

GAS Leak

Genuinely Approachable Sudoku from the CtC Discord
Volume 8: October 25, 2021 - November 13, 2021



Good morning, friends! We're living in very exciting times: this round of GAS marked the launch of our sister project, GAPP (Genuinely Approachable Pencil Puzzles) by the setters jovi_al, Tyrgannus, shye, Eric Fox, and Freddie Hand. If you haven't tried out GAPP yet, please come find them on the CtC Discord, solve some approachable non-sudoku puzzles, and collect your sloths, crabs, and birds!

This document contains GAS puzzles from days 141 to 160, plus three bonus puzzles (at the very end). As always, time standards and a list of this round's dinosaur names are on the last page. Enjoy!

- *Clover*

October 25, 2021: Minmax

Clover

Editor's note: Some of the first few puzzles in this GAS Leak volume continue the 'choose your own adventure' story that was started with the last puzzle from the GAS Leak vol. 7!

(...continued from yesterday...) Killers everywhere??? You're going to have to make a choice. You quickly scan your options. Big dinosaurs, small dinosaurs, in-between dinosaurs... who are you going to trust to lead you to the real culprit?

- ① Follow the compsoognathus. His brain is only the size of a walnut, but he looks like he keeps a lot of knowledge in there.
- ② Follow the argentinosauros. Seeing everything from a height of 100 feet, how could he have missed the real killer?

Today's GAS is a minmax sudoku! Normal sudoku rules apply. Also, a value outside the grid gives the sum of the largest and smallest of the first three digits in that row or column, seen from that direction. For instance, if the first three digits in row 4 were 7 4 9, then the clue to the left of row 4 would be 13.

This day's GAS post was followed by a series of non-puzzle posts in which solvers voted on which actions to take next! We followed the argentinosauros, who led us to a mysterious hat-filled 18-wheeler, which we promptly got trapped inside of. Then a mysterious figure flung open the door...

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

f-puzzles: <https://f-puzzles.com/?id=yfh7d499>

CtC: <https://tinyurl.com/4awj5kfu>

October 26, 2021: Extra Regions

Sam Cappleman-Lynes

We interrupt this Choose Your Own Adventure game to bring you an emergency broadcast. The Scheming Sudoku Setter is on the loose again and has been adding extra regions to all of my puzzles and I need you to help me sort it out.

In this Extra Regions Sudoku, normal Sudoku rules apply, and additionally each shaded region contains all of the digits from 1-9 exactly once each.

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

f-puzzles: <https://f-puzzles.com/?id=yzho77kd>

CtC: <https://tinyurl.com/sykpryax>

October 27, 2021: Paired Pairs

Philip Newman

Previously on Slasher.

You're almost blinded by the sudden daylight, but you just manage to make out...

Quadrilateral Maximization Sudoku, Esq.???

"PREPARE FOR TROUBLE"

wait, where is that weird music coming from?

"AND MAKE IT DOUBLE"

"and then double that again because TWO TIMES TWO IS FOUR"

Oh no, it seems Quad. Max. Sudoku IV has seen through your clever disguise and is preparing to monologue. How will we ever get out of this situation?

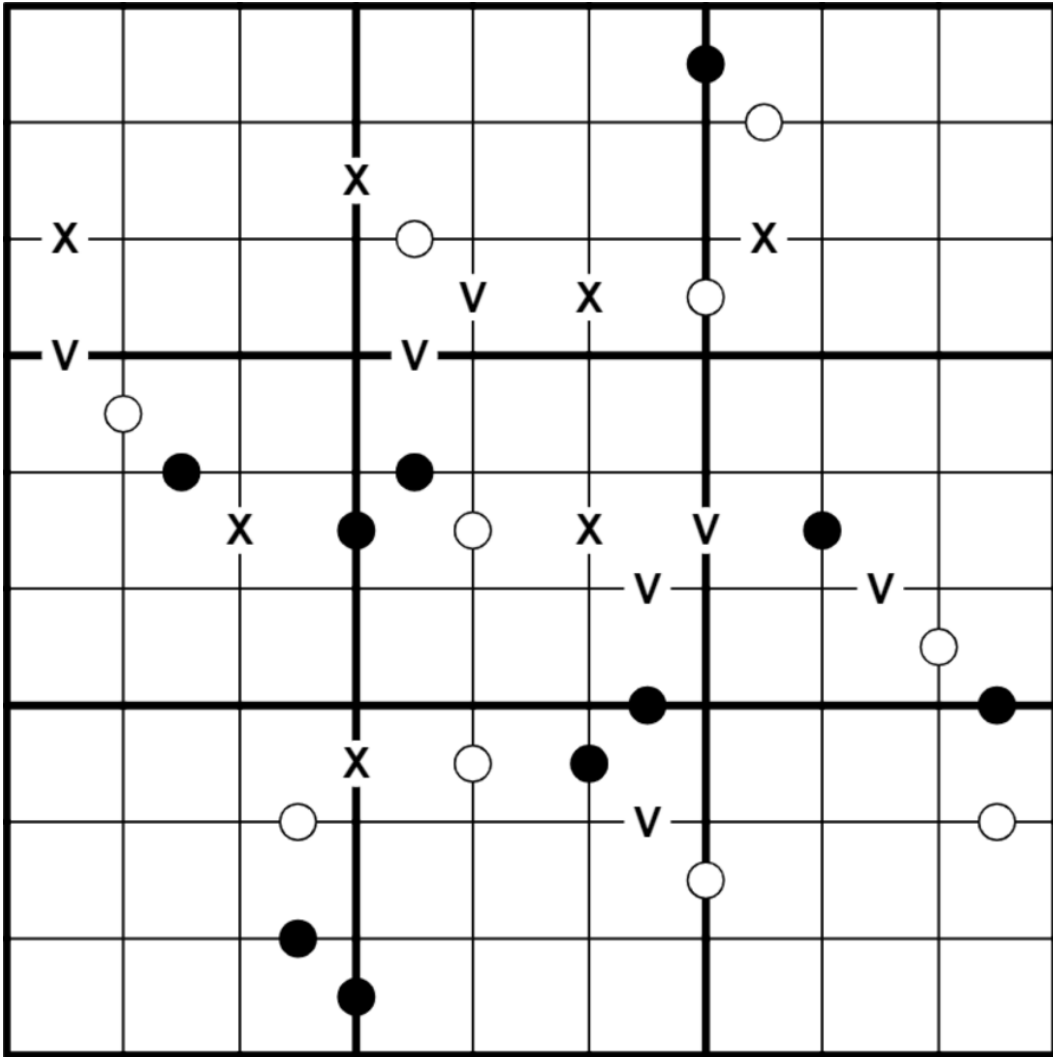
A Use your Pikachu to electricute EVERYTHING in sight, something will probably blow up and stop this evil plan.

B Wait, Quad. Max. Sudoku IV can't be the killer, that's an entirely different variant. Take a deep breath and ask what's going on here.

C Say "TO PROTECT THE WORLD FROM DEVASTATION".

Today's GAS is a Pairing of Pairs of Pairs... that's right, it's a Kropki Pairs + XV Pairs Sudoku! That means FOUR different constraints (see how I tied all that together? dripping with theme) to use!

Normal sudoku rules apply. Digits in cells separated by a white dot must be consecutive. Digits in cells separated by a black dot must have a 2:1 ratio. Digits in cells separated by an X must sum to 10. Digits in cells separated by a V must sum to 5. (No negative constraint; cells not separated by a white dot can still have consecutive digits, etc.)



Play on f-puzzles: <https://f-puzzles.com/?id=yjvft7pc>

Play on CTC App: <https://tinyurl.com/6stjwvnp>

October 28, 2021: Big Bands

Clover

"To protect the world from devastation!" you say.

Quadruple Maximization Sudoku looks puzzled for a moment. Maybe he hasn't seen Pokemon? Then, he grins.

"You understand better than you realize muahahahahaha. You see, all I ever wanted was to protect the world from being OVERRUN BY SUDOKU muahahahaha."

"Sudoku is literally your name."

"Yeah, and Daily Sudoku Solver is literally your name, but do you actually do them every day?"

"Touché. Anyways, what do you want, Q?"

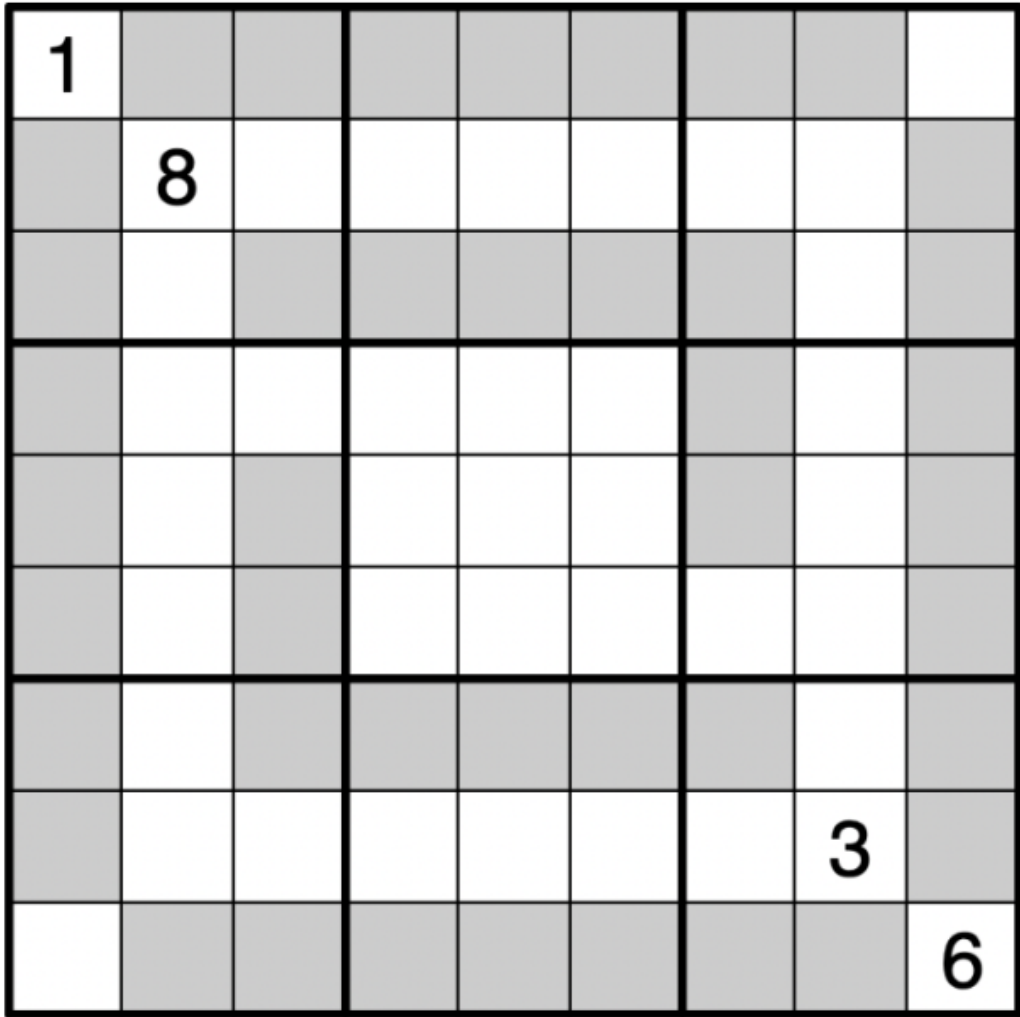
"All I ever wanted was for the people to solve OTHER PUZZLES! But the siren song of fancy party hats is luring them to the dark side of sudoku. But: NO HATS, NO MORE SUDOKU. Right?"

You suddenly hear a SUSPICIOUS BEEPING NOISE. You look around and spot an ominous bomb! This truck full of party hats is rigged to blow!

Q. Max cackles. "And the only way to defuse the bomb is to solve this puzzle! You'll never get there!"

Today's GAS is a Big Bands Sudoku. Normal sudoku rules apply. In addition, Q. Max has supplied six nefarious passcodes that must be correctly inserted into the grey lines. Don't scramble up the digits, but passcodes don't necessarily have to go left to right or top to bottom! Which passcode goes in which line is to be determined by the solver. Each passcode should be used exactly once.

I highly recommend using Penpa today, since you'll be able to use 'surface' mode to check off which passcodes you've used!



1 3 5 6 4 7 8

2 3 4 5 6 7 8

3 4 1 2 5 8 7

4 5 2 3 6 7 8

5 3 8 7 1 4 2

6 1 8 9 2 8 9

penpa: <https://git.io/JPYIJ>

f-puzzles: <https://f-puzzles.com/?id=yzml2l2k>

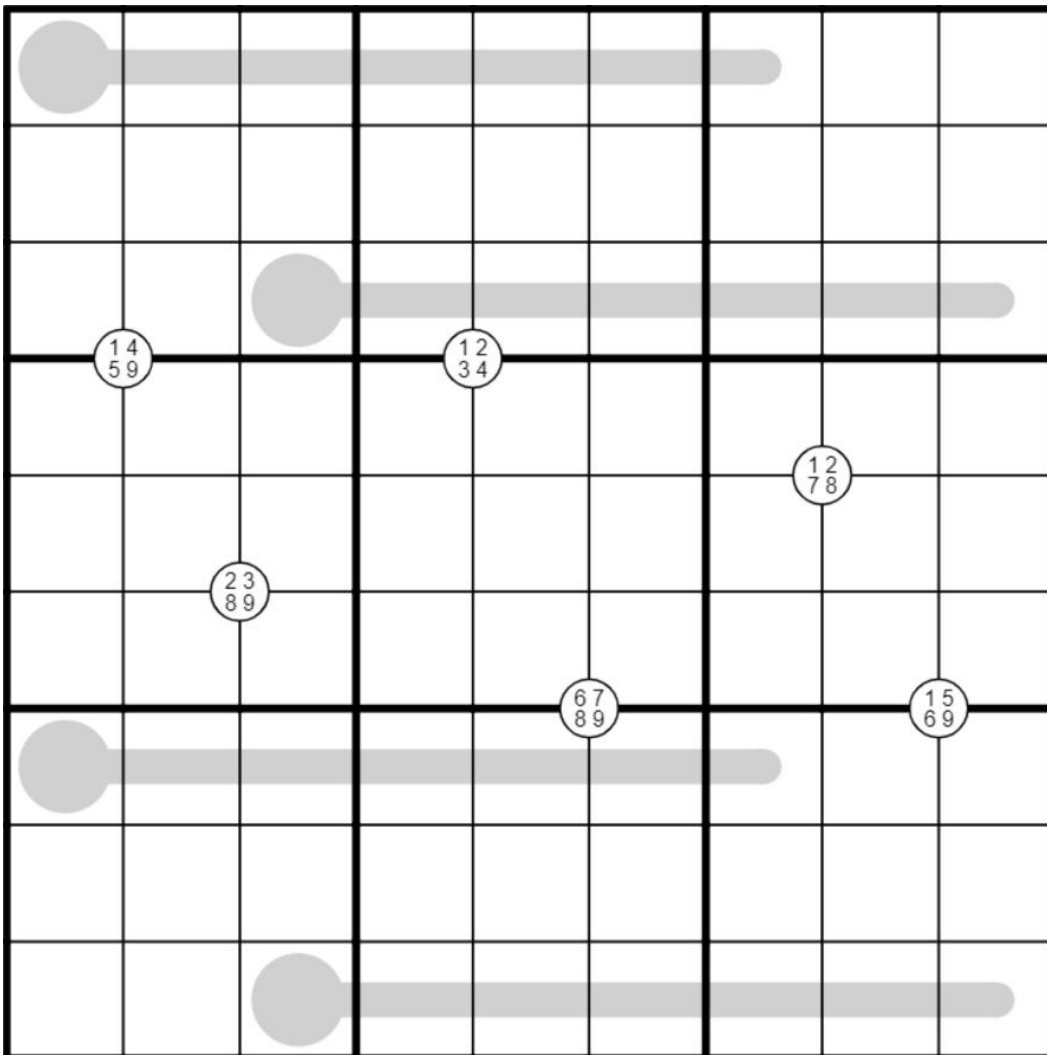
CtC: <https://tinyurl.com/5esprc2e>

October 29, 2021: Thermo Quadruples

Sam Cappleman-Lynes

Thanks for your help defusing that bomb! Given what you must know about thermal engineering in order to have done so, these straightforward thermometers ought to be fairly simple to deal with in comparison!

In this Thermo Quadruples Sudoku, normal Sudoku rules apply. Digits along thermometers must increase starting from the bulb end, and digits written in a white circle must appear in the four cells surrounding the circle.



f-puzzles: <https://f-puzzles.com/?id=pzkjhpzt>

CtC: <https://tinyurl.com/ru6hxppm>

October 30, 2021: Breaking News

Philip Newman

Good news, everyone! Today's GAS is hot off the presses!

Extra! Extra! Regions all about it!

Normal sudoku rules apply. Grey regions must also contain the digits from 1 to 9 without repeats.

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

Play on f-puzzles: <https://f-puzzles.com/?id=yesmy65u>

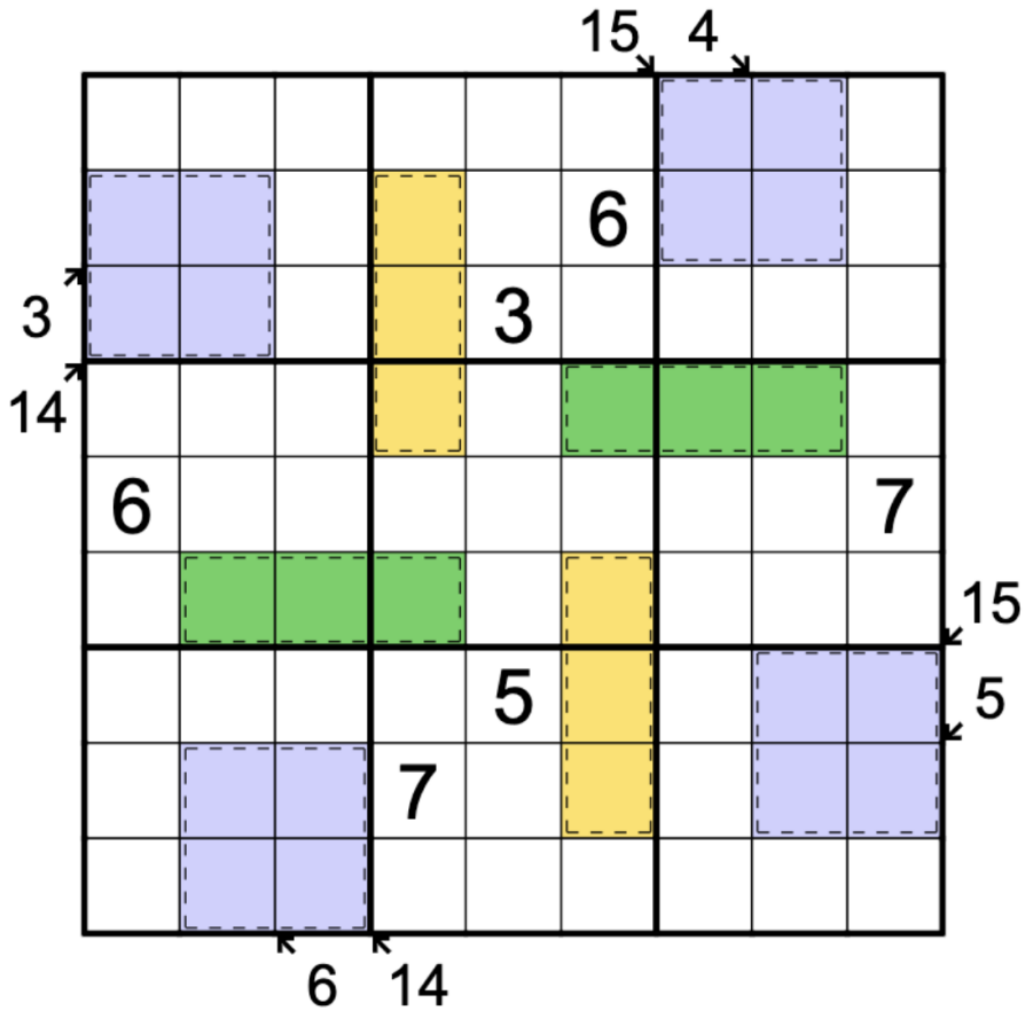
Play on CTC App: <https://tinyurl.com/caaj22mu> (extra regions are denoted by dashed lines, like cages)

October 31, 2021: Little Killer Clone

Clover

To celebrate Halloween, here's a GAS that's sweet and scary: a Little Killer Clone. Just look at that little guy! He wants to stabby-stab but he can only just manage to pokity-poke 🤪🔪

- Normal sudoku rules apply.
- Shapes of the same color (and shape) are clones of each other. All matching shapes must contain exactly the same digits in the same positions. No rotation or reflection allowed!
- Digits along a marked diagonal must sum to the value shown.



f-puzzles: <https://f-puzzles.com/?id=yghm3394>

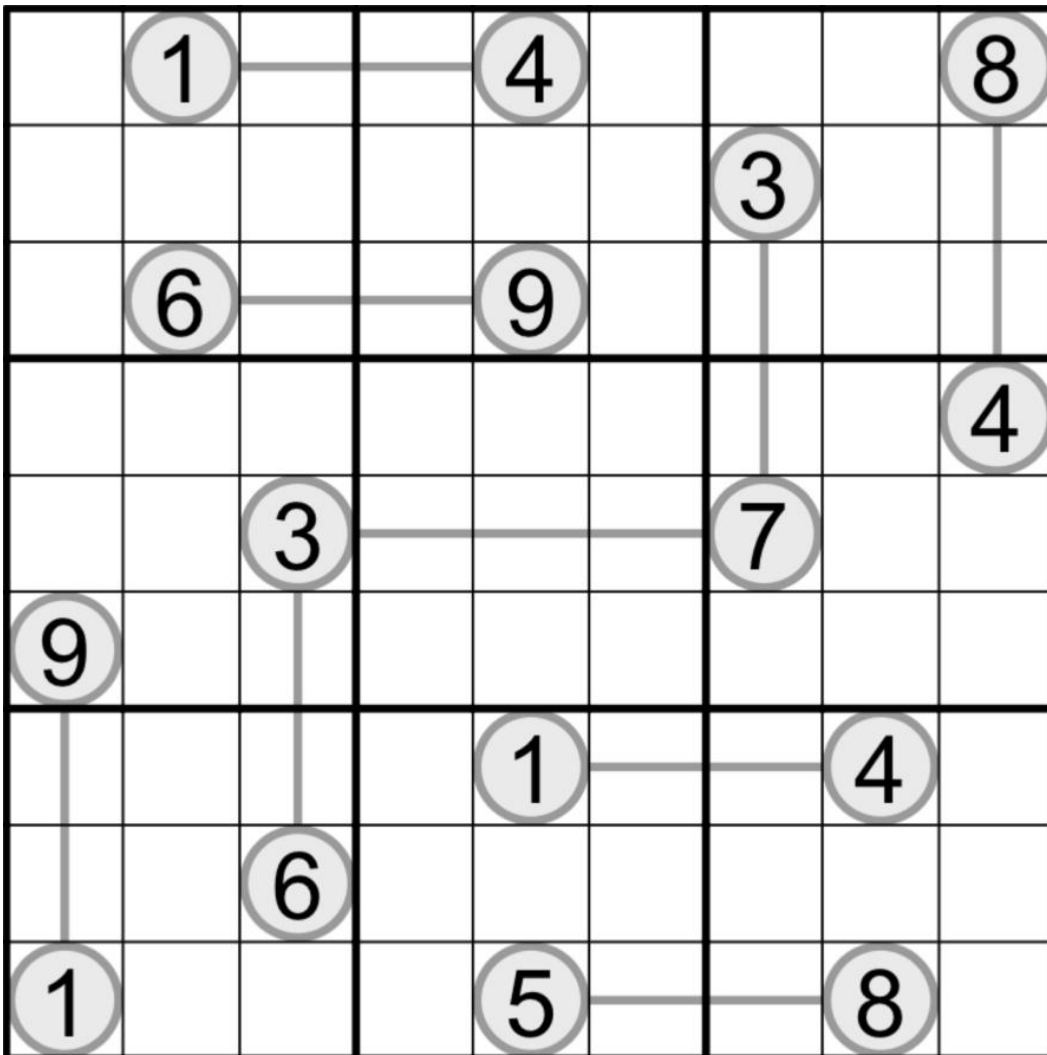
CtC: <https://tinyurl.com/6m8tw8v4>

November 1, 2021: Between Sudoku

Sam Cappleman-Lynes

Between you and me, I don't actually like Between Sudoku very much 😬 So I've taken this opportunity to write a GAS that reimagines the constraint as it would be if I were in charge of the world. Fortunately (or unfortunately, depending on your viewpoint) that isn't actually the case, but for a brief moment the sense of power compelled me to laugh maniacally before I was brought back down to earth.

In this Between Sudoku, normal Sudoku rules apply. Additionally, digits on a grey line must fall strictly between the two digits placed in the circles on either end of the line.



f-puzzles: <https://f-puzzles.com/?id=3cvey59z>

CtC: <https://tinyurl.com/pr64cfvn>

November 2, 2021: Tatooine Threesday

Editor's note: Philip had planned to take a few days off starting on the 4th, so to send him away in style, we celebrated Tatooine Threesday! There were **three** "tatooine sunset" style puzzles posted, one from each setter. The time standards for today apply to all three puzzles together. Earn a bonus hat by correctly guessing who set which puzzle! (Correct answers are at the bottom of the last page of this document.)

Puzzle 1 (Taonetnine, Thermo) - Normal sudoku rules apply. Normal thermo rules: Digits along thermometers must increase starting from the bulb end.

Play on f-puzzles: <https://f-puzzles.com/?id=yh4pn57p>

Play on CTC App: <https://tinyurl.com/yd3ubtdp>

Puzzle 2 (Tatwotween, Killer/Between Line) - Normal sudoku rules apply. Normal killer rules: Digits in cages cannot repeat, and must sum to the total given. Normal between line rules: Digits along a line must have values strictly between the values in the circles on the ends of that line.

Play on f-puzzles: <https://f-puzzles.com/?id=yfypubwo>

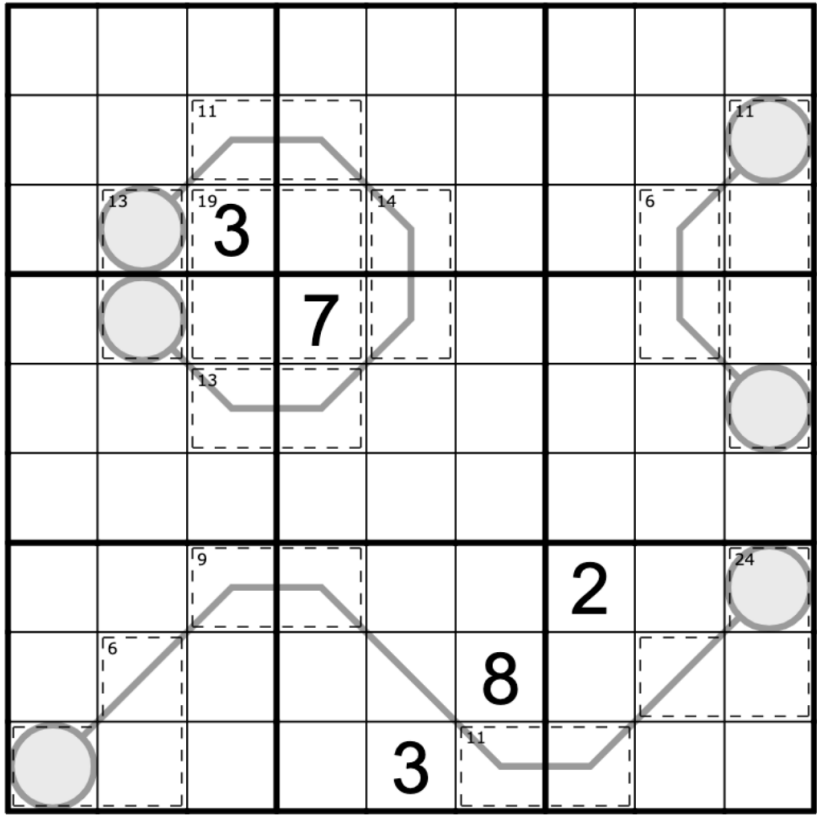
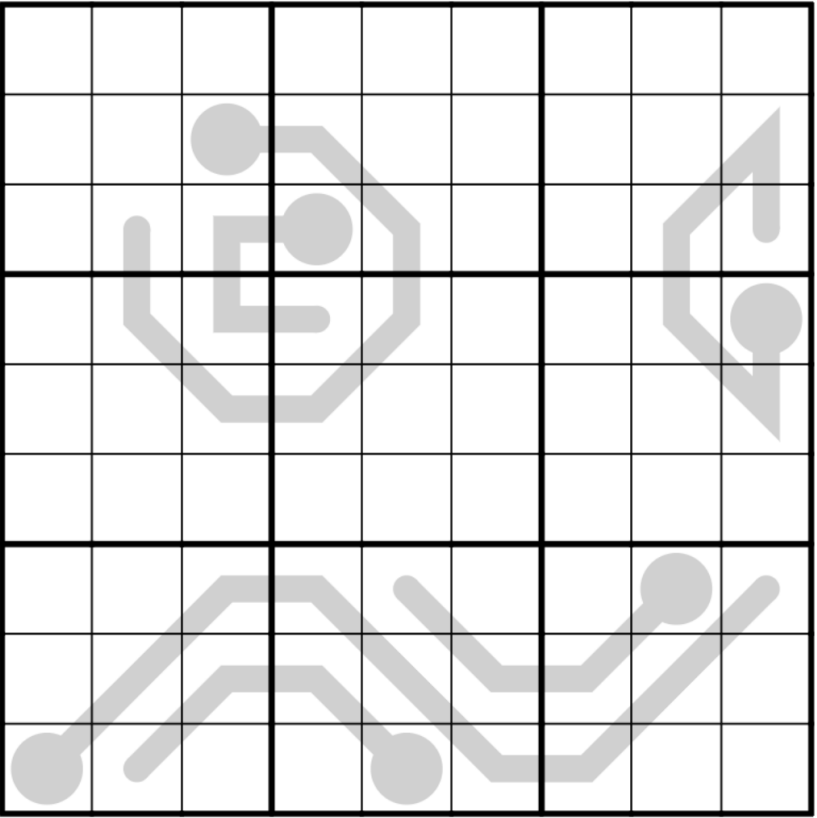
Play on CTC App: <https://tinyurl.com/yj72w4yp>

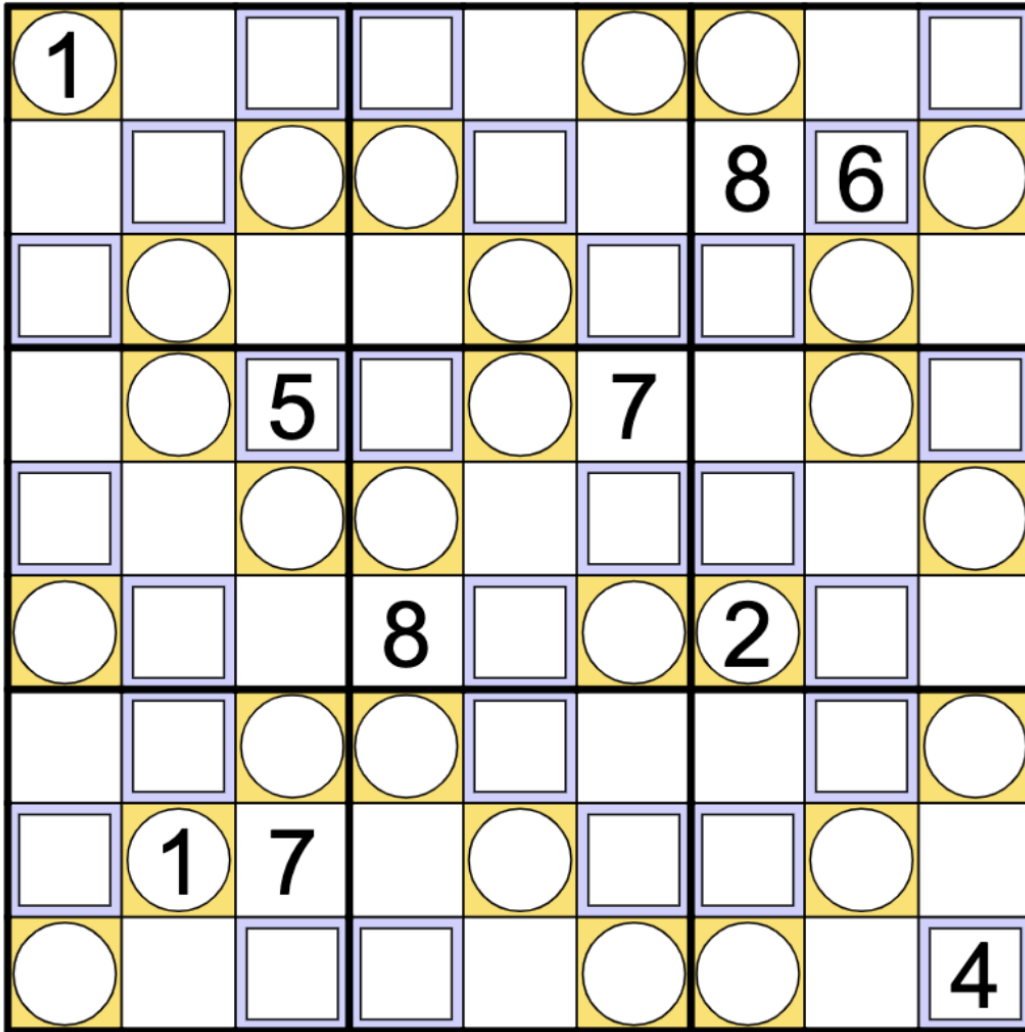
Puzzle 3 (Tatrioine, Trio) - Normal sudoku rules apply. Normal trio rules: The digits 1, 2, and 3 are indicated with (orange) circles, and the digits 4, 5, and 6 are indicated with (blue) squares.

Play on f-puzzles: <https://f-puzzles.com/?id=yhnxctst>

Play on CTC App: <https://tinyurl.com/7unyha4s>

Images of all three puzzles appear on the following two pages!





November 3, 2021: GAS 101 - X-Sums

Today's GAS is a little bit different. I put this puzzle together as a potential app puzzle, but based on testing feedback we decided it would make a good candidate for GAS 101!

Welcome to class, students! 🍎

This puzzle contains something a bit more advanced that some may struggle to find on-the-fly under hat time pressure. If you want to tackle it without additional help, great! But if you get stuck, or just want a little advanced knowledge, I have written a short explainer for the techniques used in this puzzle!

GAS 101 - X Sums -

<https://docs.google.com/document/d/1F4uVsst8yGN9kP7920uqtRlohV-nHaGuLwzaBgNBeY/edit?usp=sharing>

Editor's note: the GAS 101 document is reproduced on the next three pages of this GAS Leak, followed by an image of the puzzle and links to solve.

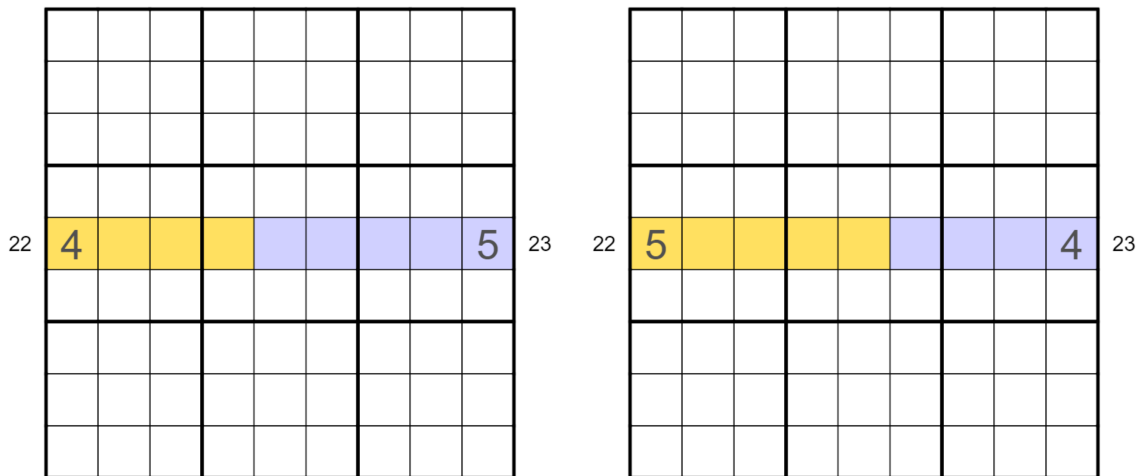
Normal sudoku rules apply. Clues outside the grid are the sum of the first X digits in the corresponding row or column, starting with the digit adjacent to the clue and continuing away from the clue, where X is the adjacent digit. For example: ?????7534 (19) would be a valid fill for a row where 19 is the sum of the rightmost 4 digits.

The Secret (of X Sums)

As you are hopefully all aware, the digits from 1 to 9 add up to 45. (The Not-So-Secret Secret)

This can be a powerful tool in X Sums. Consider two X Sums clues on opposite sides of a row. If these clues add to 45, we know that together they must sum all the cells in the row!

For example, in the images we have a 22 clue and a 23 clue. Since $22 + 23 = 45$, we can conclude that the sums include all 9 cells in the row - therefore, the ends of the row must sum to 9 (since these digits tell us how many cells are part of the sums).



(In this particular example, we can in fact deduce that the ends must be 4 and 5 in some order, since the maximum for a 3 cell X Sums clue is $20 = 3 + 8 + 9$.)

This has been used in GAS before; continue to the next page for a slightly more advanced variation of this trick!

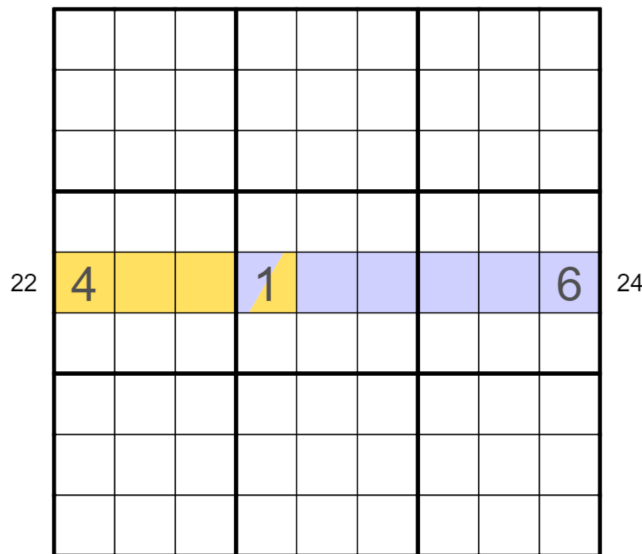
Overlapping X Sums

If two opposite X Sums clues sum to 45, they must cover all 9 cells in the row.

But if two opposite X Sums clues sum to *more* than 45, they must overlap! (If they didn't, the most they could sum to is 45.)

We can conclude two things from this. First, if they overlap, the sums must include more than 9 cells - the entire row/column plus the overlapping cell(s). This means that the ends sum to more than 9 as well.

Second, the overlap must include digits summing to the "extra" amount above 45. This can be particularly useful if the two X Sums clues sum to 46 or 47, as in this example:



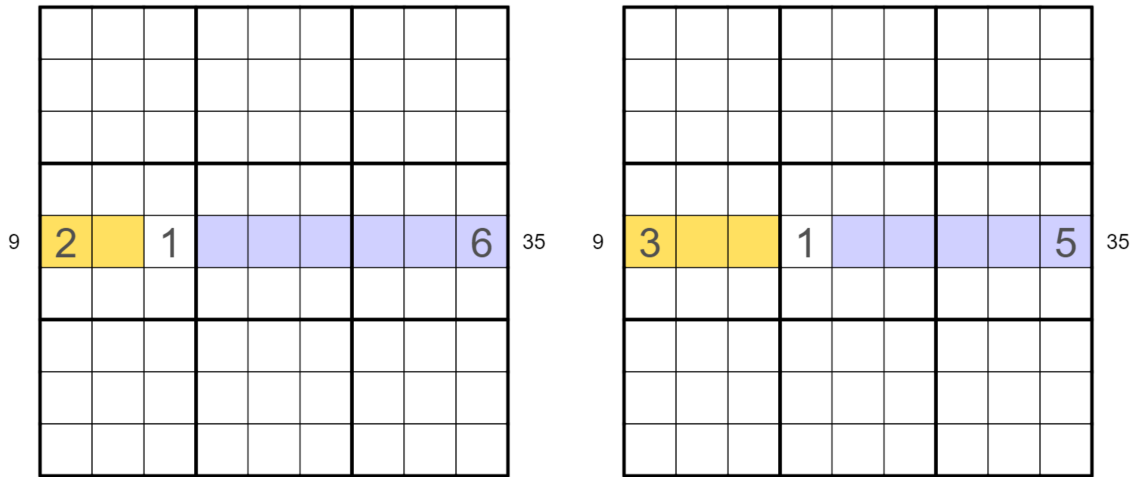
Here, we have $22 + 24 = 46$, which is 1 more than 45. That means the overlap must be 1, and this must be a single cell. Additionally, the ends sum to 10, since they overlap in one cell (so they cover the entire row, plus the double-counted overlap cell).

(In fact, unlike in the previous example, the three placed digits are totally forced! Can you figure out why?)

Underlapping X Sums

We've covered opposing X Sums clues summing to 45 and to more than 45... that leaves one last case: summing to less than 45.

In this case, the clues can't cover all 9 cells of the row, so the ends sum to less than 9. Additionally, the "underlap" (cells not included in either sum) must account for the difference from 45.



In this example, we have $9 + 35 = 44$, so we are 1 short of a full row. This means our underlap is one cell, and that cell must again contain a 1. The ends sum to 8 (since the clues cover the other eight cells in the row). Here, we can get to 8 with $2 + 6$ or $3 + 5$, and either potentially works with the X Sums clues ($2 + 7 = 9$, or $3 + 2 + 4 = 9$). In either case, the placement of the 1 is determined - but you would need to use additional information in the grid to determine which configuration is correct.

36								
10								36
24								20
6								40
								36
	12		9				3	

Play on f-puzzles: <https://f-puzzles.com/?id=yzrmolpy>
 Play on CTC App: <https://tinyurl.com/c5z53n4w>

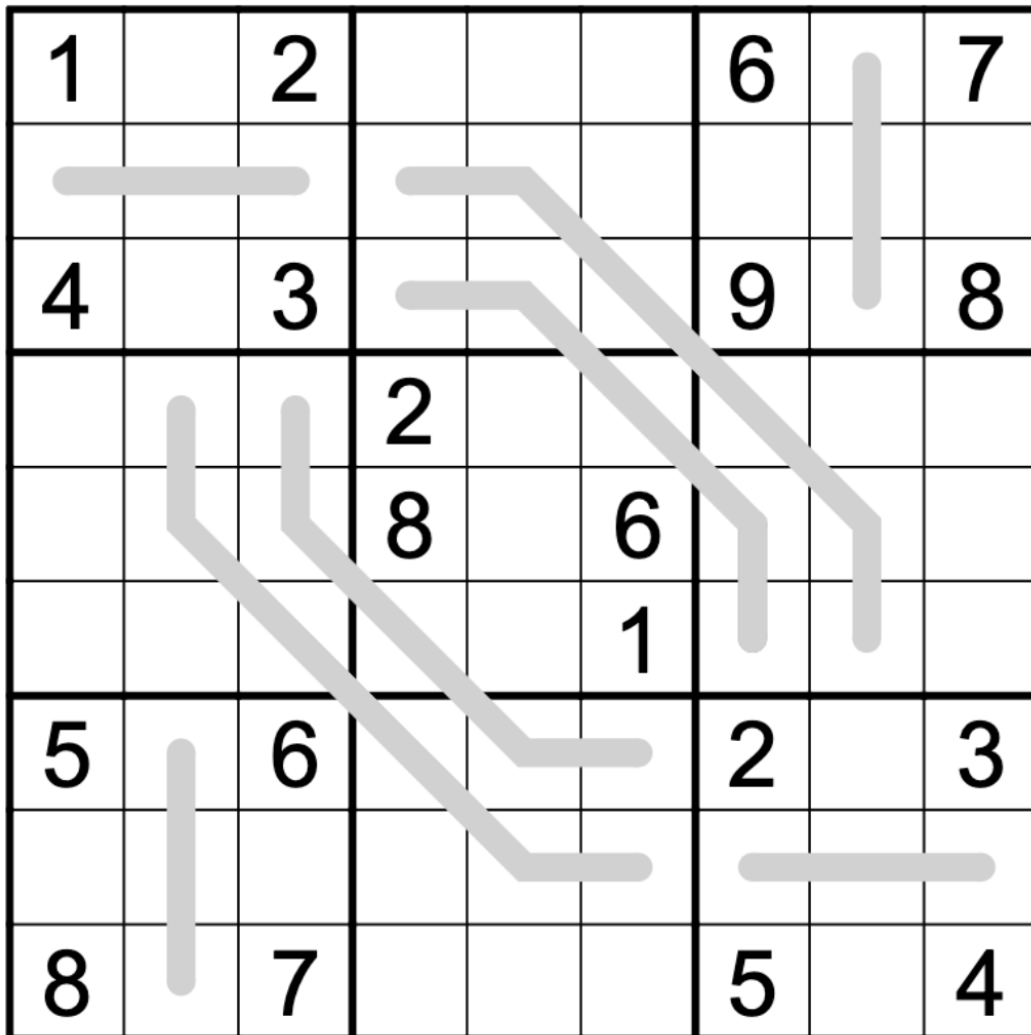
November 4, 2021: Parrot-y Lines

Clover

I've noticed that our friends over at GAPP are giving away birds for successful puzzle completion! (A bird is a sort of avant-garde dinosaur.) In that spirit, today's GAS is a parrot-y lines sudoku.

Normal sudoku rules apply. All lines must involve parrots. 🦜 🐦

Also, all of the digits along a line must have the same parity. (Huh, weird coincidence!) That means each line has all odd digits or all even digits. Digits can repeat on a line as long as they follow sudoku rules.



f-puzzles: <https://f-puzzles.com/?id=yfa4kj42>

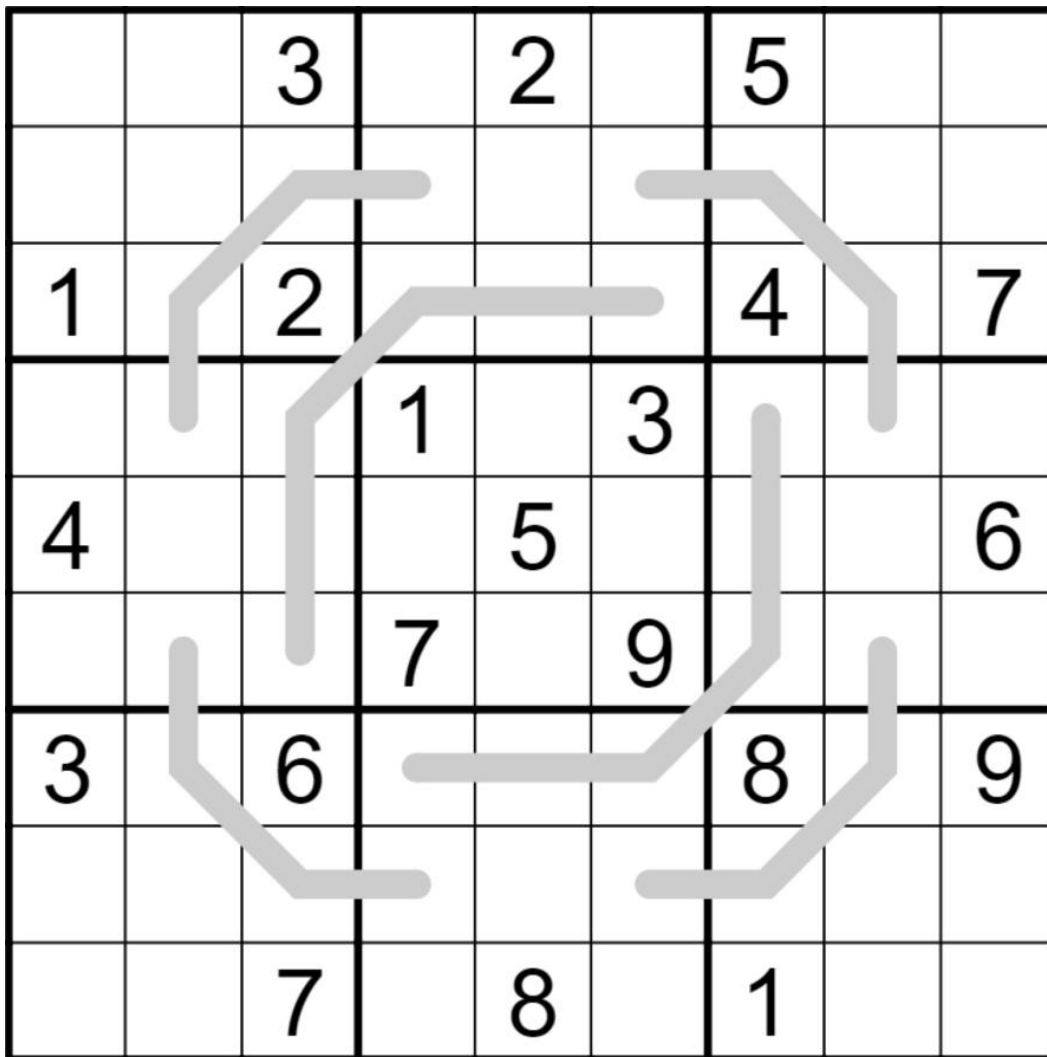
CtC: <https://tinyurl.com/ftcxubr4>

November 5, 2021: Parody Parrot-y Lines

Sam Cappleman-Lynes

Do you know what else parrots are known for, other than being excellent prizes for completing GAPP puzzles and perfect pun fodder for Sudoku rulesets? Repetition! Repetition!

I have therefore decided to parrot clover's puzzle from yesterday and produce this parody parrot-y lines Sudoku. As before, normal Sudoku rules apply, and for each grey line in the grid, either all of its digits are odd or all of its digits are even. Digits may repeat on these lines if allowed by the normal rules of Sudoku.



f-puzzles: <https://f-puzzles.com/?id=3z9wmacn>

CtC: <https://tinyurl.com/d8v2898c>

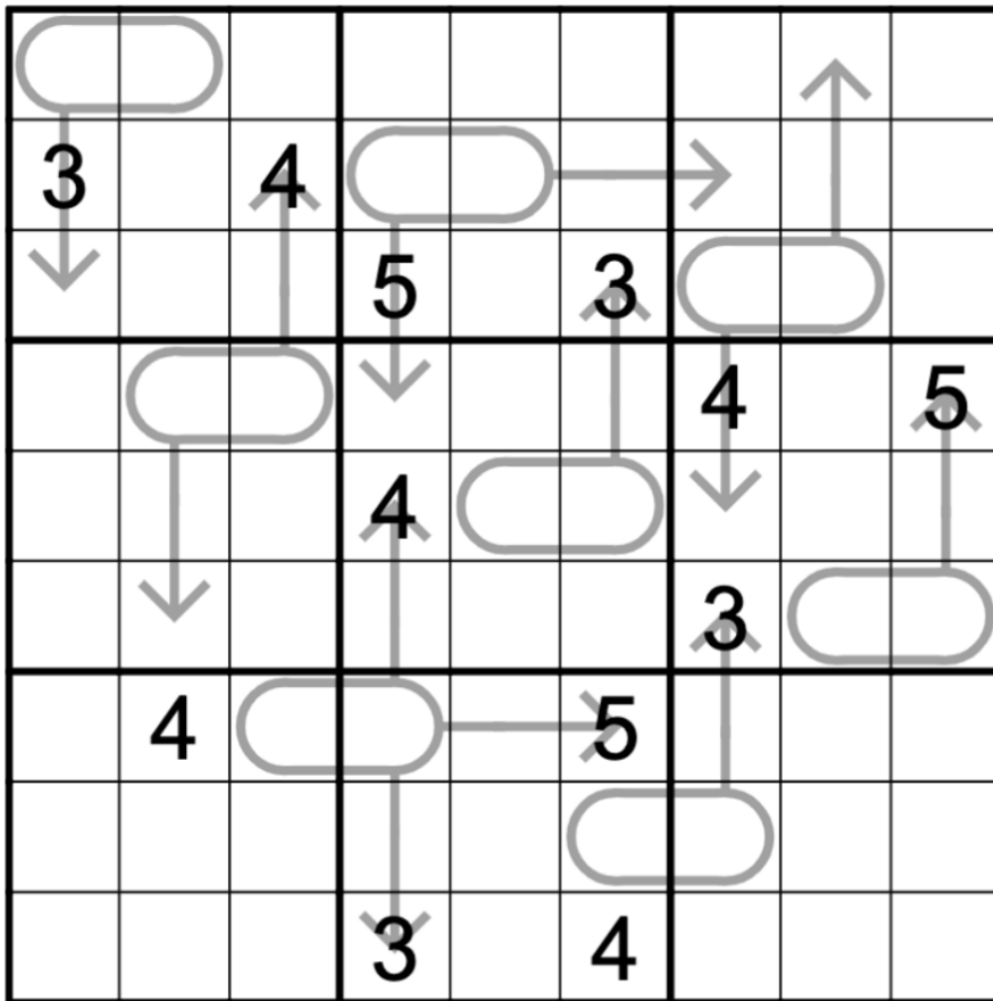
November 6, 2021: Two-Digit Arrow

Clover

Philip is out today - had a bit of a mishap when the biomechanical sudoku-solving AI parrot he was developing mistook him for the digit 4. *We told him to train it on something other than MNIST, but did he listen? Noooooo.* Anyways, he's recuperating over in #theory-and-programming , where you should send him all of your spiciest sudoku questions. Just try to avoid making any bird noises, he's a touch rattled.

Today's GAS is a two-digit arrow sudoku! Digits along an arrow sum to the value in the adjoining bulb. In this puzzle, each bulb contains a two-digit value, which you should read as a two-digit number from left to right. (Don't sum the values in a bulb!)

Note for new solvers: If a bulb has multiple arrows leaving it, each of those arrows **individually** sums to the bulb value. Don't sum multiple arrows together.



f-puzzles: <https://f-puzzles.com/?id=yzp6aheg>

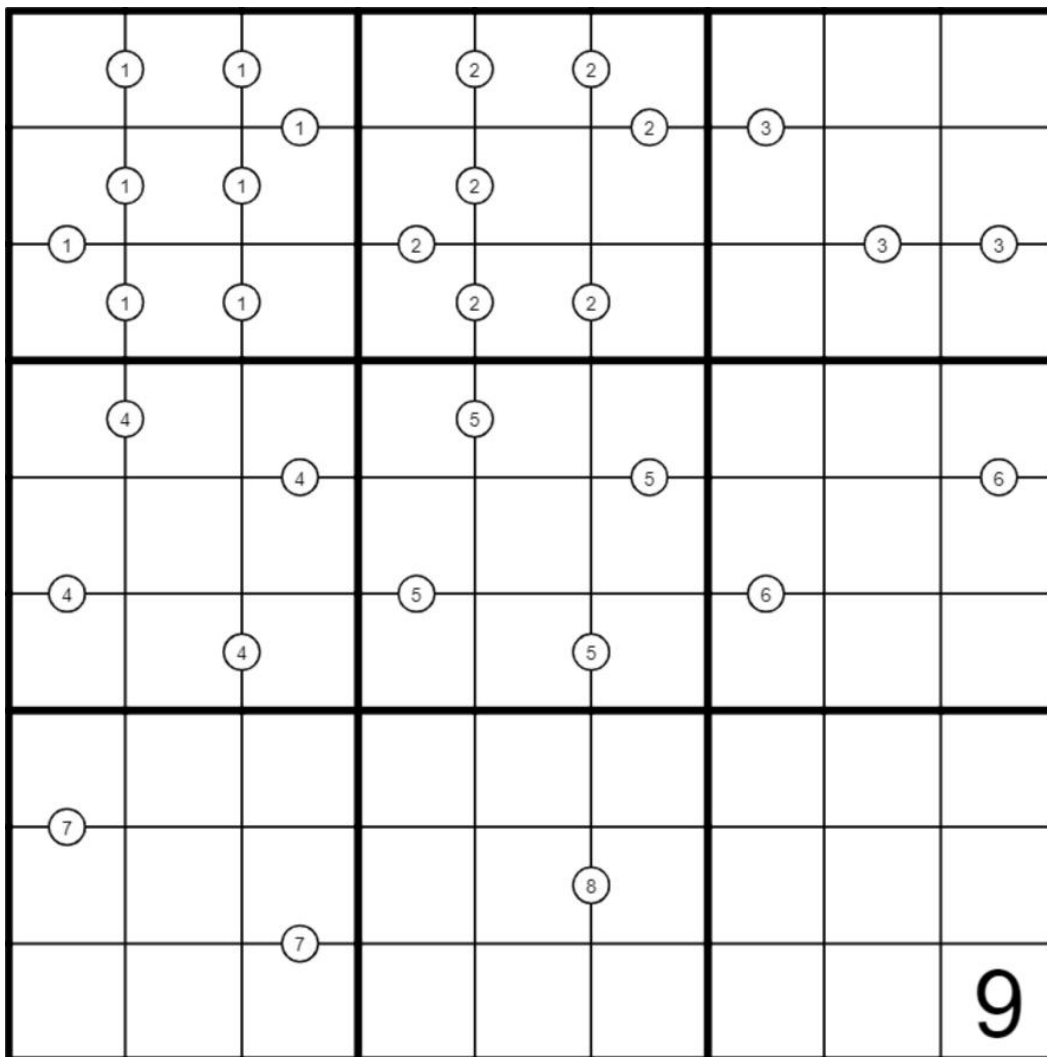
CtC: <https://tinyurl.com/453d5w7y>

November 7, 2021: Difference

Sam Cappleman-Lynes

A crucial skill in solving Sudoku puzzles is to be able to recognise all of the numbers from 1 to 9. Occasionally, you need to know the order they go in too. Unfortunately, during my maths degree, I completely forgot how to deal with actual numbers, so I constructed this puzzle to help me remember how to count to 9. I hope it helps you too!

In this Difference Sudoku, normal Sudoku rules apply. Additionally, if a white dot is given between two cells, then the digits in those cells must have a difference equal to the number written in the dot.



f-puzzles: <https://f-puzzles.com/?id=zs69z57k>

CtC: <https://tinyurl.com/2d9kexjr>

November 8, 2021: PAINKILLERS

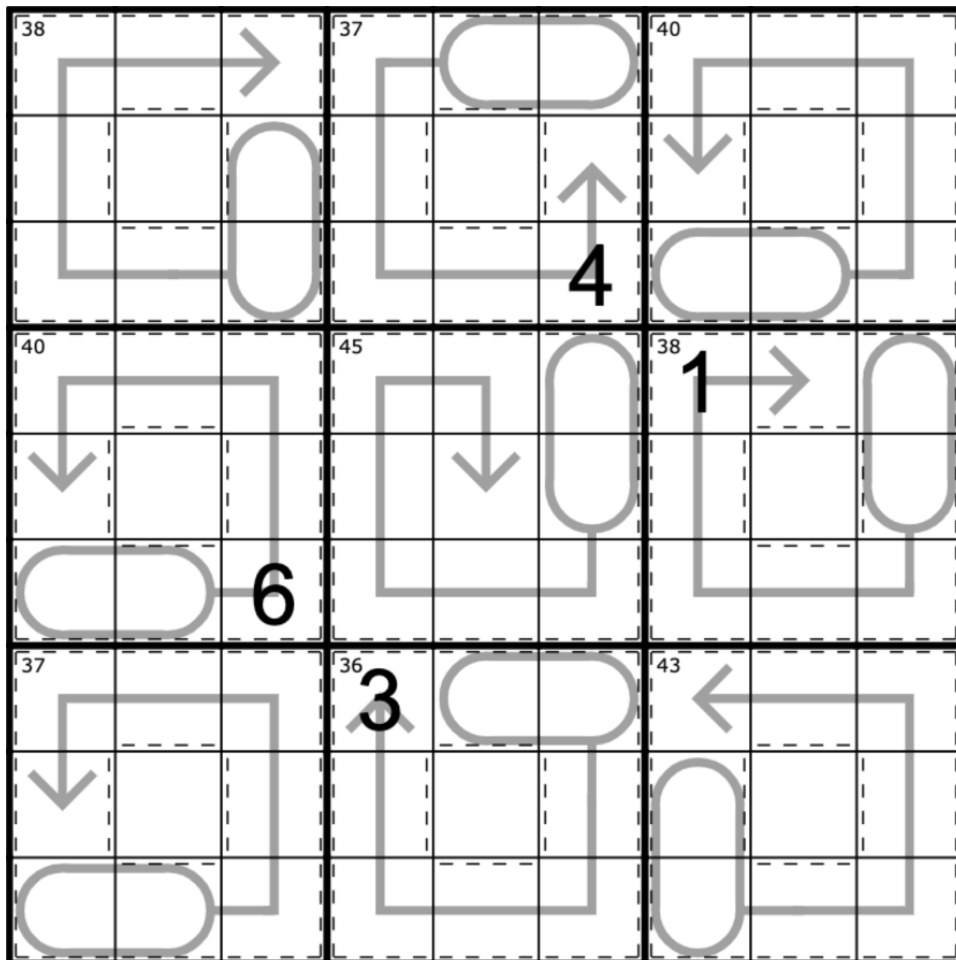
Philip Newman

I'm baaaaaack!

While I'm stuck in bed recovering from foot surgery that unfortunate parrot incident, I've been setting puzzles based on my experience! You might even get to see my attempt at drawing a foot in a sudoku grid, if Sam lets me get away with it. >_>

Today's puzzle is called PAINKILLERS... because it's got a bunch of pills! (And also killer cages.) Unlike what you might suspect looking at it, I did not set this one under the influence - I've only got that excuse for the third one... <_<

Normal sudoku rules apply. Digits in cages cannot repeat, and must sum to the total given. Digits along arrows must sum to the two digit total given in the corresponding pill, read left-to-right or top-to-bottom.



Play on f-puzzles: <https://f-puzzles.com/?id=yzxdqj7n>

Play on CTC App: <https://tinyurl.com/3pwesjdb>

November 9, 2021: Symmetric Unequal

Clover

cue royalty-free patriotic music

AHEM

We hold these truths to be self-evident: that this sudoku is created **symmetric unequal**, that it is endowed by its setter with certain unalienable digits, and that among these are 1, 2, 3, life, liberty, 4, 5, 6, the pursuit of happiness, and 7. Also, 8. And possibly even 9.

Normal sudoku rules apply. Also, digits that are located opposite each other (around the center of the grid) can't be equal. For instance, the digit in the top left corner has to be different from the digit in the bottom right corner, and the digit in r1c2 has to be different from the digit in r9c8. The digit in r3c6 has to be different from the digit in r7c4. And so on.

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

f-puzzles: <https://f-puzzles.com/?id=yzubuqe9>

CtC: <https://tinyurl.com/we2zmjym>

Penpa: <https://git.io/JXovH>

November 10, 2021: Symmetric Unequal

Sam Cappleman-Lynes

All Sudoku are equal, but some are more equal than others. This is one of the others, as non-equality is baked into its ruleset. If you solved yesterday's puzzle, then this variant will be familiar to you. That's right, it's another Symmetric Unequal Sudoku!

Normal sudoku rules apply. Also, digits that are located opposite each other (around the center of the grid) can't be equal. For instance, the digit in the top left corner has to be different from the digit in the bottom right corner, and the digit in r1c2 has to be different from the digit in r9c8. The digit in r3c6 has to be different from the digit in r7c4. And so on.

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

f-puzzles: <https://f-puzzles.com/?id=5ej3edvy>

CtC: <https://tinyurl.com/596xm5nz>

November 11, 2021: Out with a Foot

Philip Newman

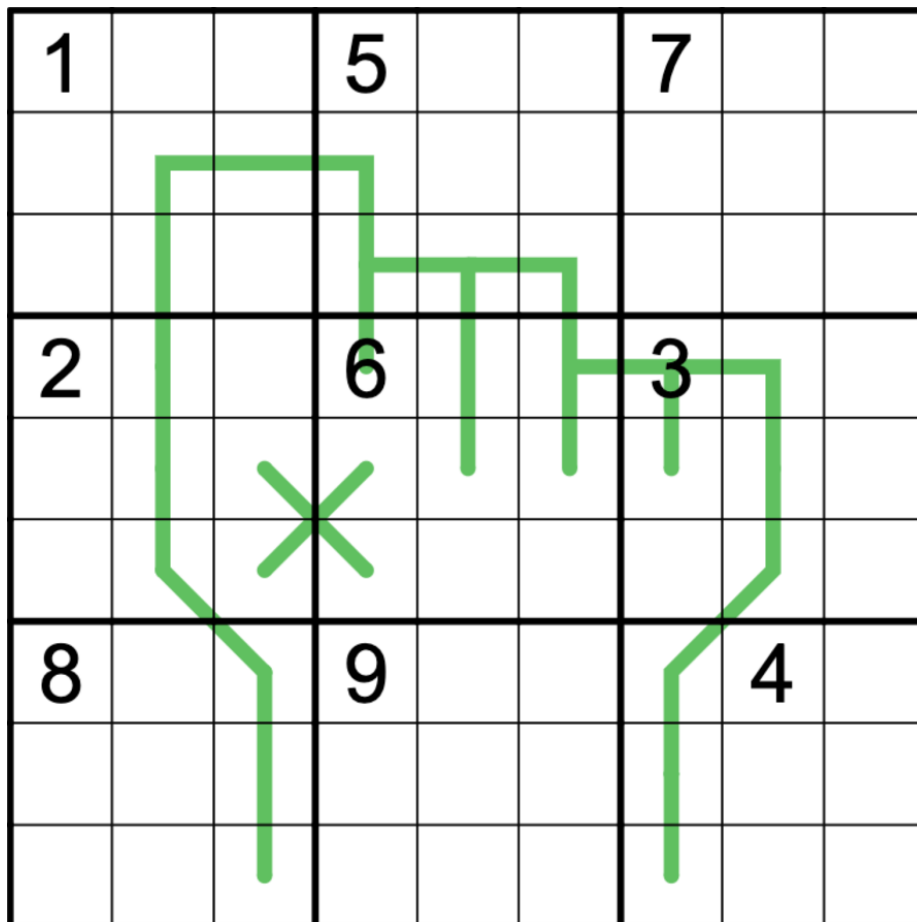
I'm having a rough time.

My foot keeps falling off (of the pillows it's propped up on while I sleep). I broke my wrist (watch, it gets so confused by time changes). Then I threw out my Back (in Black cassette tape, because I don't have a way to play it). I have a fever (and the only cure is more cowbell), and don't get me started on the rash (decisions I keep making, like the theme of this intro).

Fortunately for all of you, I made this puzzle days ago. I don't know that I'm capable of setting a puzzle in this state, (for all I know Texas has banned puzzle setting overnight).

Today's puzzle is a 100% Accurate Image of my foot surgery. (It's also a German Whispers Sudoku, shhhh don't tell anyone.)

Normal sudoku rules apply. Along green lines, digits must differ by at least 5.



Play on f-puzzles: <https://f-puzzles.com/?id=yfnvd6sm>

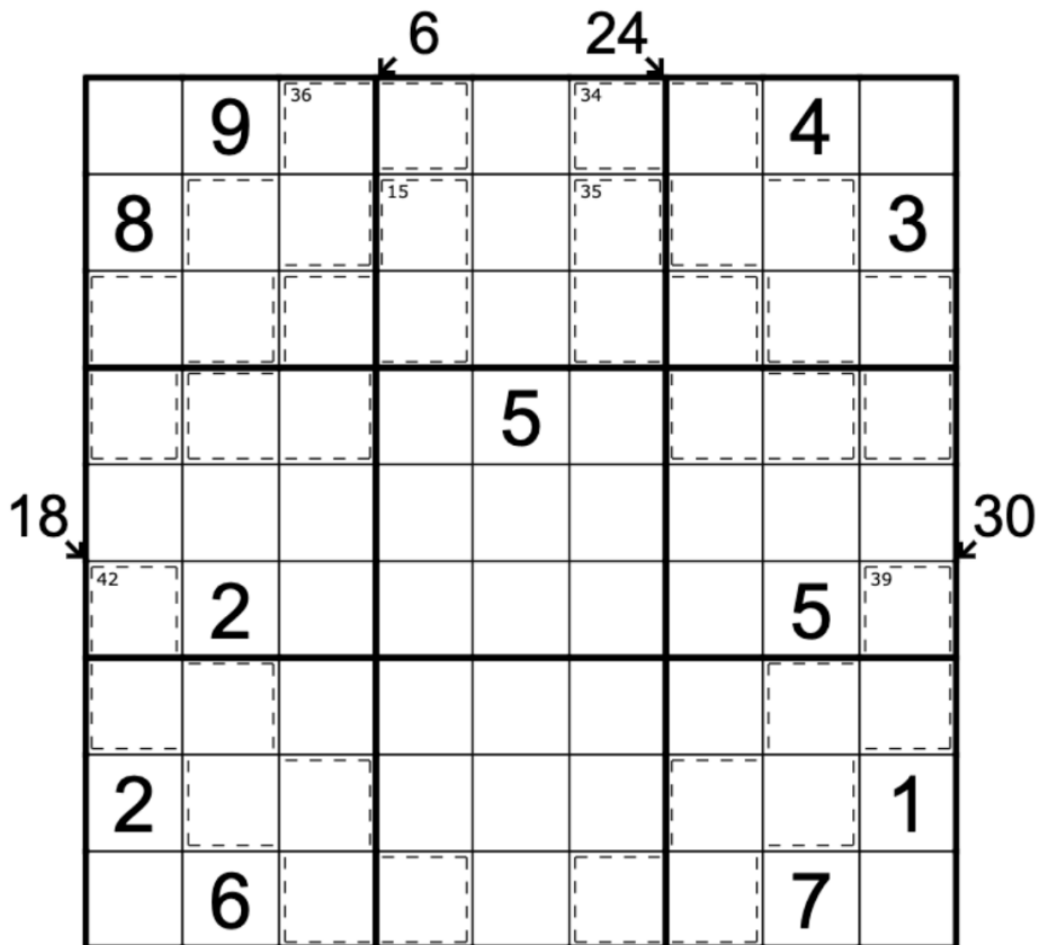
Play on CTC App: <https://tinyurl.com/38xwp4w3>

November 12, 2021: Little Killer Killer

Clover

In yesterday's GAS video, Mark had the absolute gall to speculate that we might have been setting easy puzzles in this channel. The utter nerve. The balls on that sudoku game YouTuber! I've made him an extra special GAS that has fangs and claws. It's so wicked that it has not one, but two different types of killers. It's so brutal that it has 81 entire digits. It's so vicious, it actually has nine rows and nine columns. This'll show him. This might even kill(er) him! 😈 😈 😈

Normal sudoku rules apply. Also, normal killer cage rules apply: digits in a cage can't repeat, and must sum to the value provided. Finally, normal little killer rules apply: digits along a marked diagonal must sum to the value shown.



f-puzzles: <https://f-puzzles.com/?id=yffp4zvu>

CtC: <https://tinyurl.com/fftj5768>

Penpa: <https://git.io/JXbWH>

November 13, 2021: XV Pairs

Sam Cappleman-Lynes

Personally, I am sick and tired of seeing all these Arabic numerals in my Sudoku. What was wrong with good old Roman numerals? Only seven different symbols needed instead of this overly complex system with no fewer than ten different symbols. And who decided it was a good idea to need to understand exponentiation in order to write down multi-digit numbers? Addition served us well for hundreds of years before this newfangled system came along.

Well, it's time I put things right. I don't think people are quite ready for a full overhaul just yet, so I've started small, with just a smattering of Roman numerals, and over time people will come round to my point of view and we can look at replacing all of the digits in a Sudoku with their Roman equivalents.

In this XV Pairs Sudoku, normal Sudoku rules apply. If two cells have a V between them, then they must contain digits adding to 5. If they have an X between them, then they must contain digits adding to 10. Not all pairs of digits that add to 5 or 10 are necessarily marked.

	v			X			X	
								v
				X				
9			v	v		v		
2							X	
		X						3
			v			v		8
			v			v		
					X			
	v							
		X			X			v

f-puzzles: <https://f-puzzles.com/?id=2aca99v5>

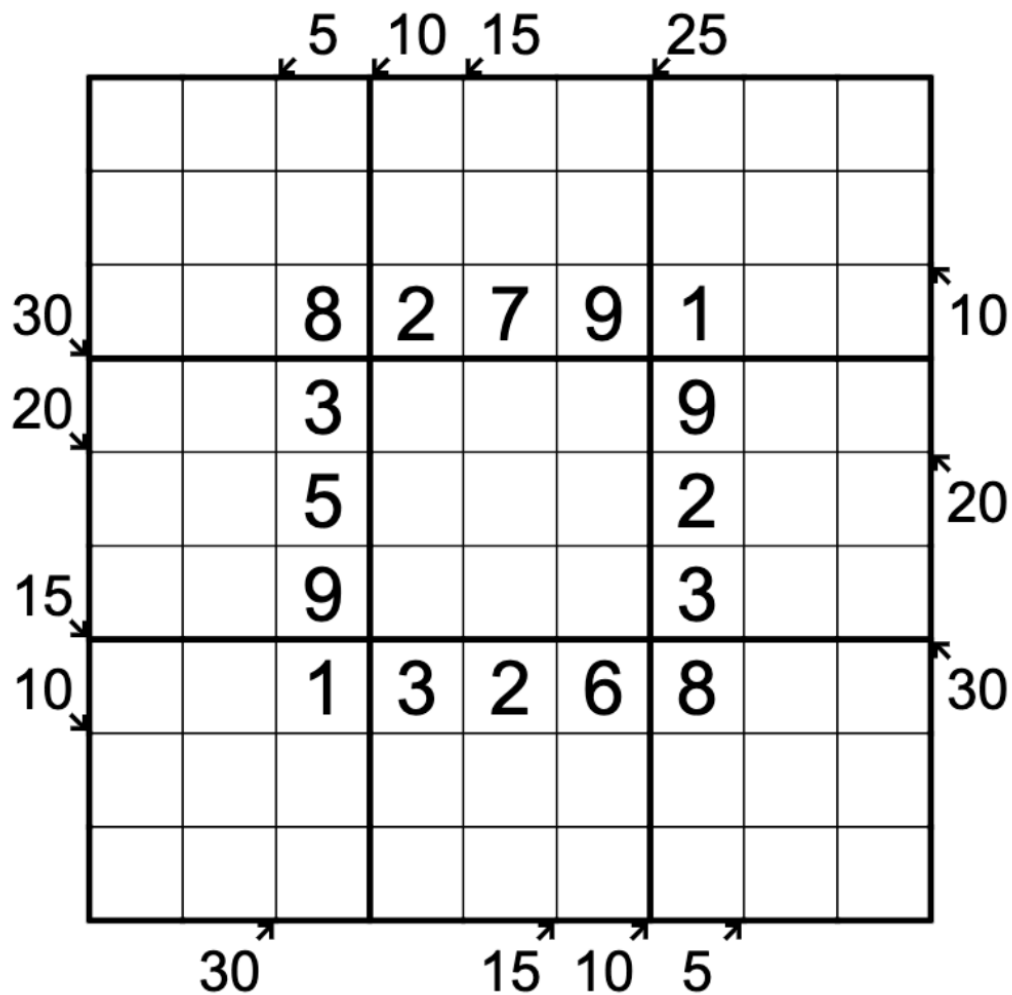
CtC: <https://tinyurl.com/2efdhu78>

Bonus 1: Skip Counting

Philip Newman

Normal sudoku rules apply. Digits along the indicated diagonals sum to the total given. (Digits may repeat if allowed by other rules.)

Editor's note: This puzzle has a unique solution even without any of the given digits! Why not try erasing a few before solving...?



f-puzzles: <https://f-puzzles.com/?id=yjx2ebvt>

CtC: <https://tinyurl.com/yjkkcp6t>

Bonus 2: X or No X?

Clover

Normal sudoku rules apply. Digits separated by an X must sum to 10. **This puzzle includes a negative constraint: if two digits are *not* separated by an X, they must not sum to 10.**

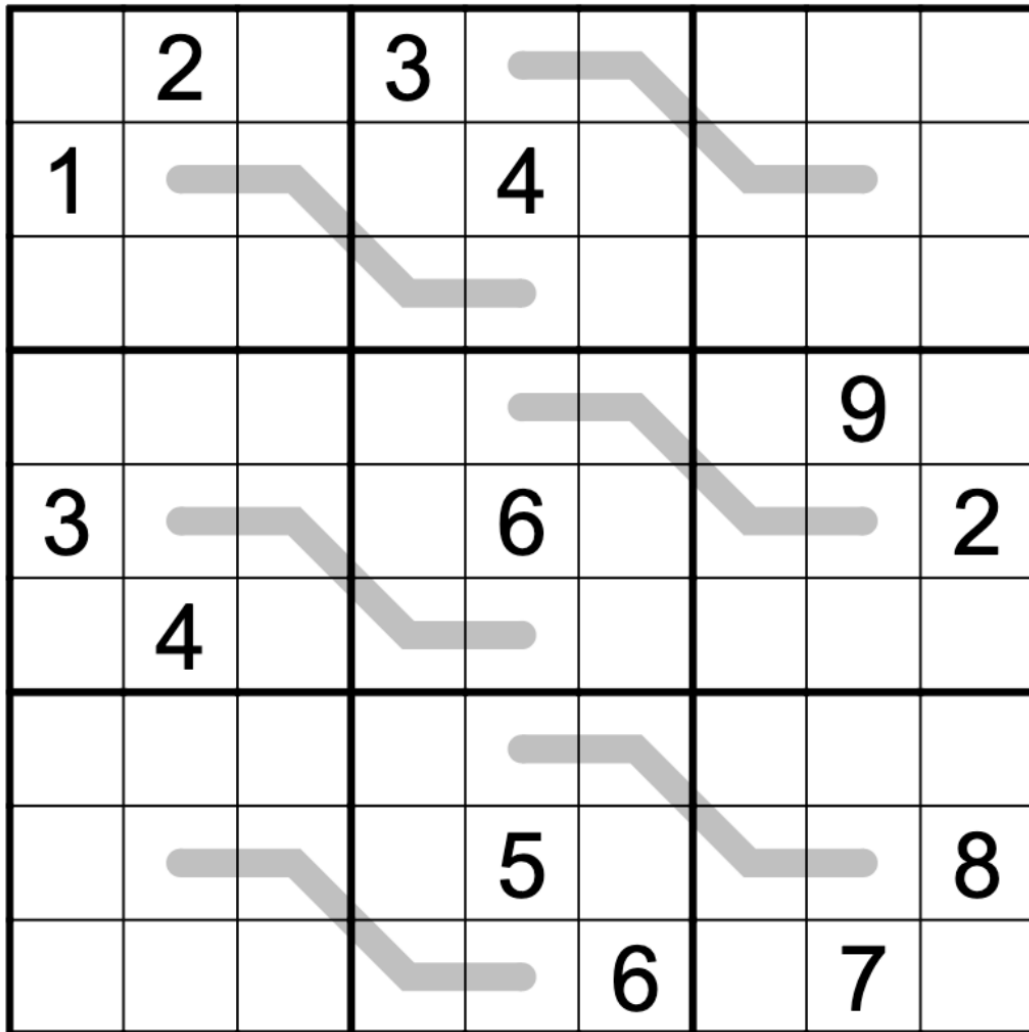
2		3	x		7		8
	4		x			6	
1			x	x			9
x			4		x		
		1		5	x	9	
		x			8		
			x				
9				x			1
	8		x			2	
				x			
6		7		x	3		4

f-puzzles: <https://f-puzzles.com/?id=yha8h6b5>

CtC: <https://tinyurl.com/2y4d9bet>

Bonus 3: Palindrome
 Sam Cappleman-Lynes

Normal sudoku rules apply. Digits along a grey line must form a palindrome (read the same forwards and backwards).



f-puzzles: <https://f-puzzles.com/?id=ye3r82mu>
 CtC: <https://tinyurl.com/hcdbmkaf>

Time Benchmarks

	One party hat	Two party hats	Today's dinosaur:
October 25, 2021	11:00	6:00	intriguing irritator
October 26, 2021	10:00	6:00	sly struthiomimus
October 27, 2021	14:00	7:00	quadrupedal quaesitosaurus
October 28, 2021	12:30	7:00	explosive erketu
October 29, 2021	9:00	5:30	thermodynamic tarbosaurus
October 30, 2021	17:00	9:00	journalist jingshanosaurus
October 31, 2021	9:00	5:00	spooky saichania
November 1, 2021	0:10:00	6:30	power-drunk pantydraco
November 2, 2021	30:00 (for all three puzzles combined)	17:30 (for all three puzzles combined)	sandcrawling supersaurus
November 3, 2021	18:00	9:00	educated efraasia
November 4, 2021	12:30	7:00	feathered falcarius
November 5, 2021	10:00	6:30	repetitive rugops
November 6, 2021	9:00	5:00	bruised becklespinax
November 7, 2021	15:00	9:30	elementary erlikosaurus
November 8, 2021	15:00	6:00	puertasaurus placebo
November 9, 2021	11:30	6:30	liberated ligabuesaurus
November 10, 2021	15:00	10:00	familiar fukuiraptor
November 11, 2021	18:00	9:00	recuperating rinconsaurus
November 12, 2021	11:00	6:00	merciless microraptor
November 13, 2021	15:00	9:00	outdated orodromeus