 2024 | 0:02:30 | 0:05:00 | Pointy Point-Tailed Palmcreeper |
| 11 Dec 2024 | 0:02:45 | 0:05:00 | Spoke Speke's Weaver |
| 12 Dec 2024 | 0:01:45 | 0:03:30 | Tutorial Toucan |
| 13 Dec 2024 | 0:02:30 | 0:05:00 | Bright Besra |
| 14 Dec 2024 | 0:03:33 | 0:07:06 | Marvelous Spatuletail |
| 15 Dec 2024 | 0:03:00 | 0:06:00 | Cardinal Cardinal |
| 16 Dec 2024 | 0:02:45 | 0:05:00 | Early Bird |
| 17 Dec 2024 | 0:03:21 | 0:06:54 | African Snipe |
| 18 Dec 2024 | 0:02:30 | 0:05:00 | Disorderly Dickcissel |
| 19 Dec 2024 | 0:02:00 | 0:04:00 | Six-Legged Rail |
| 20 Dec 2024 | 0:02:45 | 0:05:15 | Infernal Inti Tanager |
| 21 Dec 2024 | 0:04:00 | 0:08:00 | Treetop Snowy Plover |
| 22 Dec 2024 | 0:02:10 | 0:04:32 | Triangular Trilling Tailorbird |
| 23 Dec 2024 | 0:02:30 | 0:05:00 | Great Frigatebird |
| 24 Dec 2024 | 0:03:00 | 0:06:00 | North Polar Skua |
| 25 Dec 2024 | 0:07:00 | 0:12:25 | Festive Coquette |
| 26 Dec 2024 | 0:03:00 | 0:06:00 | Technicolor Turtle Dove |
| 27 Dec 2024 | 0:02:00 | 0:04:00 | Normal Northern Nutcracker |
| 28 Dec 2024 | 0:03:30 | 0:07:00 | Arctic Albatross |
| 29 Dec 2024 | 0:03:00 | 0:05:55 | Late Kite |
| 30 Dec 2024 | 0:02:15 | 0:04:30 | After Eight Eiao Monarch |
| 31 Dec 2024 | 0:01:30 | 0:03:00 | Countdown Chimney Swift |

Appendix 1: Yin-Yang GAPP 101

In a Yin-Yang*, the checkerboard pattern, like shown at the right, cannot exist anywhere on the grid.



* *This pattern also cannot exist in genres like Cave or Coral.*



If this pattern exists in a valid solution, then we should be able to draw a continuous path from one white circle to another one.

However, this means we've closed off one of the black circles to another one, breaking the connectivity rule! Therefore, checkerboards cannot exist.