Mind the GAPP 8

Genuinely Approachable Pencil Puzzles from the CtC Discord
Volume 8: June 1, 2022 - June 30, 2022

June 1, 2022: Context
Eric Fox

Yo-yos! Apple pies! Those little plastic sifters you find in kids' sandboxes! What's that you say? Oh, I've forgotten to give you the context behind what I'm talking about 😄
Well, I'll leave that for you to figure out. Today's puzzle genre is Context, an invention from @RSP!

Rules: Shade some cells so that no two shaded cells are orthogonally adjacent and the remaining unshaded cells form one orthogonally connected area. An unshaded clue indicates the number of orthogonally adjacent shaded cells. A shaded clue indicates the number of diagonally adjacent shaded cells.

⚠️ Due to the nature of this genre, today's example is a fair bit trickier than the main puzzle ⚠️

Example: https://tinyurl.com/27hc7y2g
Puzzle: https://tinyurl.com/22hvd2uv

June 2, 2022: White Link
shye

It's June! Perhaps my favorite month of the year, it has my birthday (tomorrow owo), its the month of pride 🏳️‍🌈 and its the beginning of winter here in the southern hem! I love the winter days where I can cozy up in a blanket with a nice hot cocoa ☕ and look outside to snow. Although we don't quite get snow here in ~~hell~~ Australia, best you see is frost. So today's puzzle is fittingly not quite an Icebarn or Icelom, but still a lovely cold shade of white, its a White Link!

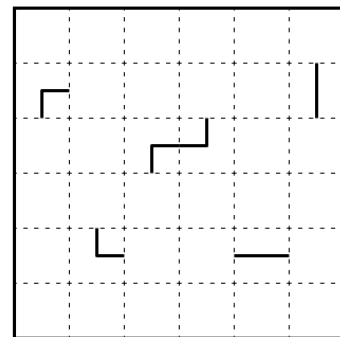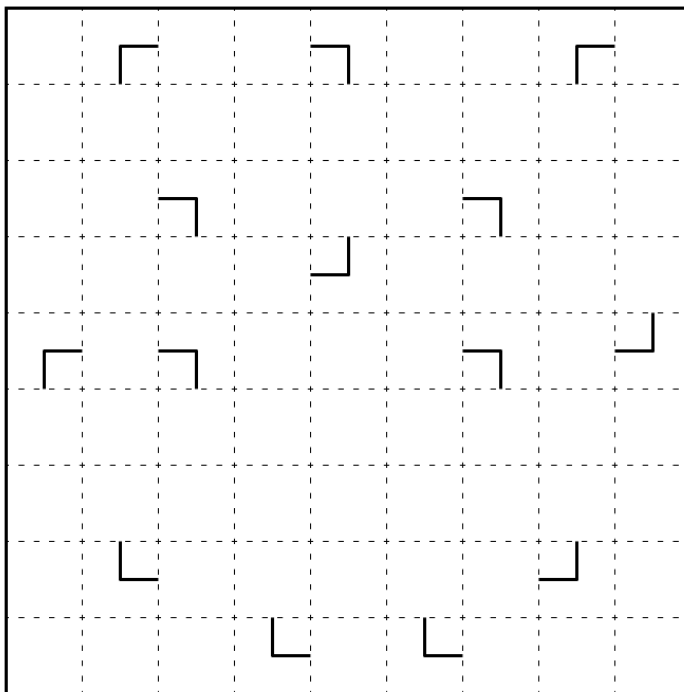**Rules**: Draw a non-intersecting loop through the centers of some cells. A clue shows how the loop crosses through the cell it's in. No two unused cells may share an edge.

Example: https://tinyurl.com/v57fdy7c
Puzzle: https://tinyurl.com/yckcdd6s
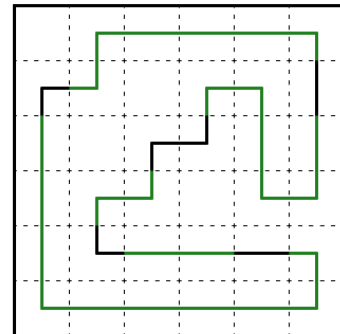
June 3, 2022: Fobidoshi
jovi_al

For answer check to work, use the medium circle size under "Shape," and use the first circle type. Also, if you used shading or coloring to aux-mark cells that must not be used by circles, make sure you get rid of it! Thanks! :blobheart:

Today's puzzle is of a genre created by Naoki Inaba from Japan. Upon googling it to find its inventor, I was surprised to see many books full of the puzzle type-- I had never heard of it before I set out to make a GAPP! So, I hope you enjoy this Fobidoshi, or "Forbidden Four"!

Rules: Place circles into some empty cells such that the cells containing circles form one orthogonally connected area. There may not exist a run of more than three consecutive cells all containing circles horizontally or vertically anywhere in the grid.

Example: https://tinyurl.com/2co7vswo
Puzzle: https://tinyurl.com/2ckmbgdw
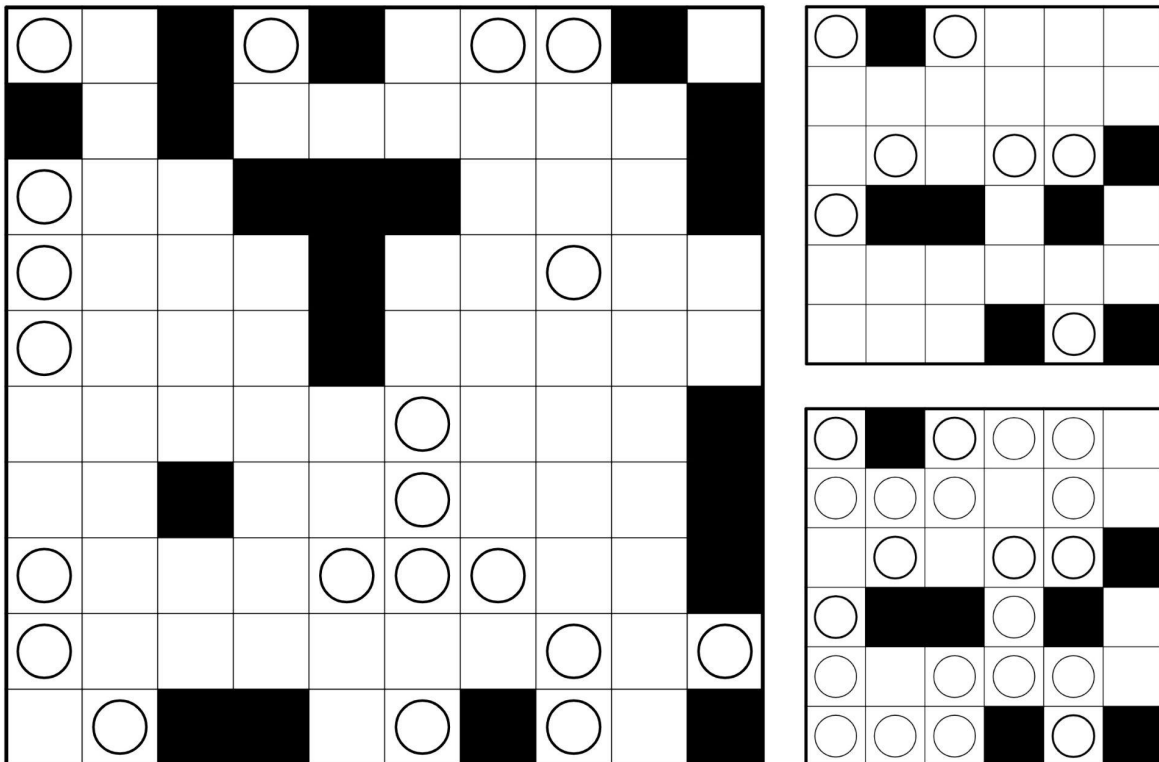
June 4, 2022: Shikaku (Supersized)

Tyrgannus

It's that time again, Saturday! Who doesn't love a good Saturday puzzle to tickle the brain tingles for a bit longer than the rest of the week, eh? Well, this week we'll be revisiting a great genre that combines arithmetic, geometry, and our good ol' friend "reachability"! Get ready to make some tasty mathematical rectangles

Today's GAPP is a Shikaku!

Rules: Divide the entire grid into rectangular regions, each containing exactly one circle. A number inside a circle indicates the number of cells in its rectangle.

Example: https://tinyurl.com/yc4ntpwr
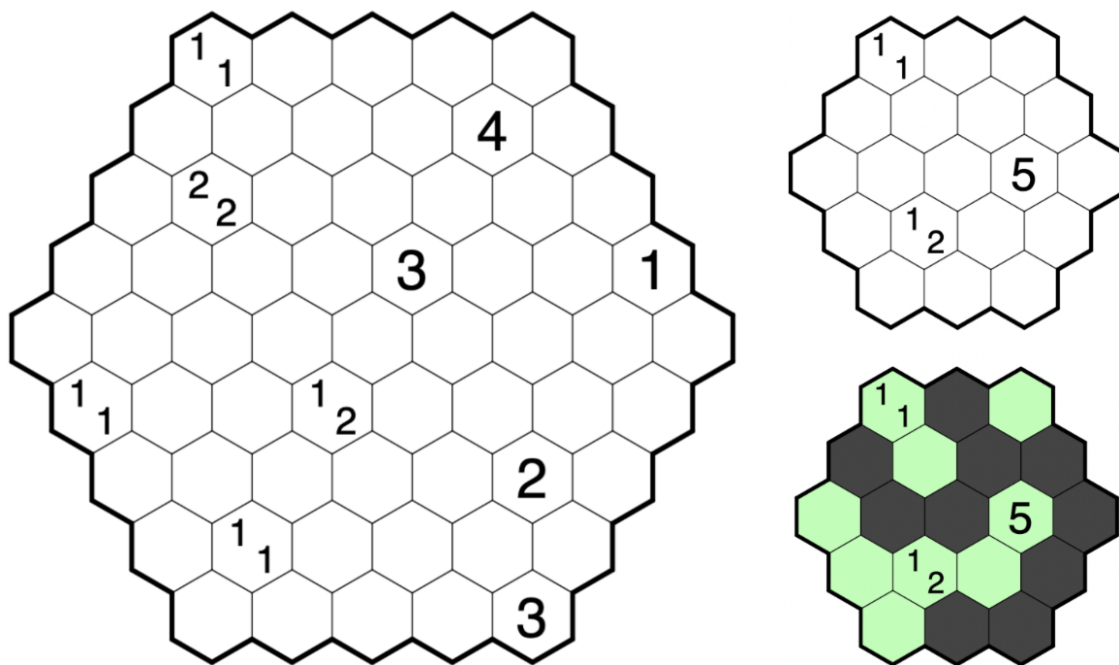Puzzle: https://tinyurl.com/3ms3w7n3
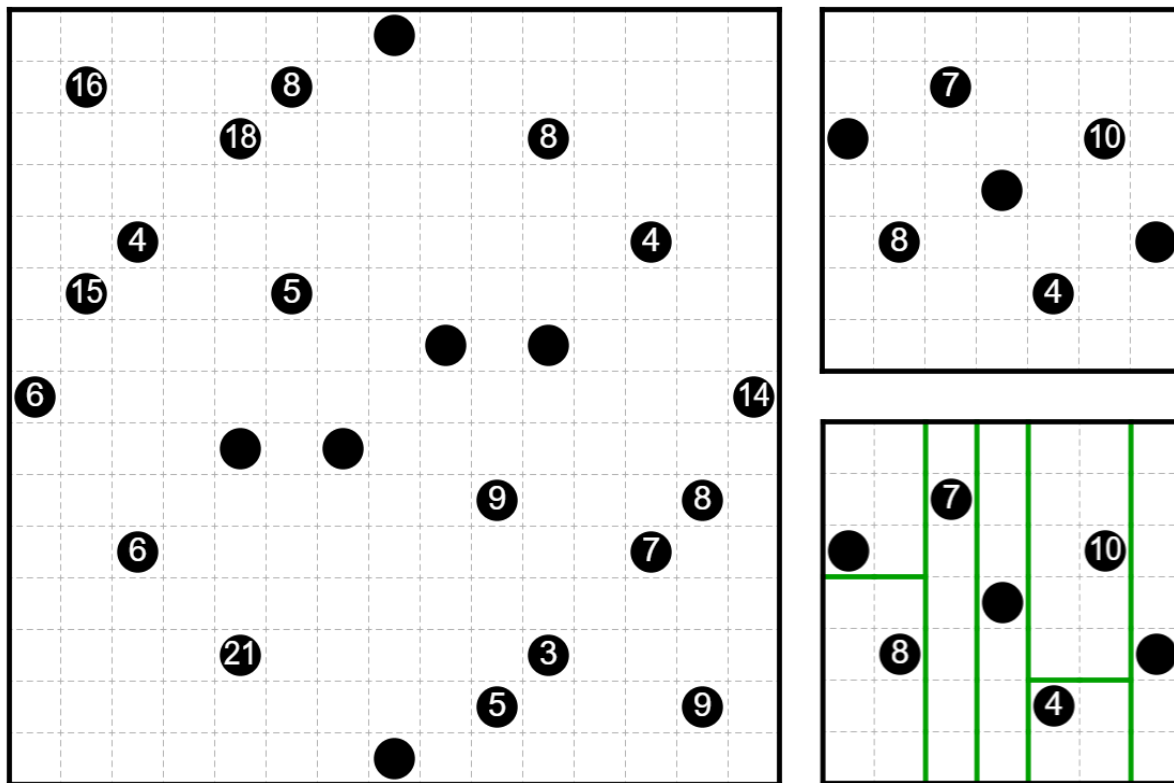
June 5, 2022: Tapa (Hexagonal)
Freddie Hand

You've heard of Supersized Saturday... Now it's time for Strange-shaped Sunday! (And no, I have not been accepting bribes from BenceJoful). Today's Tapa (Hexagonal) puts a spanner in the works, with 6 cells around each clue instead of 8, and a pattern of 3 shaded cells being banned instead of 4.

Disclaimer: Strange-shaped Sunday is not a thing.

Rules: 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) six cells surrounding the clue. No three shaded cells may meet at a vertex (i.e. any 'triangle' of 3 cells cannot be entirely shaded).
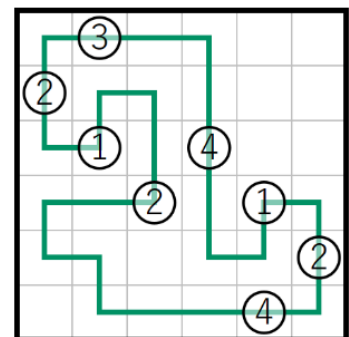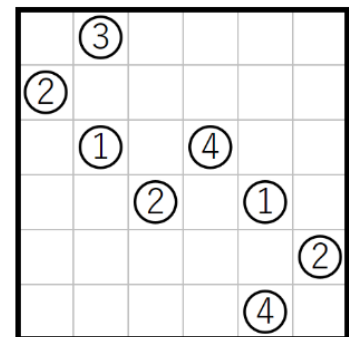

Example: https://tinyurl.com/2dqarynq
Puzzle: https://tinyurl.com/24qgq8b3

June 6, 2022: Geradeweg
Eric Fox

Watch your head! There are bricks on the bed! 🧱 🛏️
Watch your arm! There are pigs on the farm! 🐷 👨‍🌾
Watch your leg! There's a Geradeweg!

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: https://tinyurl.com/yvpcenje
Puzzle: https://tinyurl.com/5a2dfeuj

June 7, 2022: Turnkey
shye

It has come to my attention that one too many speedy sloths :speedysloth: have been awarded lately, take a quick scroll through the last few puzzles to see what I'm talking about. There can only be one explanation, we have a sloth-snatchin' thief on the loose since it obviously can't have anything to do with us setters as the ones who determine the time standards. So I went ahead and doubled down on security yesterday by installing a bunch of fancy locks in GAPP HQ 🔒 and as shown by the reactions to the Geradeweg, it was effective!
...Only issue is, I went and lost all the keys now 😭 I swear they were right here just a moment ago! Maybe the thief is cleverer than I anticipated, and they're messing with me... I always come prepared though, by solving today's Turnkey puzzle, we should hopefully find some shape that fits! 🔑

Rules: From each clue, draw a path through the centers of cells. A number indicates how many times its path turns. Each path must be at least two cells long (not including the cell with the clue) and every cell must be visited by exactly one path.

Example: https://tinyurl.com/6s6hxuxc
Puzzle: https://tinyurl.com/bp59myzw
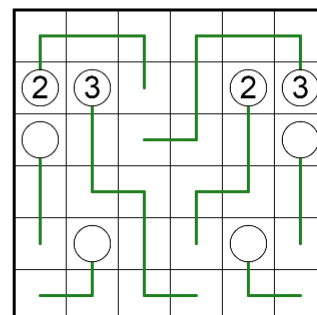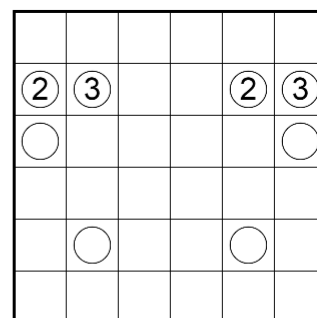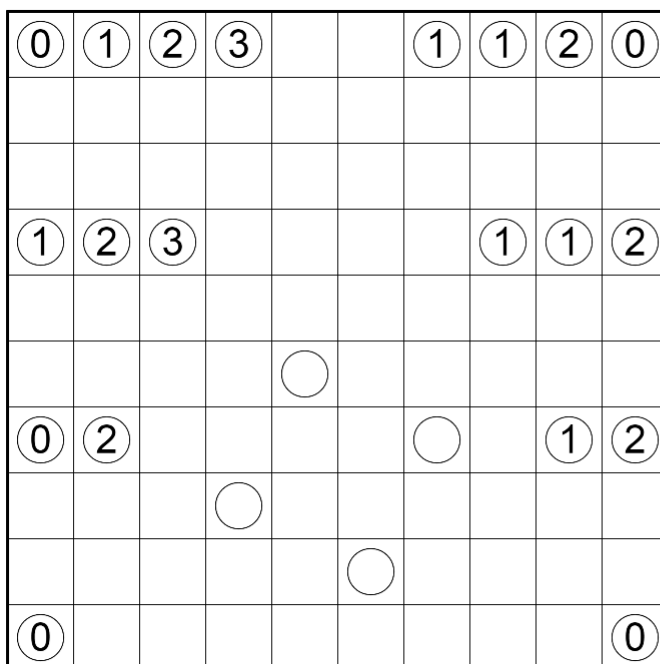
June 8, 2022: Midloop (Full)
jovi_al

Today's genre is another full loop! I simply like them a lot, so I hope you enjoy solving this Midloop (Full) as much as I enjoyed setting it!

Rules: Draw a non-intersecting loop through the centers of some cells that passes through every circle. Each circle marks the center of the straight line segment it lies on.
Variant Rule: The loop must pass through all cells.

Example: https://tinyurl.com/25o9gwgo
Puzzle: https://tinyurl.com/26msa5h6
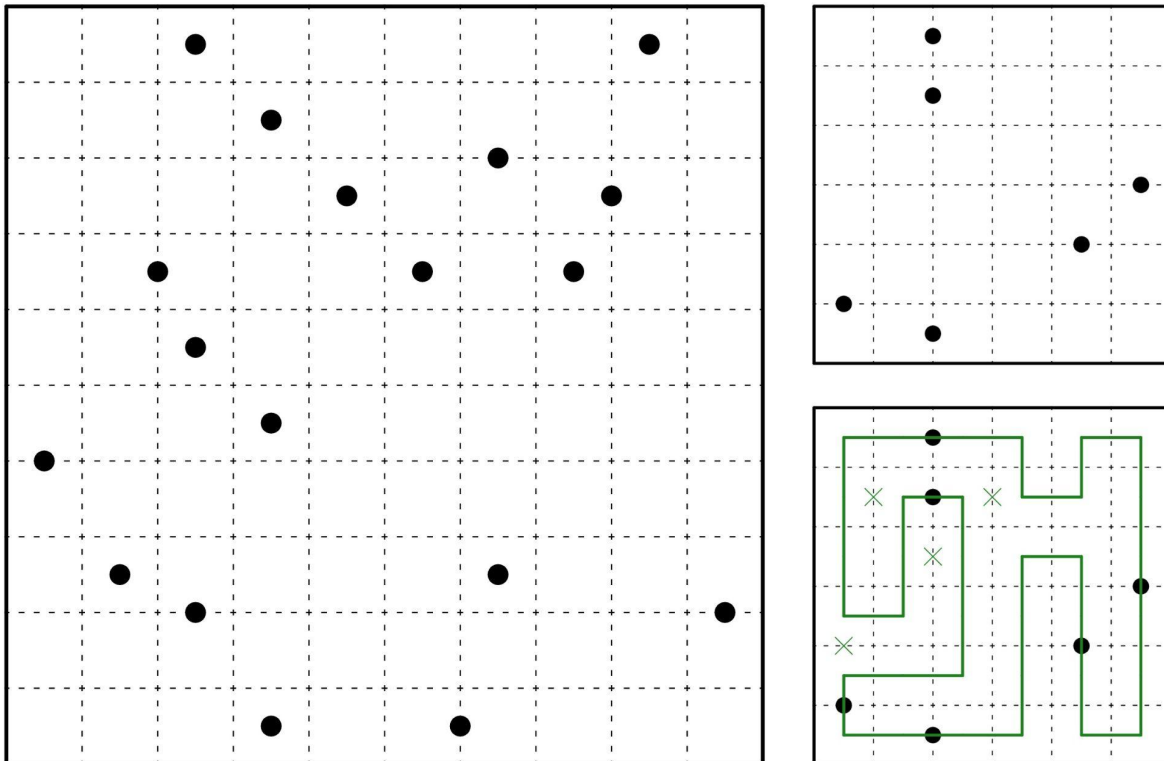
June 9, 2022: Pentominous (Borders)
Tyrgannus

Today's GAPP is a throwback to the early, early days of the channel. We're talking October type far back 😲. Revisiting a genre that hasn't been covered for more than 220 days, we will once again dividing the alphabet...logically! 😎 This time though, we have a bit of a twist. Some silly setter that it was a good idea to put walls in the puzzle, oh no!
Today's GAPP is a Pentominous (Borders)!

Rules: Separate the grid into sets of five orthogonally connected cells called pentominoes. Pentominoes of the same type cannot share an edge orthogonally, but they can touch diagonally. Letter clues indicate which type of pentominoes the clue resides in. Not all pentominoes are clued and multiple letter clues may belong to the same pentomino.
Variant Rule: A single pentomino may not cross a border nor have cells on both sides of a border.


Example: https://tinyurl.com/3md5nyrf
Puzzle: https://tinyurl.com/k39cs8r5
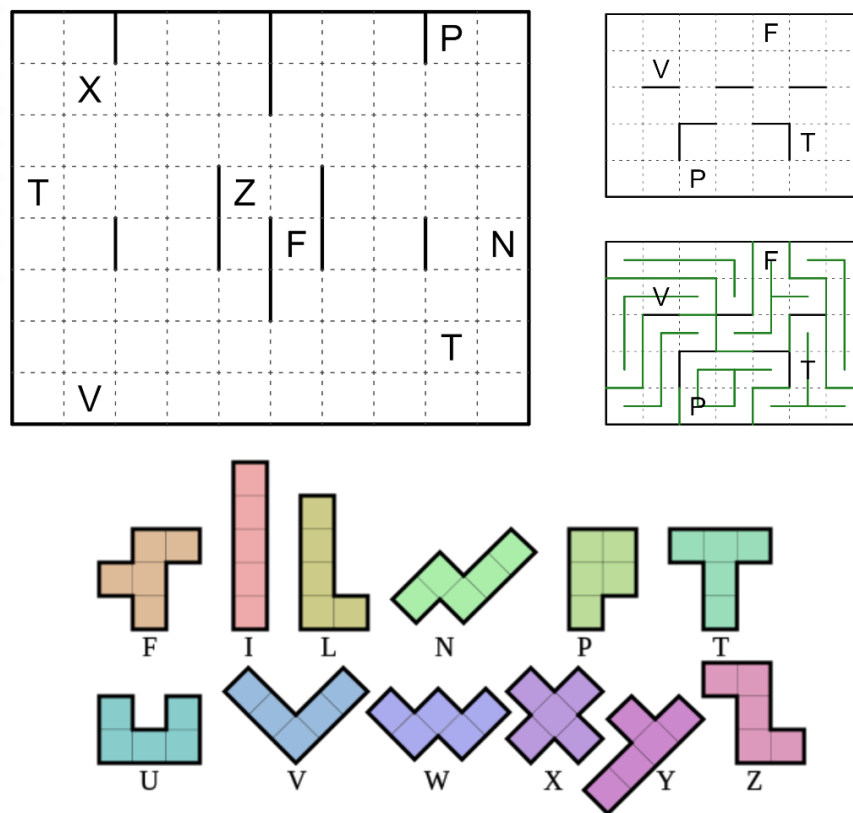
June 10, 2022: Sunglasses
Freddie Hand

We've had spiral galaxies and Fillomino (Symmetry), which have tested your grasp of rotational symmetry, leaving reflectional symmetry to idly watch on the sidelines. But today it comes to the forefront in this Sunglasses puzzle, so perhaps it's no surprise that this is the "Coolest" GAPP since Jotunloop.

Rules: Shade some cells to form pairs of sunglasses, each consisting of one of the given bridges and two lenses made of orthogonally connected shaded cells which are symmetric with respect to the perpendicular bisector of the bridge. The endpoints of each bridge must be shaded, and all other cells on the bridge must be unshaded. Pairs of sunglasses may not share lenses, and lenses may not touch one another orthogonally. A clue outside the grid represents the total number of the shaded cells in the corresponding row or column.


Example: https://tinyurl.com/384tmpf4
Puzzle: https://tinyurl.com/2p9e5r23
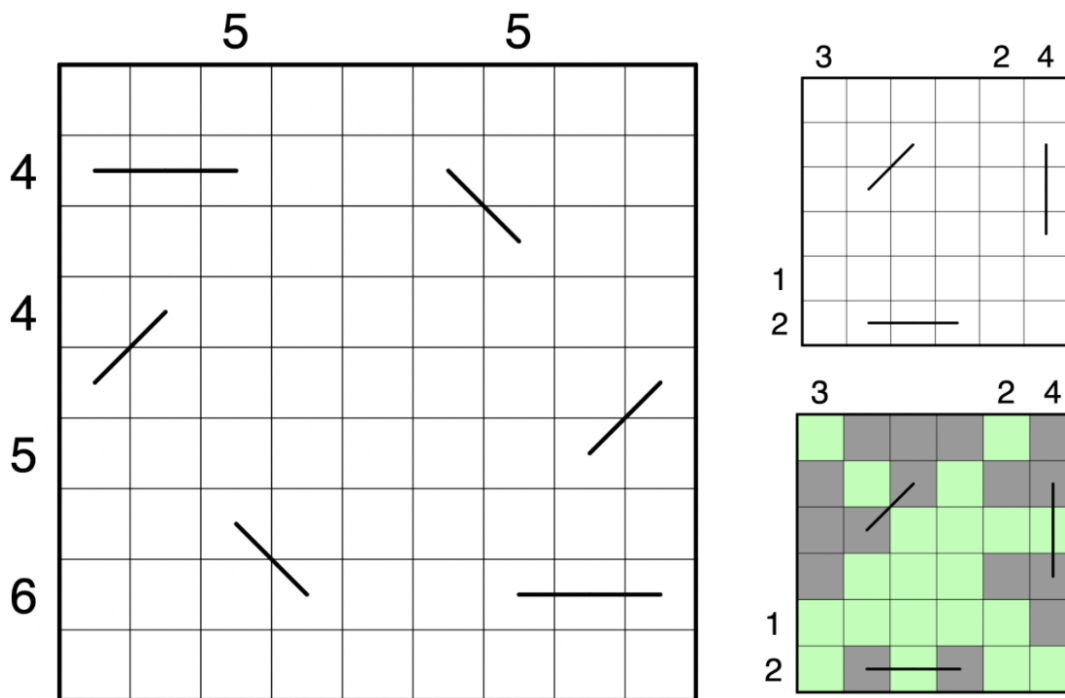
June 11, 2022: LITS (Supersized)
Eric Fox

It's Supersized Saturday again, GAPP solvers! Today we're revisiting a genre which is one of my personal favorites: LITS!

Rules: Shade one tetromino of cells in each region so that all shaded cells form one orthogonally connected area. Two tetrominoes of the same shape may not share a bold border, counting rotations and reflections as the same. No 2x2 region may be entirely shaded.

Example: https://tinyurl.com/2p82afba
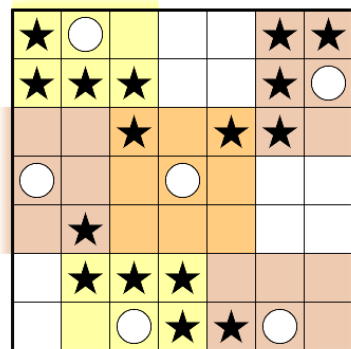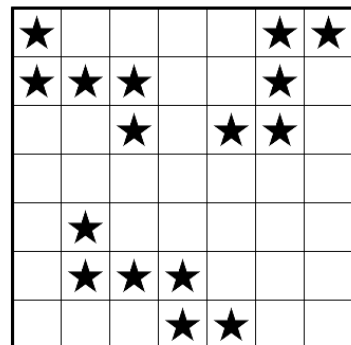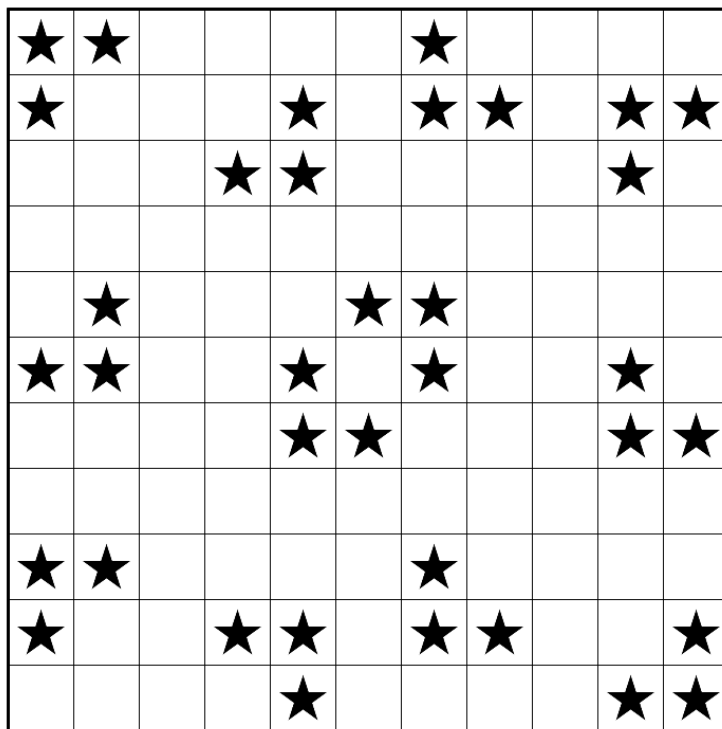Puzzle: https://tinyurl.com/597dancp
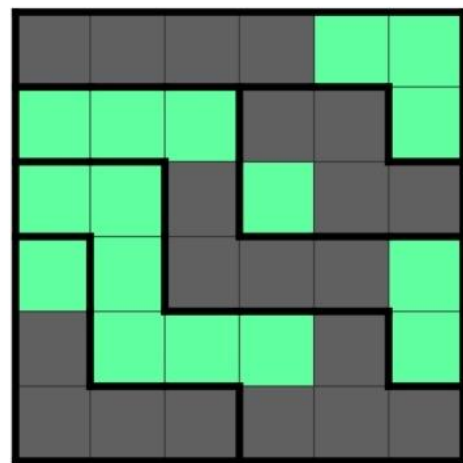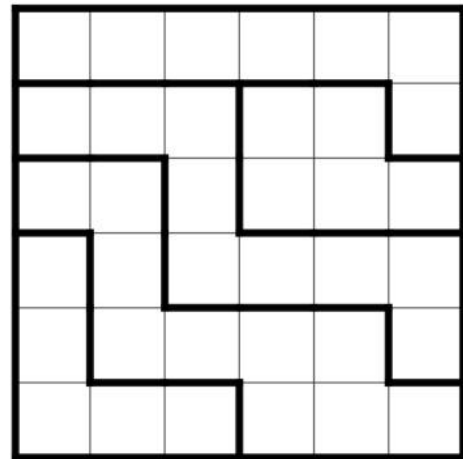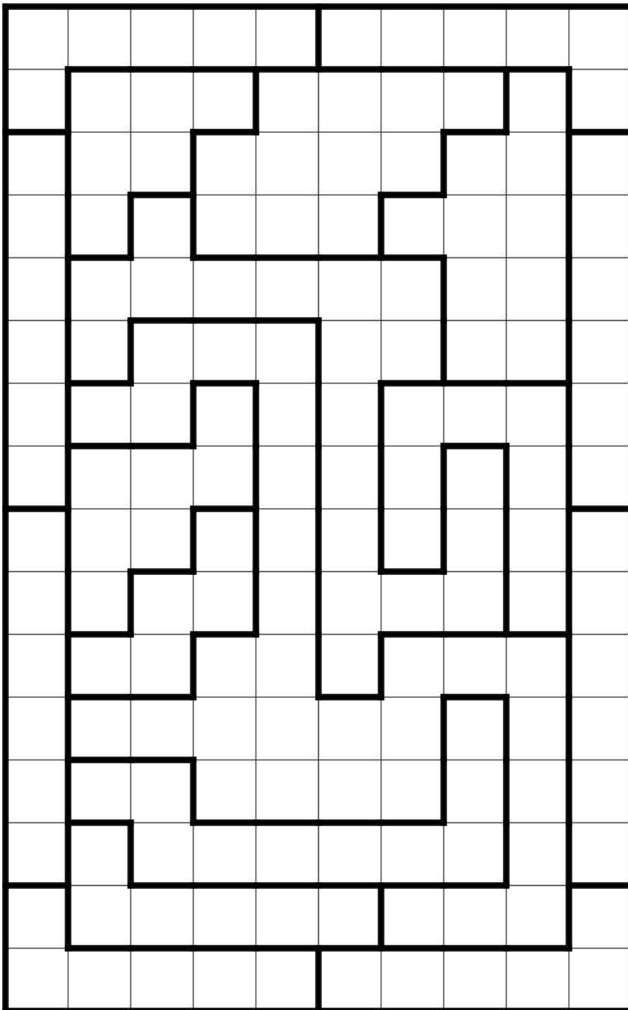
June 12, 2022: Stardust
shye

All this time setting GAPPs and I haven't done a single object placement genre... well that changes today! It's a simple little ruleset this, but with some cute logic that I hope you'll enjoy :>

Today's puzzle is a Stardust! ✨ 💫

Rules: Place circles into some cells. Circles cannot be placed in cells containing stars. Every star must be contained within the 3x3 area surrounding a circle. Circles' surrounding 3x3 areas may not overlap one another.
Note: 3x3's don't have to exist entirely within the grid, so long as the circles are within the grid! Also, I advise using colors to help track which cells cannot be circles, but you can go about it however is most intuitive to you.
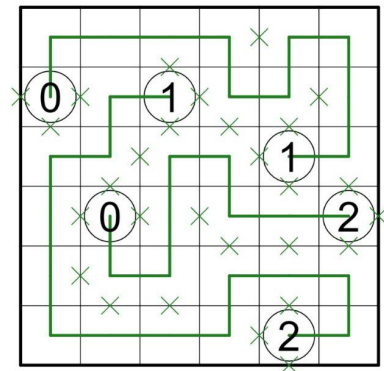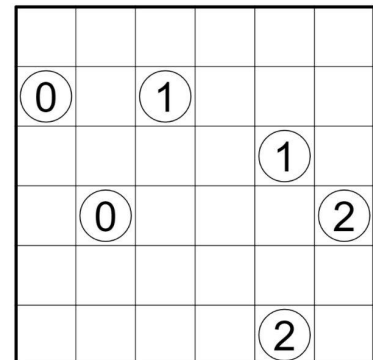
Example: https://tinyurl.com/2p97nkkf
Puzzle: https://tinyurl.com/2bhc24dh

June 13, 2022: Portal Loop

jovi_al

"Hello and, again, welcome to the GAPP-erture Science Computer-Aided Enrichment Center. We hope your brief detention in the relaxation vault has been a pleasant one. Your specimen has been processed and we are now ready to begin the test proper."

Today's genre is a Portal Loop!

Rules: Draw a non-intersecting loop through the centers of all cells. When the loop enters a portal with no number, it must travel straight through the cell the portal is in (note that there are no numberless portals in this puzzle). When the loop enters a portal with a number, it must teleport to the corresponding portal and continue in the same direction (the loop does not necessarily have to visit the portals in ascending order).

Example: https://tinyurl.com/2y2agxan
Puzzle: https://tinyurl.com/2y7yy2uk

June 14, 2022: Trio Cut

Tyrgannus

It's been long established at this point that I like silly looking noodley regions 🍜 . I wouldn't be surprised if the gapps I've done have the highest percentage of silly looking regions 😅 . But you know what? I think I'm going to just cut it out and make a nice shading puzzle. Hmmm, maybe something with triominoes will make the cut. Hmmm, maybe I should cut it out and talk normally ✂️

Today's GAPP is a Trio Cut!

Rules: Shade some triominoes of cells so that every region contains exactly three shaded cells. Shaded triominoes may not touch orthogonally. Each triomino must be cut twice by region borders.

Example: https://tinyurl.com/yc5ukxan
Puzzle: https://tinyurl.com/4v4e43vj
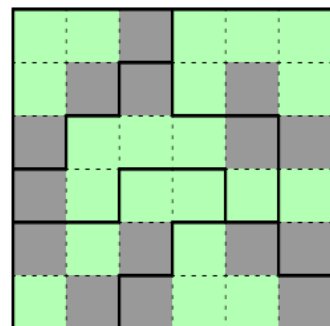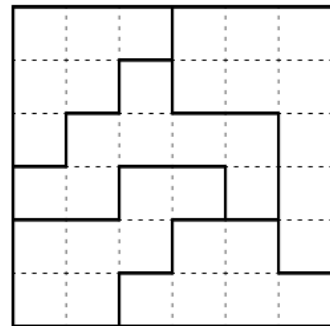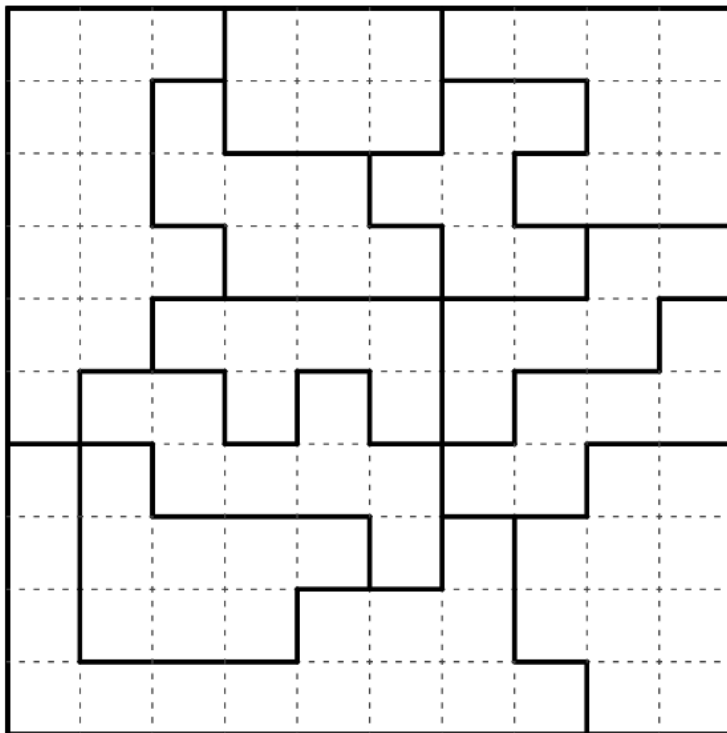
June 15, 2022: Falling Numbers
Freddie Hand

At GAPP we try to make our puzzles approachable for a (fairly) international audience. So today's puzzle, Falling Numbers, is the non-abecedarian version of Falling Letters, a genre which first appeared at 2017 WPC, invented by Nikola Živanović. (I haven't just made this up on the spot, falling numbers has appeared before!). And watch out for a falling numbers puzzle with '27' clues coming soon to truly assert its dominance.

Speaking of which, Falling Numbers (modulo n) could be an interesting variant... anyway,

Rules: Place numbers into some cells in the grid. Equal numbers cannot share a side, and blank/shaded cells cannot share a side. Each outlined region must be filled in increasing order, starting with 1, from left to right and top to bottom (i.e in reading order). Each outlined region contains at least one blank/shaded cell. Cells with numbers form a single (orthogonally) connected area.

Note: it is not necessary to shade all blank cells for answer check. However it maybe be helpful as notation (and similarly greening cells which are known to contain a number).

Example: https://tinyurl.com/ywkzrcaa
Puzzle: https://tinyurl.com/269jv3wq

June 16th, 2022: Directions
Eric Fox

Up, up, down, down, left, right, left, right……Unfortunately that cheat code won't get you the answer to this puzzle. Can you work your way through this **Direction** puzzle using its mind-bending ruleset?

Rules: Place an arrow into each empty cell of the grid, each pointing toward one of its (up to) four orthogonally adjacent cells. A clue in a cell indicates the direction of the arrow its own arrow is pointing at. (Arrows may not point off the grid)

Answer check is not enabled for the example or the main puzzle, because Penpa+ doesn't support this input mode!

U	L	R	D	L
D	U	R	D	U
D	L	D	U	D
L	R	R	L	R
L	R	R	R	U

R	D	L
L	R	U
U	L	D

↓R	◁D	◁L
▷L	◁R	↓U
▷U	↑L	↑D

Example: https://tinyurl.com/2bbg8caq
Puzzle: https://tinyurl.com/26n5ympc

June 17th, 2022: Ququ
Shye

Today I'll be righting a wrong, since my last post was a regular boring square-gridded puzzle on what was supposed to be the second ever Strange-Shaped Sunday. So I hope you'll enjoy this overdue **Ququ**!

Rules: Shade some triangles such that each edge-connected group of unshaded triangles has exactly one clue. Clues cannot be shaded, and indicate the total unshaded triangles in its group. No two groups of edge-connected shaded cells that meet at a corner may be the same shape (counting rotations and reflections as the same).


Example: https://tinyurl.com/4arnw46x
Puzzle: https://tinyurl.com/5n7zkxyc
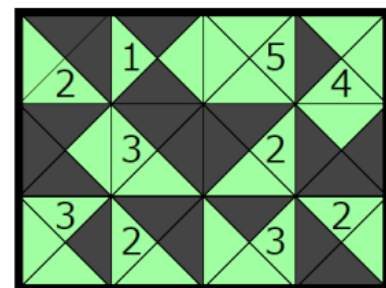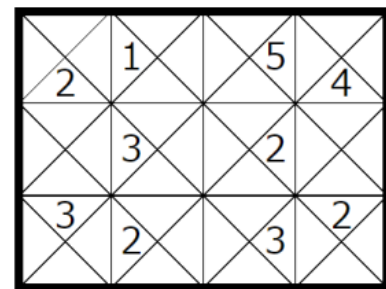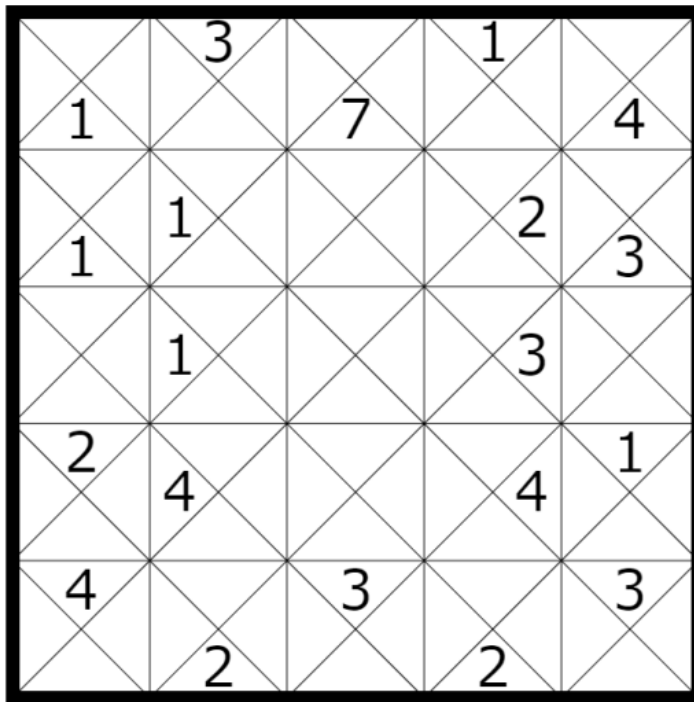
June 18th, 2022: Shugaka/School Trip (Supersized)
Jovi_al

Today's *S u p e r s i z e d S a t u r d a y* GAPP is **Shugaku**, AKA **School Trip**! That's all I've got to say today-- enjoy!

Rules: Place some non-overlapping 1x2 beds into the grid such that each bed contains a pillow on one of its cells, and that vertically oriented beds do not have the pillow on the top half. Shade all of the non-bed cells such that each bed is orthogonally adjacent to at least one shaded cell, all shaded cells form one orthogonally connected network, and no 2x2 regions of cells are entirely shaded. Cells containing circles cannot be shaded cells nor beds, and if a circle is numbered, it indicates the number of cells containing pillows orthogonally adjacent to it.

Example: https://tinyurl.com/444em3ns
Puzzle: https://tinyurl.com/5xbxk8ea
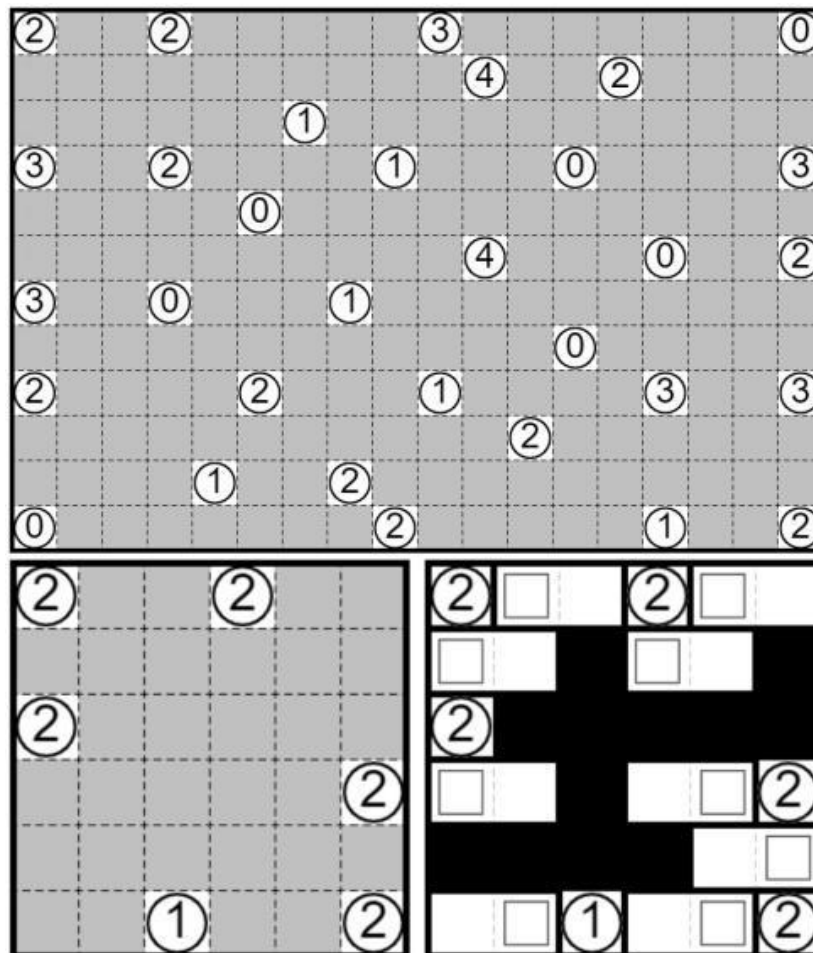
June 19th, 2022: Simple Loop (Cube)
Tyrgannus

Some of the last few GAPPs have taken a bit longer than average, and we have noticed. Also, someone wondered if we were going to do more odd shaped grids in the channel. We also noticed. We're just shameless people pleasers. Anyways, I wanted things to be simple, but not a complete repeat. So, without further ado, let us show this channel that we're not just two dimensional. Today's GAPP is a **Simple Loop (Cube)!**

Rules: Draw a single non-intersecting loop through the centers of all empty cells.
Variant: The grid is cubic.

Example: https://tinyurl.com/2jtypreu
Puzzle: https://tinyurl.com/38at25z8
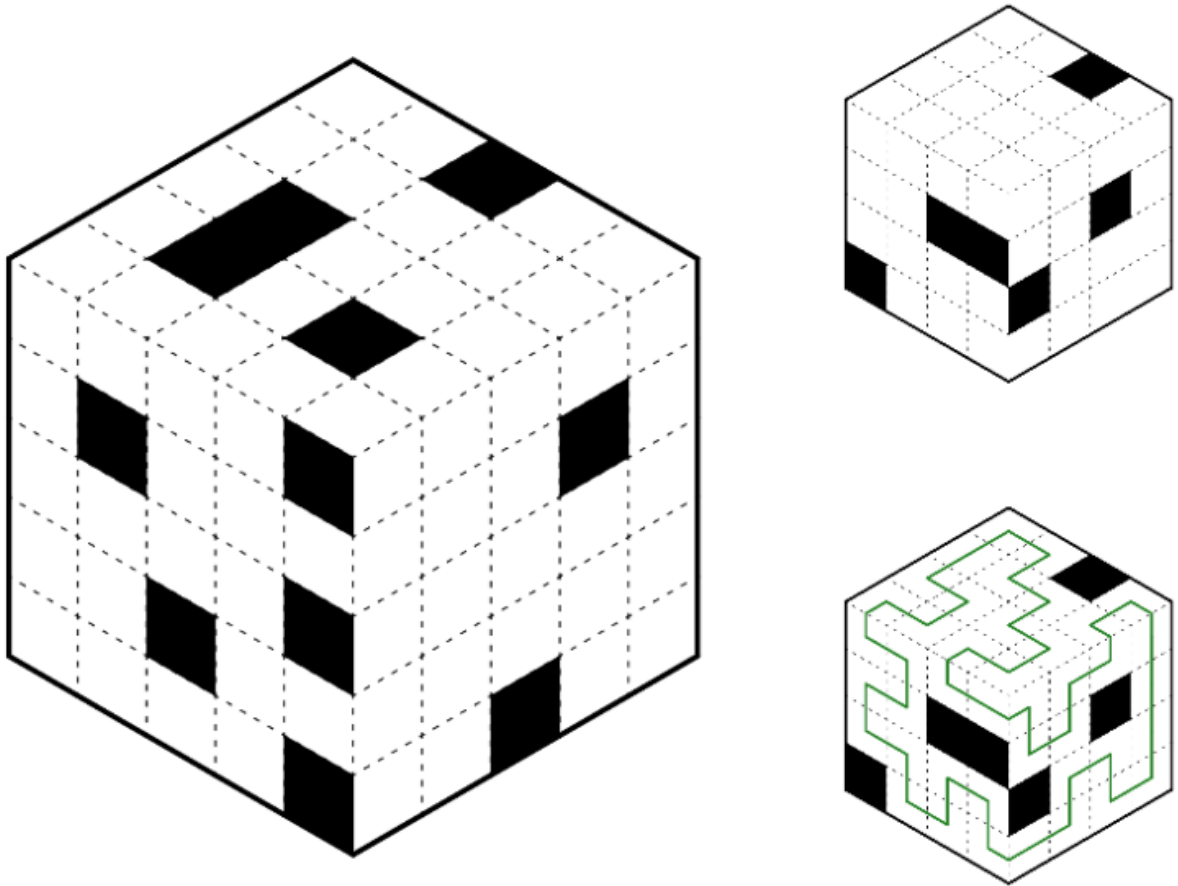
June 20th, 2022: Neighbours
Freddie Hand

People often have a complicated relations with **Neighbours**. Sometimes they'll want to look as similar as possible, but other times they'll enter into an arms race to make themselves appear as different as possible. And apparently these sorts of people mark their land in a light grey hue.

Rules: Place one of the digits 1, 2, or 3 into each cell, one digit per cell, so that each digit appears exactly N/3 (i.e. 2 for the example, 3 for the GAPP) times in each row and column, where N is the side length of the grid. Some digits may already be placed for you. After placing all digits, each white cell must touch at least one cell with the same number along an edge, and each gray cell must not touch any cells with the same number along an edge.


Example: https://tinyurl.com/27xytreg
Puzzle: https://tinyurl.com/29ldbm99
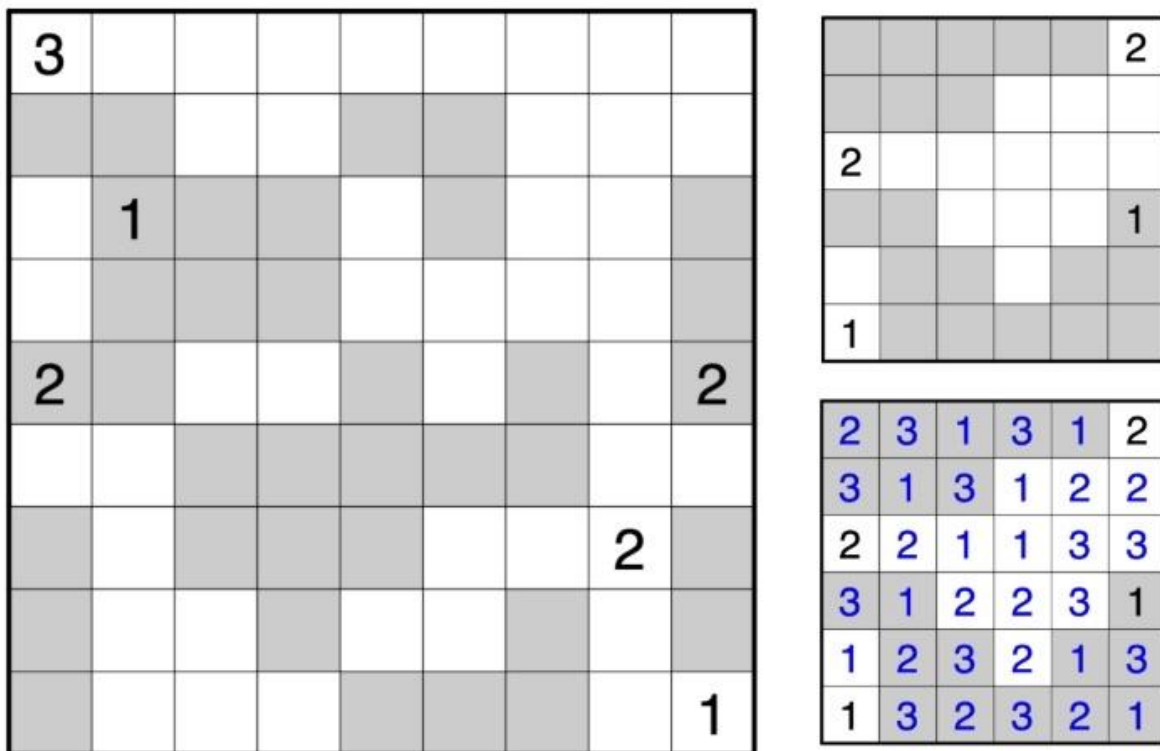
June 21st, 2022: Cut Blocks
Eric Fox

Do do do, chopping away! Oh, hi there! The GAPP team has recently opened a restaurant and I'm the head chef. Here, we're used to lots of puzzles where similar objects aren't allowed to touch, so we require that pieces of adjacent vegetables are differing sizes. It keeps the food interesting, because each bite tastes completely different! To practice, why not try this **Cut Blocks** puzzle?

Rules: Cut each region along the gridlines into two connected pieces. Among the resulting regions, none of the same size may be orthogonally adjacent.

Example: https://tinyurl.com/25kahf8j
Puzzle: https://tinyurl.com/236qd6og
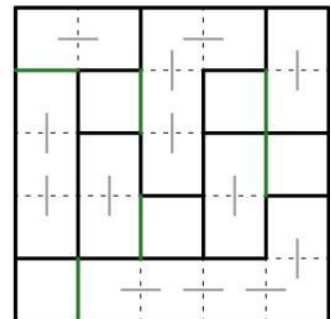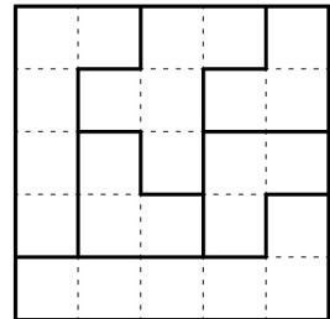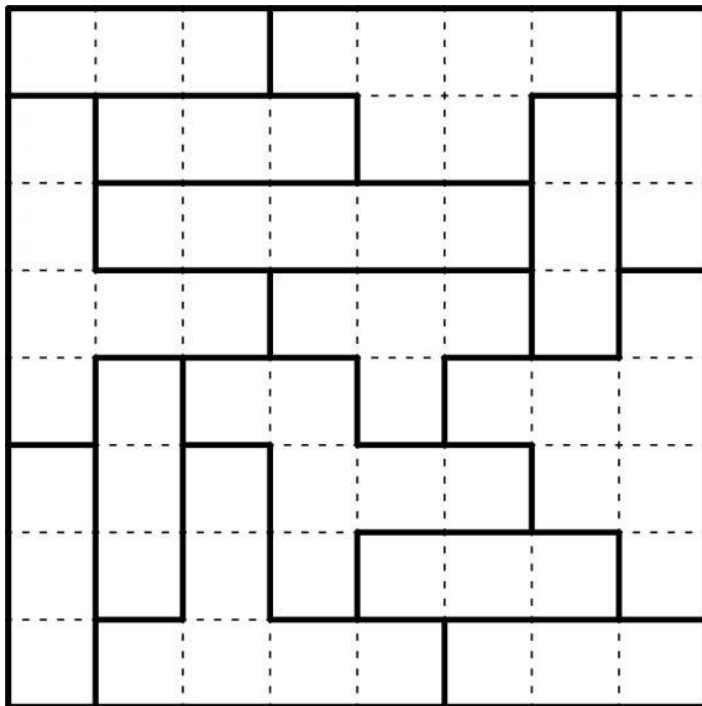
June 22nd, 2022: Castle Wall
Shye

The apathetic setter tasks herself with an evidently over-restrictive theme, the challenge momentarily reigniting the spark that has been fading through setting new genres. Today we revisit **Castle Wall** because some days you want your own castle, and some days you just wanna build walls.

Rules: Draw a non-intersecting loop through the centers of some cells. The loop may not enter outlined cells; Outlined white cells must lie inside the loop, while outlined black cells must lie outside the loop. Grey cells may either be inside or outside the loop. A number represents the sum of the lengths of loop segments in the indicated direction.

Example: https://tinyurl.com/3986bkuk
Puzzle: https://tinyurl.com/rnnm2v8r
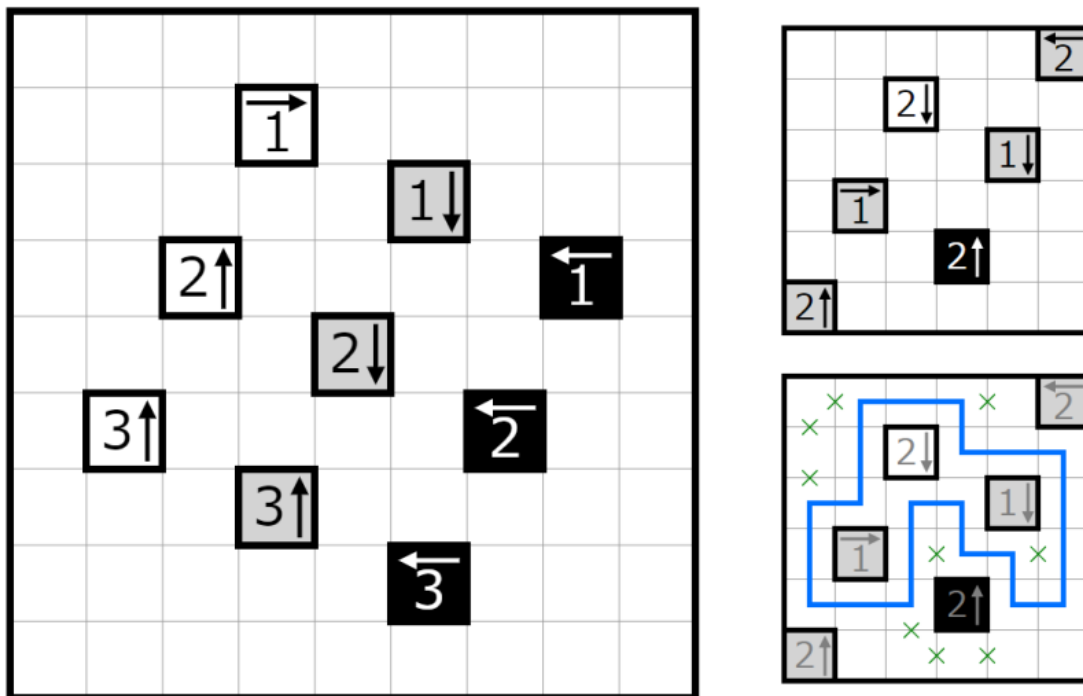
**June 23rd, 2022: All or Nothing**
Jovi_al

[insert intro here: jovi edition]

All or Nothing!

Rules: Draw a non-intersecting loop through the centers of some cells. A region may be visited by the loop at most once, and if it is, all of its cells must be visited. Two orthogonally adjacent regions may not both be unused.

Example: https://tinyurl.com/2fpegz24
Puzzle: https://tinyurl.com/2oaphmuu
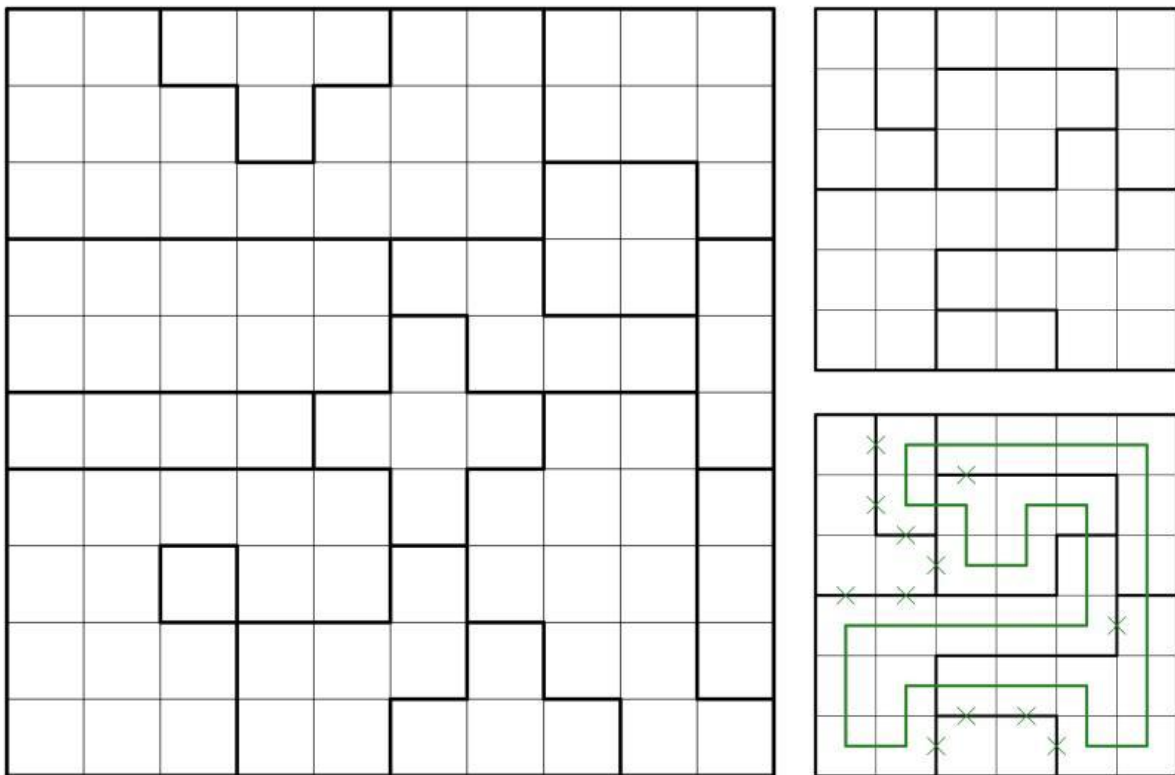
June 24th, 2022: Creek

Tyrgannus

When logic churns and narrow channels flow
*Some tributaries falling from the peak*
With clues that shade in column and in row
The genre for today must be a Creek!
Today's GAPP is a **Creek!**

Rules: Shade some cells so that the remaining unshaded cells form one orthogonally connected area. A clue represents how many of the (up to) four cells it touches are shaded.

Example: https://tinyurl.com/ykzru29m
Puzzle: https://tinyurl.com/3es3bzsw
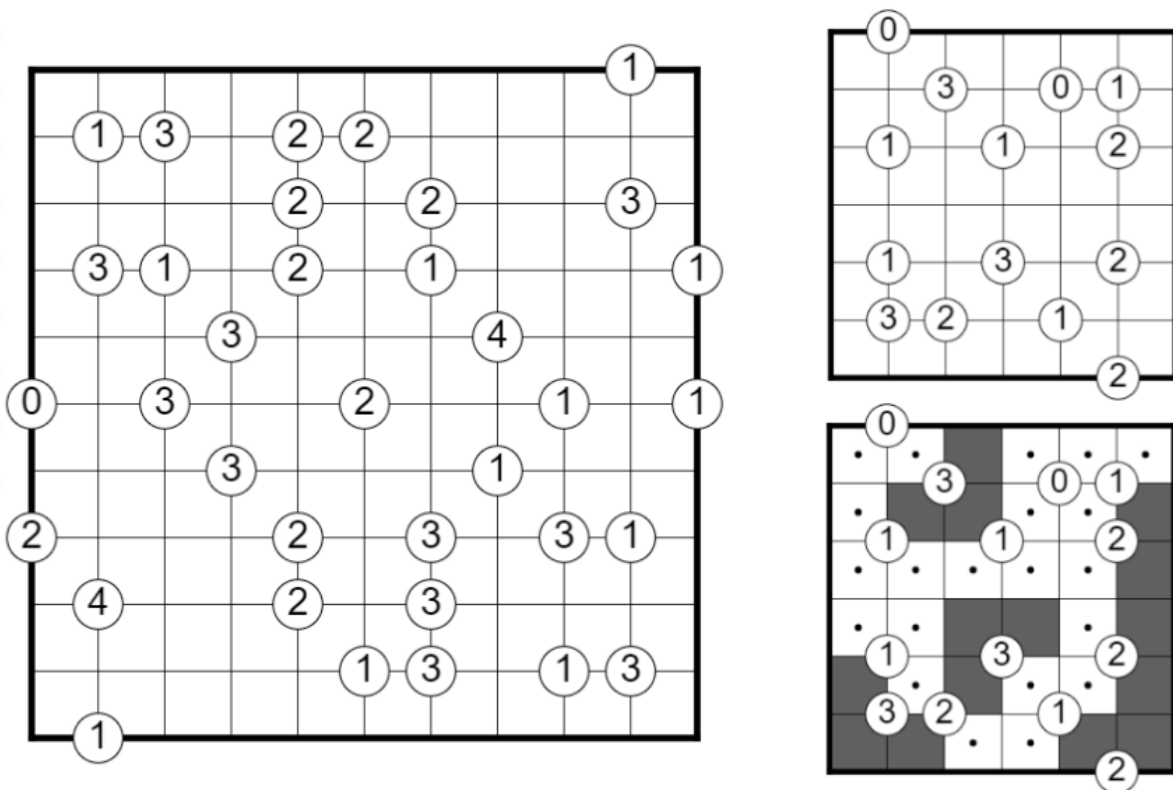
June 25th, 2022: Geradeweg (Supersized)
Freddie Hand

Hello, it's me again, on a Saturday. So you probably know what to expect. LOOP!
Today's puzzle is a **Supersized Geradeweg**. It's up to you to decide whether it's a left-
or right-oriented egg.

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: https://tinyurl.com/yvpcenje
Puzzle: https://tinyurl.com/2s3ujk6h
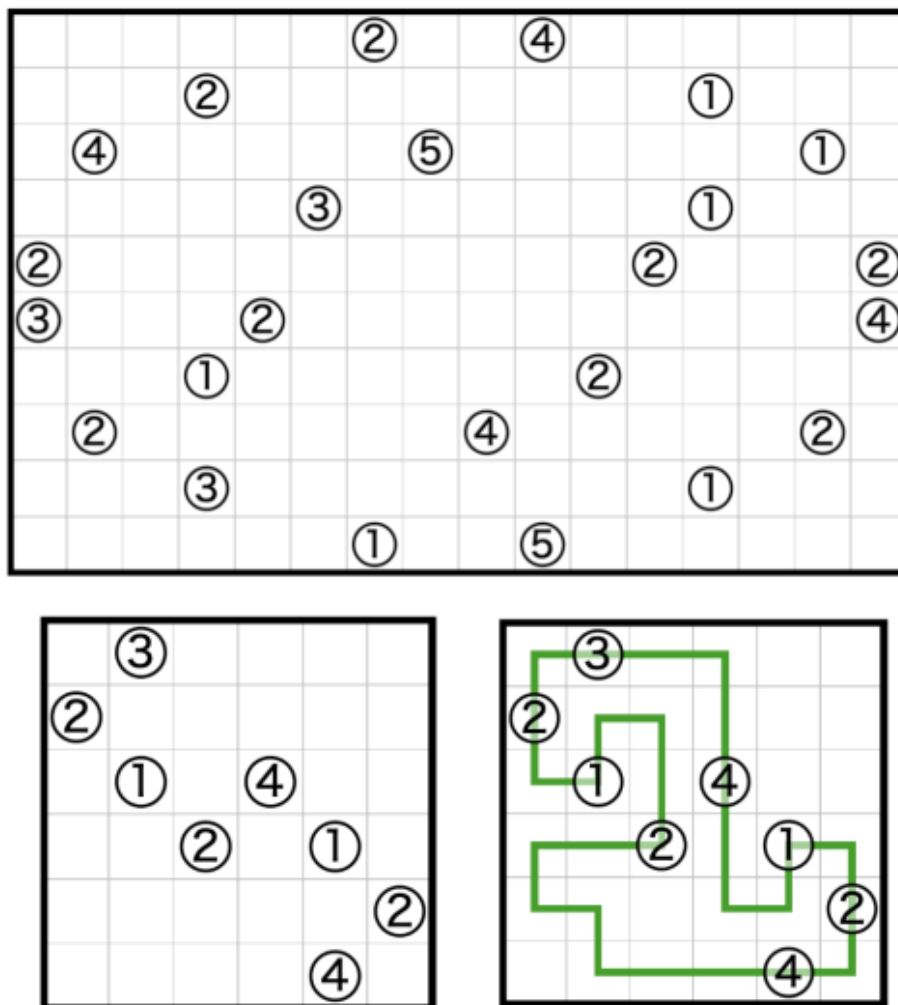
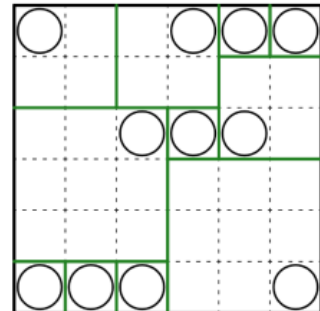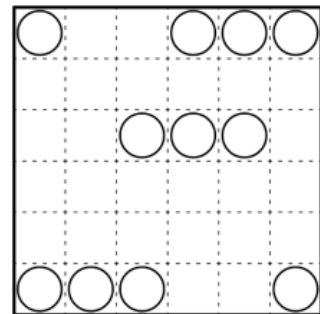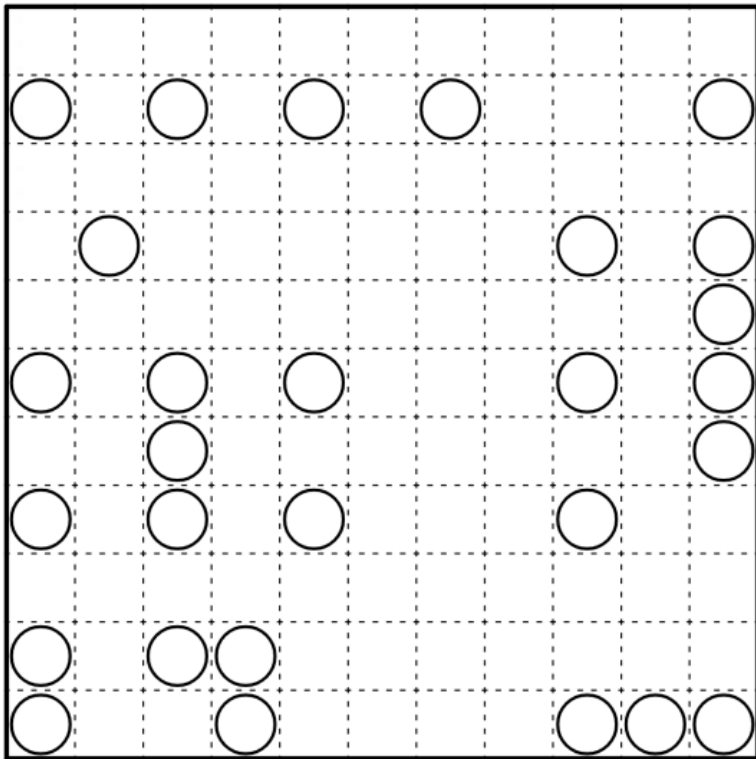**June 26th, 2022: Meadows**
Eric Fox

Today's genre is another square-based one. Come and frolic with me through the
Meadows!

Rules: Divide the grid into square regions of orthogonally connected cells such that
each region contains exactly one circle.

Example: https://tinyurl.com/27tevufw
Puzzle: https://tinyurl.com/27mpj8nm

June 27th, 2022: Coffee Milk
Shye

Many of our solvers get the daily GAPP in the morning and for those of us who aren't quite morning people that can be a little detrimental to solve times. So I'm taking the initiative to start up a small coffee shop here to get everyone bright-eyed and bushy-tailed for each new puzzle! This place could use some more barista's though, someone who can tell their blacks and flat whites apart, give this **Coffee Milk** a solve to show us what you've got!

Rules: Connect pairs of circles horizontally or vertically forming connected networks. All circles must be part of a network. Connections may not cross one another. White circles and black circles may not be directly connected to one another. Each connected network of circles must have the same number of white circles as it has black circles, and must have exactly one grey circle.

Example: https://tinyurl.com/yuzt4ywy
Puzzle: https://tinyurl.com/yckj4x99
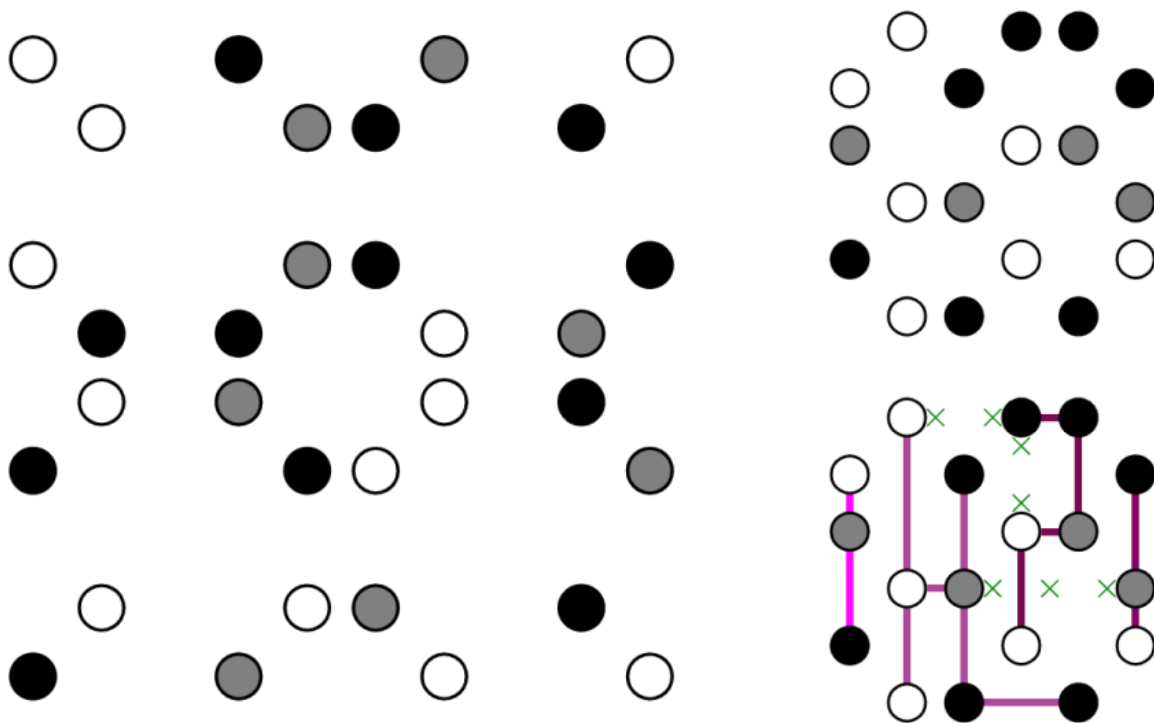
June 28th, 2022: Slitherlink (Full)
Jovi_al

Hey all! Admittedly, I don't like Slitherlink that much... but this variant is quite fun! Maybe it's just because I like full loops... but I hope you enjoy this **Slitherlink (Full)**!!

Rules: 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).
Variant Rule: Every dot must be used by the loop.

Example: https://tinyurl.com/2afzewjz
Puzzle: https://tinyurl.com/27k44h28
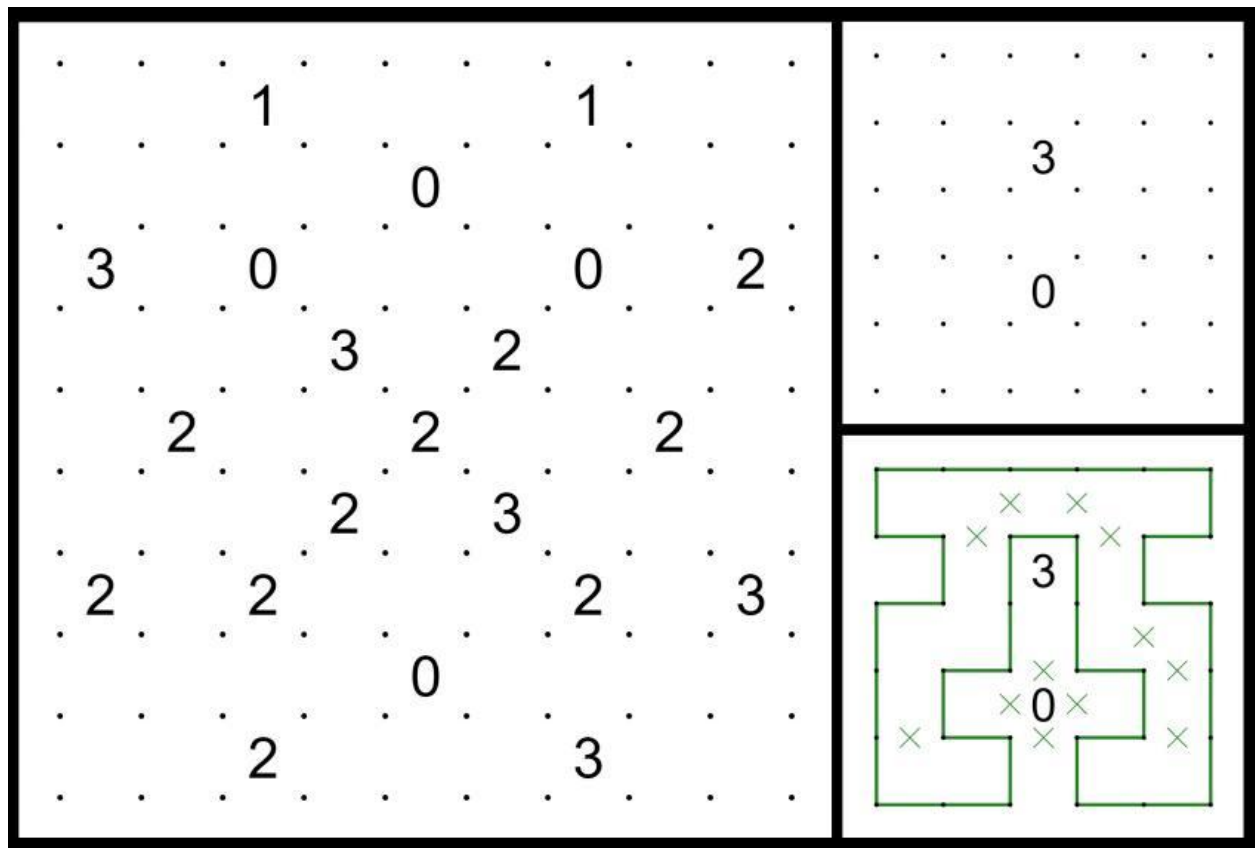
June 29th, 2022: Mosaic
Tyrgannus

I certainly love beautiful tile art or a stunning stained glass window. The aesthetic style is old and is still used in many ways, and even some what replicated in certain styles of animation. Just something about a good mosaic really captures my eye, and hopefully this genre catches your interest. While technically a new ruleset, you'll find it quite similar to something very familiar. Today's GAPP is a **Mosaic!**

Rules: Shade some cells such that each clue indicates the number of shaded cells in its surrounding (up to) 3x3 area* including the clued cell* itself.

Example: https://tinyurl.com/44fyzcu6
Puzzle: https://tinyurl.com/5f2588tp

June 30th, 2022: Onsen-Meguri
Freddie Hand

I think it's time we took a stroll down letter frequency lane. Today's puzzle, an **Onsen-Meguri** (or **Onsen**), is only the second single-word genre in GAPP to start with an O (can you name the first)? It may be even more surprising that only one single-word genre starts with an E. And in fact, no genres at all starting with Z! Perhaps an issue which deserves to be remedied? And for an extra challenge, what is the initial letter that appears the *second* most frequently? (Now counting multiple word genres + duplicates). The answer may surprise you!

Rules: For each circle in the grid, draw a non-intersecting loop through the centers of some cells which passes through that circle. Loops may not overlap themselves or each other. **A loop may visit any region at most once**, and every region must be visited by at least one loop. Each loop must occupy an equal number of cells in each region that it visits. A number in a circle indicates how many cells that is per region for its loop.
Notes - The rule in bold is not demonstrated in the example, so pay special attention to this.
- To keep the puzzle fairly transparent, there are no unnumbered circles in the example or GAPP. But note that these can exist, and can represent any positive integer.


Example: https://tinyurl.com/5vksz9r3
Puzzle: https://tinyurl.com/t4kyf759
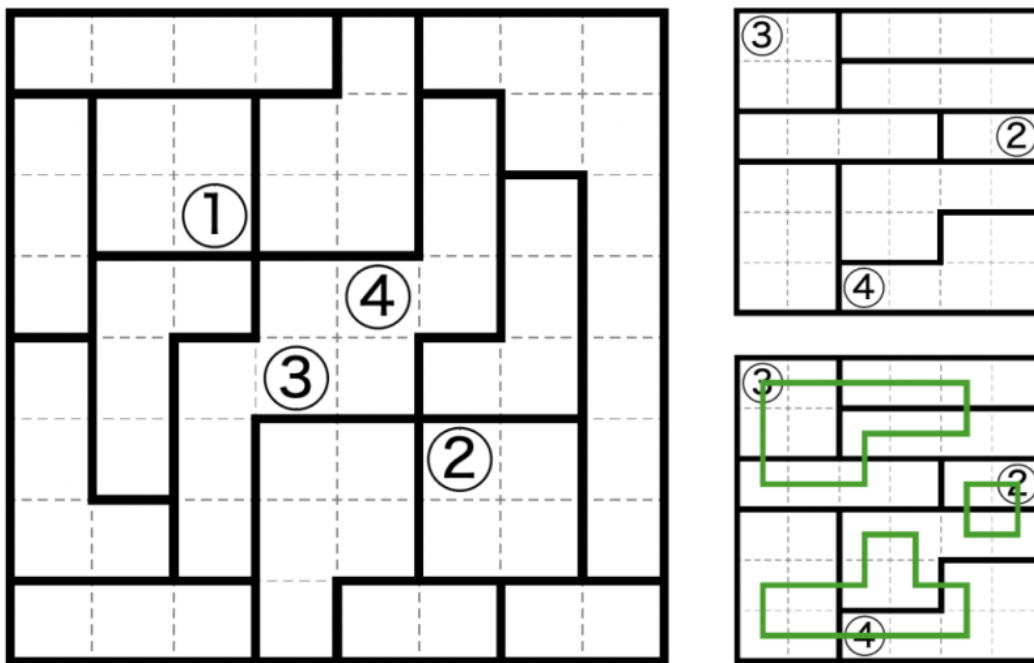
Bonus Puzzle #1 LITS

Eric Fox

Rules: Shade one tetromino of cells in each region so that all shaded cells form one orthogonally connected area. Two tetrominoes of the same shape may not share a bold border, counting rotations and reflections as the same. No 2x2 region may be entirely shaded.
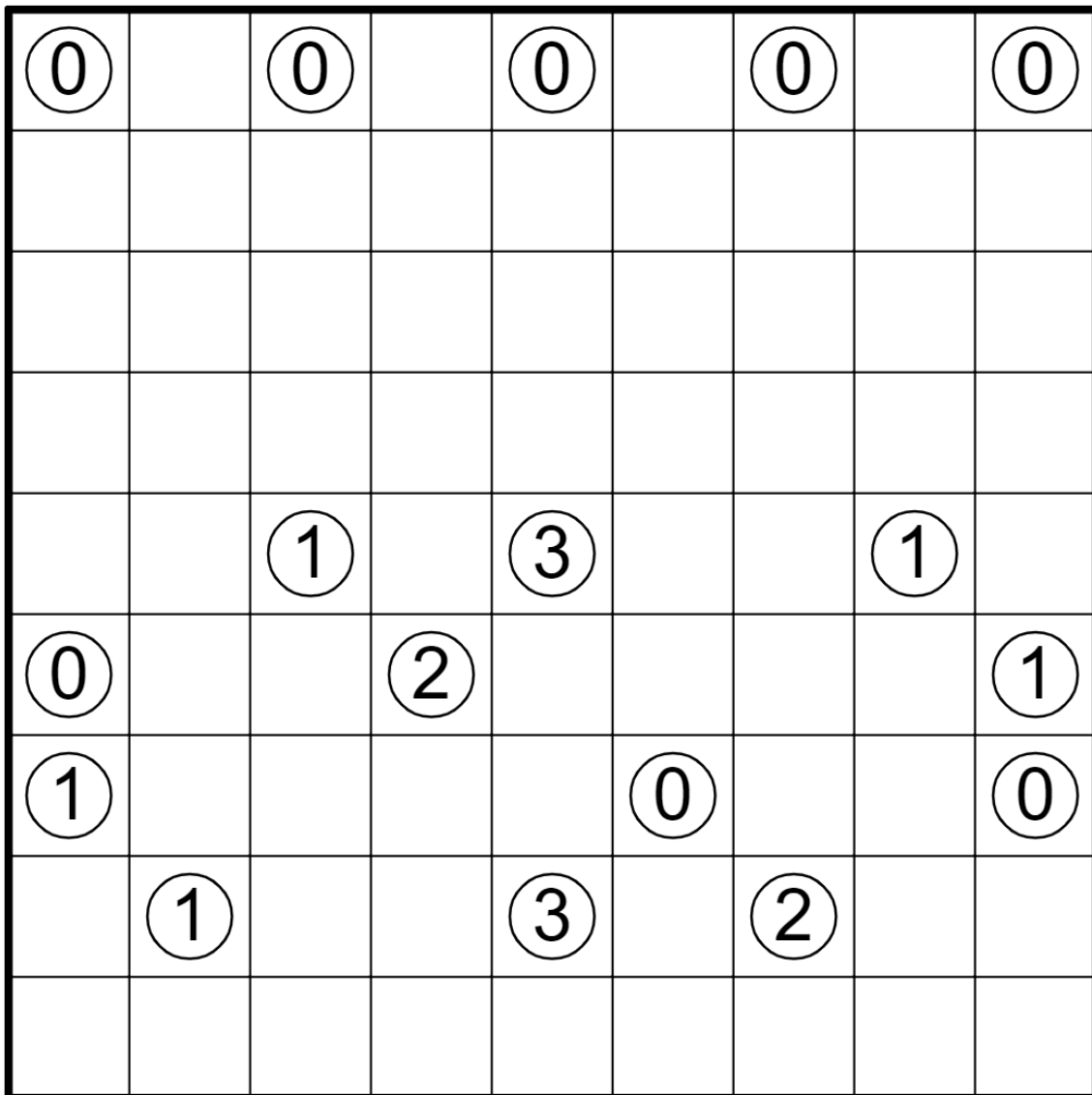
Puzzle: http://tinyurl.com/ks6ax5dw
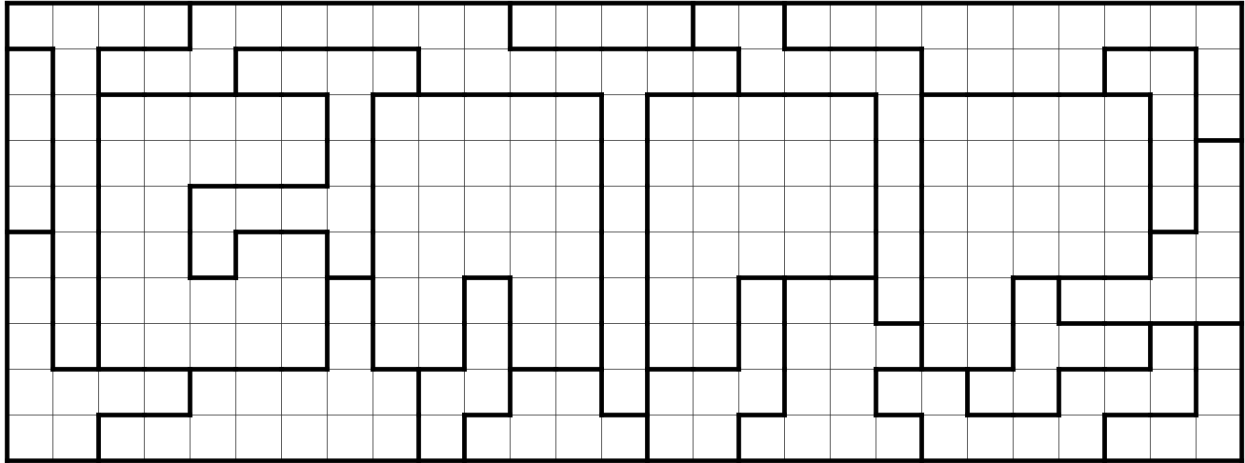
Bonus Puzzle #2: Turnkey
Shye

Rules: From each clue, draw a path through the centers of cells. A number indicates how many times its path turns. Each path must be at least two cells long (not including the cell with the clue) and every cell must be visited by exactly one path

Puzzle: https://tinyurl.com/2p9jnwdu

Bonus Puzzle #3: Slitherlink (Full)

Jovi_al

Rules: 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).

Variant Rule: Every dot must be used by the loop.

Note: Answer check will will work if you don't follow variant, so double check your grid!
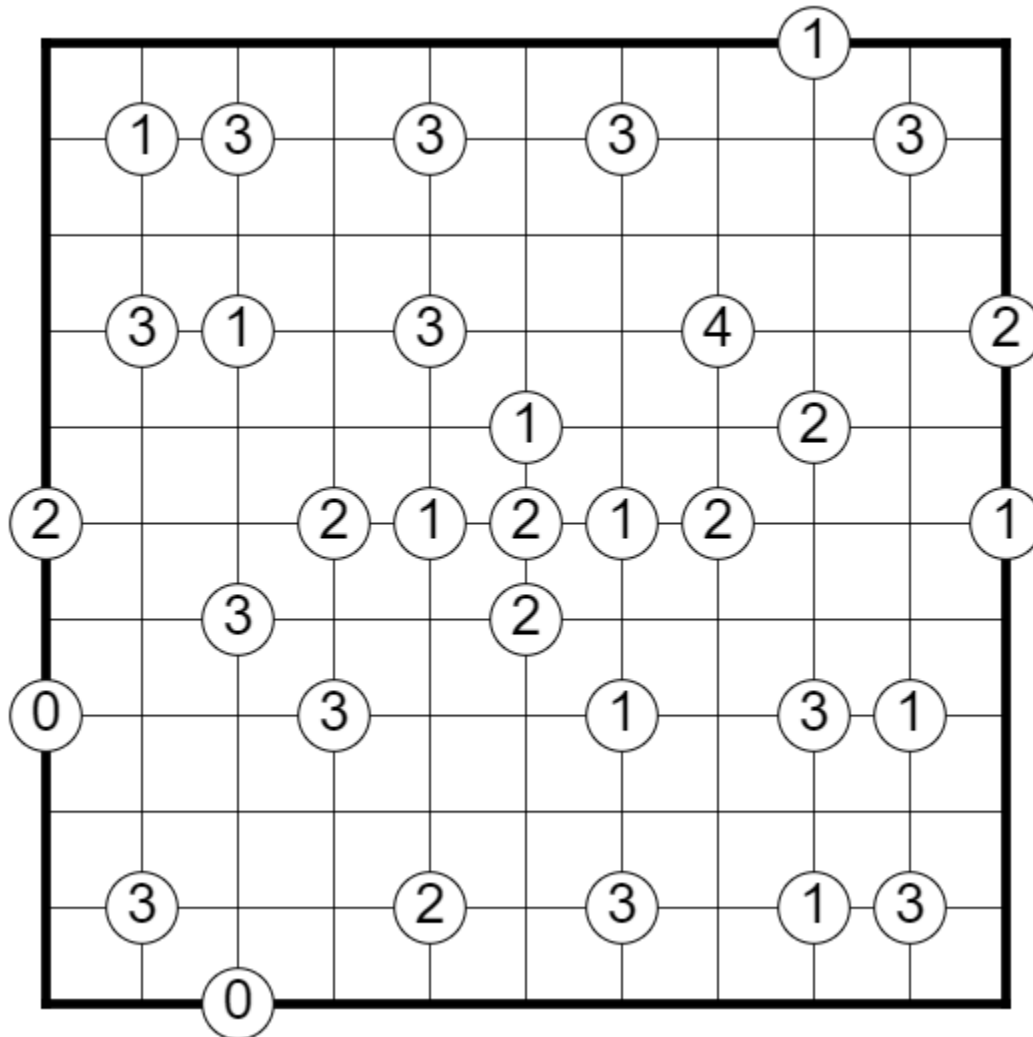

Puzzle: http://tinyurl.com/3mk7x5he

Bonus Puzzle #4: Creek

Tyrgannus

Rules: Shade some cells so that the remaining unshaded cells form one orthogonally connected area. A clue represents how many of the (up to) four cells it touches are shaded.

Puzzle: http://tinyurl.com/5ypdjf9d

Bonus Puzzle #5: Balance Loop
Freddie Hand

Rules: Draw a non-intersecting loop through the centers of some cells that passes through every circle. The straight line segments coming out of a white circle must have equal length, while the straight line segments coming out of a black circle must have different lengths. A clue in a circle represents the sum of the lengths of these two line segments.

Puzzle: http://tinyurl.com/34hnyzrt
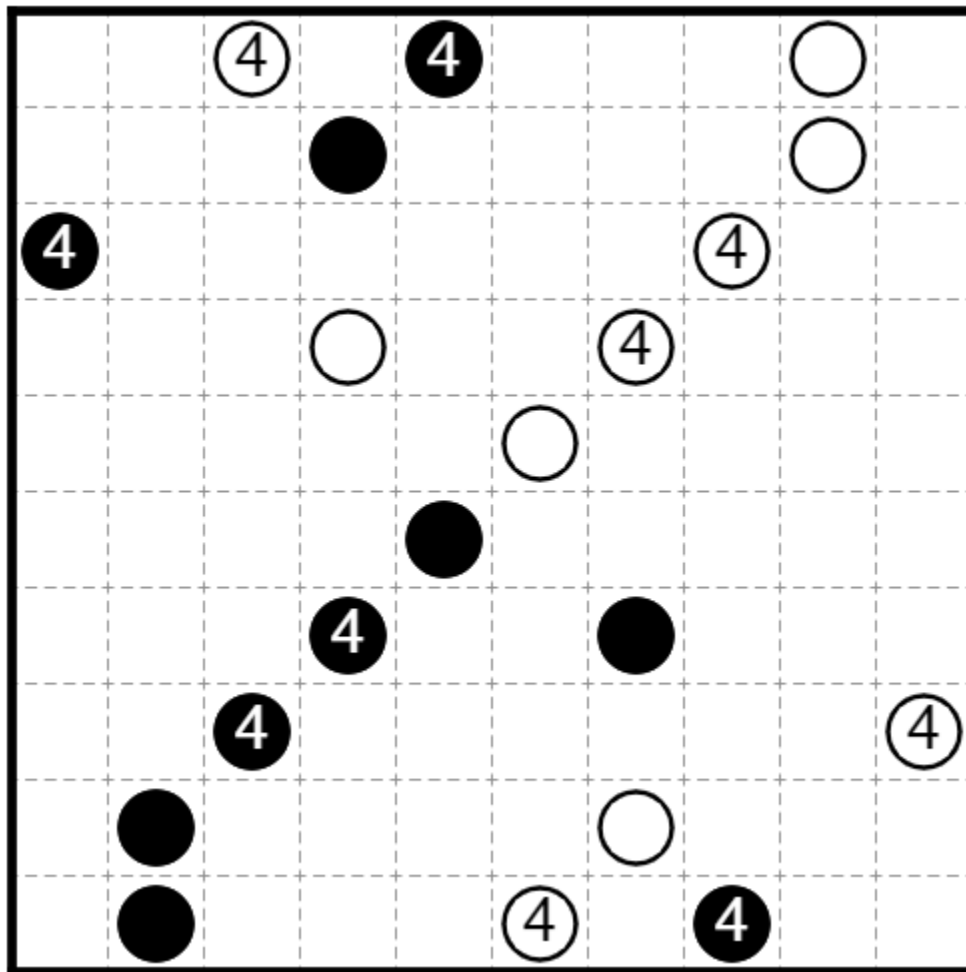
DATE	GENRE	SLOTH TIME	CRAB TIME
June 1st, 2022	Context	2:45	6:00
June 2nd, 2022	White Link	1:45	4:15
June 3rd, 2022	Fobidoshi	1:45	4:00
June 4th, 2022	SUPERSIZED Shikaku	5:43	12:34
June 5th, 2022	Tapa (Hexagonal)	2:15	5:45
June 6th, 2022	Geradeweg	3:30	7:00
June 7th, 2022	Turnkey	2:30	7:00
June 8th, 2022	Midloop (Full)	2:00	5:00
June 9th, 2022	Pentominous (Borders)	3:06	7:14
June 10th, 2022	Sunglasses	3:45	8:30
June 11th, 2022	SUPERSIZED LITS	3:30	8:00
June 12th, 2022	Stardust	2:00	5:00
June 13th, 2022	Portal Loop	3:30	9:00
June 14th, 2022	Trio Cut	2:30	6:45
June 15th, 2022	Falling Numbers	5:00	11:45
June 16th, 2022	Direction	3:10	7:00
June 17th, 2022	Ququ	4:00	8:00
June 18th, 2022	SUPERSIZED Shugaku	5:30	14:00
June 19th, 2022	Simple Loop (Cube)	1:30	3:00
June 20th, 2022	Neighbours	6:30	13:45
June 21st, 2022	Cut Blocks	3:15	6:30
June 22nd, 2022	Castle Wall	2:45	6:20
June 23rd, 2022	All or Nothing	1:45	4:30
June 24th, 2022	Creek	2:22	5:55
June 25th, 2022	SUPERSIZED Geradeweg	5:00	12:00
June 26th, 2022	Meadows	1:30	3:30
June 27th, 2022	Coffee Milk	3:00	6:00
June 28th, 2022	Slitherlink (Full)	2:00	5:00
June 29th, 2022	Mosaic	2:00	4:50
June 30th, 2022	Onsen-Meguri	2:15	5:30