

GAS Leak

Genuinely Approachable Sudoku from the CtC Discord
Volume 16:
May 2022



Good morning, friends! The 1-year anniversary of GAS is just a few days from now, on June 7. 3,071 of you have come along with us for the journey, and we appreciate every one of you. As of this writing, we've handed out 25,089 dinosaurs and 90,675 hats... not to mention the ones quietly claimed by everyone who's been following along without chatting on Discord. And there are plenty more where those came from.

In this document, you'll find the GAS puzzles from May 2022, plus a handful of slightly quirky bonus puzzles. As always, the bonus puzzles appear at the end of this document, followed by time standards. Enjoy!

Clover

May 1, 2022: Classic Sudoku

Sam Cappleman-Lynes

Today's GAS is a Classic Sudoku that is only just permissible according to Nikoli's guidelines that a Sudoku puzzle should have no more than 32 given digits. Containing 31, this puzzle still leaves 50 empty cells for you to deduce.

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

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

CtC - <https://tinyurl.com/yc294vb7>

May 2, 2022: Nonzero Sum Game

Philip Newman

Now that we are through a month of security fiascos, we can sit back, relax, and focus on our primary mission: making you do maths.

Today's GAS is an X-Sums Sudoku!

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.

Helpful reminder/hint: For larger clues, it may be more helpful to consider the cells which are not part of the sum!

			7							
		6	4							
		2		9		8				
					1	5				
					3					

Clues (circled numbers):

- Top: (5,1)=5, (5,2)=9, (5,3)=14
- Left: (1,1)=10, (3,1)=6, (5,1)=15
- Right: (3,10)=15, (5,10)=25, (7,10)=1
- Bottom: (9,1)=40, (9,2)=30, (9,3)=1

Play on f-puzzles: <https://f-puzzles.com/?id=y6j844qr>

Play on CTC App: <https://tinyurl.com/y5a9c8h5>

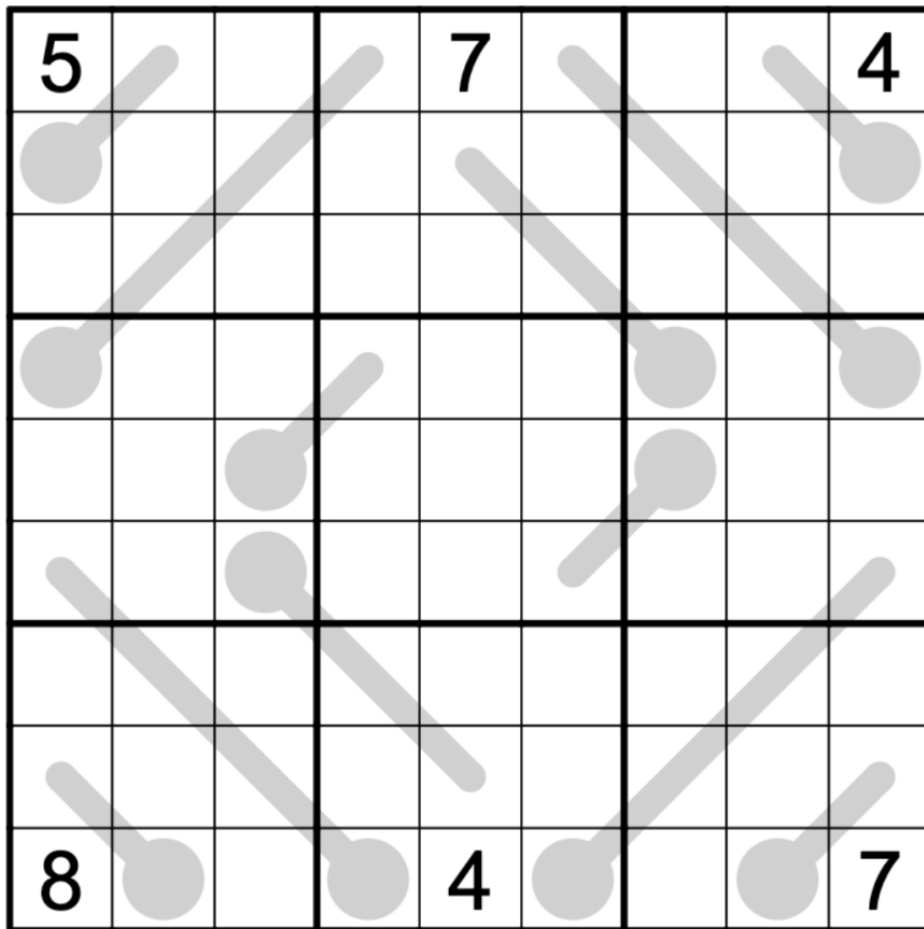
May 3, 2022: Consecutive Thermo

Clover

Today's puzzle isn't a vanilla thermo sudoku - please read the rules before you start!

One of our most frequently asked questions here at GAS is: what does "strictly increase along a thermometer" actually mean? Does that mean digits along a thermometer need to be consecutive? And the answer is, "strictly" just means that digits have to always increase, every single step, and can't ever stay the same (like in a "slow thermo"). It doesn't necessarily mean digits have to be consecutive, although I suppose they could be if they wanted to. 🤔

And now that we've had a sudoku terminology lesson, let's get weird. 🐱 In this consecutive thermo sudoku, normal sudoku rules apply. Also, digits along a thermometer have to increase consecutively. So, in this puzzle, a thermo could contain the digits 3 4 5 6, but not the digits 3 4 5 7.



f-puzzles: <https://f-puzzles.com/?id=y2mlxxvz>

CtC: <https://tinyurl.com/2k3pyhye>

May 4, 2022: Quadro Sudoku

Sam Cappleman-Lynes

Today's GAS is a Quadro Sudoku, one of the ten variants that has been appearing weekly on <http://www.fed-sudoku.eu/enindex.php> (where you can also solve three daily classic Sudoku and various other special contests) since 2008!

In this puzzle, normal Sudoku rules apply. In addition, no 2x2 area can contain all odd numbers or all even numbers.

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

f-puzzles - <https://f-puzzles.com/?id=y67swbnj>

CtC - <https://tinyurl.com/4jh98hsz>

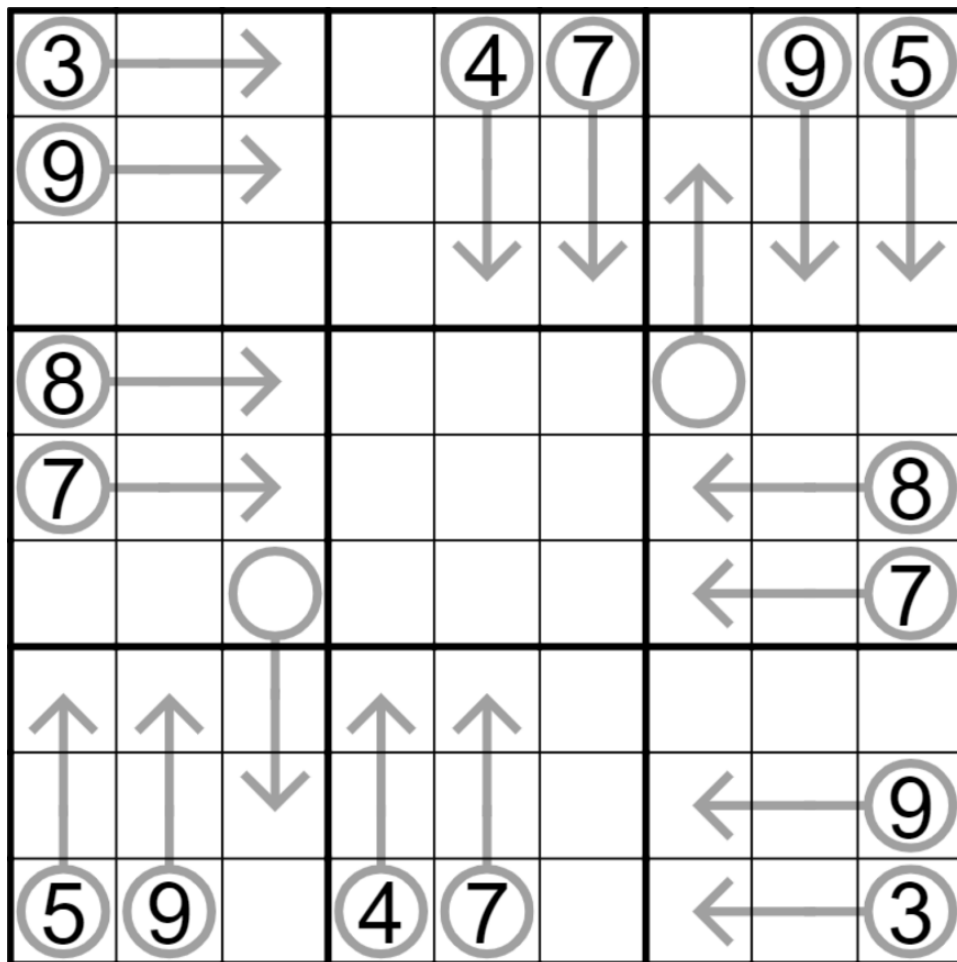
May 5, 2022: The Arrow of Hat Time

Shallow Thoughts with Philip Newman

What is time? Why must we be stuck going in one direction? Would hat times become meaningless if we could reverse the flow of time, or would GAS morph into the setters posting completed grids and you unwinding them to a puzzle?

Today's GAS is an Arrow Sudoku!

Normal sudoku rules apply. Digits along arrows must sum to the circled total.



Play on f-puzzles: <https://f-puzzles.com/?id=y3kd8bta>



Play on CTC App: <https://tinyurl.com/ye2yy7zk>

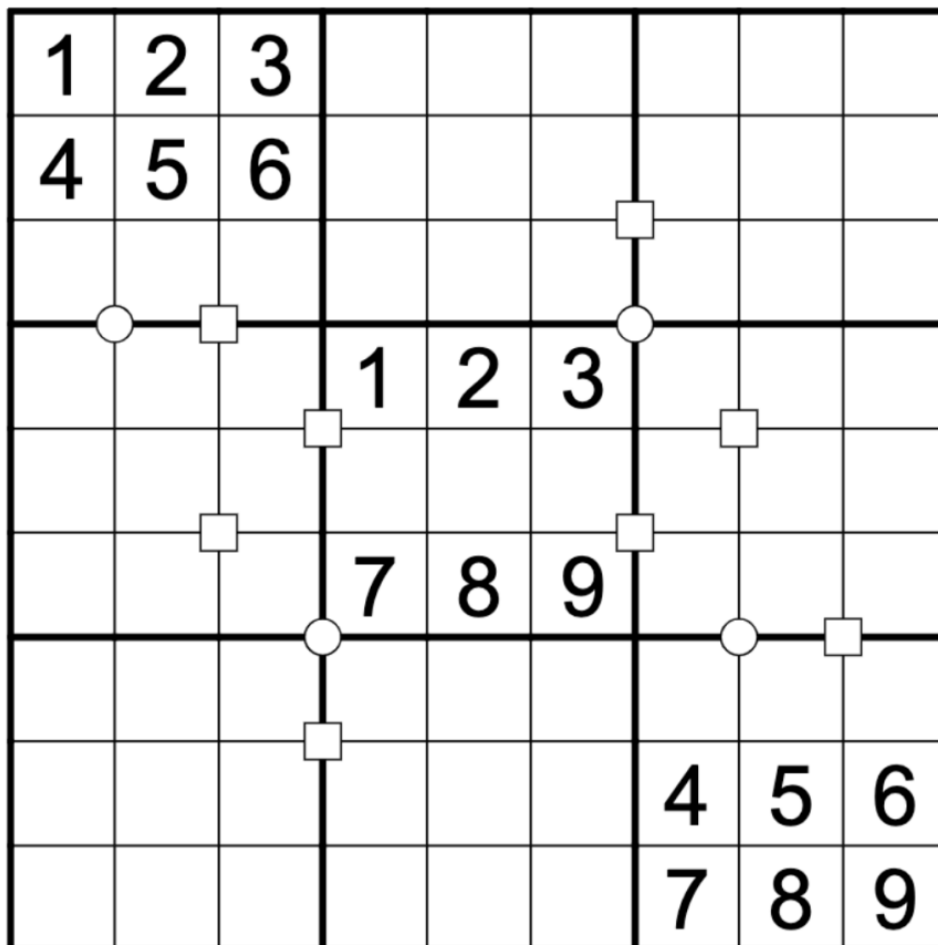
May 6, 2022: Full or Half

Clover

Shallow thoughts with Clover

Is humankind essentially good, or essentially evil? Is there really such a thing as altruism? Is the 2x2 arrangement of cells half full, or half empty? Solving today's GAS will settle the age-old debate over at least one of these questions!

In today's full or half sudoku, normal sudoku rules apply. If a square  appears at the intersection of four cells, then exactly two of those cells have even digits, and exactly two of them have odd digits (not necessarily in a 'checkerboard' pattern.) If a circle  appears at the intersection of four cells, then all four of those cells have the same parity: either all odd, or all even. Not all shapes are necessarily given.



f-puzzles: <https://f-puzzles.com/?id=y6l7cxc4>

CtC: <https://tinyurl.com/5n6cz3d7>

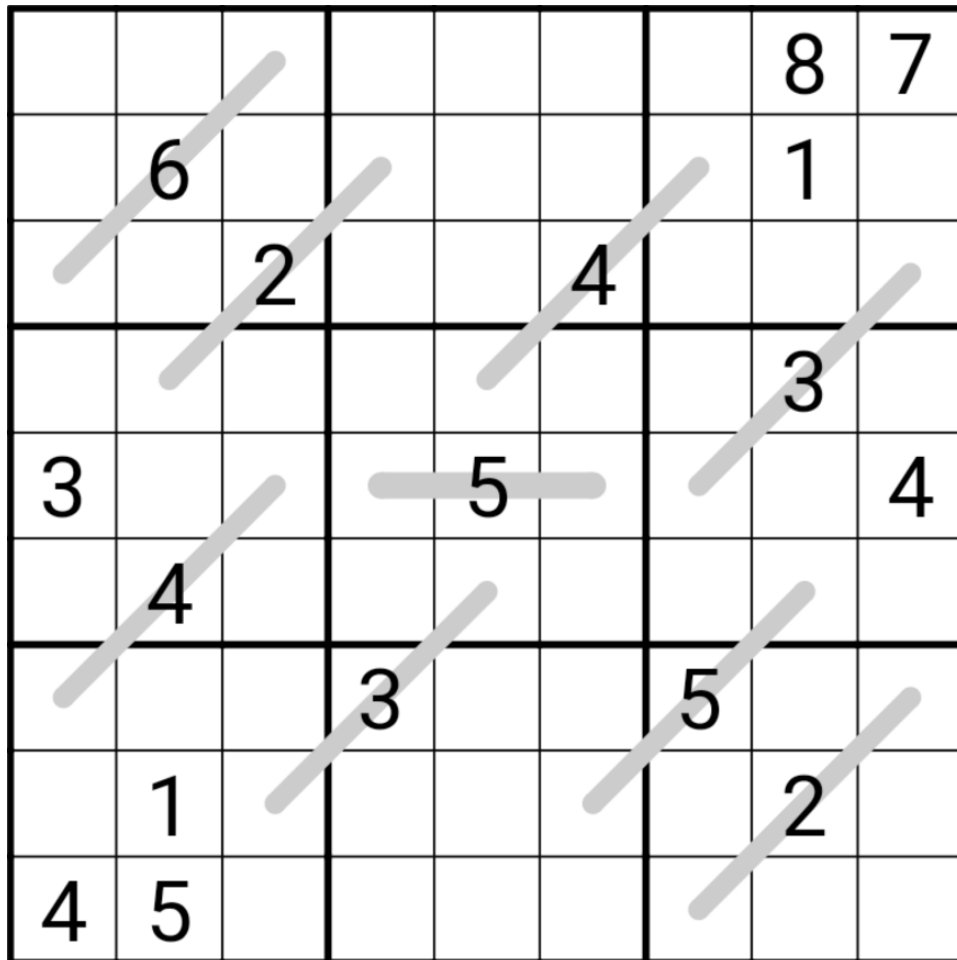
May 7, 2022: Sequence Sudoku

Sam Cappleman-Lynes

Good afternoon! Today's GAS is a Sequence Sudoku. This ruleset is similar to another puzzle posted by Clover about a week ago.

In this puzzle, normal Sudoku rules apply. Also, each grey line must consist of an arithmetic sequence; that is, a sequence of numbers in order, with a constant difference between the terms, like 1-2-3-4 or 3-5-7-9. The sequence can start at either end of a line.

Editor's note: This puzzle isn't broken! If it seems impossible to solve, reread the rules carefully - there's a strange possibility that's technically allowed.



f-puzzles - <https://f-puzzles.com/?id=y5um4yez>

CtC - <https://tinyurl.com/3u8yt87h>

May 8, 2022: Four in One

Philip Newman

We may have finally resolved our security woes with Giancarlo Espawcito, but at some point during the month of April some nefarious rogue stole a top secret set of very unique and different puzzles and is now threatening to release them to the public. No one blackmails GAS, Inc. - we'll release them ourselves!

Normal 6x6 sudoku rules apply...

X-Sums: Clues outside the grid tell you 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.)

Sandwich: Clues outside the grid tell you the sum of the digits between the 1 and the 6 in that row or column, not including the 1 and 6 themselves.

Skyscrapers: Each number you place into the grid represents the height of a building. Clues outside the grid tell you how many buildings can be "seen" in the corresponding row or column when looking from that direction; taller buildings block the view of any smaller buildings behind them.

Little Killer: Clues outside the grid tell you the sum of the digits along the indicated diagonal (digits may repeat if allowed by other rules).

(Images appear on the following page.)

Play on f-puzzles:

<https://f-puzzles.com/?id=y55lsj3d> (X-Sums)

<https://f-puzzles.com/?id=y2wt7to3> (Sandwich)

<https://f-puzzles.com/?id=y5qttavs> (Skyscrapers)

<https://f-puzzles.com/?id=yyax3bz> (Little Killer)

Play on CTC App:

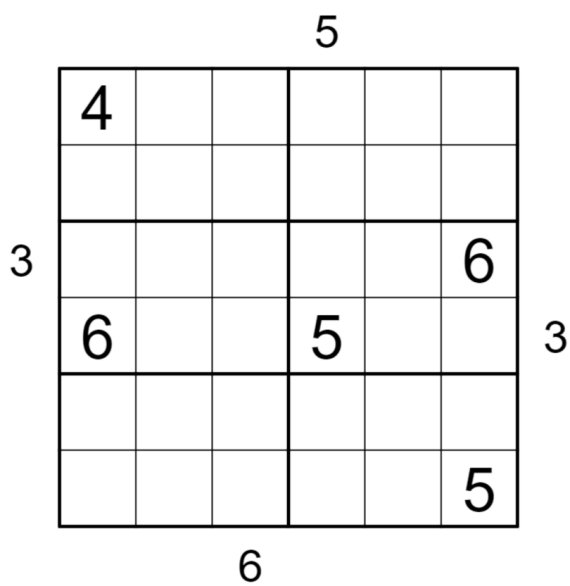
<https://tinyurl.com/2h9jb83u> (X-Sums)

<https://tinyurl.com/44rrs6e5> (Sandwich)

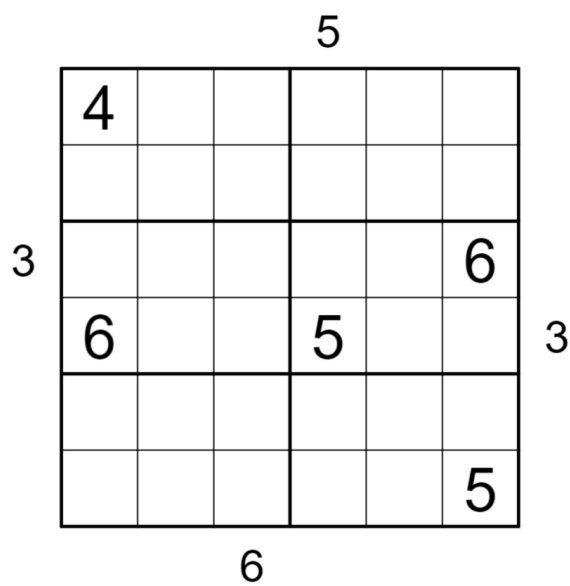
<https://tinyurl.com/mrxs66n4> (Skyscrapers)

<https://tinyurl.com/yc666myn> (Little Killer)

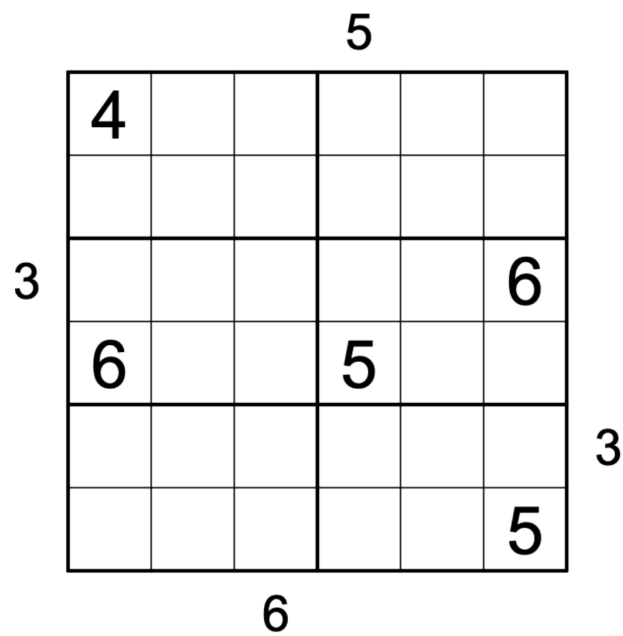
X-Sums



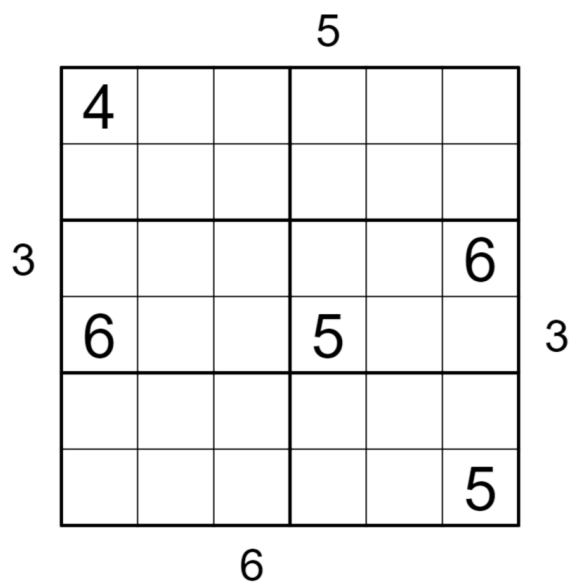
Sandwich



Skyscraper



Little Killer



May 9, 2022: Equal Sudoku

Clover

Continuing the long-running series of Killer Cage Sudoku For People Who Don't Care For Killer Cage Sudoku (KCSFPWDCFKCSes), today's GAS is an equal sudoku. Are you equal to the task of solving it?

Normal sudoku rules apply. Also, digits may not repeat within a cage. Within each cage, the sum of the odd digits is equal to the sum of the even digits.

6		8			2		4	
2		3			1		8	
		5				3		
	6		3			1		2
	8		2			6		4

f-puzzles: <https://f-puzzles.com/?id=y2komk6x>

CtC: <https://tinyurl.com/2czz5ubz>

May 10, 2022: Clone Sudoku

Sam Cappleman-Lynes

Today's GAS features a variant that I used in the very first Sudoku puzzle I ever wrote - clones! In that puzzle, though, you weren't told where the clones were. And they could overlap with each other. In this puzzle, the clones are much more forthcoming.

Normal Sudoku rules apply. In addition, the two grey areas must contain exactly the same numbers in the same places.

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

f-puzzles - <https://f-puzzles.com/?id=y3gzzn2e>

CtC - <https://tinyurl.com/2p849yt2>

May 11, 2022: Return of the King

Philip Newman

Sorry for the delay in posting today's puzzle. I was out of the house dealing with a family emergency... that's right, my crazy uncle is back causing trouble.

Perhaps a united demonstration of this channel's anti-monarchy sentiment will encourage him to go back into hiding and stop causing trouble.

Today's GAS is an Anti-King Sudoku!

Normal sudoku rules apply. Digits in diagonally adjacent cells cannot be the same. (In other words, a digit cannot touch itself, even diagonally.)

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

Play on f-puzzles: <https://f-puzzles.com/?id=yve225pd>

Play on CTC App: <https://tinyurl.com/bdhfwn79>

May 12, 2022: Product/Sum Killer

Clover

Is it possible for killer sudoku and non-killer sudoku to coexist within the same puzzle? Is there any chance of creating a kinder, gentler killer? 🗡️ 😈 These questions might be answered someday... but not today! This product/sum killer is like killer sudoku, except even mathier (except I've made the math quite gentle because, ya know, GAS. Give it a chance!)

Normal sudoku rules apply. Cages marked with a "+" give the sum (addition) of all of the digits within that cage. Cages marked with a "x" give the product (multiplication) of all of the digits within that cage.

	+5					+6		
x5		x6			+7			x6
	+6						x7	
			+20		6			
				x20				
	x9		7		2		+8	
+8								x7
		+9			x8			
	x8					+7		

f-puzzles: <https://f-puzzles.com/?id=y74bbkpg>

CtC: <https://tinyurl.com/mtx9ucu8>

May 13, 2022: Diagonal Sudoku

Sam Cappleman-Lynes

Today's GAS is a Diagonal Sudoku and comes to you from a hospital waiting room as I wait to find out if I've broken my foot 😞

Normal Sudoku rules apply. Additionally, each marked diagonal must also contain each digit exactly once.

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

f-puzzles - <https://f-puzzles.com/?id=y6znlh9x>

CtC - <https://tinyurl.com/mr39fy8k>

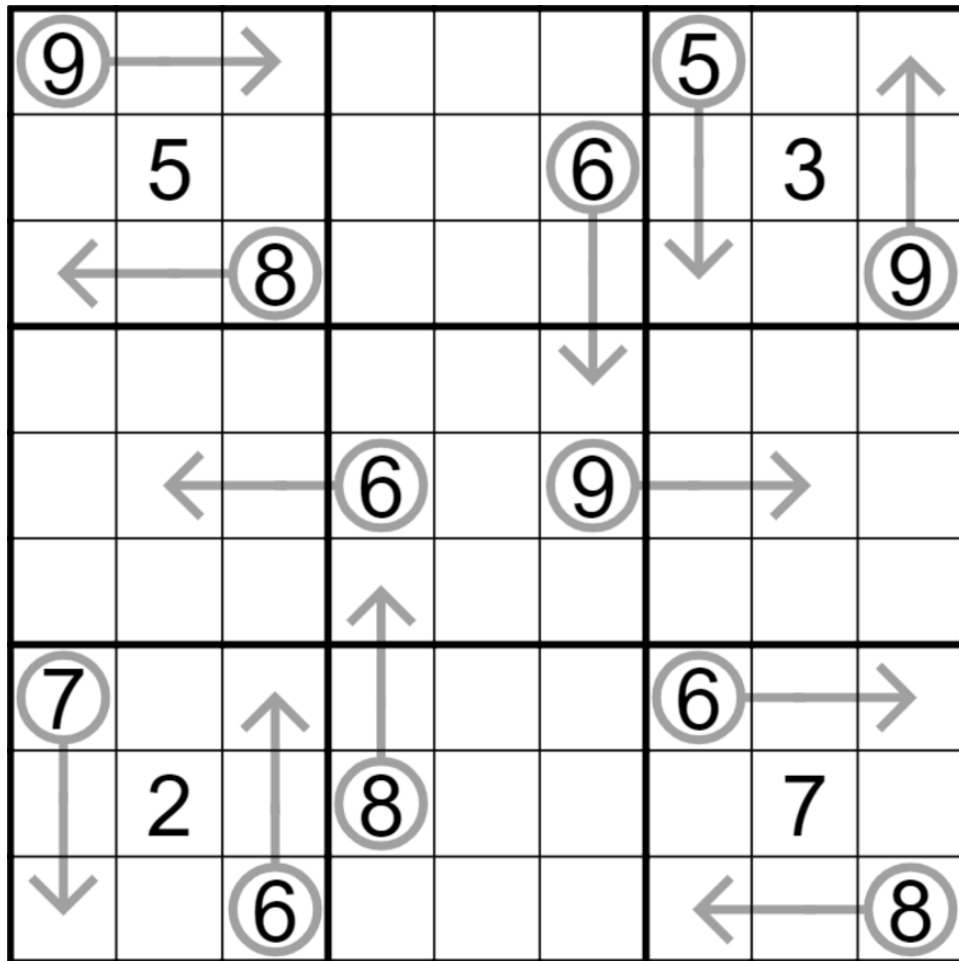
May 14, 2022: Fruit Flies Like a Banana

Philip Newman

Welcome once again as we play my favorite game: Will Mark understand this title in a few weeks?

Today's GAS is an Arrow Sudoku!

Normal sudoku rules apply. Digits along arrows must sum to the circled total.



Play on f-puzzles: <https://f-puzzles.com/?id=y6b5ufde>

Play on CTC App: <https://tinyurl.com/yc7rdm6e>

May 15, 2022: Scattered Sudoku

Clover

Sudoku setters are a superstitious lot! We never open our between lines indoors, avoid walking under thermos, and throw white kropki over our left shoulders. It's even said that breaking an irregular sudoku will bring seven digits of bad luck - so of course I slipped and dropped this one while I was getting it ready for GAS, and one of the regions shattered into nine pieces! Now they're scattered all over the grid and I'm in for a really bad day 🤔

In this scattered sudoku, normal irregular sudoku rules apply (exactly like regular sudoku, except that the regions are irregularly shaped, instead of being 3x3 squares). Also, the orange region isn't contiguous. When you solve, treat this region like any other region: it contains the digits 1 through 9 exactly once each.

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

f-puzzles: <https://f-puzzles.com/?id=yxvap36j>

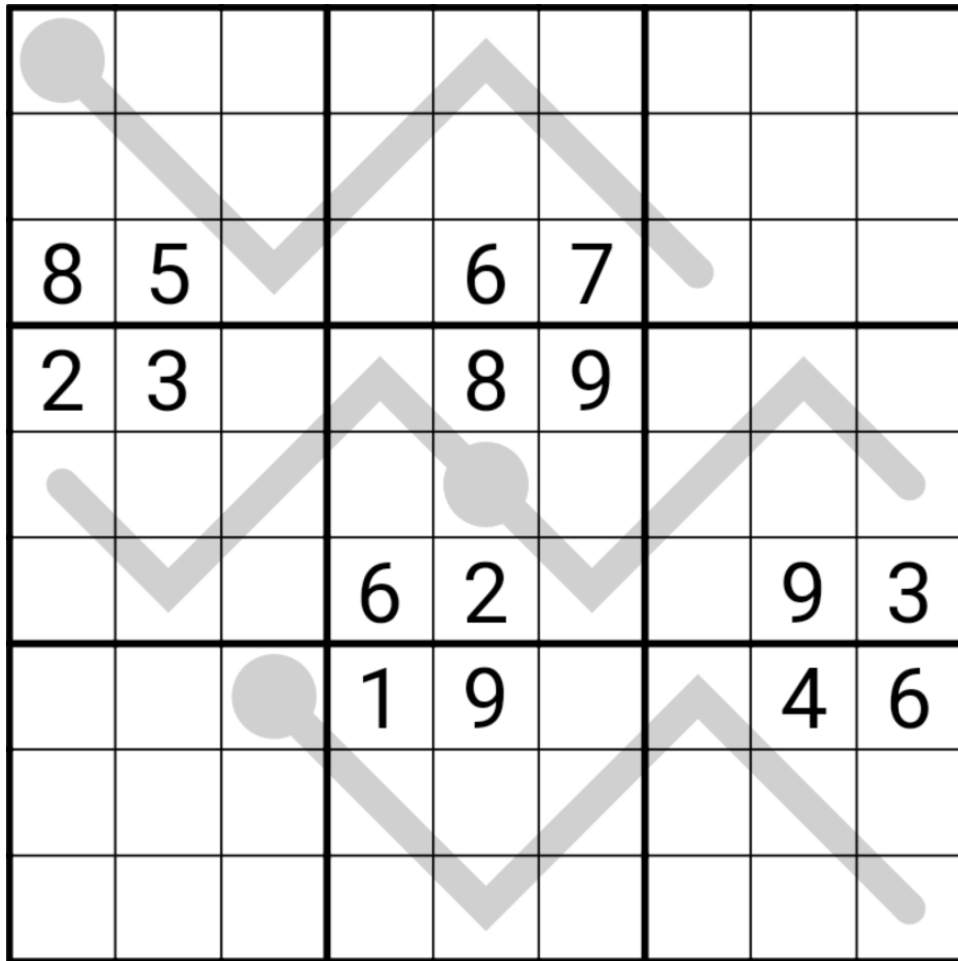
CtC: <https://tinyurl.com/2z4fwwbb>

May 16, 2022: Thermo Sudoku

Sam Cappleman-Lynes

In case anyone is wondering about my foot, it is not broken and is still attached to my leg. The circumstances surrounding its injury are open to speculation.

In other news, today's GAS is a Thermo Sudoku. Normal Sudoku rules apply. Numbers on each thermometer shape must increase along the thermometer, starting at the bulb.



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

CtC - <https://tinyurl.com/4nuf9rpm>

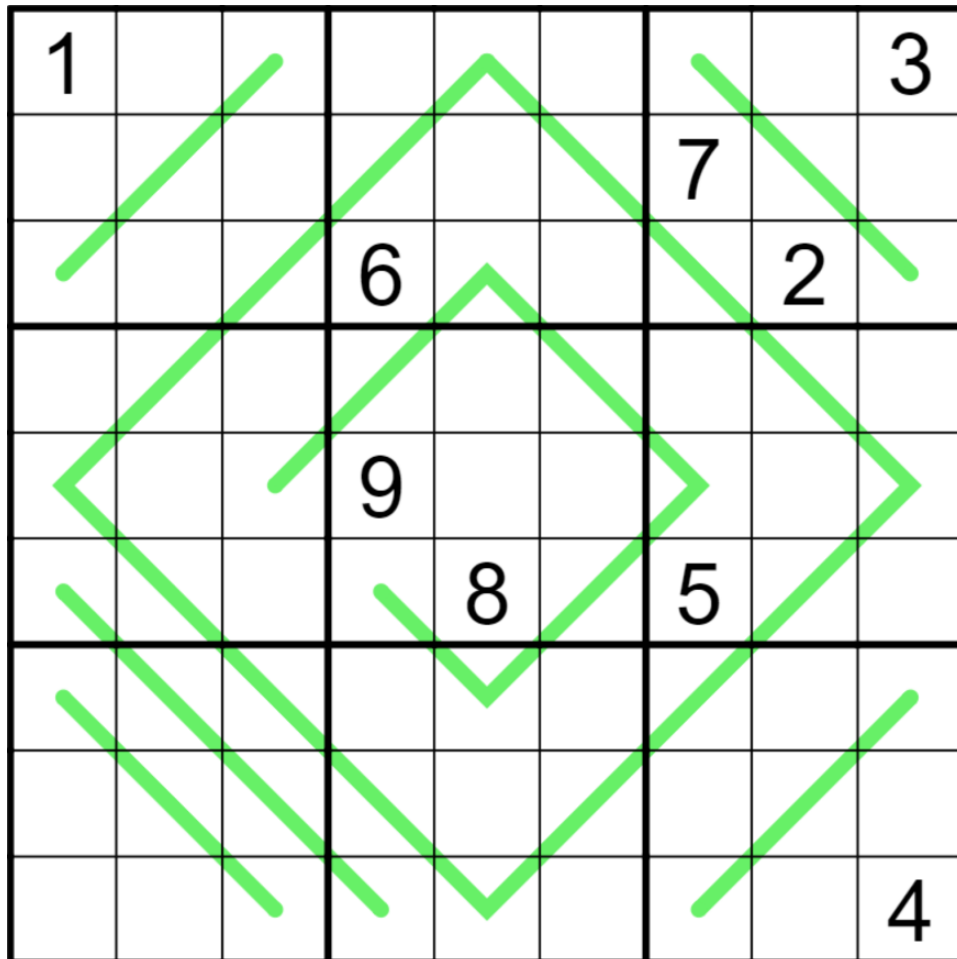
May 17, 2022: Quiet Reflection

Philip Newman

Another day begins in GASville (population 3018 and growing!). Before we rush into frantically solving puzzles, let's take a moment to meditate. Look at today's puzzle. What do you see? There are no wrong answers. Only right answer. And that right answer is "it looks like a robot". That's because today's puzzle is dedicated to our introverted companion, Kevin the Kilowatt Robot.

It's ok, Kevin, they won't bite. They only want to solve you.

Today's GAS is a German Whispers Sudoku! Normal sudoku rules apply. Digits in cells directly connected by a green line must differ by at least 5.



Play on f-puzzles: <https://f-puzzles.com/?id=y3gwh6yj>

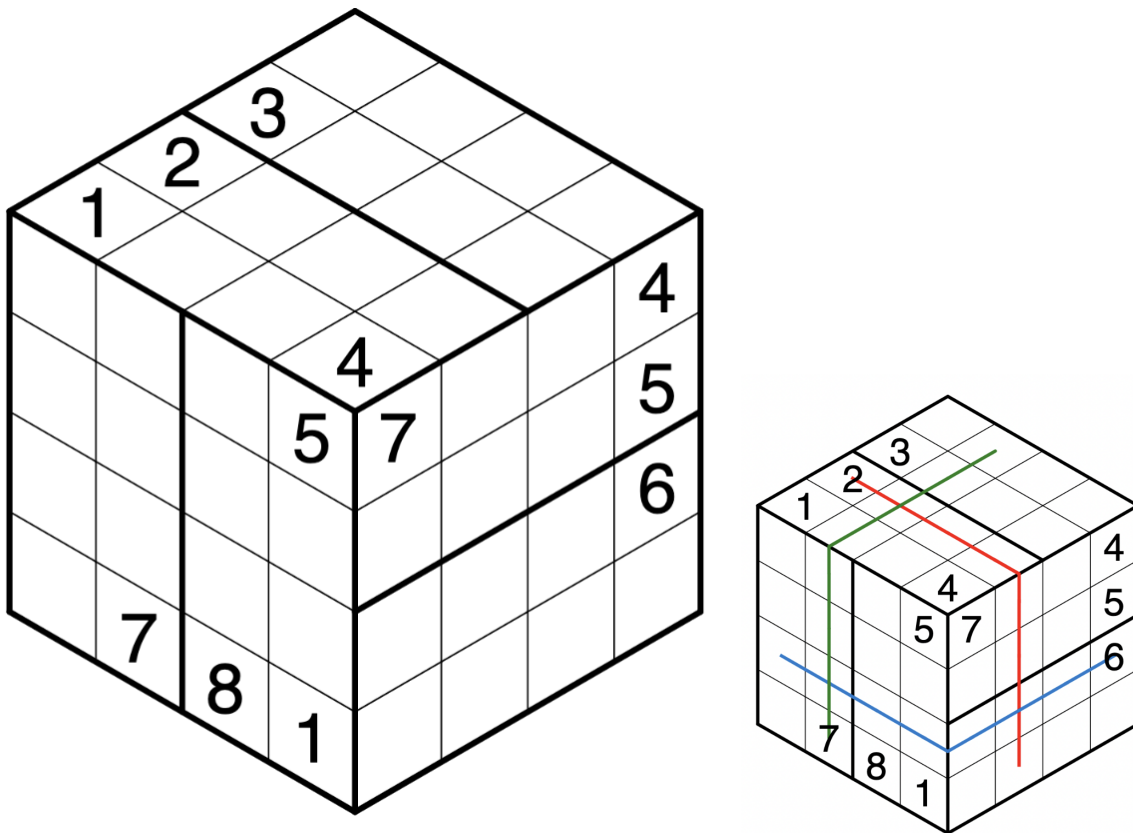
Play on CTC App: <https://tinyurl.com/yrem8j8t>

May 18, 2022: Isudoku

Clover

I finally had a moment to properly reassemble that GAS I dropped and shattered a few days ago (clumsy, clumsy clover). I've just about got it patched back up, although I think the 9s must have rolled under the couch and I really can't find them - you can manage without them, right? 😊

Today's GAS is an isudoku! Fill the grid with the digits 1 through 8, so that each 2x4 region contains each digit once. Also, each "row" and "column" contains each digit once. Example rows and columns are shown in the example image (there are four lines in each of three directions, each of which contains the digits once each.)



Penpa: <https://tinyurl.com/yxwhqkn8>

May 19, 2022: Fortress

Sam Cappleman-Lynes

Good afternoon! I hope that today's puzzle does not turn out to be as impenetrable as its name would suggest. Today's GAS is a Fortress Sudoku!

Normal Sudoku rules apply. In addition, whenever a shaded cell is horizontally or vertically next to an unshaded cell, then the shaded cell must contain the higher number.

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

f-puzzles - <https://f-puzzles.com/?id=yyjpxo5k>

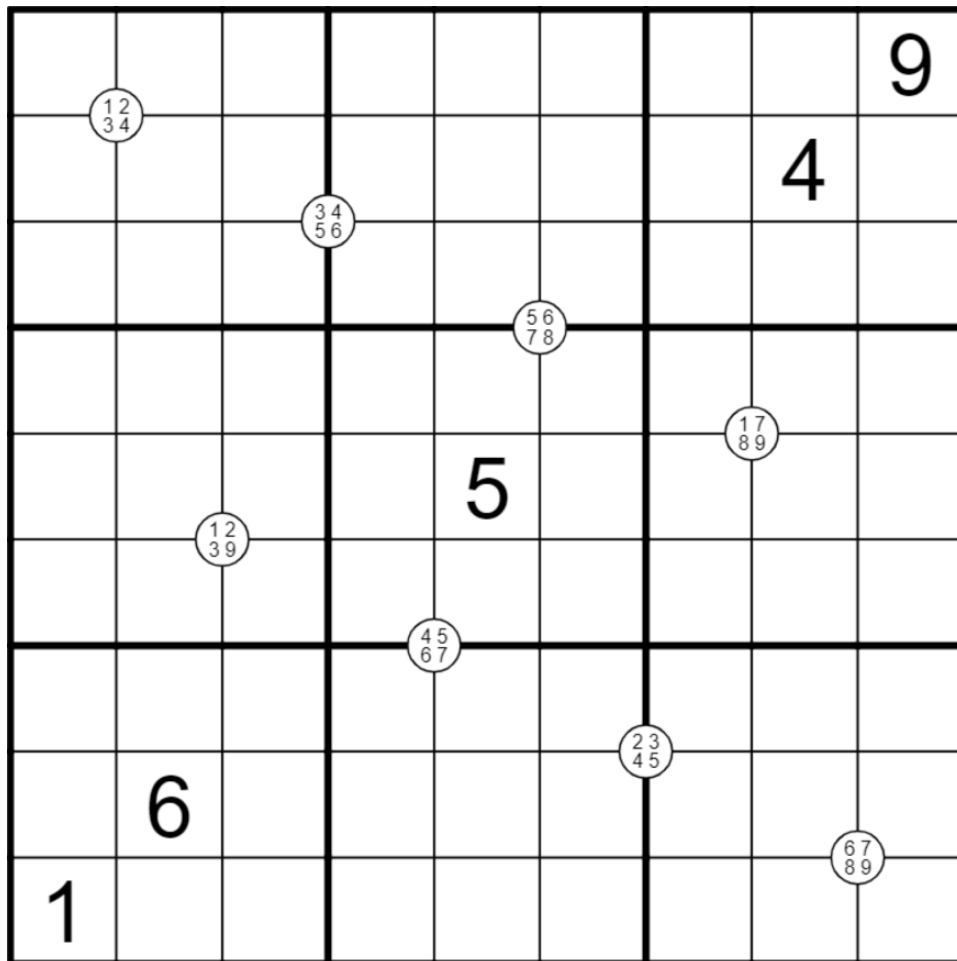
CtC - <https://tinyurl.com/59m7v3bz>

May 20, 2022: Leg Day

Philip Newman

Given the trend of foot injuries among GAS setters, we have instituted a strengthening program. Today's GAS will exercise your Quads!

Normal sudoku rules apply. Digits in corner circles must appear in the surrounding four cells, in some order.



Play on f-puzzles: <https://f-puzzles.com/?id=y6elqelo>

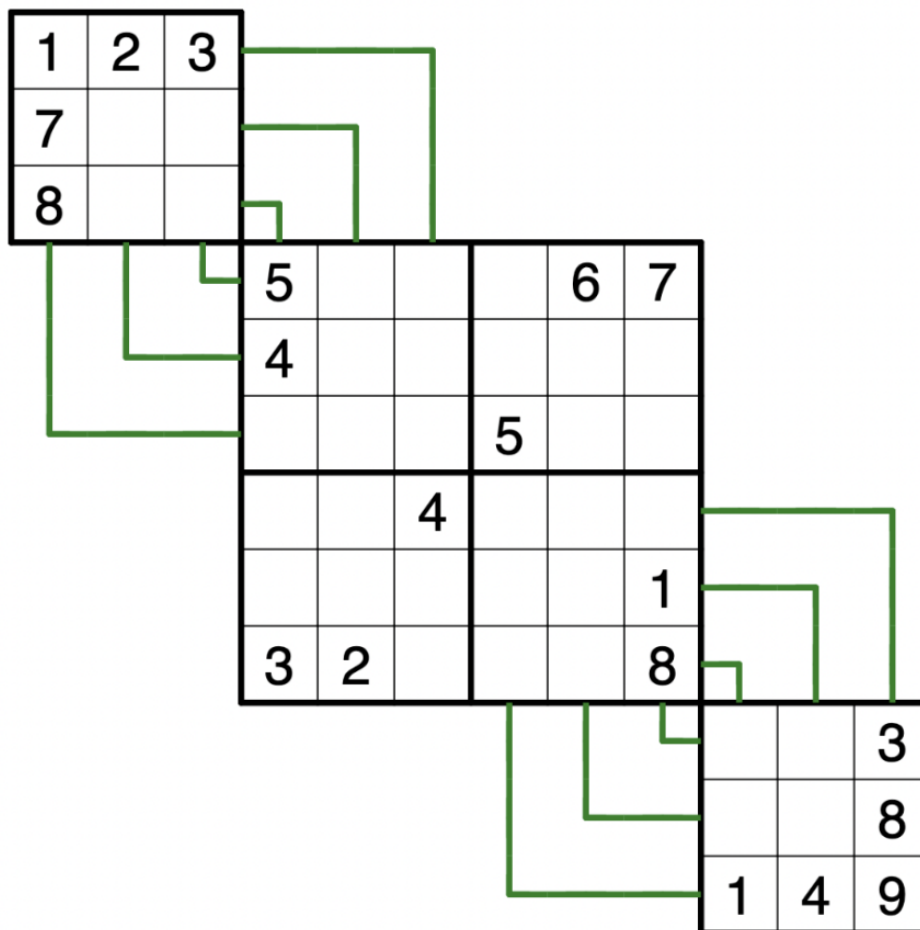
Play on CTC App: <https://tinyurl.com/ps88z7u3>

May 21, 2022: Sudokurve

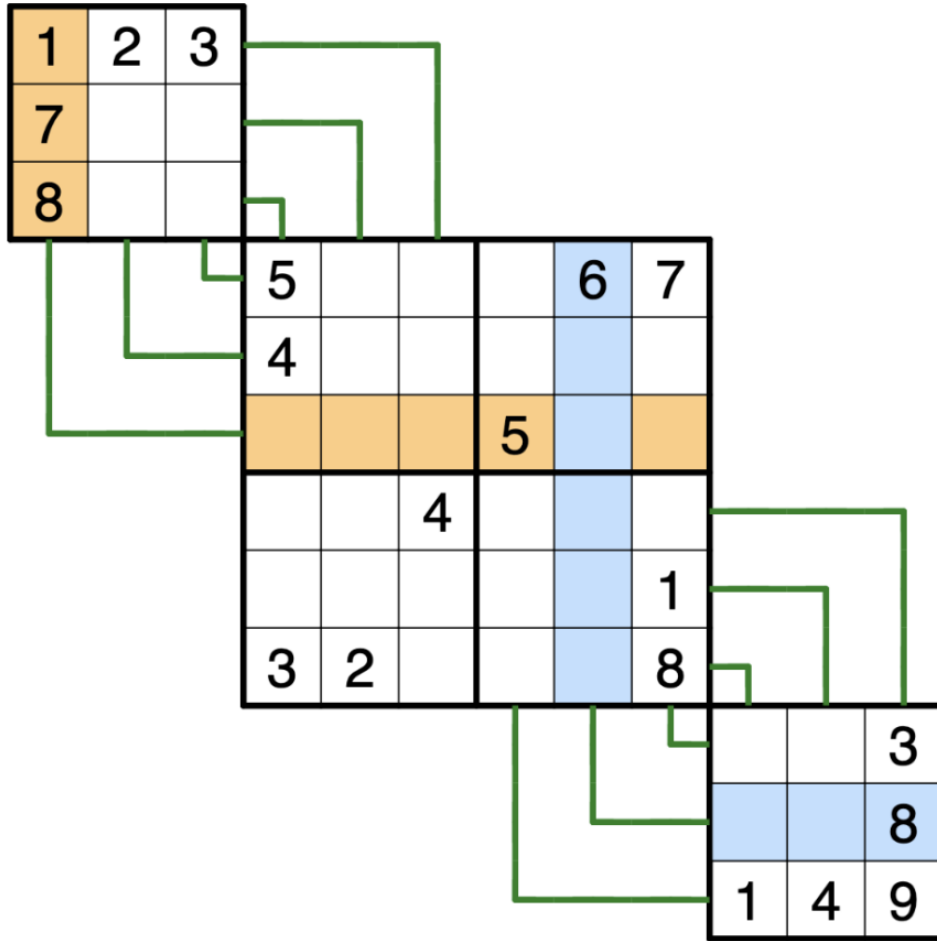
Clover

Have you been wondering about that funny-looking sudoku that appears in the background image of the Grandmaster Puzzles blog (<https://www.gmpuzzles.com/blog/>) ? No? Just me? Then today, all of your questions will be answered with a lovely sudokurve!

Fill the grid with the digits 1 through 9, so that each digit appears exactly once in each 3x3 region, "row," and "column." Rows and columns continue from one section to another as indicated by the green lines (in the example image, a row and a column have been indicated with shading).



(Solving link and example image appear on the following page.)



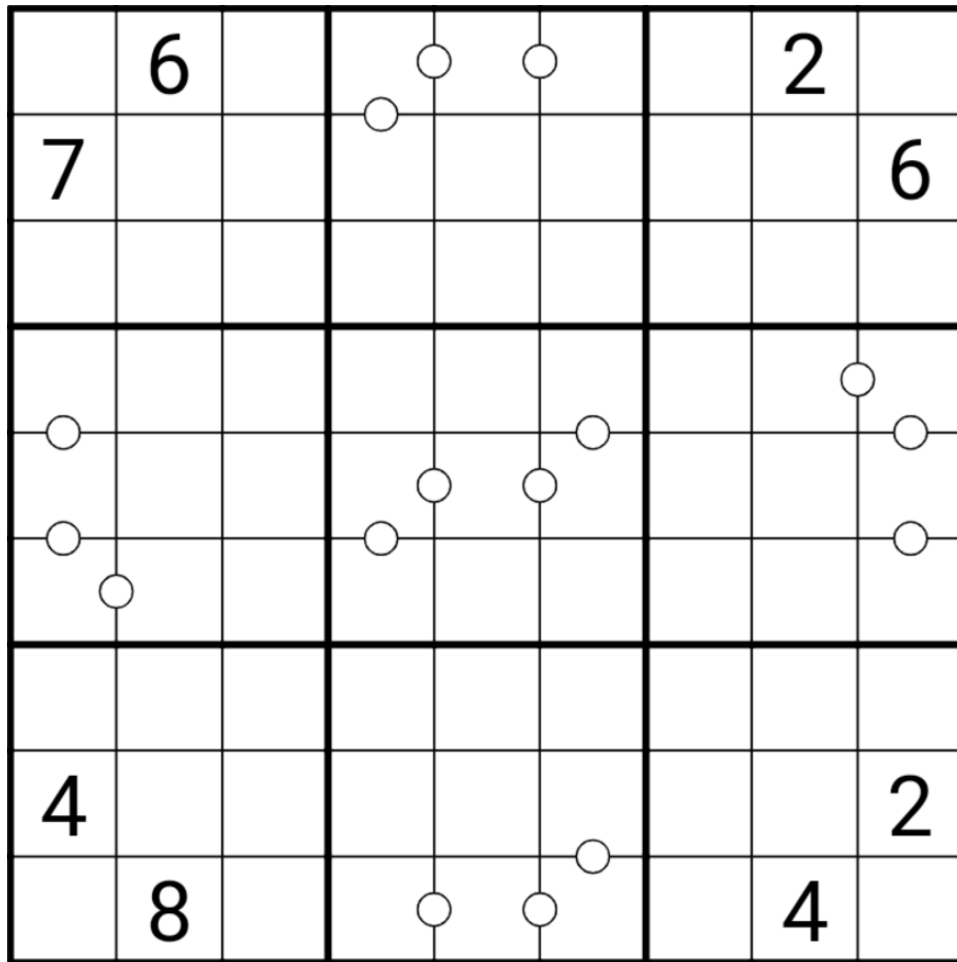
Penpa: <https://tinyurl.com/yyokubfp>

May 22, 2022: Consecutive Pairs

Sam Cappleman-Lynes

I've had an action-packed weekend so far - yesterday was my brother-in-law's wedding, and today is my wife's birthday! The celebrations don't stop there as coming up in the next week are my brother-in-law's birthday and then his wife's birthday. Every family has a month like this... 🙄

Today's puzzle is a Consecutive Pairs Sudoku. Normal Sudoku rules apply. Numbers in cells connected by a white dot must be consecutive. Not all such pairs are necessarily marked.



f-puzzles - <https://f-puzzles.com/?id=y4do6twz>

CtC - <https://tinyurl.com/2da8vbvc>

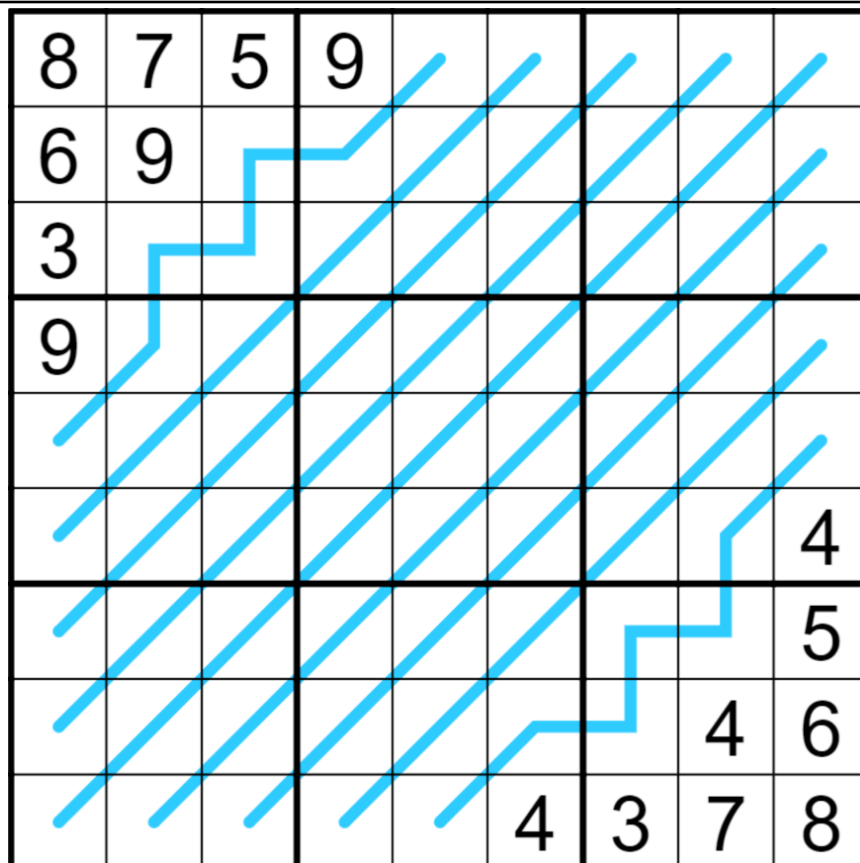
May 23, 2022: The Anduin

Philip Newman

As established in #theory-and-programming yesterday, Silmarillion Graph Theory is Peak Nerd. What does this have to do with today's puzzle? Almost nothing. I just wanted to share that fact. But if you are a Tolkien fan, you'll recognize the title of today's puzzle...

Today's GAS 101 is a Region Sum Lines Sudoku! Normal sudoku rules apply. Also, there are some lines in the grid, and each line passes through more than one of the 3x3 regions. Along each line, the digits in every region it passes through have the same sum. For instance, $r5c1 + r4c2 = r3c2 + r3c3 + r2c3$.

Setter's note: An important thing to remember in this puzzle is that when a line only passes through a single cell in a box, that cell must contain the sum for that line. Therefore, if there are multiple single cell segments on the same line, all of those cells must contain the same digit! It happens that in this puzzle there are a lot of given digits pointing at some of these "clone" cells...



Play on f-puzzles: <https://f-puzzles.com/?id=y3dzsw6q>

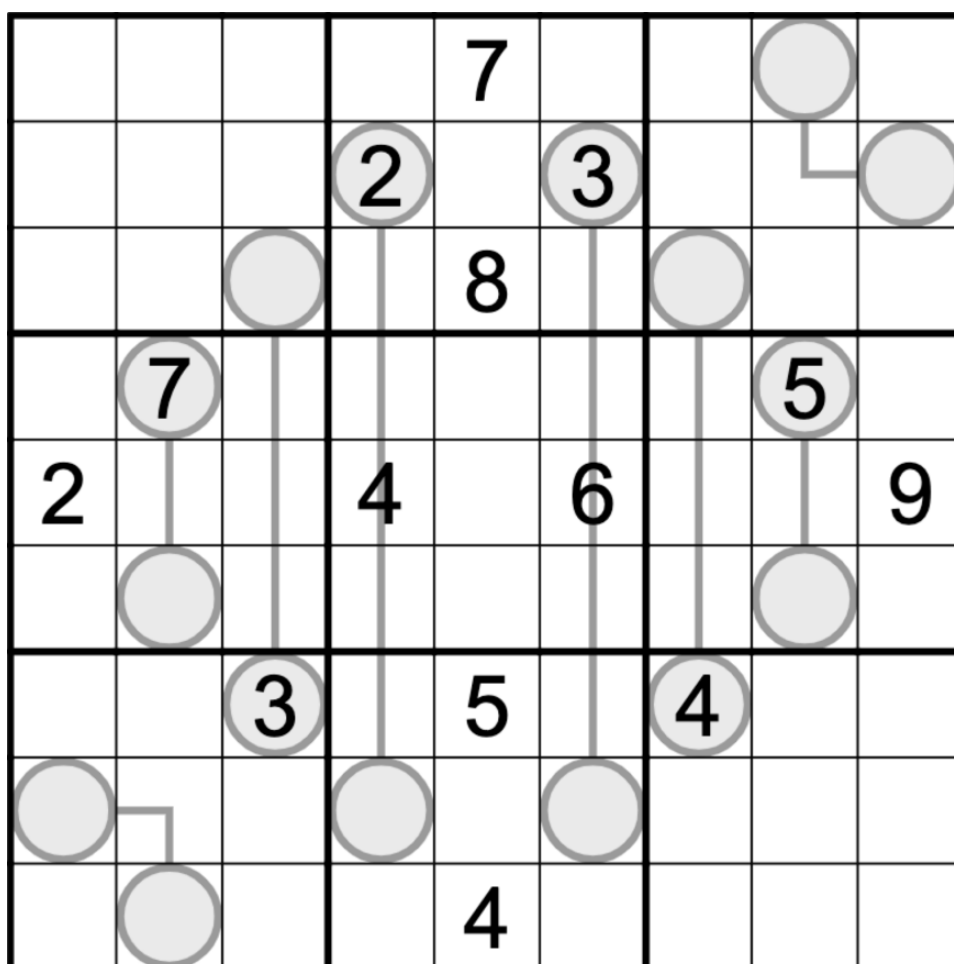
Play on CTC App: <https://tinyurl.com/3zdwhjve>

May 24, 2022: WHAT LIES BETWEEN

Clover

Coming to a Discord channel near you on May 24, 2022: WHAT LIES BETWEEN. A group of sudoku-loving college students travel to a mysterious off-grid forest cabin for a weekend speedsolving getaway. But they soon discover that the forest is haunted by the restless spirits of discarded GAS variants...and they won't be allowed to leave alive without solving them all!!!!!! 🤩🤩🤩

Normal sudoku rules apply. Also, digits along a line must have values in between the values in the attached circles. For instance, if the circles on the ends of a line contain 1 and 7, then the digits along that line can only include 2, 3, 4, 5, or 6.



f-puzzles: <https://f-puzzles.com/?id=2xnd8k8m>

CtC: <https://tinyurl.com/2rysp6an>

May 25, 2022: Your Brain On Sudoku

Philip Newman

Have you ever looked at a picture of a brain and wondered "those wrinkles sure do look awesome, how do I get more of them?" Introducing GAS, a revolutionary new treatment for wrinklifying brains. With just one dose, experience your brain being forced to bend to match the grid lines. Also, it may turn into a rectangle and poke out of your skull. Totally normal, no cause for concern.*

It's Killer Sudoku time! Normal sudoku rules apply. Digits in cages cannot repeat and must sum to the total given.

*These statements have not been evaluated by the FDA, CIA, or MI6. Also, they are completely made up. Side effects of reading this intro may include eye rolls, and in rare cases laughter. If your brain turns rectangular and pokes out of your skull, please seek medical attention immediately, and also how on earth are you still reading this??

**Sam is off today, so I am posting a day early - you are encouraged to recklessly speculate about his whereabouts.

			9					
⁶		⁷		¹⁸		¹⁹	²⁰ 6	
	8							
			⁸				²¹	
7	⁹				²²			3
¹⁰		¹¹		¹²	²³		2	²⁴
	4							
					1			

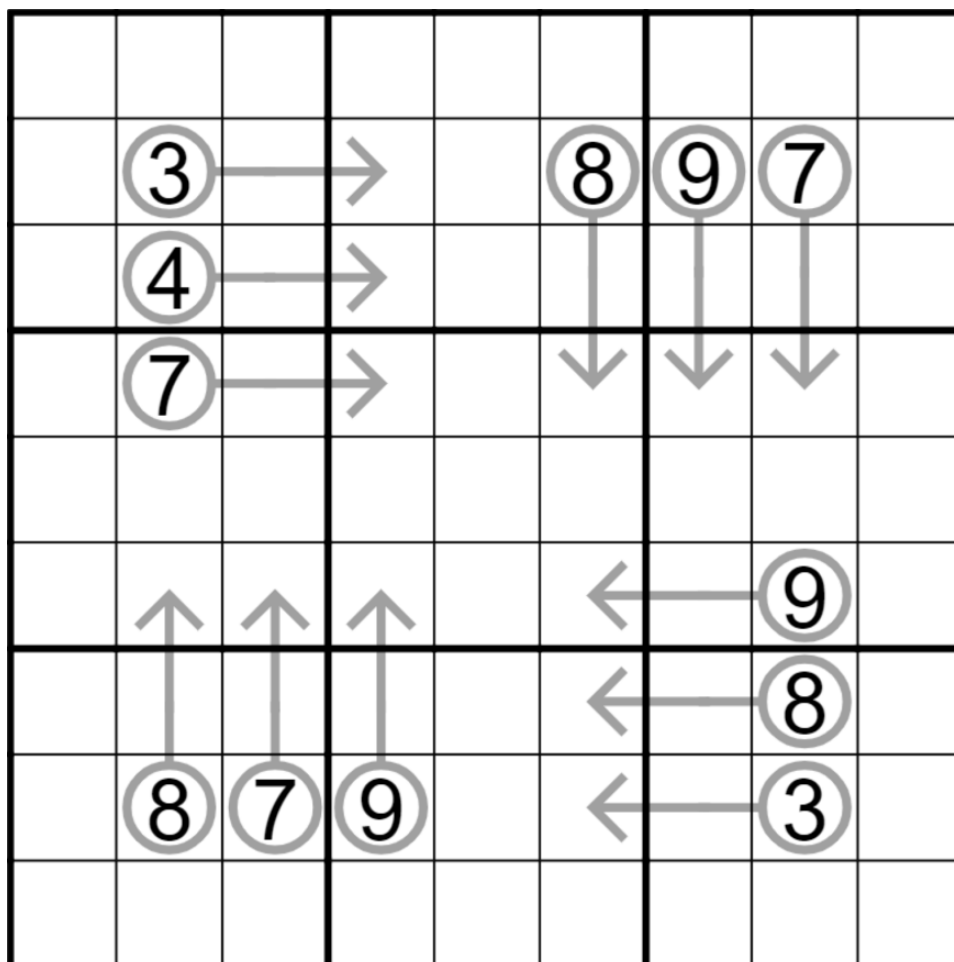
Play on f-puzzles: <https://f-puzzles.com/?id=2c7fubns>

Play on CTC App: <https://tinyurl.com/ykbdhh6e>

May 26, 2022: Arrow Sudoku

Sam Cappleman-Lynes

Today's GAS is an Arrow Sudoku! Normal Sudoku rules apply, and in addition, the numbers on the body of each arrow must add up to the number in the attached circle.



f-puzzles - <https://f-puzzles.com/?id=2pa959zz>

CtC - <https://tinyurl.com/2p8wpwuy>

May 27, 2022: Tic Tac Toe

Clover

Good morning, friends! The noble game of sudoku is a real noggin-melter at times. So today, we're going back to a kinder, gentler game of tic tac toe. If your only ambition is to force a tie, you can read this and skip today's GAS:

<https://blog.ostermiller.org/tic-tac-toe-strategy/> But if you want to win, read (carefully) onwards, because the rules are a little tricky...

Normal sudoku rules apply. Also, the digits along each gray line are either all odd, or all even. Each digit in the central box corresponds to one of the regions of the sudoku: for instance, the top right cell in the central box corresponds to the top right region of the puzzle. If the gray line in a region has odd digits, then its corresponding cell in the middle box is odd. If the gray line in a region has even digits, then its corresponding cell in the middle box is even.

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

f-puzzles: <https://f-puzzles.com/?id=2mqm6tky>

CtC: <https://tinyurl.com/25hmmc98>

May 28, 2022: Parquet Sudoku

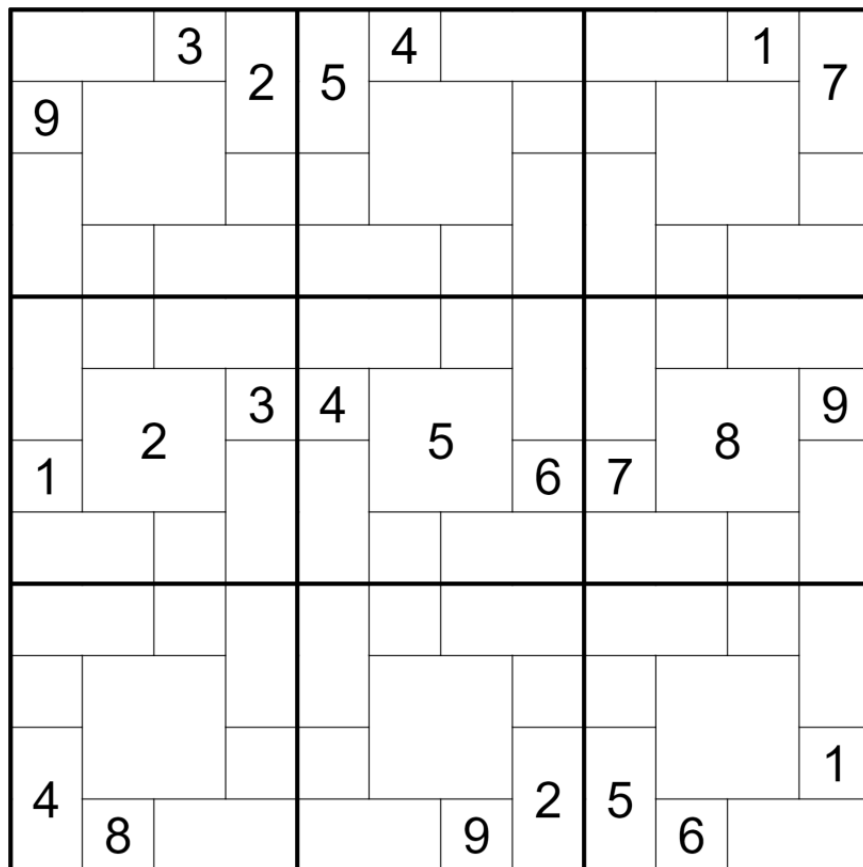
Sam Cappleman-Lynes

In this puzzle, there are 12 rows and 12 columns, but still only 9 regions. Fill each cell with a number from 1 to 9 so that each of the 12 rows and columns, as well as the 9 regions, contains every number exactly once. Some cells span more than one row or column, and the number in that cell is counted as part of every row and column that the cell stretches over.

Penpa tips and tricks:

- For this puzzle, for answer check to trigger, you have to enter all the numbers in the exact centre of the cell. Penpa should already be set up so that you can click on the centre point of each cell and enter a number, but keyboard navigation will not work properly.

- To switch between entering big numbers and entering pencilmarks, you can use the Tab key to switch between the "Normal" sub-mode and the "Medium" sub-mode. You can also switch between the two by clicking the "Normal" or "M" buttons in the bar at the top of the page.



Penpa - <https://tinyurl.com/2grxnkau>

May 29, 2022: Tilting at Windoku

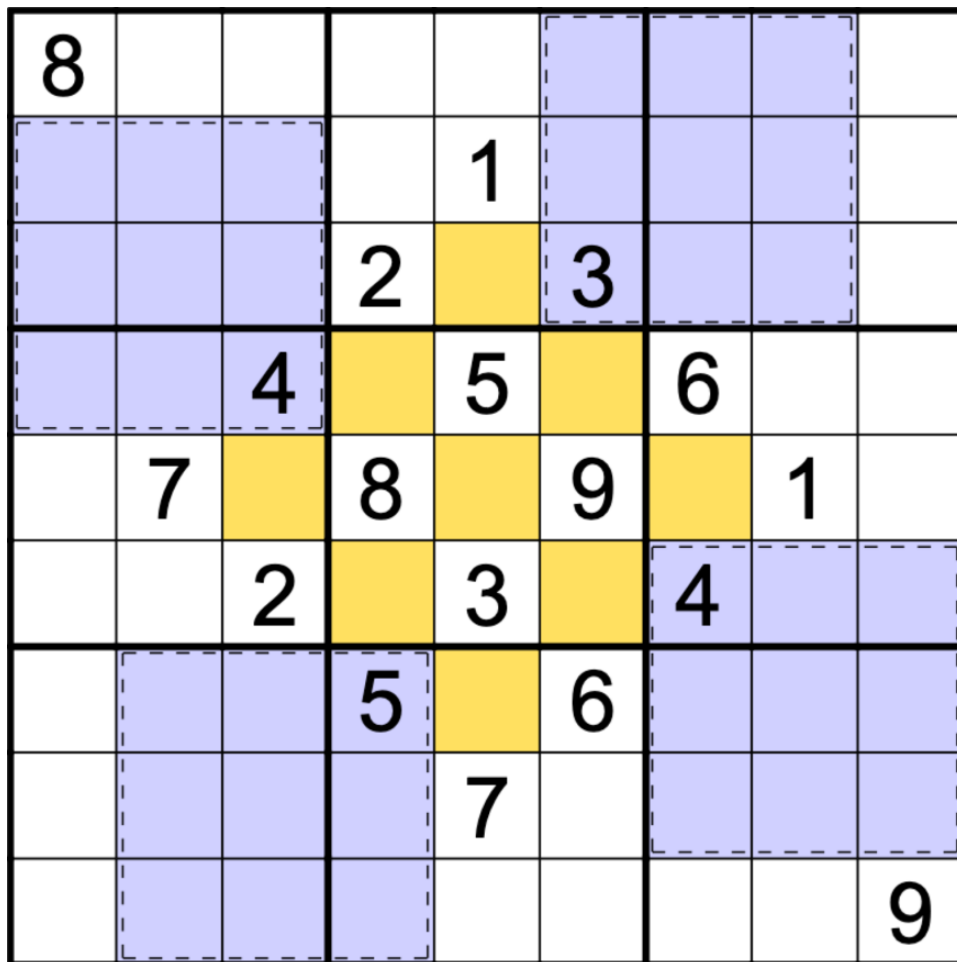
Philip Newman

Did you hear the one about Windoku?

It's a *pane* to set. 🎪

Today's GAS is like Windoku, but if the architect was really into windmills. It's an Extra Regions Sudoku!

Normal sudoku rules apply. Each colored region must contain the digits 1-9 exactly once each. (Note: The central orange region is connected diagonally!)



Play on f-puzzles: <https://f-puzzles.com/?id=2hkkafwc>

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

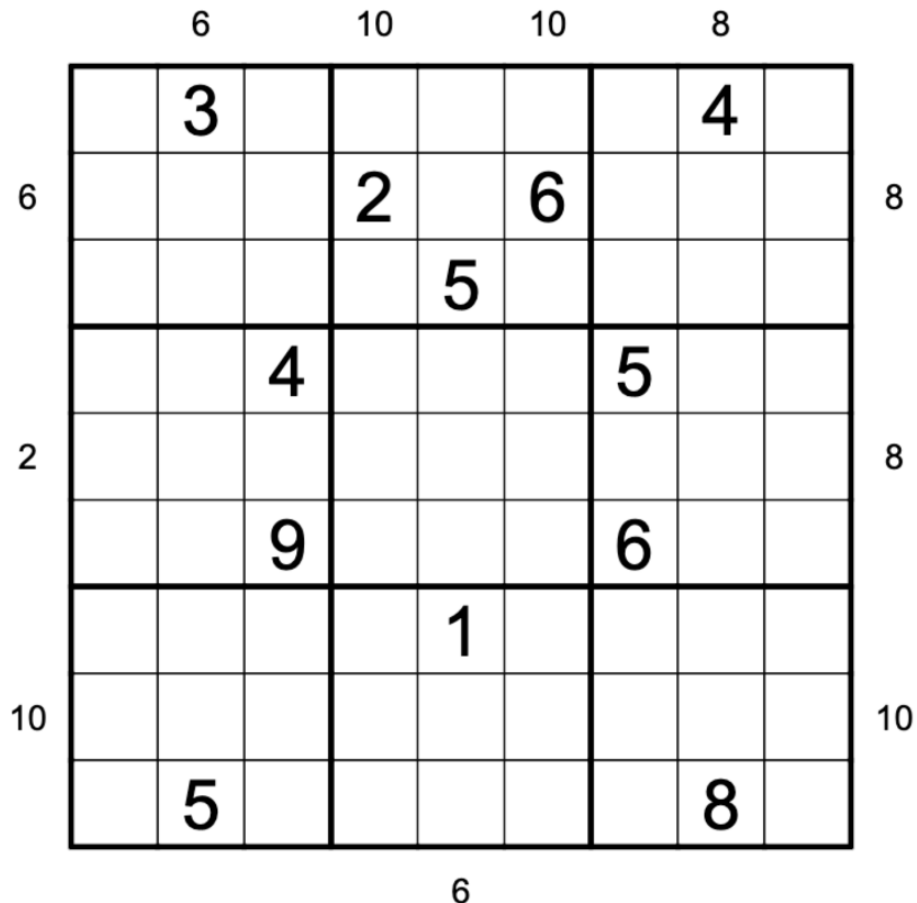
May 30, 2022: Frameless Sudoku

Clover

No matter how much pride you take in your solve time today, you may not frame this GAS and put it on your wall. You are also discouraged from framing any of the dinosaurs for crimes. You see, today's GAS is a 100% frameless sudoku.

Normal sudoku rules apply. Also, if a clue appears outside of a row or column, then the first X cells in that direction must sum to the value of that clue. X may or may not be different for different clues, and its value(s) must be determined by the solver.

For example, if a "9" appears above a column, then the topmost cell in that column could be a 9; or the top two cells in the column could be 3 and 6; or the top three cells could be 1, 2, and 6; etc.



f-puzzles: <https://f-puzzles.com/?id=2ftcuu55>

CtC: <https://tinyurl.com/y3tf4xw8>

May 31, 2022: Pyramid Sudoku

Sam Cappleman-Lynes

Today's GAS is the result of crossing those number pyramid puzzle thingies (<https://mathforlove.com/lesson/pyramid-puzzles/>) that you probably did at school with a Sudoku! Although because a Sudoku only uses the numbers 1 to 9, I've had to modify the most common form of the pyramid rules by one word...

In this Pyramid Sudoku, normal Sudoku rules apply. Additionally, if a grey cell has two grey cells immediately diagonally beneath it, then the number in the top cell must be equal to the difference between the numbers in the two bottom cells.

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

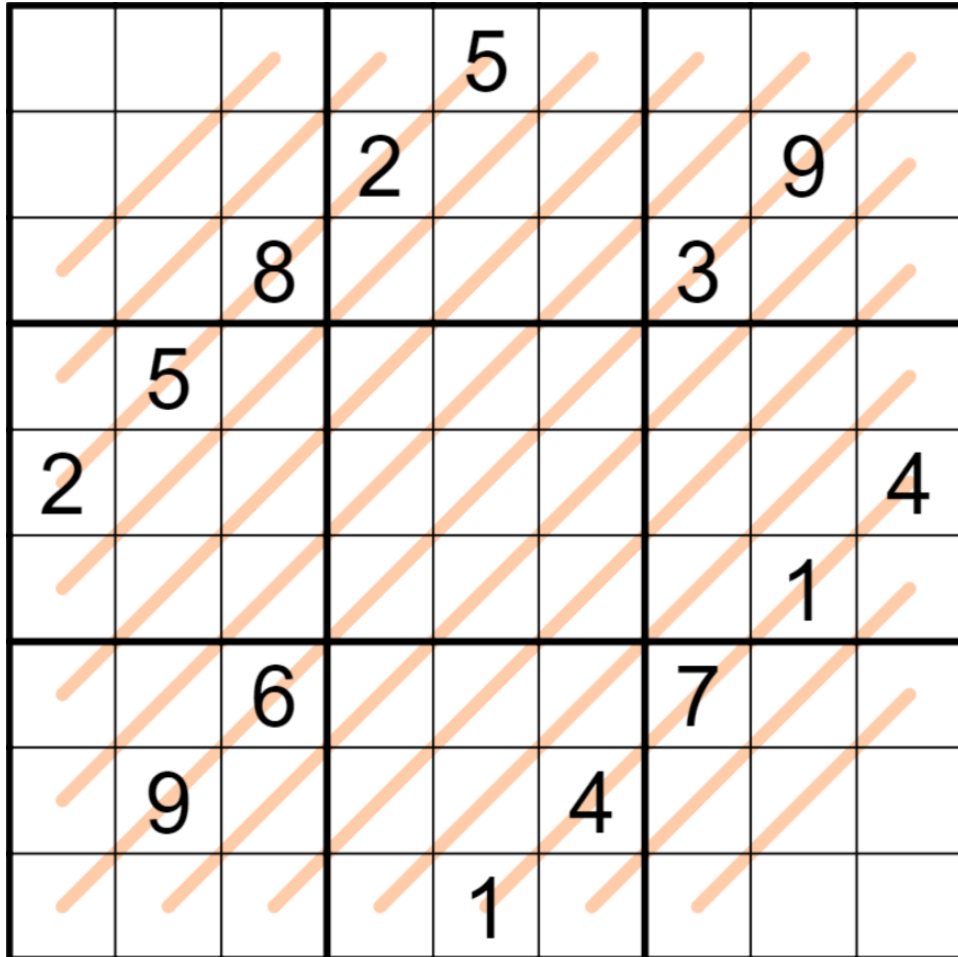
f-puzzles - <https://f-puzzles.com/?id=2mwtx38w>

CtC - <https://tinyurl.com/3a3r84w8>

Bonus 1: Entropic Lines

Philip Newman

Normal sudoku rules apply. Along each orange line, every set of three digits in a row must contain one low (1-3), one medium (4-6), and one high (7-9) digit. (Note: this rule causes the digits to appear in a repeating pattern of low, medium, and high; for instance, digits along a line could go low-high-medium-low-high-medium etc.)



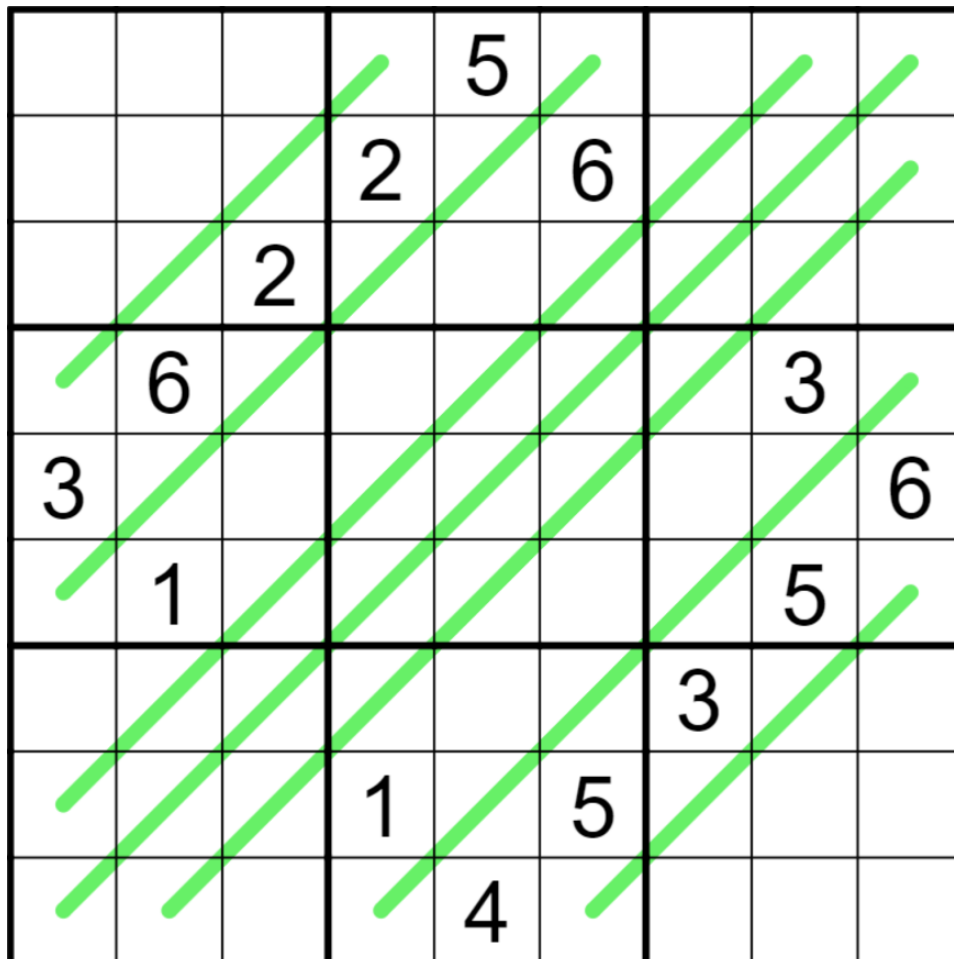
f-puzzles: <https://f-puzzles.com/?id=2dbkmyqy>

CtC: <https://tinyurl.com/yckfpj4j>

Bonus 2: German Whispers

Philip Newman

Normal sudoku rules apply. Along a line, each pair of adjoining digits must have a difference of at least 5.



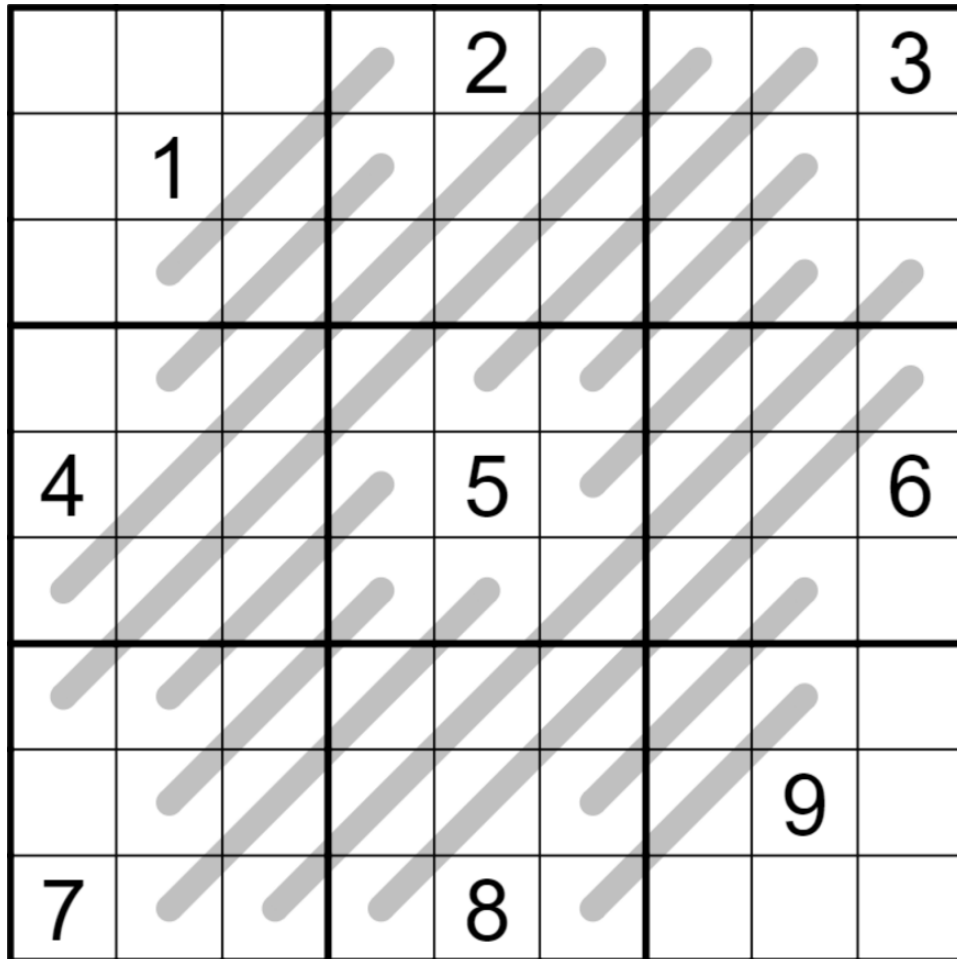
f-puzzles: <https://f-puzzles.com/?id=24phbfqs>

CtC: <https://tinyurl.com/ycy37ebs>

Bonus 3: Palindrome

Philip Newman

Normal sudoku rules apply. Digits along each line form a palindrome (that is, they read the same in both directions, such as 1-7-4-7-1).



f-puzzles: <https://f-puzzles.com/?id=28zmrabu>

CtC: <https://tinyurl.com/2p94dc9a>

Bonus 4: No Even Neighbors

Clover

Normal sudoku rules apply. Even digits may never be orthogonally adjacent.

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

f-puzzles: <https://f-puzzles.com/?id=y4ulfnje>

CtC: <https://tinyurl.com/ydm7wkfn>

Bonus 5: Small Difference Loop

Clover

Normal sudoku rules apply. Adjacent digits in gray cells must have a difference of at most 2. For instance, because r2c3 and r2c4 are both gray, their digits must have a difference of either 1 or 2.

				1				
		3				7		
1								8
3								2
			6		8			
7								4
		6	1		7	2		
				6				

f-puzzles: <https://f-puzzles.com/?id=2d22gda6>

CtC: <https://tinyurl.com/5crv68sy>

Time Benchmarks

	One party hat	Two party hats	Today's dinosaur:
May 1, 2022	11:00	6:00	rule-following rinchenia
May 2, 2022	15:00	7:30	xanthic xenoposeidon
May 3, 2022	12:30	6:30	scholarly scelidosaurus
May 4, 2022	13:00	7:00	weekly wulatelong
May 5, 2022	11:00	6:00	asynchronous antetonitrus
May 6, 2022	15:00	8:00	dialectic dryosaurus
May 7, 2022	14:00	7:30	sequential scelidosaurus
May 8, 2022	16:00 (full set)	8:00 (full set)	unique uberabatitan
May 9, 2022	15:00	8:30	equitable quetecsaurus
May 10, 2022	9:00	5:00	copied carnotaurus
May 11, 2022	15:00	8:00	yodeling yongjinglong
May 12, 2022	15:00	8:00	cheeky chubutisaurus
May 13, 2022	10:00	5:30	tilted torosaurus
May 14, 2022	12:00	6:00	summing savannasaurus
May 15, 2022	16:00	8:00	superstitious staurikosaurus
May 16, 2022	9:30	5:30	recovering rinchenia
May 17, 2022	16:00	8:00	timid tazoudasaurus
May 18, 2022	10:00	5:30	refurbished rhabdodon
May 19, 2022	12:00	6:30	fortified fruitadens
May 20, 2022	13:00	7:00	long-legged lusotitan
May 21, 2022	12:30	7:00	curvy citipati
May 22, 2022	14:00	8:00	celebratory citipati
May 23, 2022	14:00	7:00	academic argyrosaurus
May 24, 2022	12:00	6:30	spooky stygimoloch
May 25, 2022	12:00	6:30	available arcusaurus

May 26, 2022	13:00	7:00	additive achillibator
May 27, 2022	13:00	7:30	deadlocked dollodon
May 28, 2022	16:00	8:30	tiled tarbosaurus
May 29, 2022	12:00	6:00	certifiable cetiosauriscus
May 30, 2022	13:00	7:00	innocent ignavusaurus
May 31, 2022	13:00	7:00	recognisable ratchasimasaurus