Mind The GAPP Vol. 28

Genuinely Approachable Pencil Puzzles from the CtC Discord
February 1, 2024 - February 29, 2024

February 2024 was a very special month, because this year we get 3.6% more February per February! Last month, the GAPP team and GAS team have gotten together to publish a leap day pack of sudoku and puzzles titled "*Never Mind the GAS, Here's the GAPP Leap*". You can check it out here: https://www.sudokutheory.com/gas/leaks/Never_Mind_the_GAS_Heres_the_GAPP_Leap.pdf

We've also seen Puzzle Grand Prix Round 1 and Puzzle Ramayan Round 2 happen, and as usual we give out **otters** 🦦 to anyone who participated. We expect to continue doing this for future contests, and we will announce them whenever they happen.

Finally, we have 5 bonus puzzles this time. Thanks for GAPPing and see you next month!

February 1, 2024: Meandering Words

Freddie Hand

Believe it or not, this is not the first ~~Sudoku and friends~~ Puzzle Grand Prix-themed **Meandering Words** in GAPP. But as the words announce, the first round is indeed starting soon, and promises to be a varied and fun set of puzzles, albeit at a somewhat higher difficulty level than the LMI Puzzle Ramayan. For all the puzzle thrill seekers who are looking for a challenge.

Unfortunately no puns on meandering can be made this time.

Rules: Place a letter into each cell. The letters in a region must form an orthogonally connected chain of letters spelling out one of the words given outside the grid. Each given word is used exactly once. Two instances of the same letter may not appear in adjacent cells, not even diagonally. Shaded cells (if given) indicate the first letter of the word in a region.
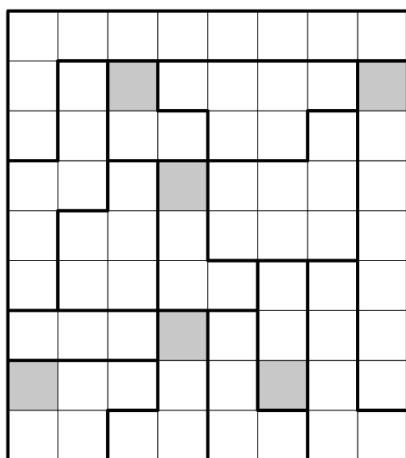
WORLD	SERBIA	
SUDOKU	HAVE	
AND	FUN	
FRIENDS	SOLVING	
FEDERATION	THIS	
GRAND		
PRIX		
ROUND		
ONE		
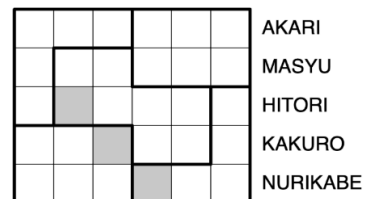
A	K	A	K	A	K	AKARI
R	U	R	U	R	O	MASYU
I	N	I	K	A	U	HITORI
R	O	H	E	B	Y	KAKURO
I	T	I	M	A	S	NURIKABE

AKARI
MASYU
HITORI
KAKURO
NURIKABE

Example (Penpa+) by Menderbug: https://tinyurl.com/2nemel2z
GAPP (Penpa+, ordered by length, RECOMMENDED): http://tinyurl.com/ywsxpv9k
GAPP (Penpa+, ordered semantically): http://tinyurl.com/ymtbxngc
Walkthrough: https://youtu.be/qUSM-pWa0us

February 2, 2024: Tilepaint

Walker

Welcome to the GAPP Art Studio! 🖌️ 🎨 🧑‍🎨 Today, we'll we doing a Paint-by-Numbers, or as I like to call it, **Tilepaint**. This one's a bit tougher than the usual, though - all of the numbers have fallen outside the canvas! The spaces may not look like anything now, but once you fill them in, I think they'll form a nice picture. Feel free to claim a **bonus otter** 🦦 (on the honor system) if you can correctly guess what the picture will be before solving! (And please don't spoil it on reactions to the post!)

Rules: Shade some cells so that each region is either fully shaded or fully unshaded. A clue on the bottom of a blocked cell represents the number of shaded cells in the vertical line below it. A clue on the right side of a blocked cell represents the number of shaded cells in the horizontal line to its right. [Said another way, the clues outside the grid represent the number of shaded cells in that row or column.] Clues cannot see through other blocked cells (this puzzle has no such internal blocked cells).

Example (puzz.link): http://tinyurl.com/2nzwb5by
GAPP (puzz.link): http://tinyurl.com/yckdc94m
Walkthrough: https://youtu.be/EcWobaCKyyQ
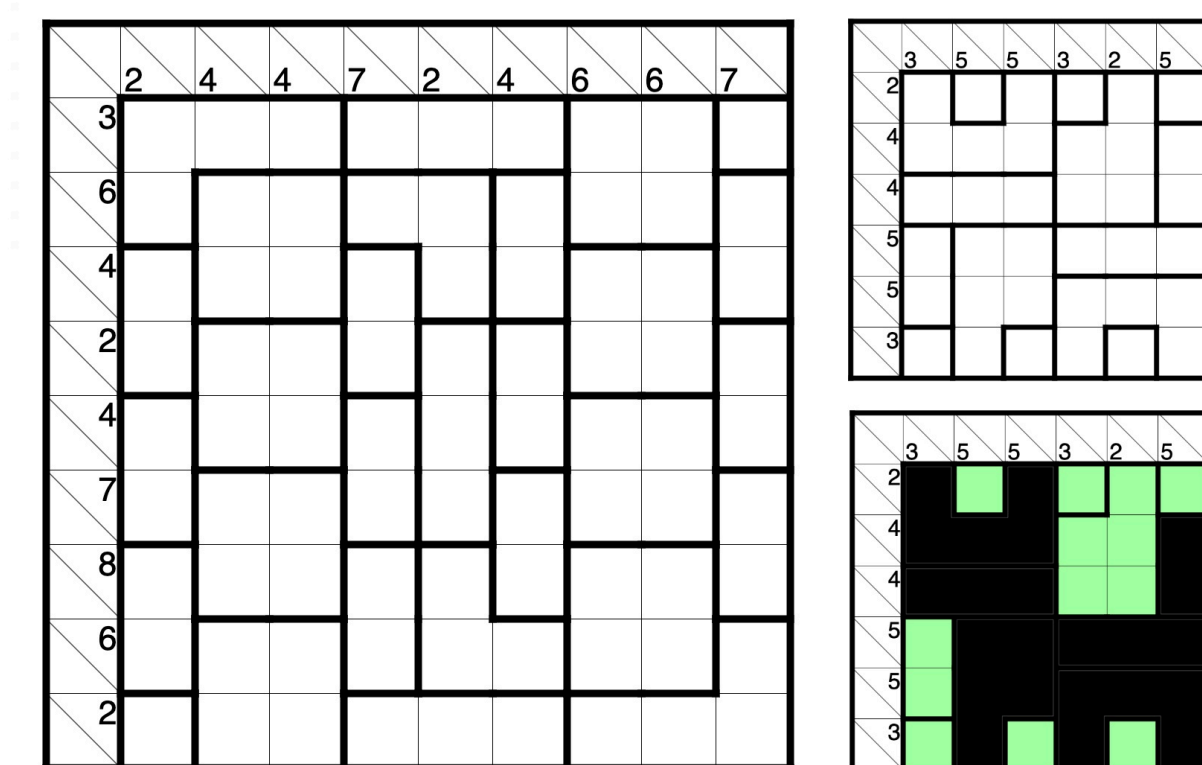
February 3, 2024: Pentominous

Lavaloid

Round 1 of this year's Puzzle [Grand Prix](#) has started! The *Otter Offer* 🦦 is back, and anyone who participates in the contest may claim one. Today's ✨ *Supersized Saturday* ✨ is a **Pentominous**, one of the genres featured in this round. Interestingly, we've never had a supersized Pentominous with letter clues, as the other supersized only uses border clues. And yes, U is a word.

Rules: Divide the grid into regions of five orthogonally connected cells so that no two regions of the same shape share an edge, counting rotations and reflections as the same. Clued cells must belong to a region with the pentomino shape associated with that letter (see below). Regions may contain any number of clues including zero. Black cells are not part of any regions.
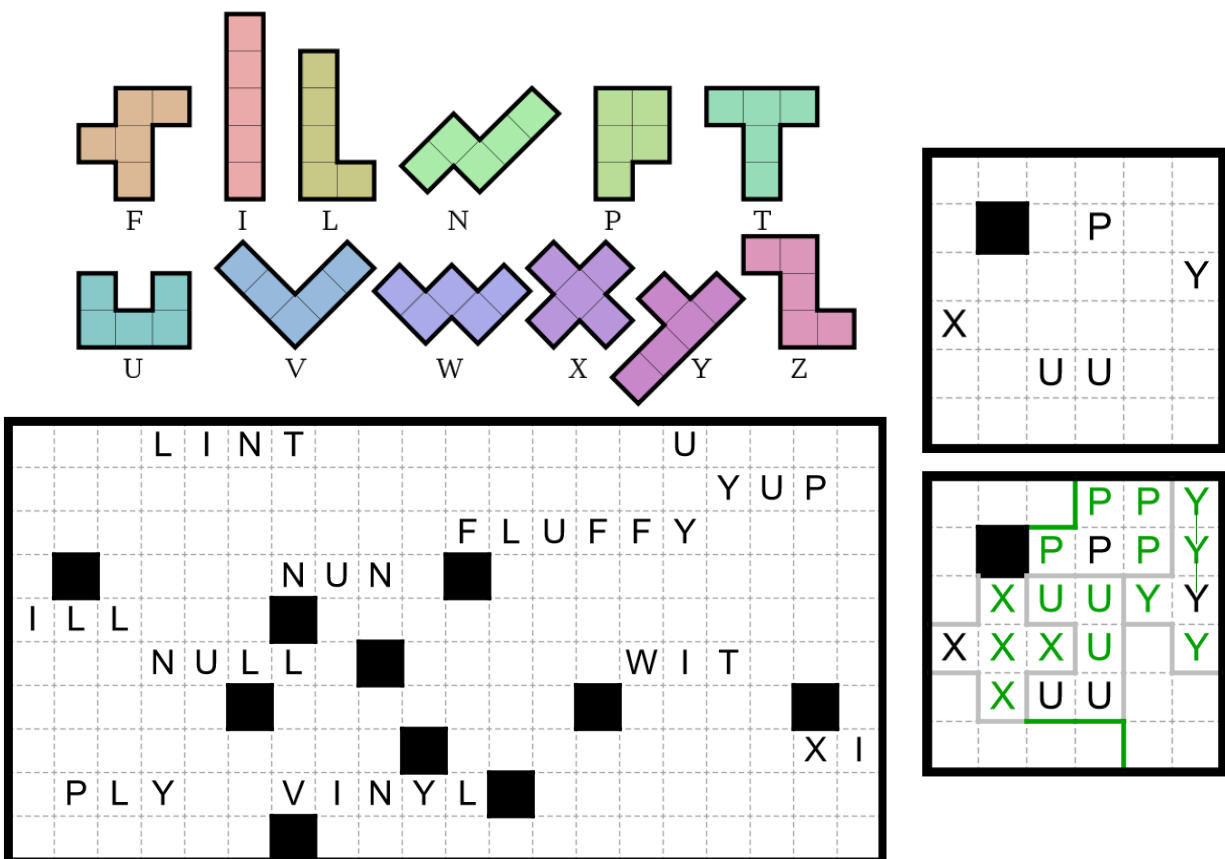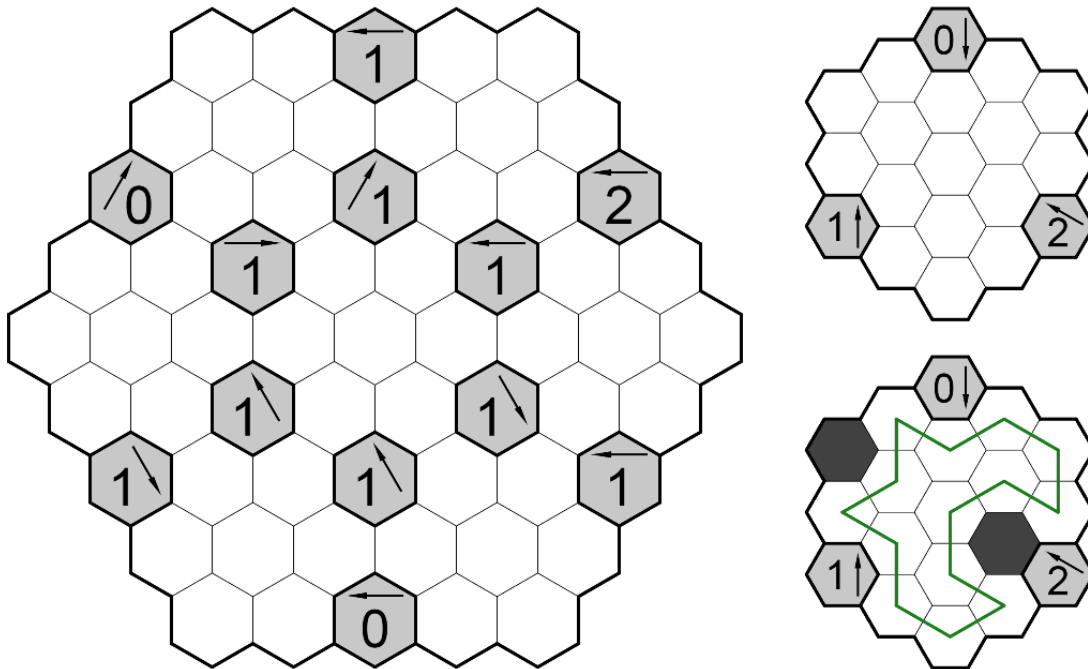
February 4, 2024: Yajilin (Hexagonal)

shye

It's everyone's favorite (not-a-) series, **Strange-Shaped Sunday**! Something I keep forgetting exists whenever its my turn, so how about we amend that with a **Hex Yajilin**

Rules: Shade some cells so that no two shaded cells share an edge and draw a non-intersecting loop through the centers of all the remaining empty cells. Clues cannot be shaded, and represent the number of shaded cells in a straight line in the indicated direction

Example (Penpa+): http://tinyurl.com/23ess28t
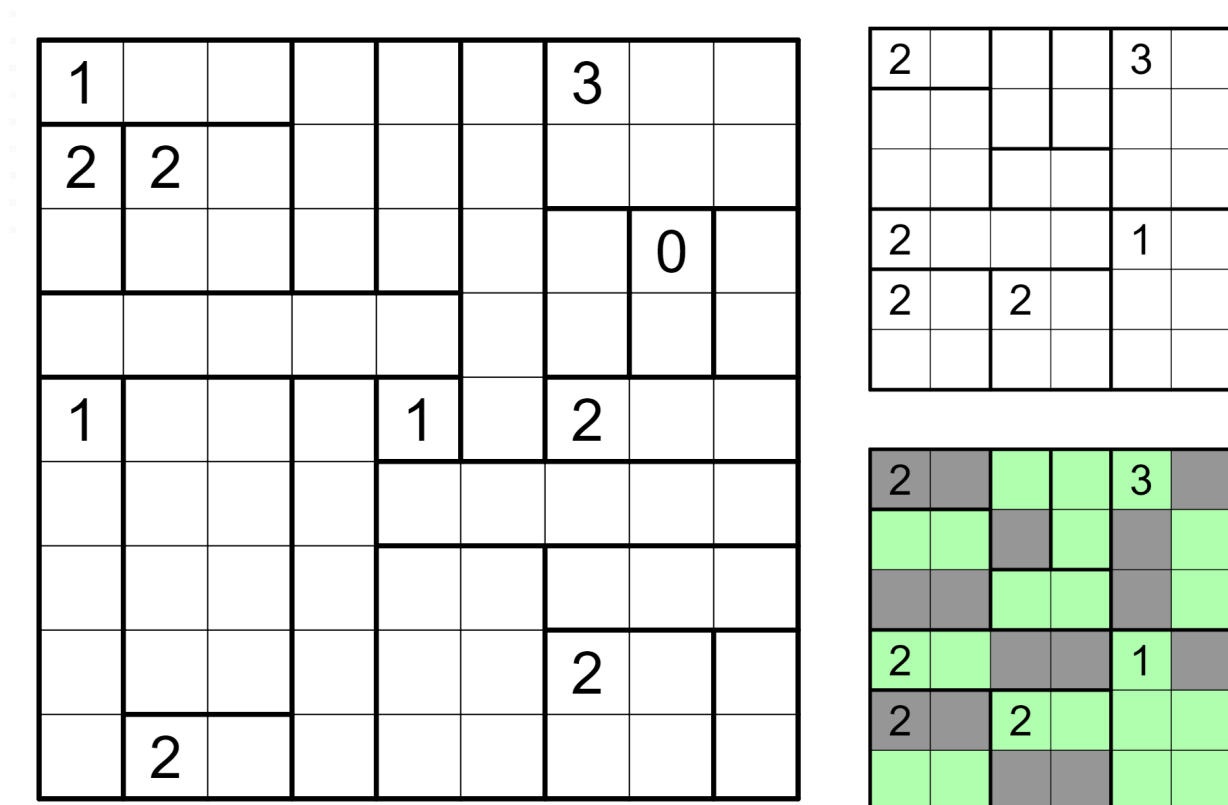GAPP (Penpa+): http://tinyurl.com/2ycesa78
Walkthrough: https://youtu.be/KgsYYfeF9HA

February 5, 2024: Bramble

Menderbug

A few weeks ago, I came up with a new genre that I'm quite fond of. This is **Bramble**, but instead of telling you about the genre I will let the puzzle speak for itself and use this space to gush about David Wise and how Stickerbush Symphony is one of the best pieces of video game music ever written. Juxtaposing the serene vibe of this track with some of the notoriously hardest levels of the game was pure genius. Don't worry, today's puzzle does not share that difficulty, but you should definitely listen to the track while solving it anyway.

Rules: Shade some blocks of one or two cells such that no two blocks are orthogonally adjacent and no block crosses a region boundary. All blocks form a diagonally connected network without loops. Two blocks which touch diagonally cannot both be single cells. Number clues indicate the amount of shaded cells in their region.
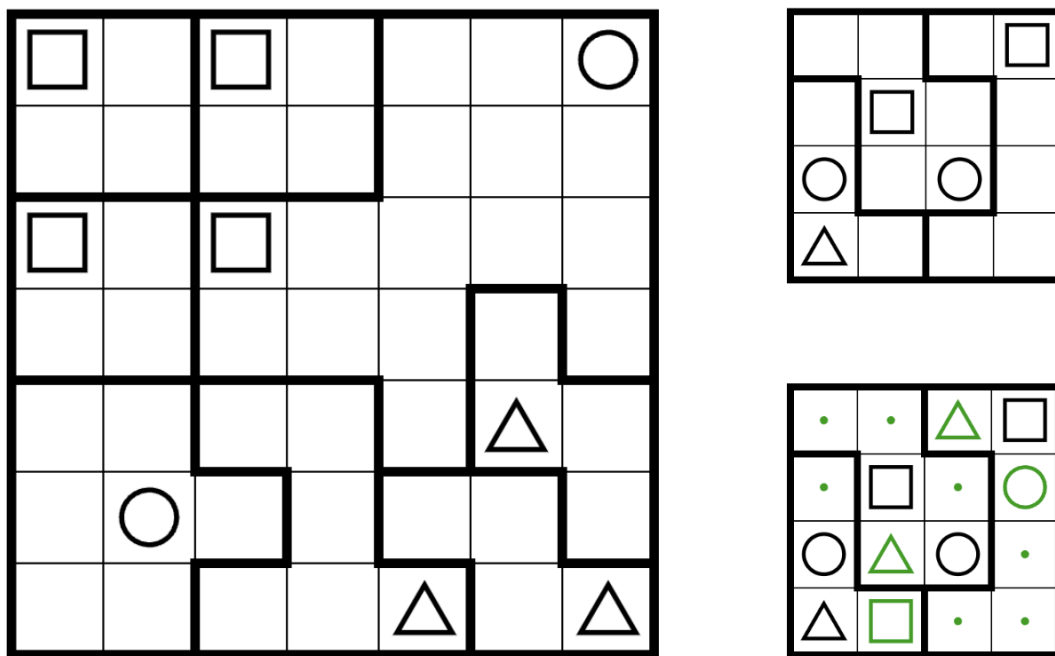
Example (Penpa+): http://tinyurl.com/25f2awpn
Puzzle (Penpa+): http://tinyurl.com/234zuogh
Walkthrough: https://youtu.be/XGbLGe53joQ

February 6, 2024: Alternation

Freddie Hand

How well can you draw a circle? Try at https://neal.fun/perfect-circle/ - my best is 96.3% after a few (read: at least 100) trackpad attempts.

Fortunately in this **Alternation** puzzle the interface will draw a perfect circle every time for you. And you especially won't have to draw perfect stars or, god forbid, perfect umbrellas.

Rules: Place a triangle, square or circle in some cells. Each outlined region contains exactly one of each possible symbol. Every row and column contains exactly 2 kinds of symbol, which appear in alternating order.

Example (puzz.link), from the puzz.link rules page: http://tinyurl.com/29kdtkf5
GAPP (puzz.link): http://tinyurl.com/ywbsynkz
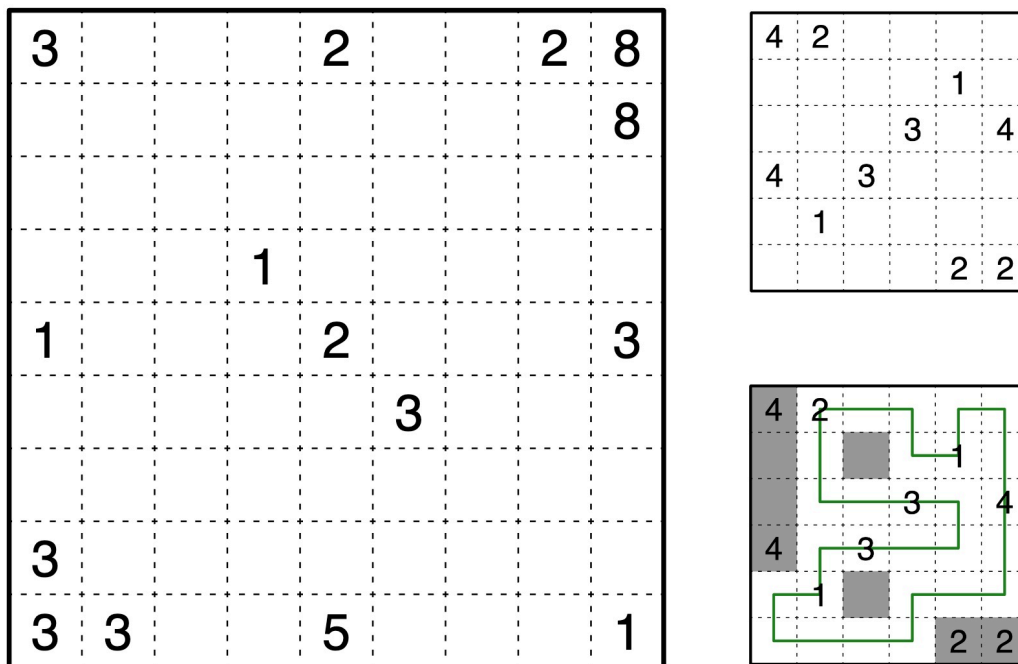Walkthrough: https://youtu.be/D65pjYB4Nb8

February 7, 2024: Flexible Counters

Walker

I was counting down the hours until midnight, deciding between Nurikabe and Geradeweg for today's GAPP. But counting cells is like counting sheep, and all too soon, I was down for the count… 😴 When I woke up, I had sleep-constructed a strange grid, with both kinds of clues (though I've lost count of how many of each). Well, I guess I should count my blessings; the fact that the puzzle still seems to solve has to count for something! The team's counting on me for a puzzle, so I'll hurry to get this **Flexible Counters** ready. There's no time to waste - every moment counts!

Rules: Draw a non-intersecting loop through the centers of some cells. For a number visited by the loop, every straight line segment that touches the number must have a length equal to the number's value. For a number not on the loop, the number represents the number of cells in its orthogonally connected area of cells not visited by the loop.

In this puzzle, clues visited by the loop behave like Geradeweg clues, while clues not visited behave like Nurikabe-Like Loop clues (though you can have multiple or none in a region).

Example (Kudamono): http://tinyurl.com/3epvmdd7
Example (Penpa+): http://tinyurl.com/28voonzg
GAPP (Kudamono): http://tinyurl.com/yes4buax
GAPP (Penpa+): http://tinyurl.com/29pllhc7
Walkthrough: https://youtu.be/VCW37jetRBQ

February 8, 2024: The Double-Headed Dragon's Eyesight Recovery
Lavaloid

This puzzle is the reason bakpao had to post his baklog 1 day after it was set. Sorry bakpao.

Today's genre choice is quite apt, as Chinese New Year is in two days, and it will be the Year of the Dragon! It's also now my new favorite genre name: **The Double-Headed Dragon's Eyesight Recovery**, or its original name as published in Nikoli Omopa: 双頭竜の視力回復. There were two translations provided by janko.at, the other one being Binaural Vision Restoration, but dragons are way cooler so that's what you're getting (also it's the more literal translation).

Rules:
- Fill some cells with orthogonal arrows (←→↑↓) such that every arrow is orthogonally adjacent to exactly one other arrow (i.e. they form dominoes).
- Each arrow indicates the unique direction that contains the longest run of consecutive empty cells before reaching another arrow or the edge of the grid.

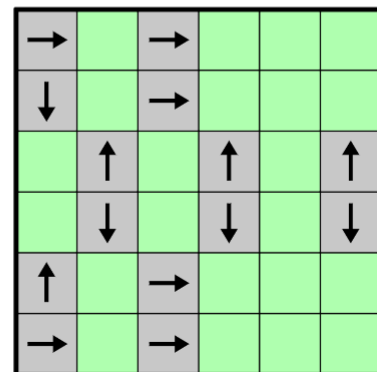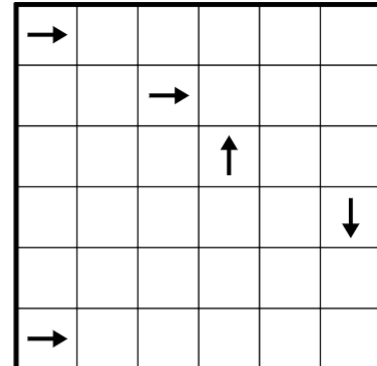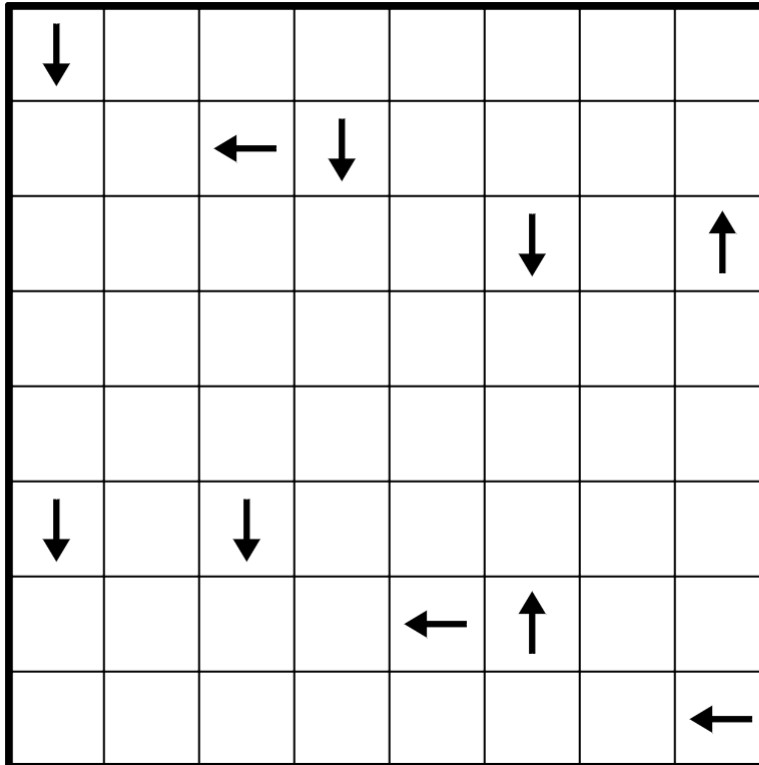See the image below for examples of correct and incorrect clues.
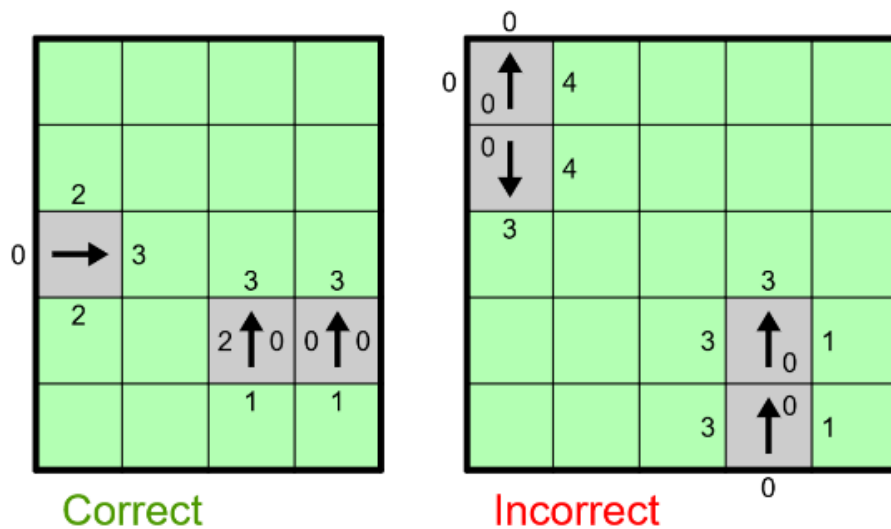
Interface note: You can use Shading mode to mark cells with arrows, as seen in the example.

Rules:

- Fill some cells with orthogonal arrows (←→↑↓) such that every arrow is orthogonally adjacent to exactly one other arrow (i.e. they form dominoes).
- Each arrow indicates the unique direction that contains the longest run of consecutive empty cells before reaching another arrow or the edge of the grid.

Example (Penpa+): http://tinyurl.com/yomjzo6w
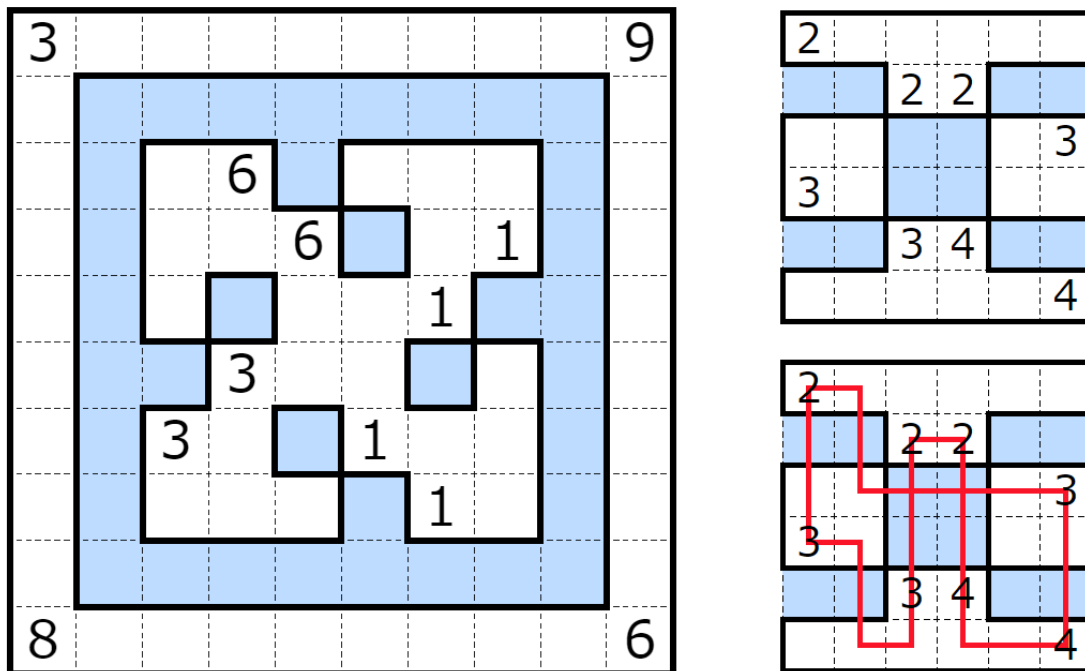Puzzle (Penpa+): http://tinyurl.com/2x5q8ymz
Walkthrough: https://youtu.be/7JN-WxfkrJc

February 9, 2024: Ice Walk

shye

It was a foggy evening yesterday on my way to drop off a parcel at GAS HQ. The air was getting frosty and **ice** began to form on the side**walk**, I had to be careful not to slip and end up getting lost!

Rules: 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.

Example (puzz.link): http://tinyurl.com/dsusbne7
GAPP (puzz.link): http://tinyurl.com/y9ca9dsr
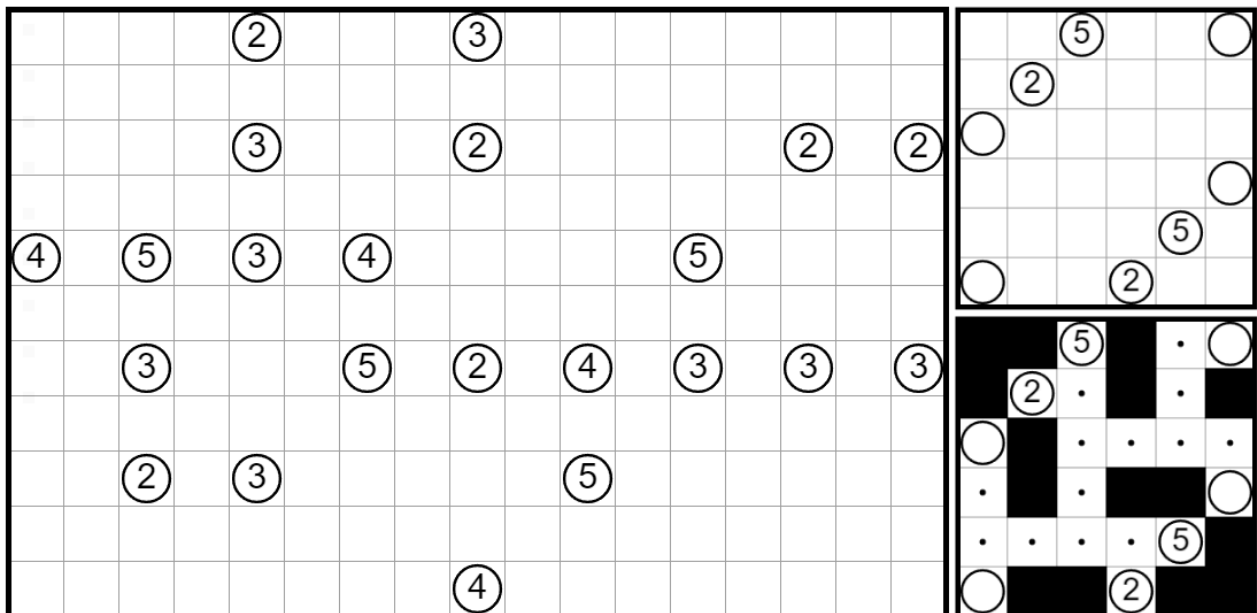Walkthrough: https://youtu.be/1PQMTdnQxno

February 10, 2024: Nurimisaki

Menderbug

Bee-doo-bee-doo-... what's that? Oh, it's the Negative Constraint Alert. Today's *Supersized Saturday* features a **Nurimisaki**. This genre takes some getting used to, so if you've never done one before, I would strongly recommend warming up with one of the previous regular-sized GAPP appearances.

Rules: Shade some cells so that the remaining unshaded cells form one orthogonally connected area. No 2x2 region may be entirely shaded or unshaded. Circles mark **every** instance of a cell which is unshaded and orthogonally adjacent to exactly one other unshaded cell. If a circle contains a number, it indicates how many cells are in the straight line of unshaded cells coming out of the cell with the circle, including itself. (This may include another circle at the other end of this straight line.)

Others on the team suggested I add a little **GAPP 101**, but I think you'll do fine without it. It's a specific deduction that is only really required once and I think it's fairly well telegraphed. So I would recommend you only click the spoiler if you actually get stuck towards the end of the puzzle: (ROT13) Gur hafunqrq pryyf pnaabg pbaarpg guebhtu pvepyr pyhrf.

Example (puzz.link) by Shye: https://tinyurl.com/yj9h38nf
GAPP (puzz.link, landscape): http://tinyurl.com/yh3remu5
GAPP (puzz.link, portrait): http://tinyurl.com/5fd9edxd
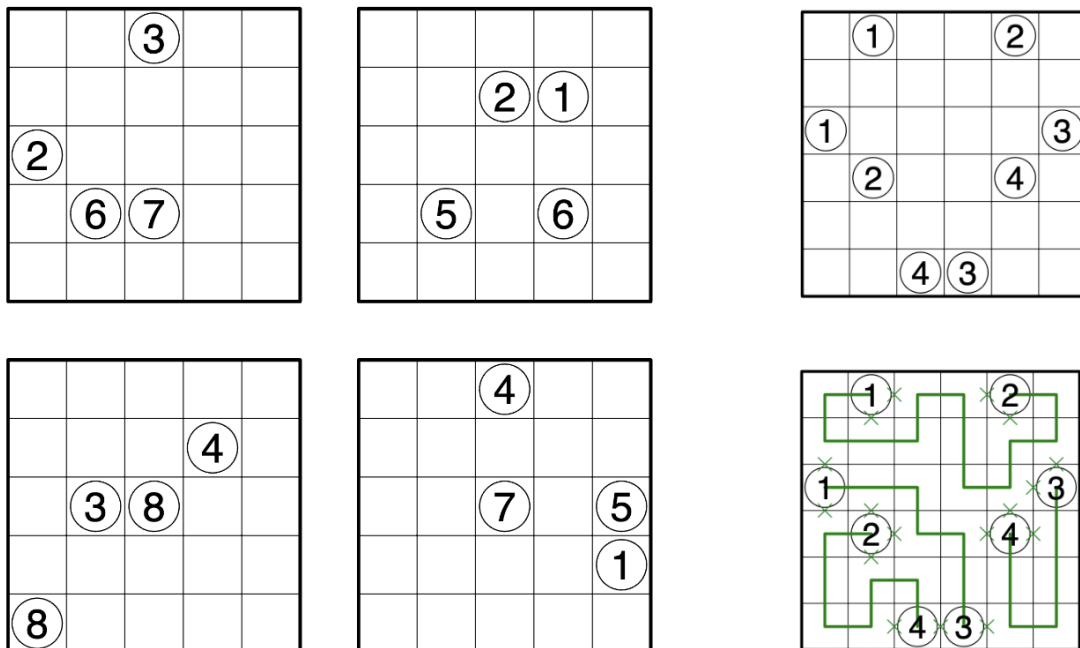Walkthrough: https://youtu.be/cW6XHOBxXYo

February 11, 2024: Portal Loop

Freddie Hand

Unfortunately, irregular grid shapes are in short supply right now, with Cairo Pentagonal imports down 20%. So instead, here are four completely independent 5x5 **Portal Loop** puzzles, merged into one conglomerate.

Rules: Draw a non-intersecting loop through the centers of all cells. When the loop enters a portal with a number, it must teleport to the corresponding portal and continue in the same direction.

Note: Portals must be used exactly once, i.e. you cannot pass through a portal multiple times.

Example (Penpa+), by shye: https://tinyurl.com/yud9qyok
GAPP (Penpa+): http://tinyurl.com/2ctd2vbe
Walkthrough: https://youtu.be/rtVKGh0MvJU

## February 12, 2024: Math Path

Walker

After all that counting practice, I think I'm ready for some larger numbers! This **Math Path** goes all the way to 28, which should be enough to make it through all the days in February! 📅 Or wait… Well, maybe I still need more counting practice 😅

Rules: Place a number from 1 to N into each cell so that every number appears once, where N is the total number of unshaded cells in the grid. (N is also above the grid.) Every number must be adjacent (orthogonally or diagonally) to all numbers in the grid that are consecutive with it. (Equivalently, the numbers form a path from 1 to N.) A clue represents the value obtained by applying the operation on the numbers in the region the clue is in; in a single-cell region, the clue represents the number in that region.

Interface Note: Answer check accepts either all the numbers or the path drawn in green diagonal Line mode. Also, for marking candidates, it might be useful to use the 🔢 -like button, so that the candidates don't overlap the number clues.

Note: This puzzle doesn't use regions larger than two cells or operationless clues (and these have been removed from the rules for simplicity). Maybe in a future Math Path…
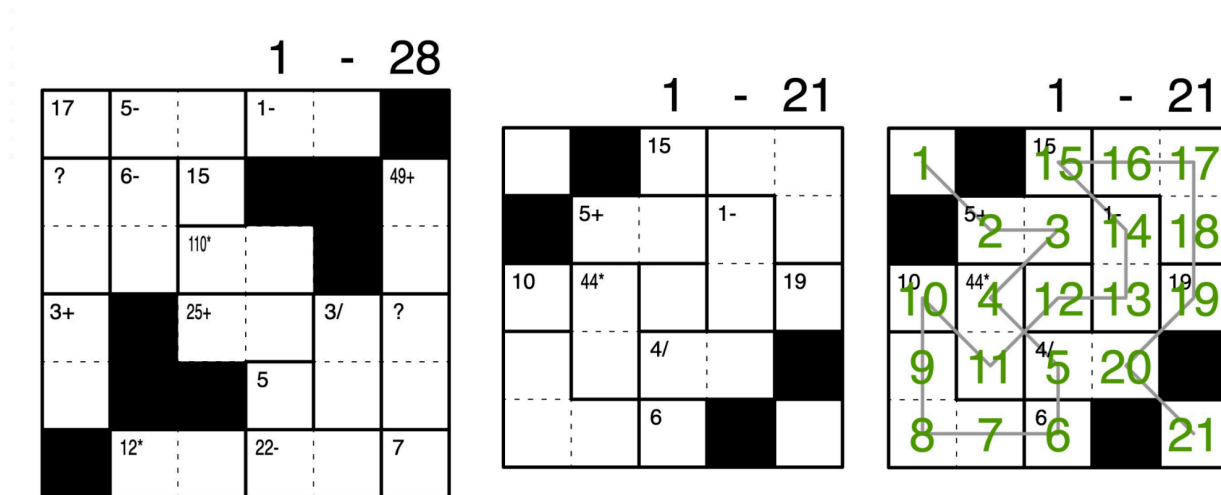
Example (Penpa+): http://tinyurl.com/266hpeft
GAPP (Penpa+): http://tinyurl.com/27baa6aq
Walkthrough: https://youtu.be/Rrfn8iI_9Yg

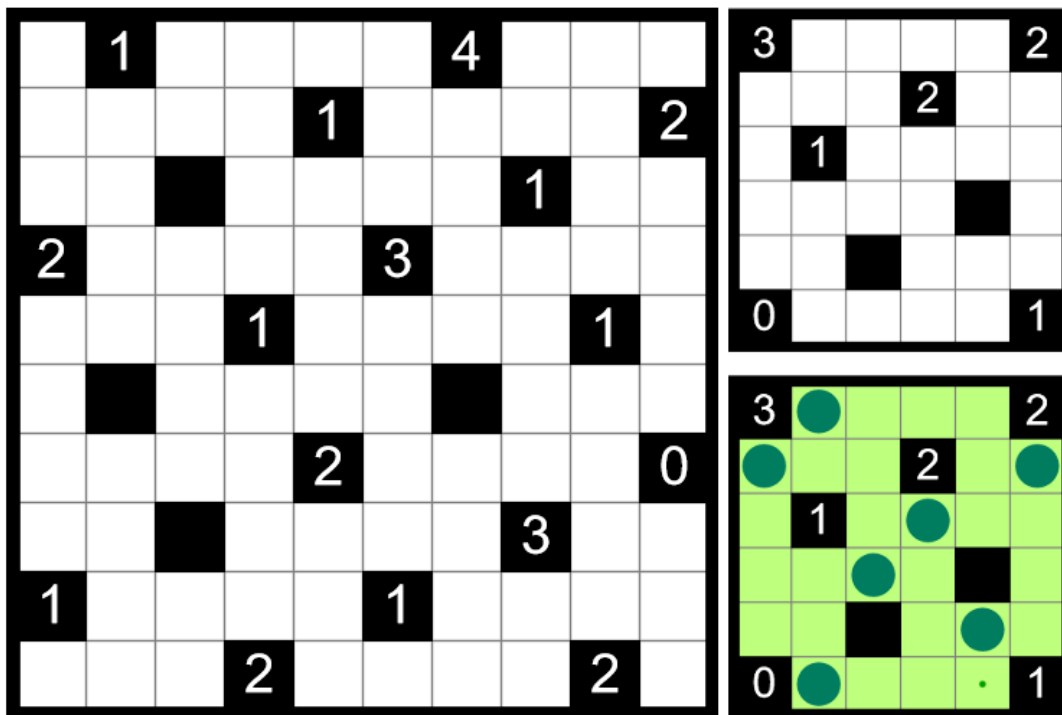**February 13, 2024: Akari (Knapp-Daneben)**

Lavaloid

Spebx'r FBOQ jr bo **Zjzsh (Lozoq-Czmfcfm)**! J tvsd ipqd lz lfxanzqe cnfto's tghgu sif kdsudst jm siht jousn xhui z qzuudqm sgbu dzm af rqmhu jmsn hqpvor pe ehwf chobsz cjhjsr uibs bzm af lbqodc sp sif Dofkjtg zmoibcfu rvbi sgbs 1 hr B boe 26 jr A! Xbhu, J ughol nx jdzapbqe't aqnldo. Mds nd fdu b odx pof.

...Okay, I think this keyboard works. Today's GAPP is an **Akari (Knapp-Daneben)**!

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. Clues are exactly one more or one less than the number of lights in the (up to) four cells surrounding the clue.

Interface note:
- The puzz.link answer check will not work, so you will have to check your work manually.
- The Penpa+ answer check works for either Shading or Composite > Akari.

Example (puzz.link): http://tinyurl.com/ndpzhpjn
Example (Penpa+): http://tinyurl.com/2ax8byuk
Puzzle (puzz.link): http://tinyurl.com/4apf8ynp
Puzzle (Penpa+): http://tinyurl.com/2cz9v89p
Walkthrough: https://youtu.be/EbPMpFw2ctA
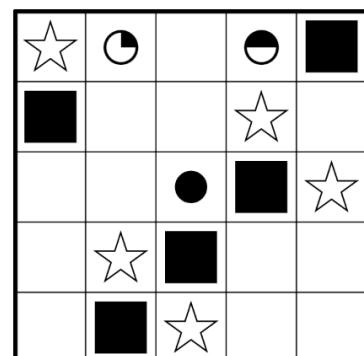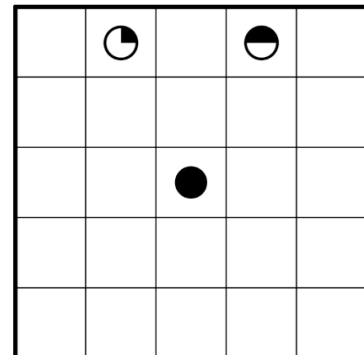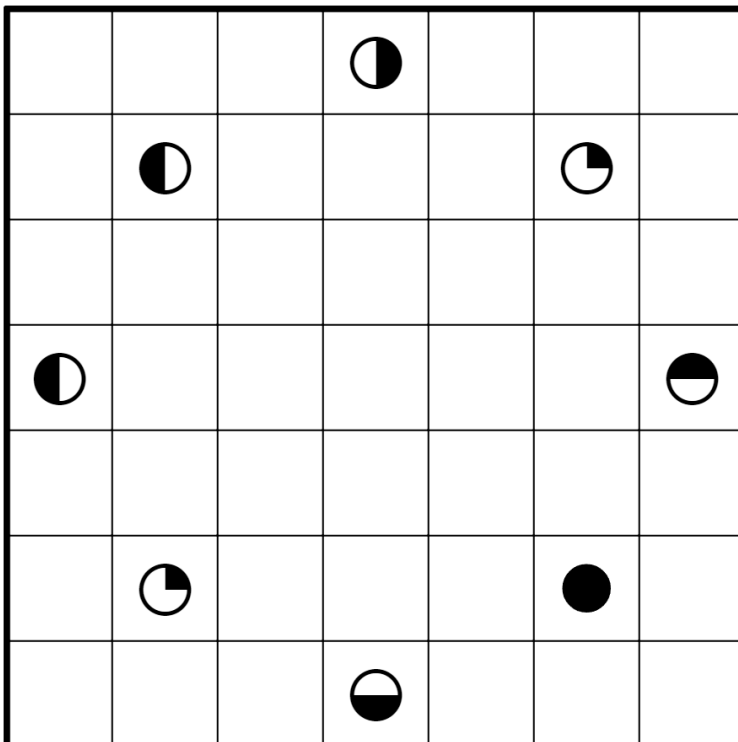
February 14, 2024: Moonlight

Menderbug

I found this moon phase chart, but the phases look a bit off. I suppose we'll need a few extra stars to explain these light patterns. And then some... Borg cubes?... to block the light from other moons. Today's genre is an old Inaba genre called **Moonlight**. Constructing this in Penpa was a bit of a pain due to certain limitations. The keen-eyed among you might spot a suspicious common feature of the example and main puzzle.

Rules: Place some stars and some blocks into empty cells of the grid such that each row and column contains one star and one block. Each cell may contain at most one object. Stars illuminate all cells seen in a straight line horizontally or vertically, not obstructed by a block or moon. The light displayed on the moons indicates the directions from which they're illuminated.

⚠️ **Interface notes:** ⚠️ For answer check, use the white stars from the Shapes mode and the black Battleships squares via the Composite mode.

Example (Penpa+): http://tinyurl.com/2yrh4yeg
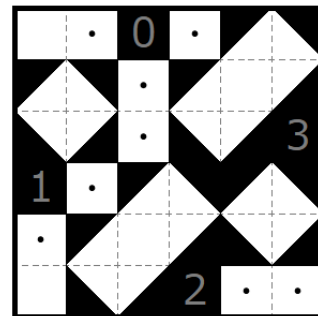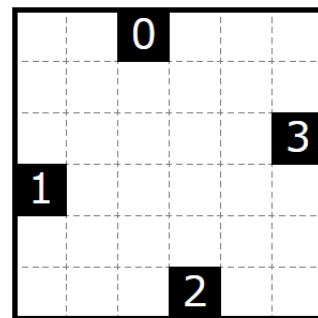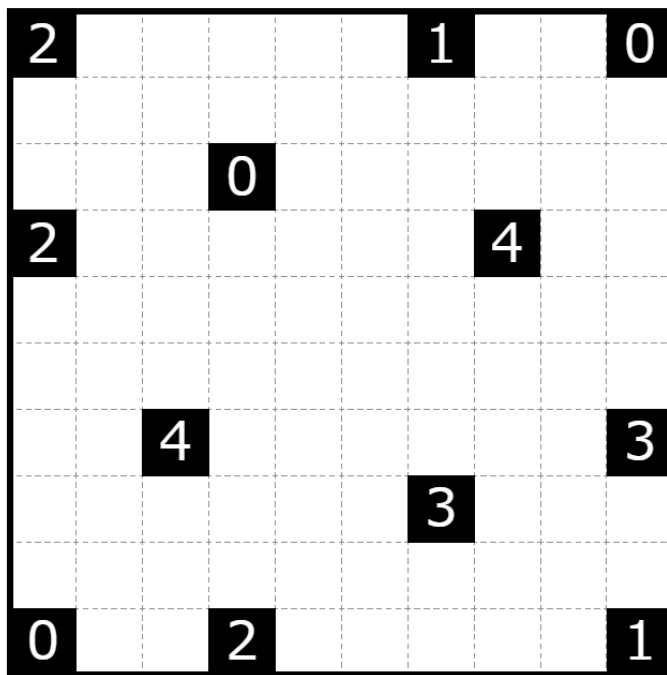GAPP (Penpa+): http://tinyurl.com/2arftm9w
Walkthrough: https://youtu.be/TR8XnU3DEYY

February 15, 2024: Shakashaka

shye

Nothing too special today, just a **Shakashaka**

Rules: Shade a right triangle in some empty cells, each of which occupies exactly half the cell it's in. Each unshaded area must be rectangular in shape. A number in a cell represents how many of the (up to) four cells orthogonally adjacent to the clue contain triangles

Example (puzz.link) by Jovi: https://tinyurl.com/36emue3c
GAPP (puzz.link): http://tinyurl.com/3y7hdcpk
Walkthrough: https://youtu.be/XSEwP854ljl
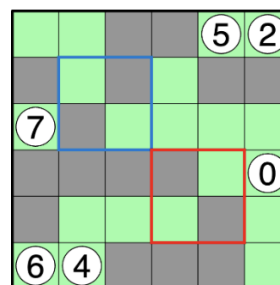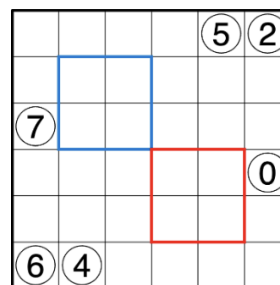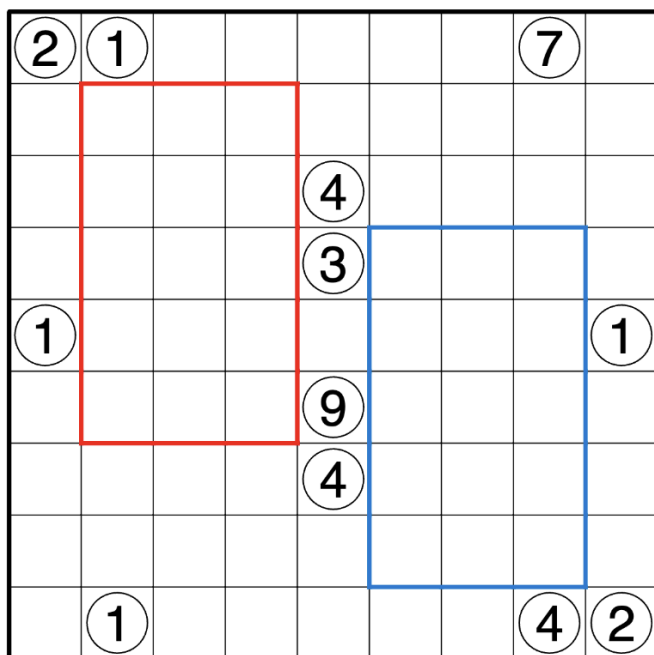
February 16, 2024: Kurotto (Windows)

Freddie Hand

Magnus Carlsen has won the 2024 Freestyle Chess G.O.A.T Challenge, to the surprise of no-one, having defeated Caruana in the semifinals in convincing fashion. This is a chess format where the location of both players' pieces are randomised at the start of the game, leading to 960 possible starting positions.

Well, strictly speaking there are at most 959 positions that can appear - if the random position is just the starting position for standard chess, then it's just standard chess. Though that would be pretty funny.

I'm quite busy with learning openings for all the possible positions right now so I don't have any time to introduce today's **Kurotto (Windows)**, which wasn't even made by me - it was stolen from my evil clone who escaped from a mirror. Mountain climbing has some surprising benefits.

Rules: 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. Clued cells cannot be shaded. Cells in the same position in corresponding windows must have the opposite shading.

Example (Penpa+): http://tinyurl.com/2d7la7z4
GAPP (Penpa+): http://tinyurl.com/2b9rzown
Walkthrough: https://youtu.be/y1QERTA6n3o

February 17, 2024: Hydra

Walker

I've arrived at the final challenge for my counting practice - the Supersized hiking trail at **Hydra** Mountain! 🏞️ 🏔️ The trail is divided into 50 short segments of roughly equal length, and pairs of signs along the path measure the distance from the trailhead. I have a few side trails I want to check out, but my main goal is to reach Fifty Point Peak in the northeast. I've heard the view is breathtaking! 🤩

Rules: Shade some cells so that all shaded cells form one orthogonally connected area with no loops (including 2x2s), that does not touch itself diagonally. Clued cells must be shaded, and are all of the shaded cells which are orthogonally adjacent to only one other. The shortest path along shaded cells from the "1" clue to another clue must occupy a number of cells equal to the value of that other clue, counting the clued cells themselves.

Interface Note: Feel free to use Number mode to mark some numbers along the path!

Example (Penpa+): https://tinyurl.com/23bb8ftd
GAPP (Penpa+): http://tinyurl.com/22dteq3p
Walkthrough: https://youtu.be/PWcDG6O2Xvw
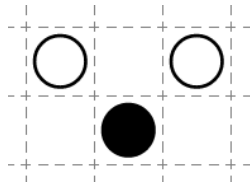
February 18, 2024: Masyu

Lavaloid

Today's ✨ *Studying Sunday* ✨ is a **Masyu** with a deduction that I'd like to introduce to you! In this puzzle, you can spot several instances of the following pattern:

There is a deduction you can make every time this pattern appears. I <u>highly</u> encourage figuring out the deduction yourself, however the GAPP 101 is still available if you're really stuck.

Rules: Draw a non-intersecting loop 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.

GAPP 101: (ROT13) Rirel gvzr gur tvira cnggrea nccrnef, gurer zhfg or n ybbc frtzrag tbvat bhg bs gur oynpx pyhr gung cbvagf njnl sebz gur gjb juvgr pyhrf.

Why is this true? (ROT13) Sbe rnfr bs rkcynangvba, jr jvyy bayl pbafvqre gur tvira bevragngvba. N oynpx pyhr zhfg unir rknpgyl bar iregvpny rkvg naq bar ubevmbagny rkvg. Vs gur iregvpny rkvg tbrf hc, gura gur gjb juvgr pyhrf zhfg unir iregvpny ybbc frtzragf tbvat guebhtu gurz, juvpu oybpxf obgu ubevmbagny rkvgf bs gur oynpx pyhr.

⬇ Puzzle is on the next page ⬇

Rules: Draw a non-intersecting loop 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.
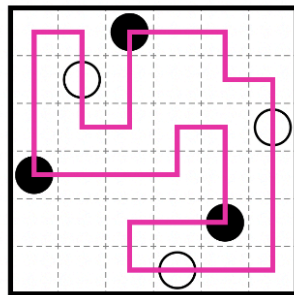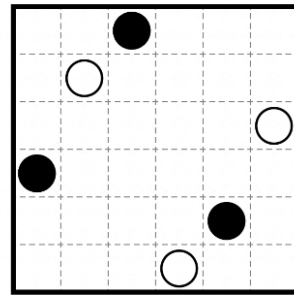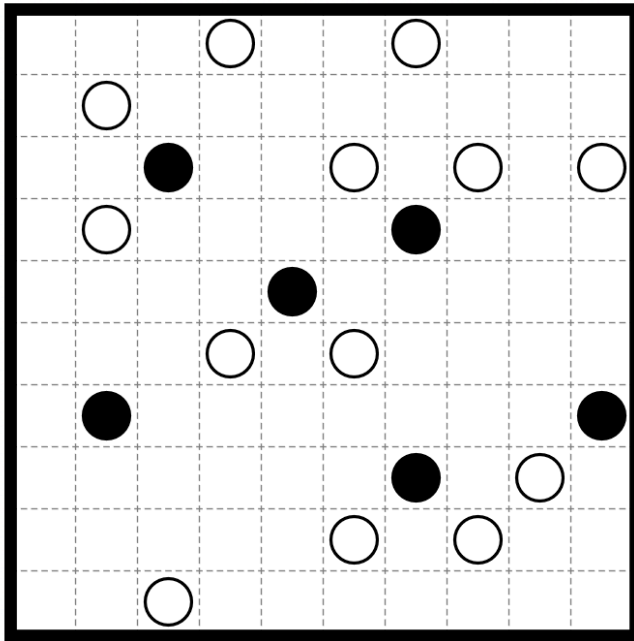

Example (puzz.link) by Eric: https://tinyurl.com/37kxaswe
GAPP (puzz.link): http://tinyurl.com/bddrsydj
Walkthrough: https://youtu.be/qIUkvcKz7Ro

February 19, 2024: Pentominous

shye

Nothing too special today, just a **Pentominous**

Rules: Divide the grid into regions of five orthogonally connected cells (pentominoes) so that no two regions of the same shape share an edge, counting rotations and reflections as the same. Clued cells must belong to a region with the pentomino shape associated with that letter. (see image)

Example (puzz.link): http://tinyurl.com/4m4ccdwh
GAPP (puzz.link): http://tinyurl.com/jdejzvnj
Walkthrough: https://youtu.be/0sYNL8rnlno
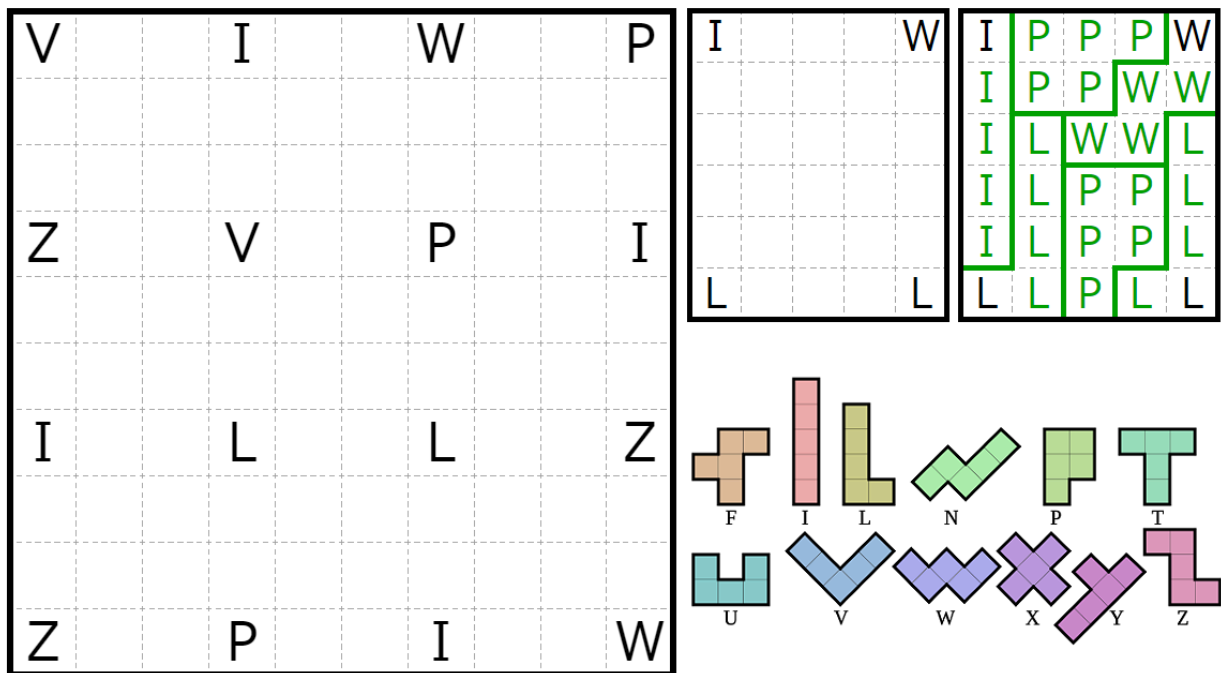
February 20, 2024: Snake

Menderbug

I've recently written a lot of snake-ish puzzles for a thing, so when I needed a genre for today's GAPP, **Snake** is what my mind naturally went to.

Rules: Shade some cells to form a non-intersecting path which does not touch itself, not even diagonally. Black circles must lie on one end of the path. White circles must lie somewhere along the path, but not at an end. A number outside the grid represents how many cells in the corresponding row or column are shaded.

Example (puzz.link) by Tyrg: http://tinyurl.com/yvnk2p97
GAPP (puzz.link): http://tinyurl.com/ytyjc7cu
Walkthrough: https://youtu.be/dbpt8t3aZ-8
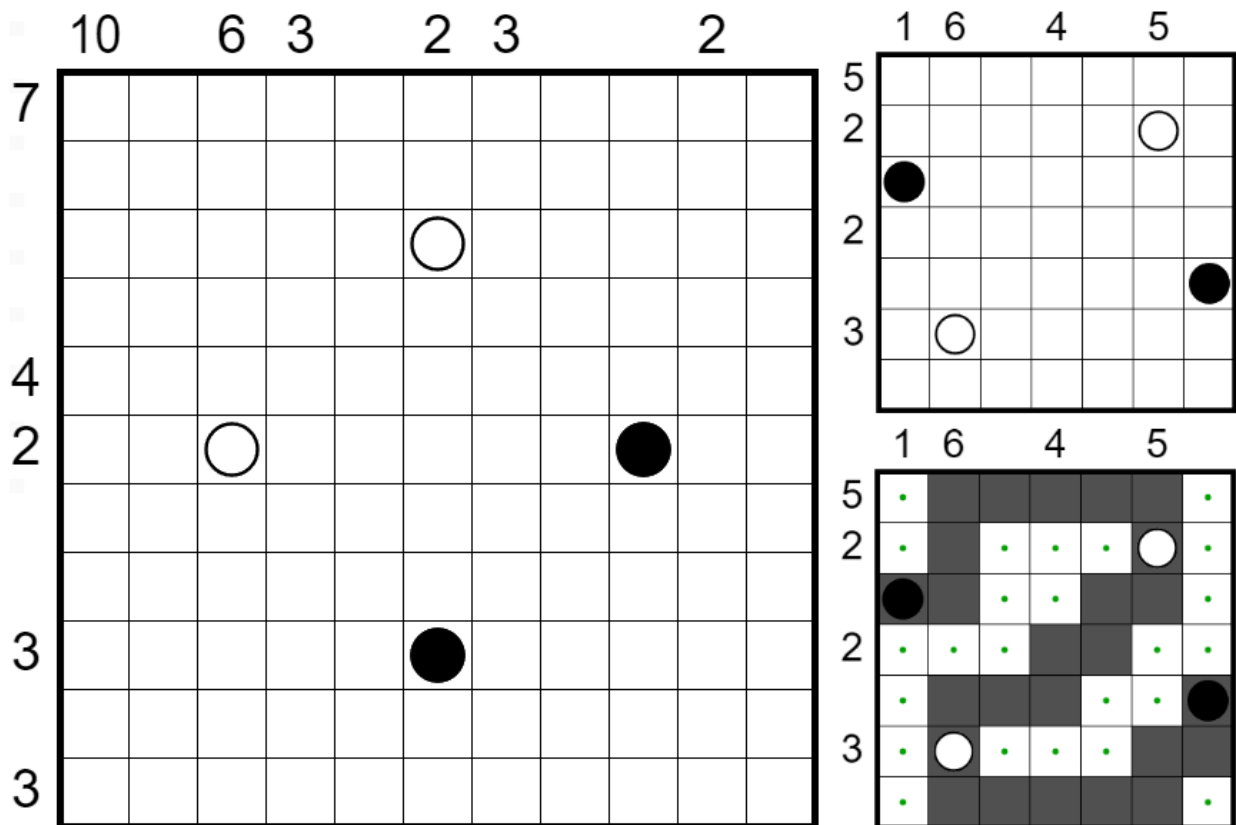
February 21, 2024: Geradeweg (Full)

Freddie Hand

The next puzzle competition is just around the corner: the second round of the *LMI Puzzle Ramayan*, authored by Ashish Kumar, begins in a littl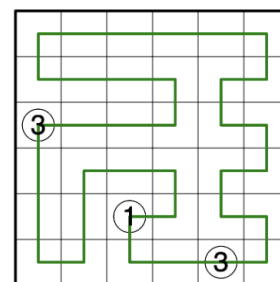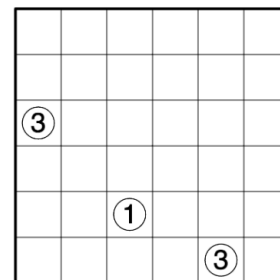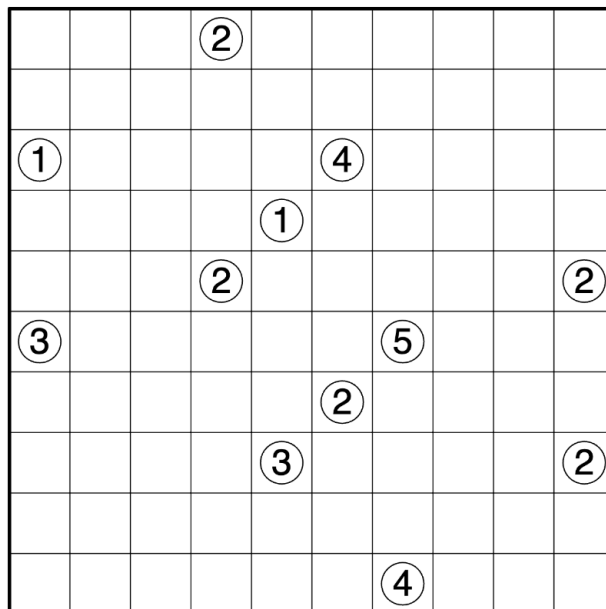e over 24 hours! The instructions booklet has been released at https://logicmastersindia.com/live/?contest=PR202402, with the genres appearing being Geradeweg, Round Trip, Turning Fences, Doppelblock, TomTom, Patchwork (Not the same one as in bakpao's GAPP - it's a number placement genre) , Tripleblock, and **Geradeweg (Full)** which is today's puzzle. As usual solvers who participate in the contest are eligible for a bonus otter 🦦.

In completely unrelated news, did you know that Conway's Game of Life is omniperiodic? That is, for any positive integer n, there exists a pattern that repeats itself after exactly n generations. The proof was actually only completed last year, with the discovery of 19- and 41-periodic patterns ending the search. It's pretty cool how much depth there is to a silly little deterministic algorithm. But no matter what new patterns are discovered the 2x2 square will always be my favourite. And it doubles as a masyu puzzle!

Rules: Draw a non-intersecting loop through the centers of all cells. Every straight line segment that touches a clue must have a length equal to the clue's value.

Example (Penpa+): http://tinyurl.com/25fzgrjc
GAPP (Penpa+): http://tinyurl.com/23leg9ls
Walkthrough: https://youtu.be/zmHzEoePPU4

February 22, 2024: Turning Fences

Walker

Here's another practice puzzle for Puzzle Ramayan, a **Turning Fences**! This genre can be a bit tricky, so I'd recommend checking out the marking note below the rules. And remember that you can get a **bonus otter** 🦦 for participating in the contest this weekend!

Rules: 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 dots.

Interface Note: In this genre, it's often helpful to mark which corners do or don't contain turns. Using Shape mode, I like to mark black circles for turns and white circles for non-turns. (The Penpa interface in the competition supports this marking method as well!)

Example (Penpa+): http://tinyurl.com/23x9leq7
GAPP (Penpa+): http://tinyurl.com/2a3feme2
Walkthrough: https://youtu.be/Sr48QUjzYwM

February 23, 2024: Geradeweg
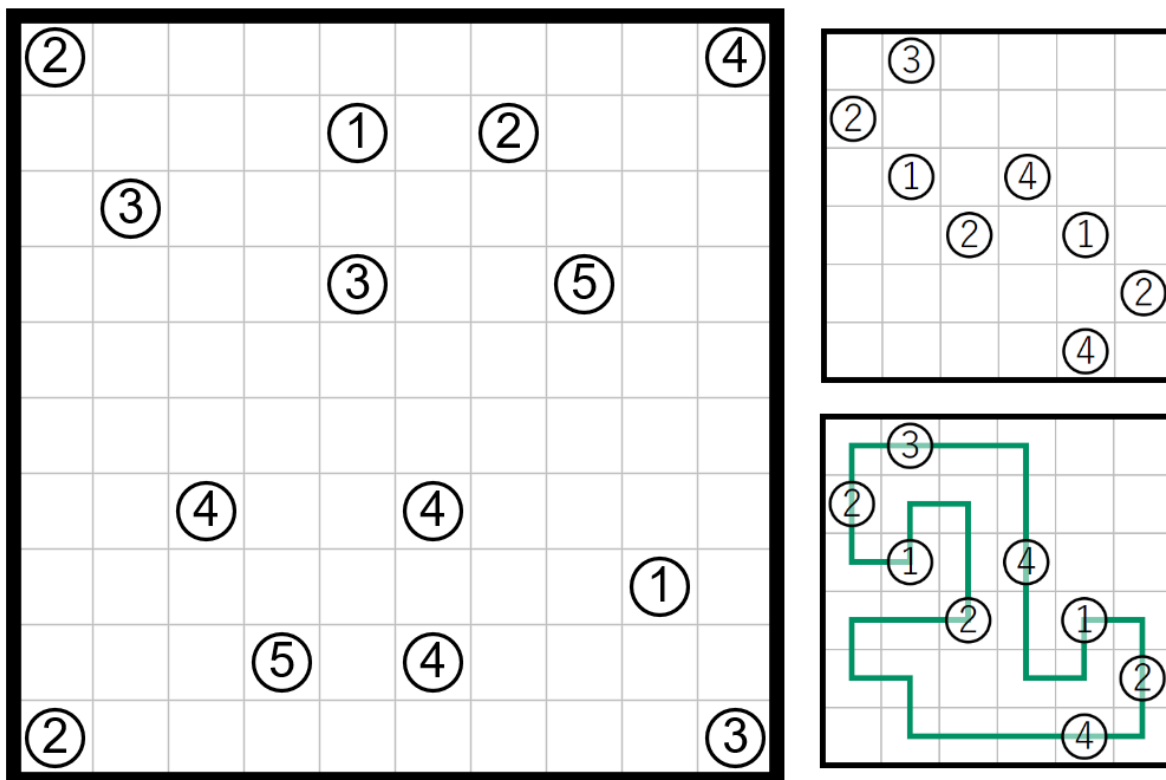
Lavaloid

it   is   he   r e : the second round of the *LMI Puzzle Ramayan*, authored by Ashish Kumar, begins   ! The instructions booklet has been released at https://logicmastersindia.com/live/?contest=PR202402,
G   o   Do   T   h   e
  m   A   l   l
Geradeweg   is today's puzzle. As usual solvers who participate in the contest are eligible for a bonus otter 🦦.

Rules: Draw a non-intersecting loop through the centers of some cells that passes through every clue. Every straight line segment that touches a clue must have a length equal to the clue's value.

Example (puzz.link) by Eric: https://tinyurl.com/yvpcenje
GAPP (puzz.link): http://tinyurl.com/42j7ubed
Walkthrough: https://youtu.be/CWOj7j2mWQE

February 24, 2024: Tetrochain

shye

Nothing too special today, jus- oh, it's Supersized Saturday, I suppose that is something special. Well then, here's a big **Tetrochain** for you to work away at ⛓

Rules: Shade some tetrominoes of cells such that no two tetrominoes touch each other orthogonally, but all tetrominoes form one diagonally connected network. Two tetrominoes of the same shape may not touch diagonally, counting rotations and reflections as the same. Clues cannot be shaded, and represent the number of shaded cells in a straight line in the indicated direction

February 25, 2024: Guide Arrow (Triangular)

Menderbug

It's been a while since we've featured **Guide Arrow** and what a wonderful Sunday to try out the genre on a different grid, a **Triangular** one in this case.

I don't have enough characters left to include all previous appearances, but we've featured the genre many times and you can search for `in:#daily-pencil-puzzles guide arrow` to remind yourself how the logic works in a regular setting.

Rules: Shade some empty cells so that no two shaded cells share an edge and the remaining unshaded cells form one edge-connected area. No complete loop of cells may be unshaded (including small hexagons of 6 cells). An arrow indicates the only direction in which one could begin a path to the star without going through a shaded cell or backtracking.

A couple of reminders of what the arrow rule implies. I will spoiler these for people who want to go in completely blind, but I wouldn't even consider them GAPP 101s and more just clarifications, so feel free to read them before solving: (ROT13)
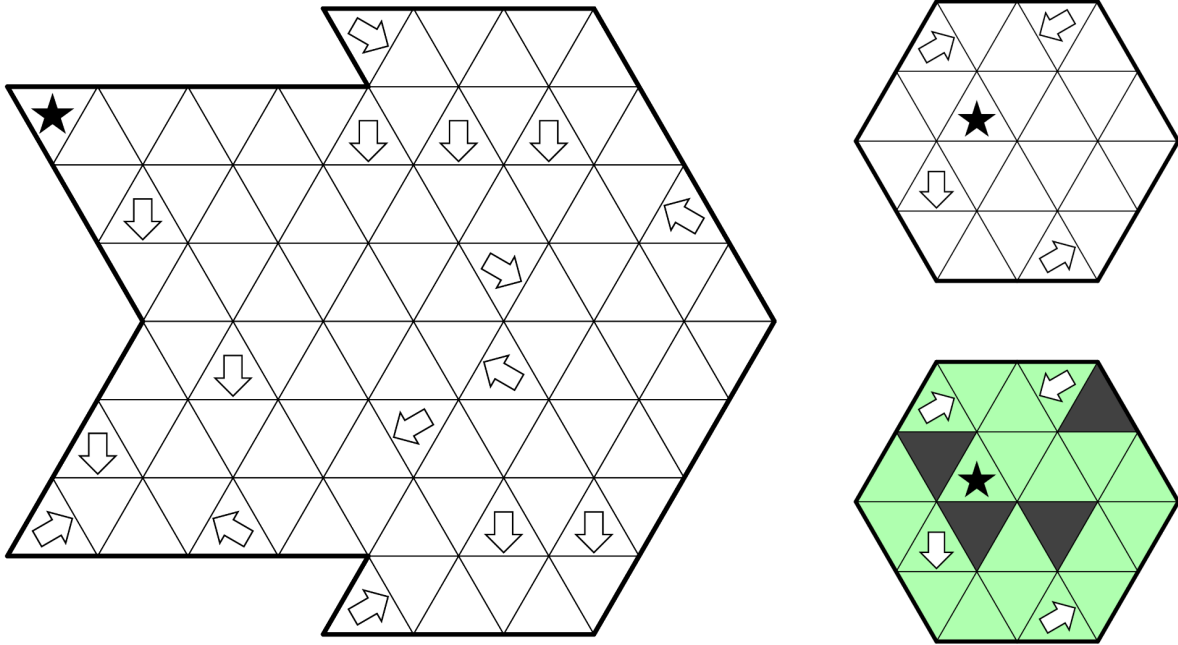
- Lbh pna arire pbaarpg nal fvqr bs na neebj bgure guna vgf gvc gb gur fgne.
- Lbh pna arire pbaarpg gjb aba-gvc fvqrf bs na neebj gb rnpu bgure (bgurejvfr bar jbhyq cbvag va gur jebat qverpgvba, be lbh'q raq hc jvgu n ybbc).

And one quick interface note, the diagonal arrows in the Penpa link look a bit off but they still point at the side you'd expect.

Rules: Shade some empty cells so that no two shaded cells share an edge and the remaining unshaded cells form one edge-connected area. No complete loop of cells may be unshaded (including small hexagons of 6 cells). An arrow indicates the only direction in which one could begin a path to the star without going through a shaded cell or backtracking.

Example (Penpa+): http://tinyurl.com/23smnlye
GAPP (Penpa+): http://tinyurl.com/23sphpew
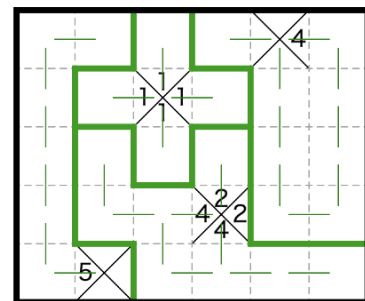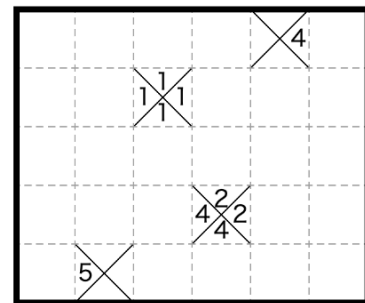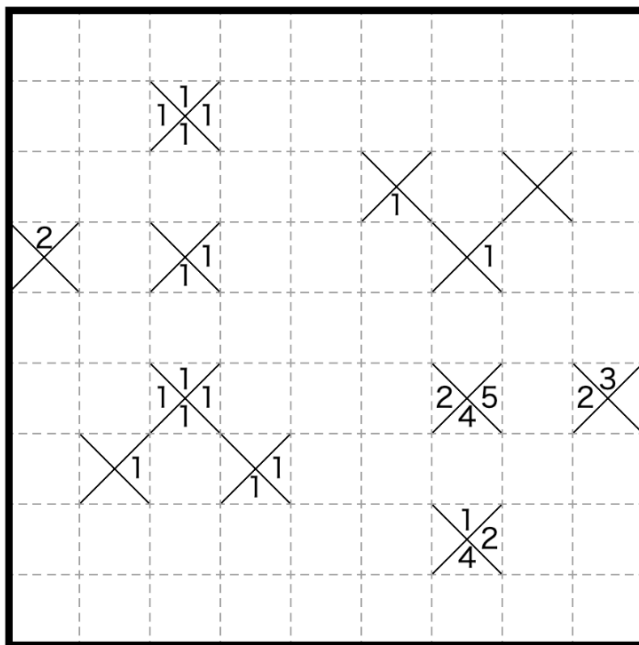Walkthrough: https://youtu.be/kRaKEQ9GxGE

February 26, 2024: Compass

Freddie Hand

Fairly busy so not much of an intro today other than reminding you that the Logic Masters India *Puzzle Ramayan* is still ongoing and open to all. I'll let the **Compass** puzzle speak for itself.

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.

If you are having trouble starting a little **GAPP 101** is attached: (ROT13) gur pbzcnffrf pbafvfgvat bs sbhe 1 pyhrf unf bayl bar cbffvoyr funcr.

Example (puzz.link) by Tyrg: https://tinyurl.com/52zr5wf3
GAPP (puzz.link): http://tinyurl.com/mcr3jars
Walkthrough: https://youtu.be/vqOhlLsE56U

February 27, 2024: Build a Maze

Walker

Today's GAPP is a **Maze**! Or maybe, more accurately, a Labyrinth, given that there is only a single path to the center, with no branches or dead ends. Historically, labyrinths appear across many cultures and in many contexts; and they're still used today as a form of meditation! Though, sometimes it's fun to go more quickly; for a **bonus otter** 🦦, can you trace the path from the start to finish within 0:18? You can try the puzzle below…

hm.

Where did the walls go?

Well… here's a backup. Maybe with these number clues, you can **Build a Maze**! And then try to solve it quickly afterwards for the otter 😄

Rules: Place some walls in the grid, creating a path going from one grey cell to another and visiting every cell exactly once. The path must go through every edge that does not have a wall. Walls are horizontal or vertical lines going along grid lines with their ends at grid nodes.

Digits outside the grid show the lengths of all wall segments in corresponding direction in order. There should be an empty space between two segments.

Here's a **GAPP 101:** (ROT13) Gur cngu guebhtu gur znmr orunirf yvxr n ybbc / cngu chmmyr! Ybbx sbe pryyf gung gur cngu unf gb ivfvg, be pryyf jurer gur cngu nyernql unf gjb ragenaprf naq lbh pna qenj rqtrf ba gur bgure fvqrf.
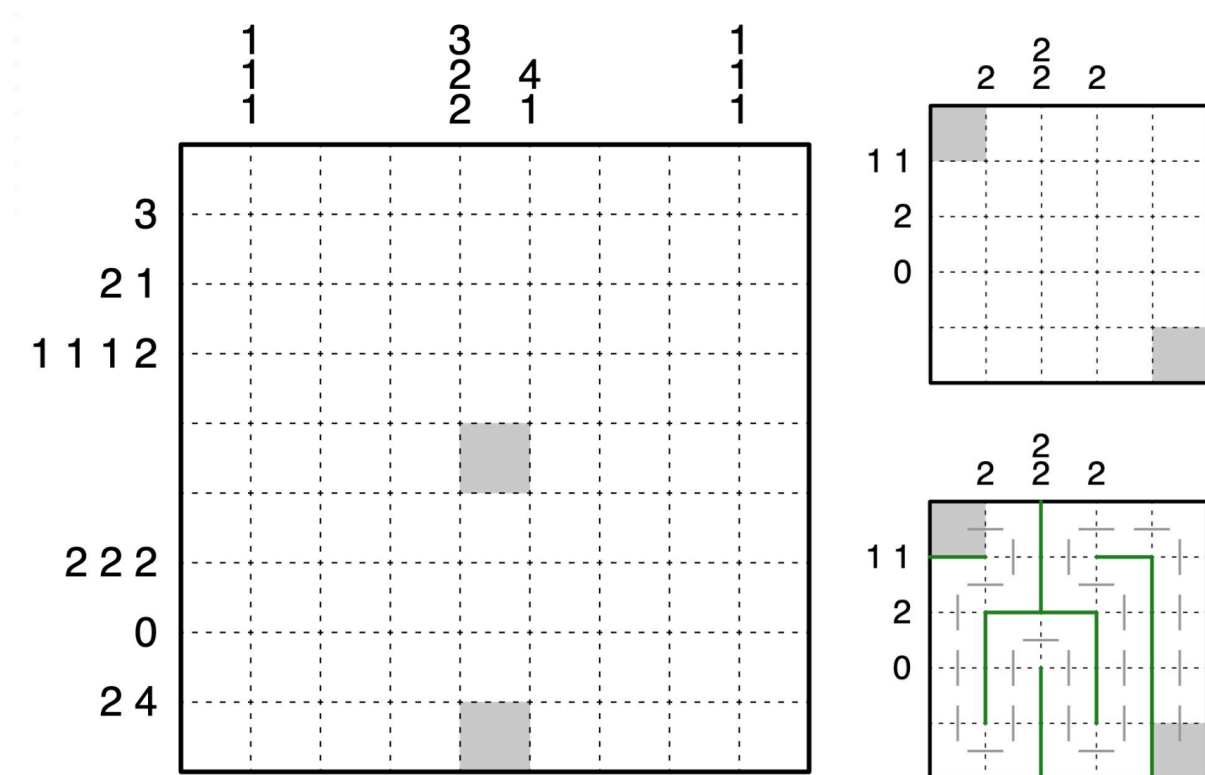
Interface Note: Answer check accepts either all the edges or the path through the maze drawn in Line mode.

⬇ Puzzle is on the next page ⬇

Rules: Place some walls in the grid, creating a path going from one grey cell to another and visiting every cell exactly once. The path must go through every edge that does not have a wall. Walls are horizontal or vertical lines going along grid lines with their ends at grid nodes.

Digits outside the grid show the lengths of all wall segments in corresponding direction in order. There should be an empty space between two segments.
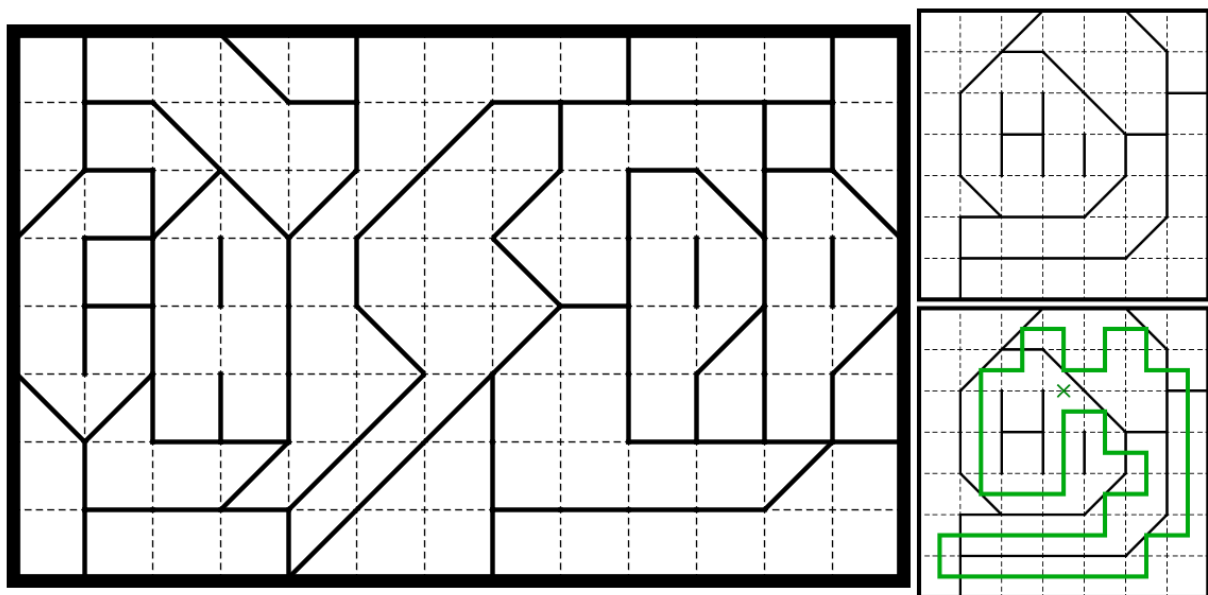
Example (Penpa+): http://tinyurl.com/297qnvpn
GAPP (Penpa+): http://tinyurl.com/227d3o3s
Walkthrough: https://youtu.be/gMQ6_9rVa74

February 28, 2024: Nanameguri

Lavaloid

The GAPP team is proud to announce that we will be launching a new rock band, GA/PP! Please look forward to our first two singles, *It's a Long Way to the Tapa (If You Want to Ring 'n' Ring)* and *Highway to Herugolf*. We've even designed a totally original logo, which you can also solve as a **Nanameguri**!

Rules: Draw a non-intersecting loop through the centers of some cells which passes through each region exactly once. Each cell containing a diagonal portion of a region boundary must be used by the loop, but the diagonal portion cannot be passed through. In other words, the loop must make a 90° turn, as though reflected off of it. *Borders that separate the same region cannot be crossed by the loop.*

Example (puzz.link): https://tinyurl.com/3yecjx72
GAPP (puzz.link): http://tinyurl.com/bdecvbut
Walkthrough: https://youtu.be/nyFuMFmdEHE
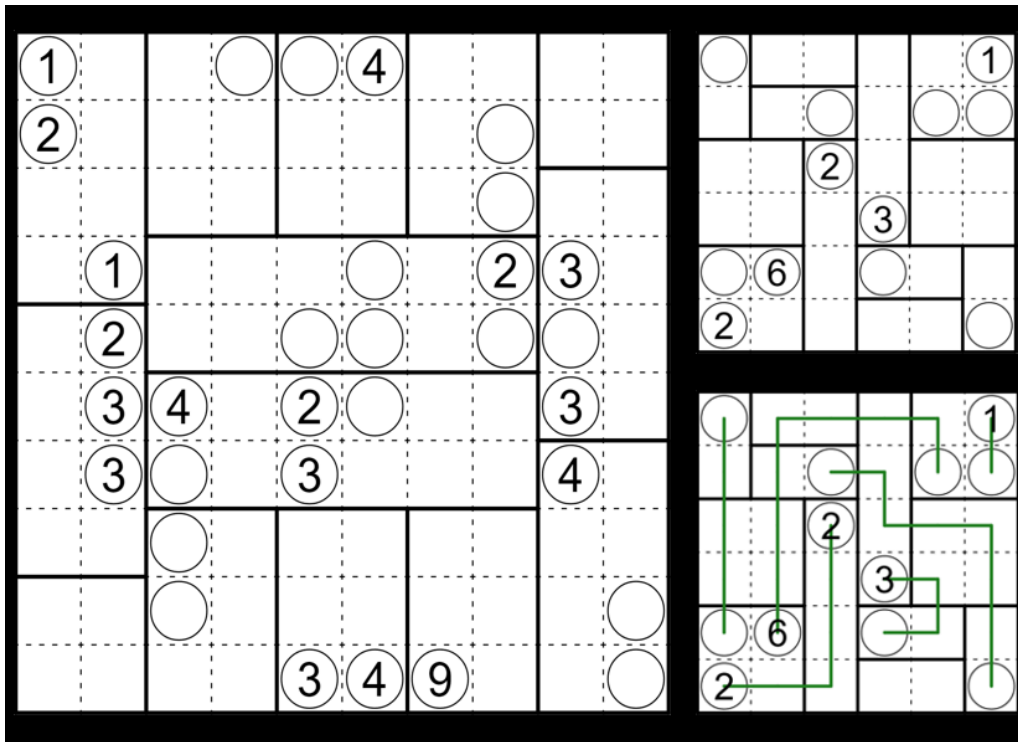
February 29, 2024: Wataridori

bakpao

Surprise, another ping! While you've already had a lovely puzzle pack from the entire team just a bit earlier, we just now decided we should also have a 'regular' puzzle for today. Hopefully you won't mind another puzzle to solve! And yes, you've guessed it, it's another baklog. This time however, the puzzle wasn't finished only one day in advance, but a whopping *two* days! And yes, the baklog is now depleted again. 😎

Today's puzzle is a **Wataridori**! This is an old Nikoli omopa genre, dating back to Puzzle Communication volume 158.

Rules: Draw non-intersecting paths through the centers of some cells with circles at both ends of each path (and none in between). Numbers, if given, indicate how many regions the corresponding path travels through. Each path may visit each region at most once.

Note: While the original rules appear to not allow unclued circles to pair up with each other, this is <u>allowed</u> in this puzzle!


Example (Penpa+): http://tinyurl.com/2yus9mbb
GAPP (Penpa+): http://tinyurl.com/2cg7g99b
Walkthrough: https://youtu.be/9USQv2DRwRk

Bonus 1: Bramble

Menderbug

Rules: Shade some blocks of one or two cells such that no two blocks are orthogonally adjacent and no block crosses a region boundary. All blocks form a diagonally connected network without loops. Two blocks which touch diagonally cannot both be single cells. Number clues indicate the amount of shaded cells in their region.

Example (Penpa+): http://tinyurl.com/25f2awpn
Bonus (Penpa+): https://tinyurl.com/23drhh5m
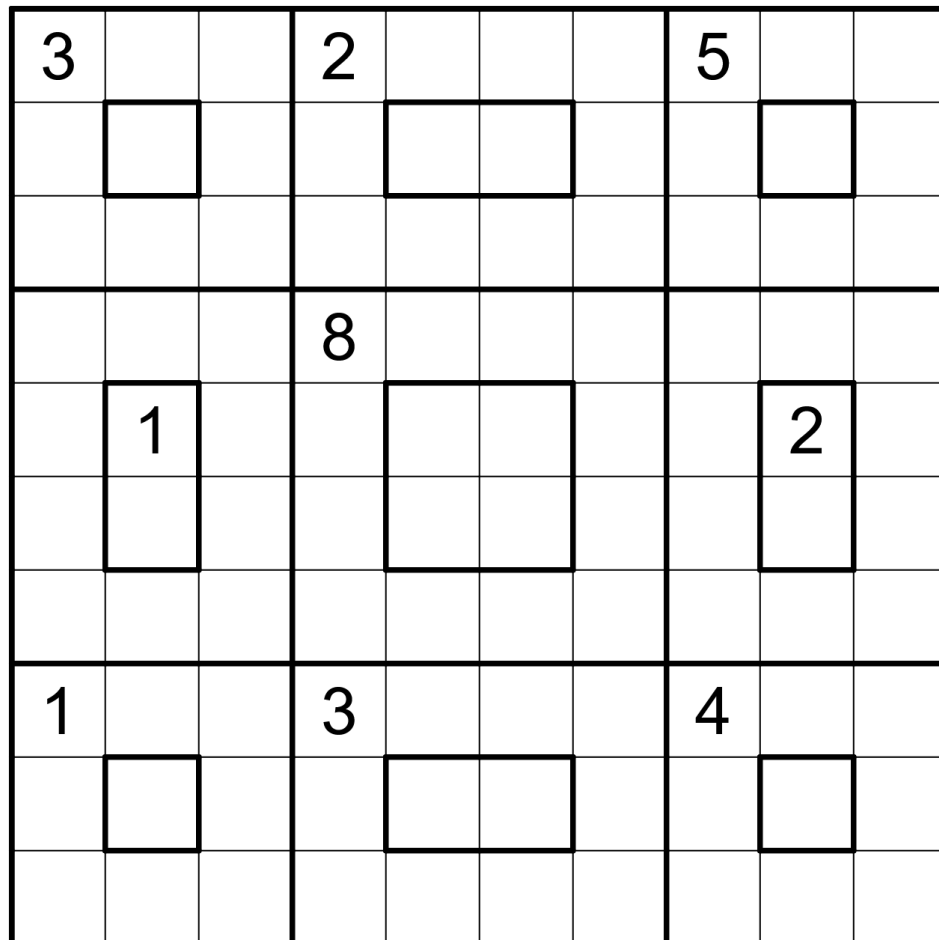
Bonus 2-3: The Double-Headed Dragon's Eyesight Recovery

Lavaloid

Rules:

- Fill some cells with orthogonal arrows (←→↑↓) such that every arrow is orthogonally adjacent to exactly one other arrow (i.e. they form dominoes).
- Each arrow indicates the unique direction that contains the longest run of consecutive empty cells before reaching another arrow or the edge of the grid.
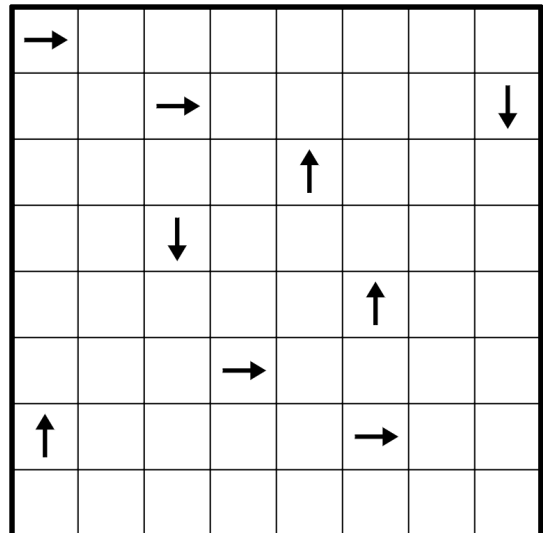
Example (Penpa+): http://tinyurl.com/yomjzo6w

Bonus 2 (Penpa+):
http://tinyurl.com/ymwgnz6s

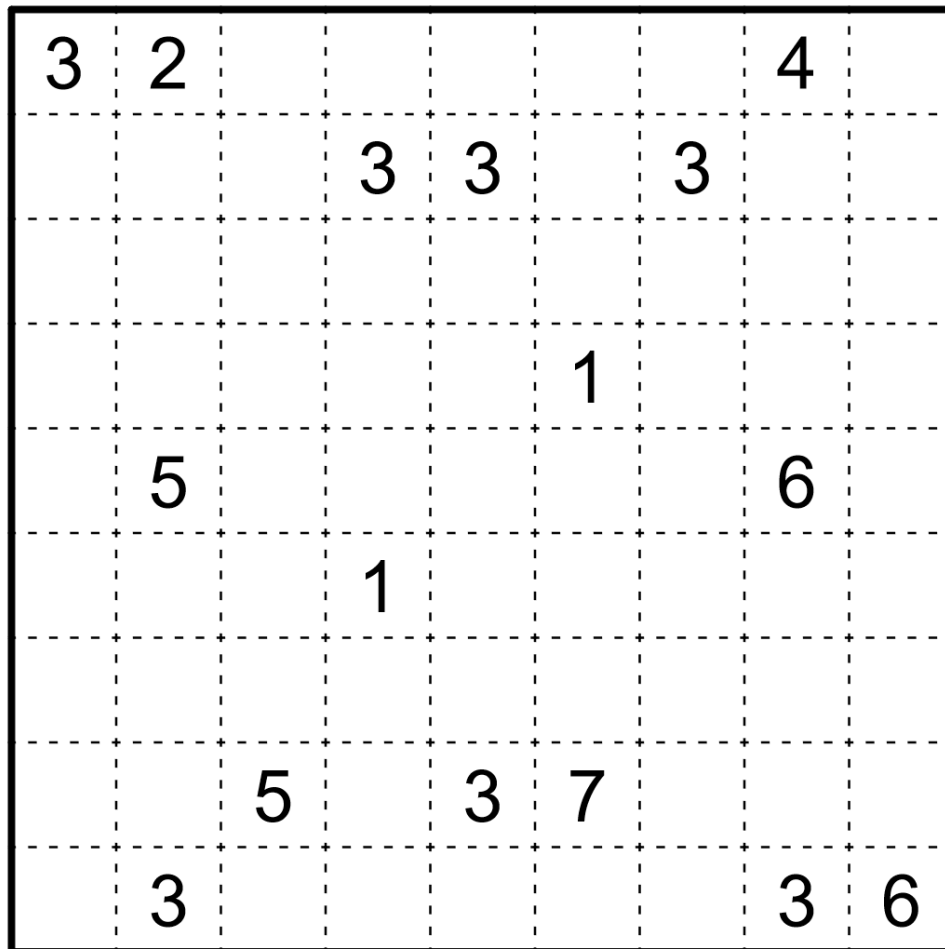Bonus 3 (Penpa+):
http://tinyurl.com/ywe5wr6t
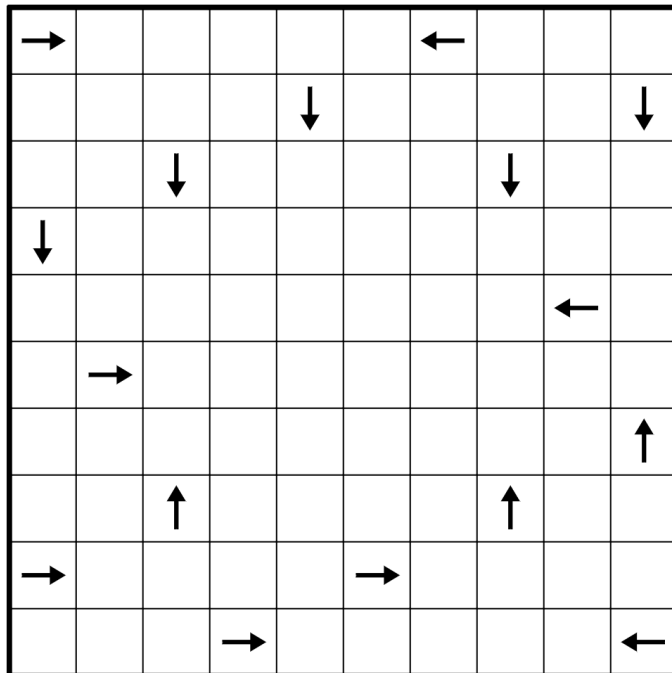
Bonus 4: Flexible Counters

Walker

Rules: Draw a non-intersecting loop through the centers of some cells. For a number visited by the loop, every straight line segment that touches the number must have a length equal to the number's value. For a number not on the loop, the number represents the number of cells in its orthogonally connected area of cells not visited by the loop.


Example (Kudamono): http://tinyurl.com/3epvmdd7
Example (Penpa+): http://tinyurl.com/28voonzg
Bonus (Kudamono): http://tinyurl.com/ycttst6d
Bonus (Penpa+): http://tinyurl.com/29t3d7d6

Bonus 5: Hydra

Walker

Rules: Shade some cells so that all shaded cells form one orthogonally connected area with no loops (including 2x2s), that does not touch itself diagonally. Clued cells must be shaded, and are all of the shaded cells which are orthogonally adjacent to only one other. The shortest path along shaded cells from the "1" clue to another clue must occupy a number of cells equal to the value of that other clue, counting the clued cells themselves.
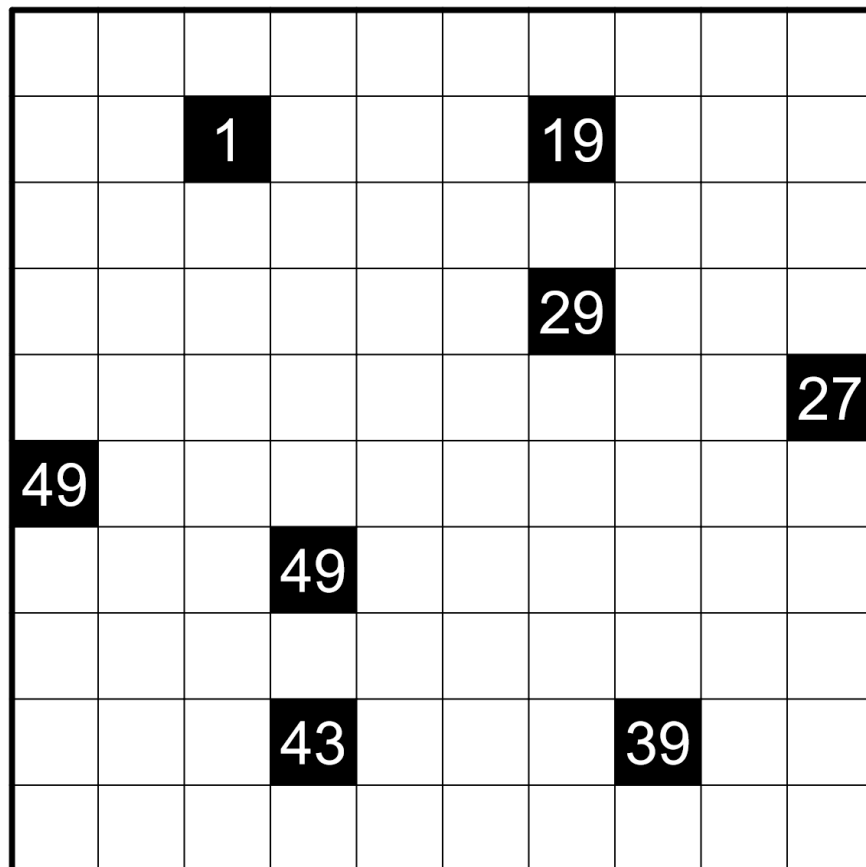
Date	Sloth Time	Crab Time	🐦
01 Feb 2024	0:04:30	0:09:00	Slithery Stygian Owl
02 Feb 2024	0:01:45	0:03:30	Paint-by-Numbered Parakeet
03 Feb 2024	0:04:30	0:09:00	FLUFFY NZ PIPIT
04 Feb 2024	0:01:40	0:03:40	Spinihexbird
05 Feb 2024	0:02:12	0:04:24	Squawks the Parrot
06 Feb 2024	0:03:30	0:07:15	Switching Striated Softtail
07 Feb 2024	0:02:30	0:04:30	Chicken Counted Before it Hatched
08 Feb 2024	0:03:33	0:07:07	Double-Headed Dragon 🐉 (that's a bird right?)
09 Feb 2024	0:02:30	0:04:30	Snowcock (I'm so mature)
10 Feb 2024	0:04:00	0:08:00	Cul-de-sac Red Kingfisher
11 Feb 2024	0:03:15	0:07:00	Chell Clapper Rail
12 Feb 2024	0:03:15	0:06:30	Math Chatham Petrel
13 Feb 2024	0:01:30	0:03:00	Near Miss Nēnē
14 Feb 2024	0:02:30	0:05:00	Lunulated Antbird
15 Feb 2024	0:02:00	0:03:30	Lusaka Tetraka
16 Feb 2024	0:02:15	0:04:45	Clotted Cream-winged Cinclodes
17 Feb 2024	0:03:00	0:06:00	Hiking Hill Partridge
18 Feb 2024	0:02:12	0:04:24	Teacher Tūī
19 Feb 2024	0:03:00	0:05:30	Five-Colored Munia
20 Feb 2024	0:02:00	0:04:00	Competitive Snake Eagle
21 Feb 2024	0:02:15	0:04:30	Ermine Eiao Monarch
22 Feb 2024	0:02:30	0:04:30	Fencing Tern
23 Feb 2024	0:01:45	0:03:30	m ao
24 Feb 2024	0:04:30	0:08:00	Chained Chough

25 Feb 2024	0:03:30	0:06:30	Triangular Honeyguide
26 Feb 2024	0:02:45	0:05:30	Orienteering Oloma'o
27 Feb 2024	0:03:00	0:06:00	Construction Crow
28 Feb 2024	0:02:30	0:05:00	Rook 'n' Roll
29 Feb 2024	0:03:00	0:05:30	Surprise Sungrebe