

GAS Leak

Genuinely Approachable Sudoku
from the CtC Discord

Volume 47:

December 1 – December 31, 2024

Welcome to December!

End of year, Christmastime, ... and we have a full month of GAS puzzles for you, one better than the other. We have fortresses and gattais, we have arrows and numbers, we have lines and dots and more – even a foggy one.

Have fun solving!

December 1, 2024: A Private Understanding/Clandestine Time (Double Sudoku)
by Bill Murphy

Walkthrough for Arrow Sudoku: <https://youtu.be/GyT0eLz6LXY>

Today's GAS is **two classics**, one of which was inspired by a Patreon who asked for an anti-knight/anti-king puzzle when I said I need inspo, and then I made one that was lovely, but also just solved as a straight classic. (doh)

I adapted it for today, it's not anti-knight anymore (or is it?) (it's not) (OR IS IT) (no really it's not)

Put the digits 1-9 in each box, row and column.

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

A Private Understanding: <https://sudokupad.app/oqe95whmgv>

⇓ ⇓ (The second puzzle is on the next page) ⇓ ⇓

Put the digits 1-9 in each box, row and column.

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

Clandestine Time: <https://sudokupad.app/us1b7n7q7z>

December 2, 2024: Three Is Company

by Philip Newman

Walkthrough of Two Classics by Bill:

<https://youtu.be/-uFQAVwq8sY>

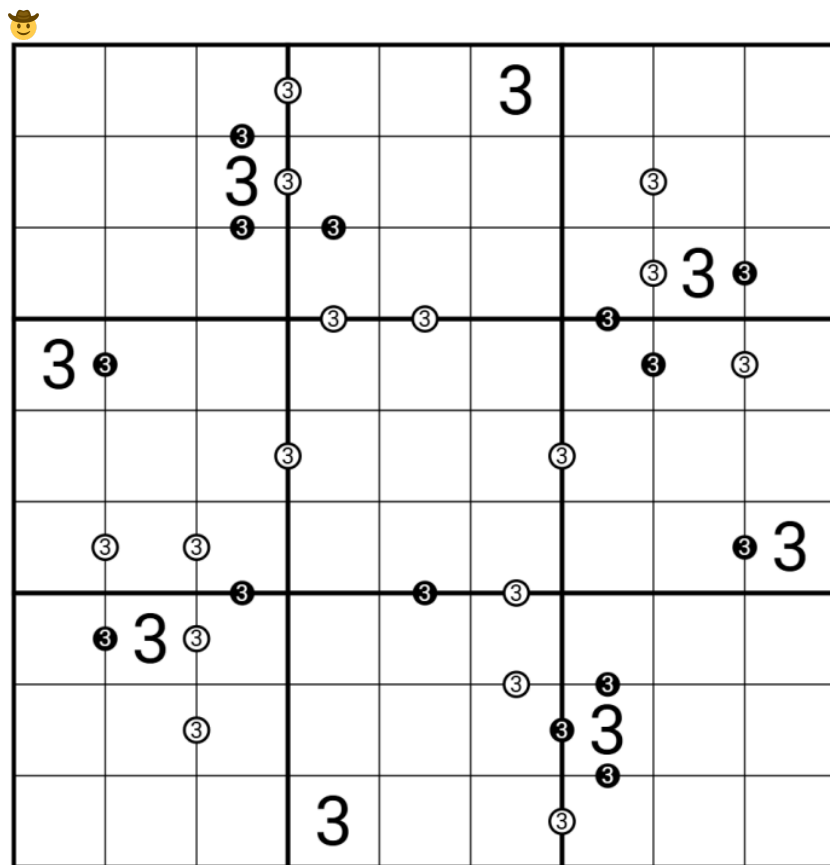
Today's **GAS** is a **Difference/Ratio Pairs Sudoku**!

I'm back! This week is no less hectic though, and Thursday may be a little weird... we'll see!

Normal sudoku rules apply.

Difference Pairs: Digits in cells separated by a white dot must have the difference given.

Ratio Pairs: Digits in cells separated by a black dot must have the ratio given.



Play on SudokuPad: <https://sudokupad.app/philip-newman/20241202-three-is-company>

Play on f-puzzles: <https://f-puzzles.com/?id=23a7vogh>

December 3, 2024: Point to Next

by clover!

Walkthrough for Philip's "Three Is Company": <https://youtu.be/b7xNHWI20TY>

Today's GAS points to tomorrow's GAS. It's over there! ---->

In this **point to next** sudoku, normal sudoku rules apply. If a digit N appears in a cell with an arrow, then the next higher digit, N+1, must appear somewhere in the direction that the arrow points (**not necessarily in the immediately adjacent cell**).

	8	←	←		→	→	4	
3		↑						7
↑	←				→	9		↑
↑						↑		↑
	↑			2			↓	
↓		↓						↓
↓		9	←				→	↓
8						↓		3
	3	←	←		→	→	7	

SudokuPad: <https://sudokupad.app/cca9gw0ndm>

December 4, 2024: Lightworks

by Bill Murphy

Walkthrough for Point To Next: <https://youtu.be/XRL5z6LJKeU>

I nearly put the phone down and went to bed, can you imagine
Happy Wrapped Day nerds, go support your faves on Bandcamp tho

Have a **Numbered Rooms!** (This one's inspired by something I did a significantly harder version on Patreon for)

Normal Sudoku Rules Apply. Clues outside the grid are digits that must appear in the Xth cell as seen from the clue, where X is the first digit seen from the direction of the clue.

9		5		3				9		9
6			9				6			6
9								3		
					5					
		8								7
8			8				5			8
9		9				7		1		9

<https://sudokupad.app/q03177s1e1>

December 5, 2024: Max Ascending

by clover!

Walkthrough for Bill's "Lightworks":

<https://youtu.be/riynScxwoUM>

Nobody expects Clover on a Philip day! Luckily I somehow set *sixteen* GAS puzzles in the last week, so I got you, fam. (Philip's a bit unwell, please send him some love!)

Today's GAS is a **max ascending sudoku**. Max Ascending, by the way, is a distant relative of Quadriiceps Maximillian.

Normal sudoku rules apply. Clues outside of the grid give the exact length of the longest contiguous string of increasing digits in that row or column, from the direction where the clue appears. Ties are permitted. For instance, if the longest strings of increasing digits are 3 5 7 8 and 1 2 6 9, then the row or column would be clued with a 4.

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

SudokuPad: <https://sudokupad.app/wptryqng1>

December 6, 2024: Killing Time
by Bill Murphy

Just like yesterday Philip is still ill so I'm here to help. You may even say it's a clone.

Today's puzzle is a **Clone sudoku**!

Normal Sudoku Rules Apply. Digits in identical shaded regions must appear in identical positions.

							4	
2					1			
	5				8			
			2				7	
			3					6
	8							

<https://sudokupad.app/k7p1rld0j7>

December 7, 2024: A Short Cut to...

by Philip Newman

Walkthrough of "Killing Time" by Bill:

[Later today!]

I'm back! Again! For anyone concerned, I had a (relatively minor) procedure Tuesday and have been recovering from that. Everything went well, and I'm mostly back to feeling normal (well, as normal as I ever feel), just the occasional reminder from my body of "you just had surgery dummy go lie down".

Bill says I should blame the pain meds for today's puzzle (more accurately, I'll blame the lack of pain meds yesterday). **It's a spicy one!** Long times and some tips and tricks below!

Today's **GAS** is a **Numbered Rooms Sudoku!**

Normal sudoku rules apply.

Numbered Rooms: Clues outside the grid give the digit which appears in the Xth cell from that clue, where X is the digit in the cell adjacent to the clue.

For example, if r8c1 were 4, the 3 clue on the left would tell us that the 3 in row 8 is in r8c4 (the fourth cell in the row, going from left to right).

If r6c9 were 4, the 3 clue on the right would tell us that the 3 in row 6 is in r6c6 (the fourth cell in the row going from right to left).

GAS 101: [#daily-sudoku-discussion](#) (too many characters for one post!) [Typesetters Note: fortunately I found some empty space near the end of this document on the „Hints“ page]

↓↓ ↓↓ (The puzzle is on the next page) ↓↓ ↓↓

Numbered Rooms: Clues outside the grid give the digit which appears in the Xth cell from that clue, where X is the digit in the cell adjacent to the clue.

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

Play on SudokuPad: <https://sudokupad.app/philip-newman/20241207-a-short-cut-to>
 Play on f-puzzles: <https://f-puzzles.com/?id=2amakbcn>

December 8, 2024: Fortress

by clover!

Walkthrough for Philip's "A Short Cut To...": https://youtu.be/N8jZp3C_nTU

I am very jet lagged today. I'm only about 80% certain that this is a reasonable time to post GAS. You see, this **fortress** (sudoku) is located in a completely different country.

Normal sudoku rules apply. Digits in gray cells are greater than all digits in orthogonally adjacent white cells.

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

SudokuPad: <https://sudokupad.app/weq2jz2ogj>

December 9, 2024: That's My Floor

by Bill Murphy

Walkthrough for Max Ascending: <https://www.youtube.com/watch?v=SW0v94gkIBU>

Walkthrough for Fortress: <https://youtu.be/bwHztMGW-JI>

As I write this and try to build my gas backlog back up, I'm also watching old episodes of the 1% club, some would say I'm brainmaxxing. (am i relevant kids) However, I'm also having a glass of red at the same time, which cancels out any gains. You can check my math, but it's pretty flawless.

Today's GAS is an **X Sudoku**!

Place the digits 1-9 in each box, row, column and along the indicated diagonals.

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

<https://sudokupad.app/8sescdh2q1>

December 10, 2024: A Consecutive Unwound

by Philip Newman

Walkthrough of "Killing Time" by Bill:

<https://youtu.be/x1yYrwbiiCQ>

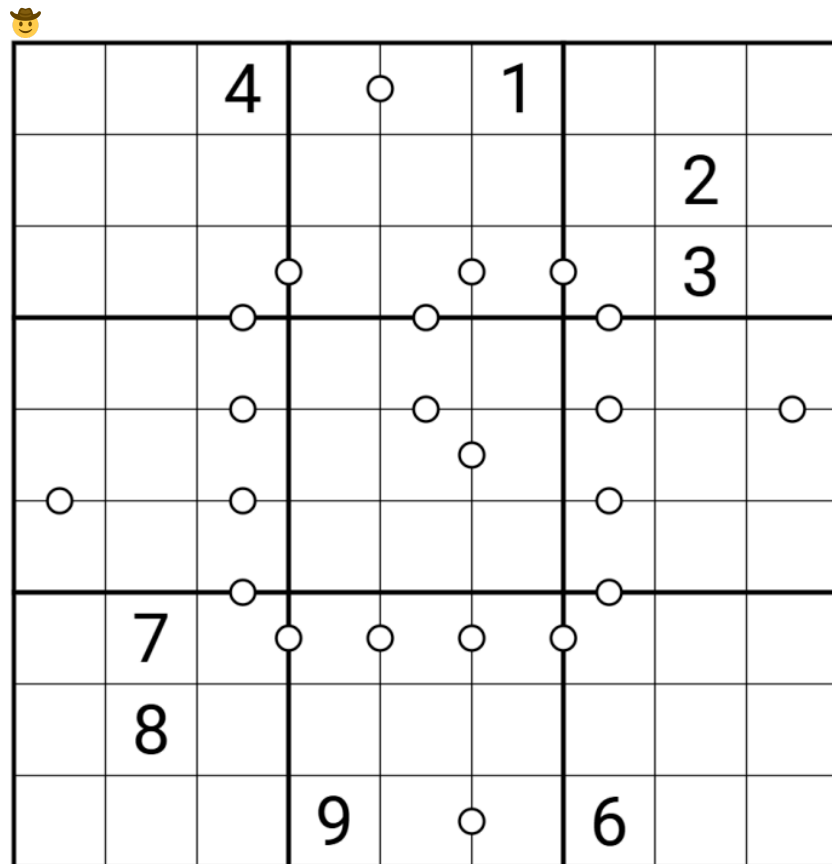
Walkthrough of "That's My Floor" by Bill:

<https://youtu.be/TVkQTbRaqiU>

Today's **GAS** is a **Consecutive Pairs Sudoku**!

Normal sudoku rules apply.

Consecutive Pairs: Digits in cells separated by a white dot must be consecutive (have a difference of 1). (No negative constraint - other pairs of digits may also be consecutive.)



Play on SudokuPad: <https://sudokupad.app/philip-newman/20241210-a-consecutive-unwound>

Play on f-puzzles: <https://f-puzzles.com/?id=28vvxyne>

December 11, 2024: Quad Sums

by clover!

Walkthrough for Philip's "A Consecutive Unwound": <https://youtu.be/0dOlqADN2UA>

Good morning! Is this the part of the intro where I confess that I still haven't worked out what Philip is doing with his puzzle titles the last couple of rounds? He's getting increasingly excited about it and at this point I'm too embarrassed to admit defeat. Oh, and Philip, don't read the two sentences immediately prior to this one. 😊

Today's GAS is a **quad sums sudoku**! Normal sudoku rules apply. Also, around each black dot, one of the four digits must be the sum of the other three.

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

SudokuPad: <https://sudokupad.app/chao5f2viz>

December 12, 2024: Let Forever Be

by Bill Murphy

Walkthrough for Quad Sums: Tomorrow

Hey! I'm about to get my resume together for a job application I am slightly less underqualified for that i would like to pretend but would be an insanely big promotion, wish me luck. (GF is watching one piece episodes at a frankly concerning rate on the couch next to me, it's fairly calming <3)

Today's GAS is an **odd/even sudoku**!

Normal Sudoku Rules Apply. Digits in cells with grey circles must be odd and digits in cells with grey squares must be even.

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

<https://sudokupad.app/kgd0drdg7n>

December 13, 2024: The Old Fortress

by Philip Newman

Walkthrough of "Let Forever Be" by Bill:

<https://youtu.be/sxQUX7Xg8NU>

The number of attempts at setting a puzzle to fit today's title... eesh. Fortress is a difficult variant to set for GAS, at least for me, but that means there will probably be at least one outtake in this month's leak!

It's a bit of a long one, but hopefully not too tricky...

Today's **GAS** is a **Fortress Sudoku**!

Normal sudoku rules apply.

Fortress: Digits in grey cells must be greater than digits in orthogonally adjacent white cells.



7	< ^ > v						< ^ > v		
< ^ > v				< ^ > v		< ^ > v	5	< ^ > v	
			< ^ > v	6	< ^ > v		< ^ > v		
	8	< ^ > v		< ^ > v					
1			< ^ > v	5				9	
					< ^ > v		2		
				< ^ > v	4				
	< ^ > v	5							
								< ^ > v	3

Play on SudokuPad: <https://sudokupad.app/philip-newman/20241213-the-old-fortress>

Play on f-puzzles: <https://f-puzzles.com/?id=2ya2kybv>

December 14, 2024: XV Pairs
by clover!

Walkthrough for Philip's "The Old Fortress": https://youtu.be/91jzyZQ1_fY

Today's GAS is an **XV pairs** sudoku! Normal sudoku rules apply. Digits separated by a V sum to 5; digits separated by an X sum to 10. Not all possible Xs or Vs are necessarily given.

1	V						X	
X				V		7		V
		X			X			
	V		X			X	V	
				X				
		X				V		
	V	X			X		V	
			X			X		
V	8		V					X
	X						V	4

SudokuPad: <https://sudokupad.app/wj2yvvlgu>

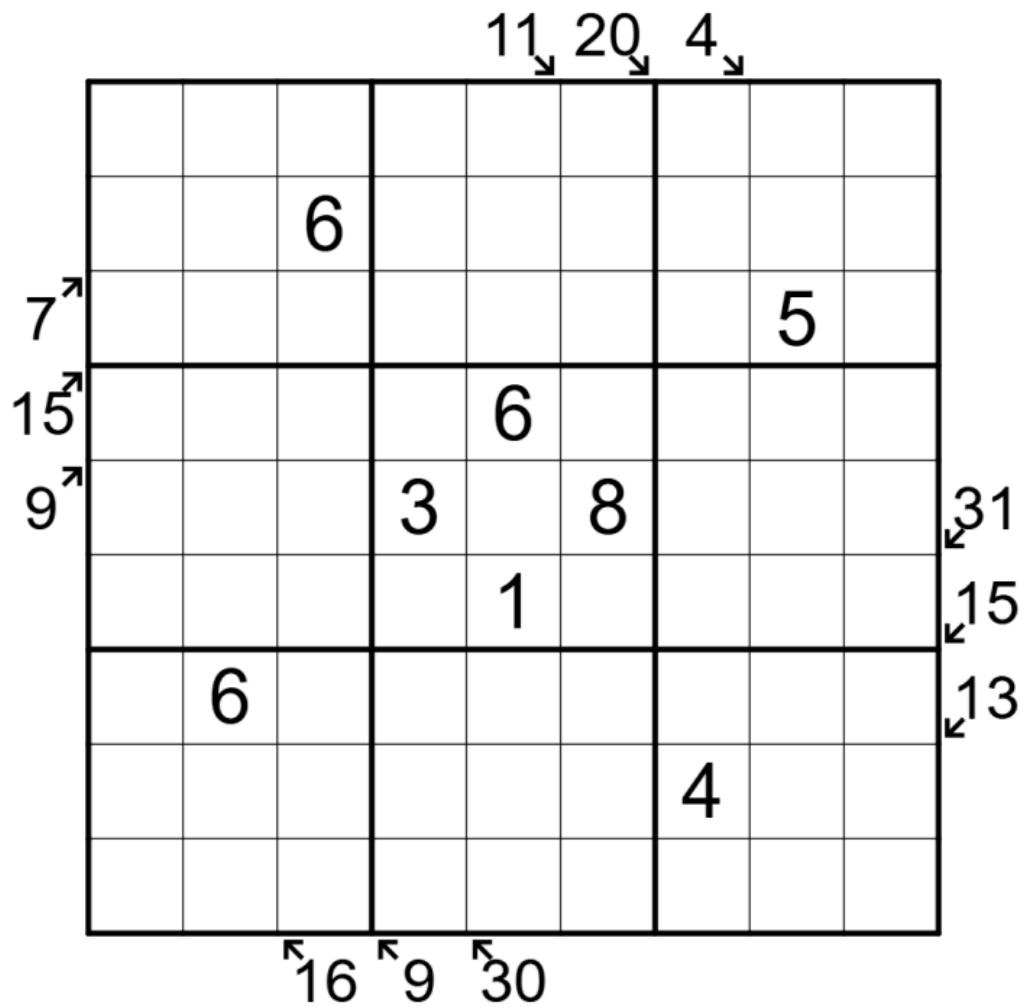
December 15, 2024: Relief Next To Me
by Bill Murphy

Walkthrough for XV Pairs: Tomorrow sorry!

I heard y'all like math in your sudokus.

Today's GAS is a **Little Killer** Sudoku!

Normal Sudoku Rules Apply. Digits along indicated diagonals must sum to the given totals.



<https://sudokupad.app/89564sh18y>

December 16, 2024: In the House of Tom Snyder

by Philip Newman

Walkthrough of "Relief Next To Me" by Bill:

<https://youtu.be/gqdtA0B3d-A>

Today's **GAS** is a **Classic Sudoku**!

This one is a bit spicy (I feel like I've said that quite a bit lately) - and deliberately so, because of the title. You *might* find it helpful to use what has been called "Snyder Notation" (though it's not actually what Thomas Snyder used when solving on paper): try using corner pencilmarks for places where a digit is limited to two (maaaaybe three) places in a row/column and box, and center pencilmarks for cells limited to two (maaaaybe three) possible digits.

Normal sudoku rules apply. And that's it!



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

Play on SudokuPad:

<https://sudokupad.app/philip-newman/20241216-in-the-house-of-tom-snyder>

Play on f-puzzles: <https://f-puzzles.com/?id=2777wpp5>

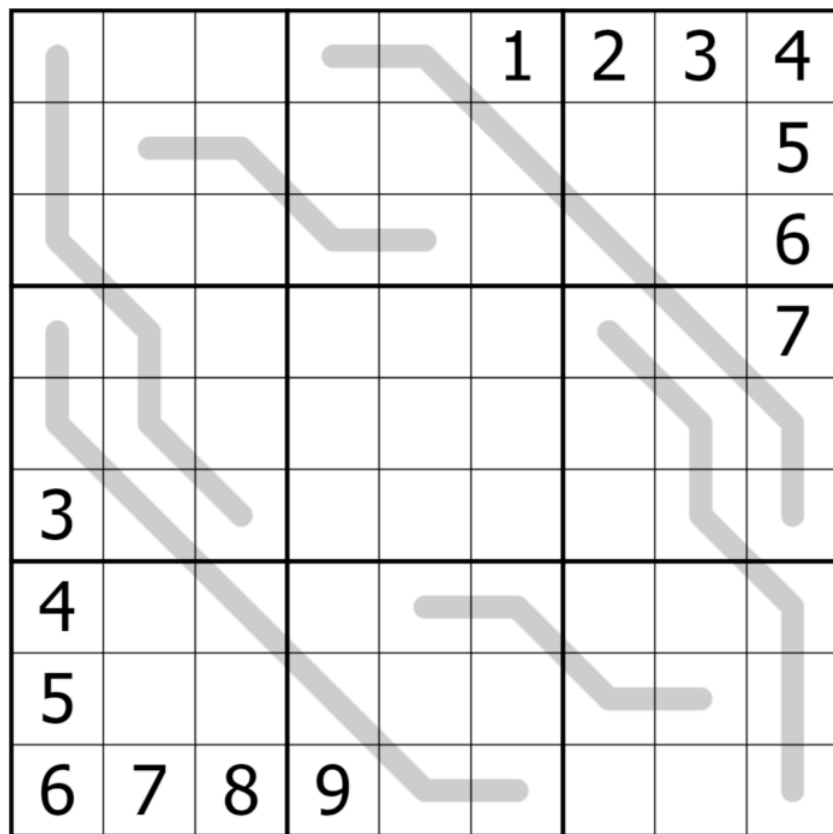
December 17, 2024: Palindrome

by clover!

Walkthrough for Philip's "In The House of Tom Snyder": <https://youtu.be/ZJMJ3GqCgzc>

Engage le jeu que je le gagne! That's French for "today's GAS is a palindrome sudoku." Normal sudoku rules apply; also, digits along each gray line form a palindrome (read the same forwards and backwards).

Fast solvers today will earn a tahiti hat. 🧢



SudokuPad: <https://sudokupad.app/2p97gqb31>

December 18, 2024: Chattai

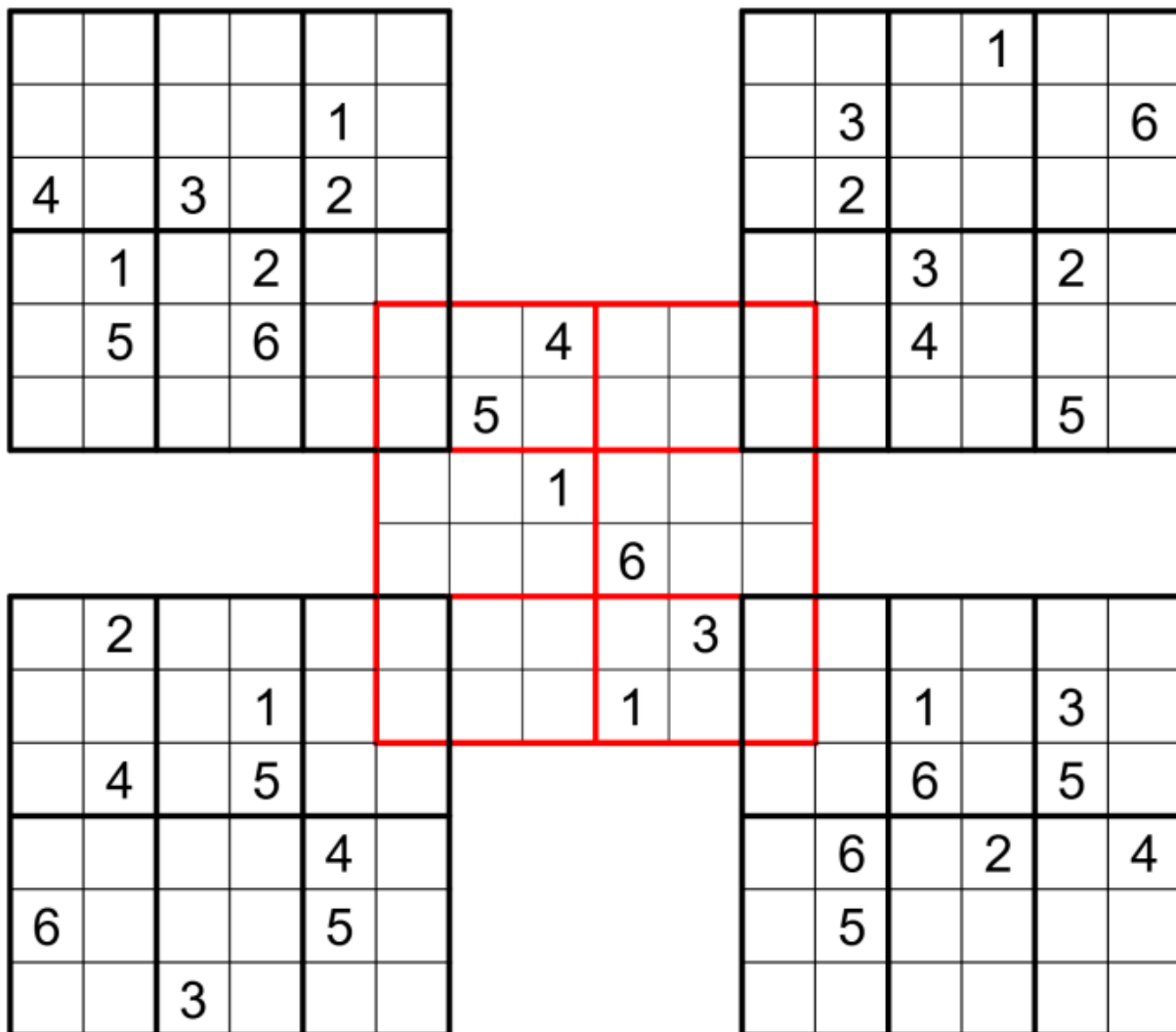
by Bill Murphy

Walkthrough for XV: <https://youtu.be/XiP70pS-IRk>

Walkthrough for Palindromes: <https://youtu.be/Ys24zq5Gcs0>

Finished work for the year! Have a cute lil **gattai** on me! I set most of it by hand in a work conference, then left the notebook i scribbled it in at the conference and did it from memory. It's a christmas snowflake if you kinda squint, I think

In each outlined grid, place the digits 1-6 in each box, row, column. Some digits appear in multiple grids as indicated by overlapping regions.



P.S. That's not a typo, that's a joke for myself and i'm gonna assume maybe three other people

Penpa: <https://tinyurl.com/2bmnmjfs>

Sudokupad: <https://sudokupad.app/xncxfqcx4>

2024-12-19: Fog on the Dominoes

by Philip Newman

Walkthrough of "Chattai" by Bill:

<https://youtu.be/QjdlyrCNzds>

Today's **GAS** is a **Fog of War Killer Dominoes Sudoku!**

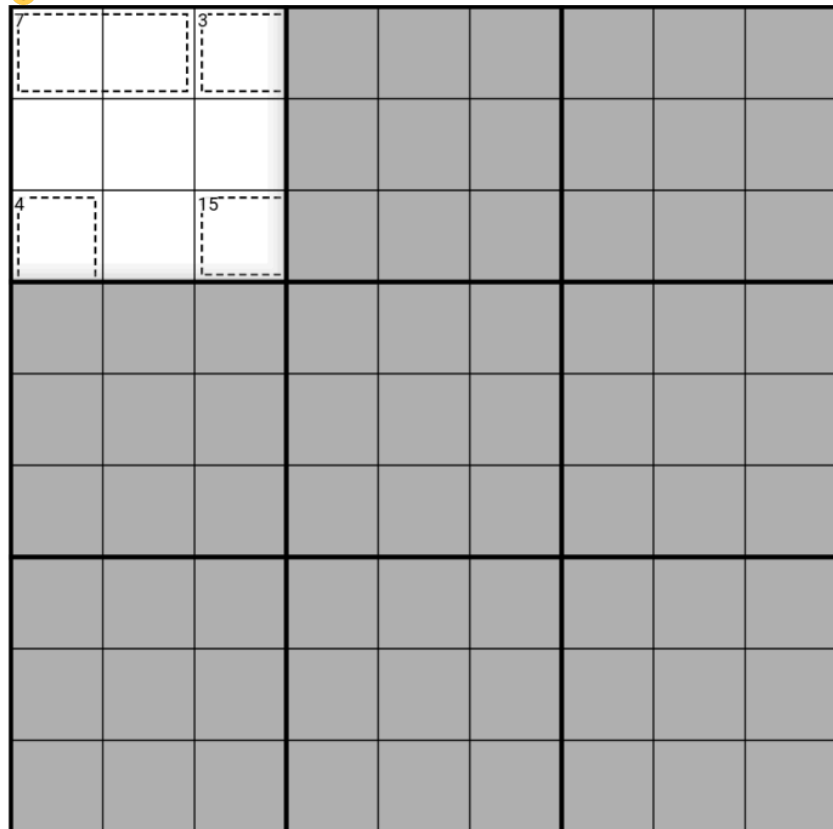
There's something in this puzzle that will leave you scratching your head. It's ok, Bill didn't understand either. [Note from typesetter: Here's some spoiled text in the original. You can read it on the „Hints and Spoilers“ page at the end of this document]

Normal sudoku rules apply.

Fog of War: Some cells are initially hidden; placing a digit will reveal all orthogonally and diagonally adjacent cells.

Killer (Dominoes): All cages in this puzzle consist of two cells. Digits in cages must sum to the total given (if given).

[Note from typesetter: Unfortunately printing technique is still not far enough advanced to make it solvable here. You have to use the link provided. It's worth it!]



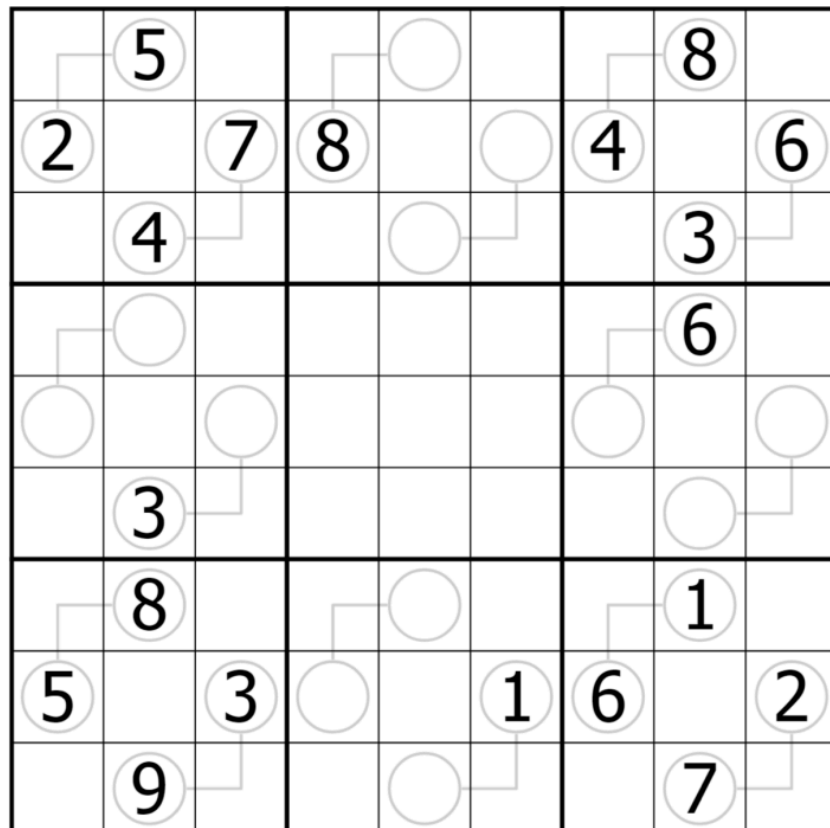
Play on SudokuPad: <https://sudokuapp.philip-newman.com/20241219-fog-on-the-dominoes>

December 20, 2024: Between
by clover!

Walkthrough for Philip's "Fog on the Dominoes": <https://youtu.be/edoWaweRHx4>

Today's puzzle can be solved by filling the grid with between 2 and 7,463 digits. Good luck!

In this **between lines sudoku**, normal sudoku rules apply. Also, digits on lines must have values in between the two values in the attached circles.



SudokuPad: <https://sudokupad.app/h1xr2qalex>

December 21, 2024: Future Me Hates Me

by Bill Murphy

Walkthrough for Between: <https://youtu.be/iUNSFegRfU>

It's known that the weird titles for my puzzles come from just songs i'm listening to, so a week and a bit out from 2025, here's my favourite 2025 albums in no particular order

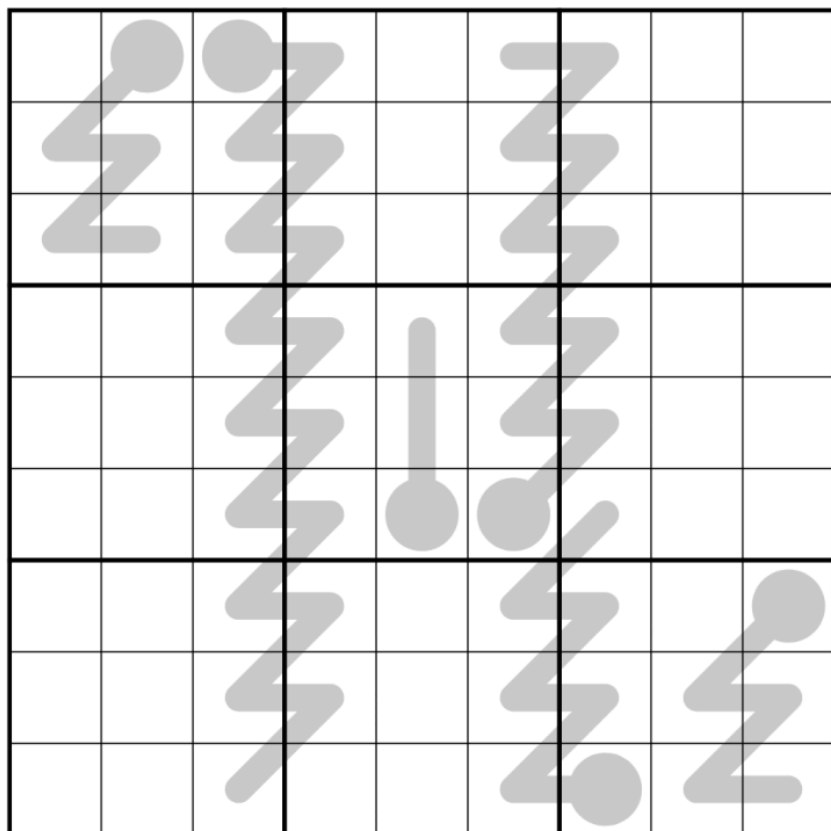
Gouge Away - Deep Sage
Los Campesinos - All Hell
Magdalena Bay - Imaginal Disk
MJ Lenderman - Manning Fireworks
High Vis - Guided Tour
Drug Church – Prude
Charli XCX – Brat
Fontaines DC – Romance
Adrienne Lenker - Bright Future
Kneecap - Fine Art
Bob Vylan - Humble As The Sun
Chat Pile - Cool World

Anyway, today's **Slow Thermometer** Sudoku is both non-symmetrical AND comes with a GAS 101 about how to think about pencilmarking Slow Thermos, which must mean I think it's worth it.

GAS 101: [See the spoiled text on the „Hints and spoilers“ page at the end of this document]

↓↓ ↓↓ (The puzzle is on the next page) ↓↓ ↓↓

(Slow Thermo rules)



<https://sudokupad.app/1vprqutj36>

December 22, 2024: @ of the Anti Pony

by Philip Newman

Walkthrough of "Future Me Hates Me" by Bill:
<https://youtu.be/IFpZnajlpHo>

Today's **GAS** is an **Antiknight Sudoku**!

@Malrog 🐾 has correctly identified the pattern in the puzzle titles! Today's title is, I suspect, completely unhelpful if you don't already know. Teehee.

Normal sudoku rules apply.

Antiknight: Cells separated by a (chess) knight's move cannot contain the same digit.



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

Play on SudokuPad: <https://sudokupad.app/philip-newman/20241222--of-the-anti-pony>

Play on f-puzzles: <https://f-puzzles.com/?id=29st2gg8>

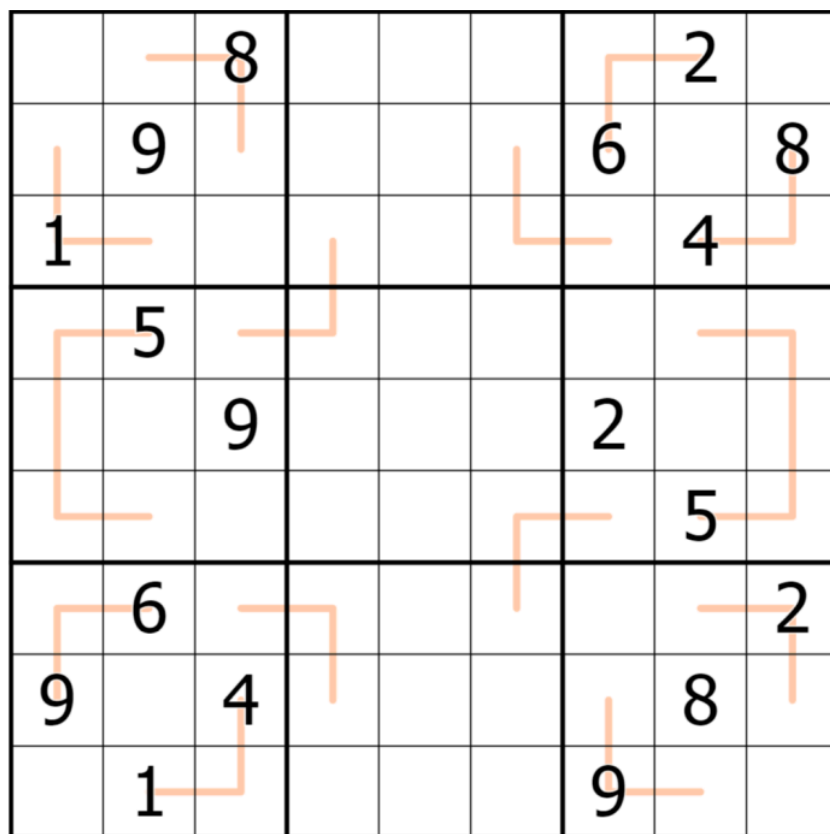
December 23, 2024: Entropic Lines

by clover!

Walkthrough for Philip's "@ of the Anti Pony": <https://youtu.be/cf6B9NaP3SY>

Good afternoon, friends! If you could receive any one gift for Puzz-mas, what would it be? I wouldn't mind a very technical 8x8 sudoku using some kind of obscure variant invented decades ago and rarely seen since. Or socks. You can never have too many pairs of warm socks.

Today's GAS is an **entropic lines sudoku**! Normal sudoku rules apply. Along each peach line, digits must appear in a repeating pattern of high (789), medium (456), and low (123), such as HMLHML or LMHLMH. For instance, 1 9 4 2 9 6 2 8 4 is a valid line.



SudokuPad: <https://sudokupad.app/j9f8fqbymm>

December 24, 2024: Plaster Casts Of Everything

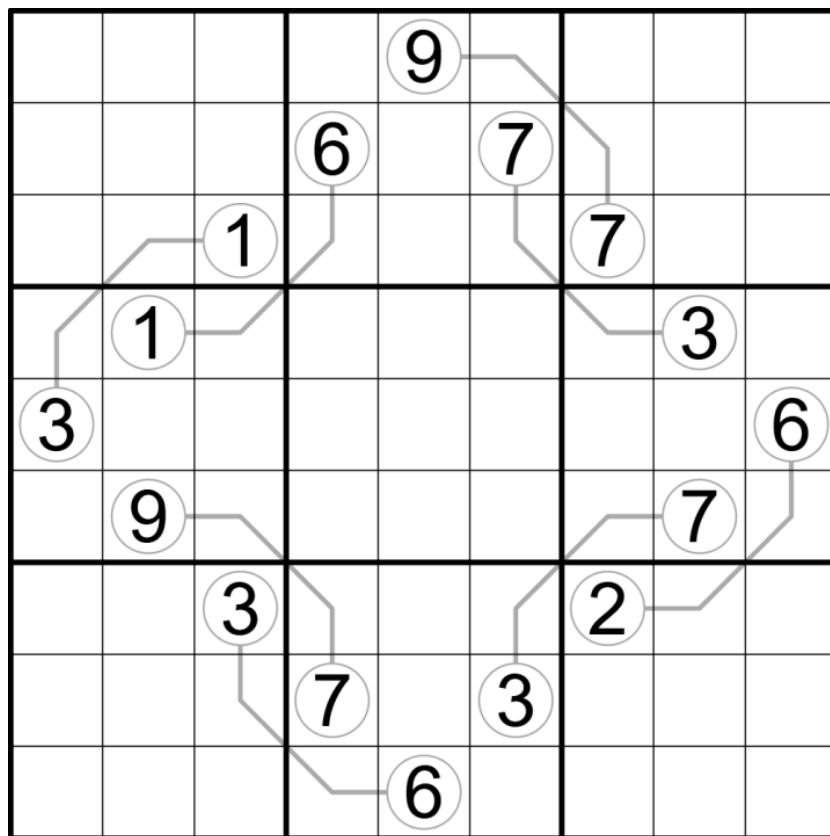
by Bill Murphy

Walkthrough for Entropic Lines: <https://youtu.be/0aAJ3vdTIUo>

Because I won't see y'all till the other side, merry critmas to you and yours/happy holidays. I watched Hot Frosty last night and it was very silly and the part of those hallmark holiday films with a widower learning to love again always annoys me because I know how it sits in the soul and that's not it man. But I do feel blessed to be full of love now despite it all, and to be able to annoy all of you on a 2-3 times a week basis is a blessing

P.S. I cleverly named a puzzle C.R.E.A.M. (Christmas Rules Everything Around Me) and then decided to post today's Double Arrow Sudoku instead

Normal Sudoku Rules Apply. Digits along lines must have the same sum as digits in circles at each end of the line.



<https://sudokupad.app/ypvdl50z69>

December 25, 2024: Strider

by Philip Newman

Walkthrough of "Plaster Casts Of Everything" by Bill:

<https://youtu.be/ys3G8O6BjfA>

You know Frodo and Samwise and Pippen and Merry

Boromir, Legolas, Gandalf, and Gimli

But do you recall

The most famous ranger of all...

Today's **GAS** is a **Disjoint Groups Sudoku**! Everyone's favorite sudoku variant for Christmas!



Normal sudoku rules apply.

Disjoint Groups: A digit cannot appear in the same relative position in different boxes.



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

Play on SudokuPad: <https://sudokupad.app/philip-newman/20241225-strider>

Play on f-puzzles: <https://f-puzzles.com/?id=26qr2a6v>

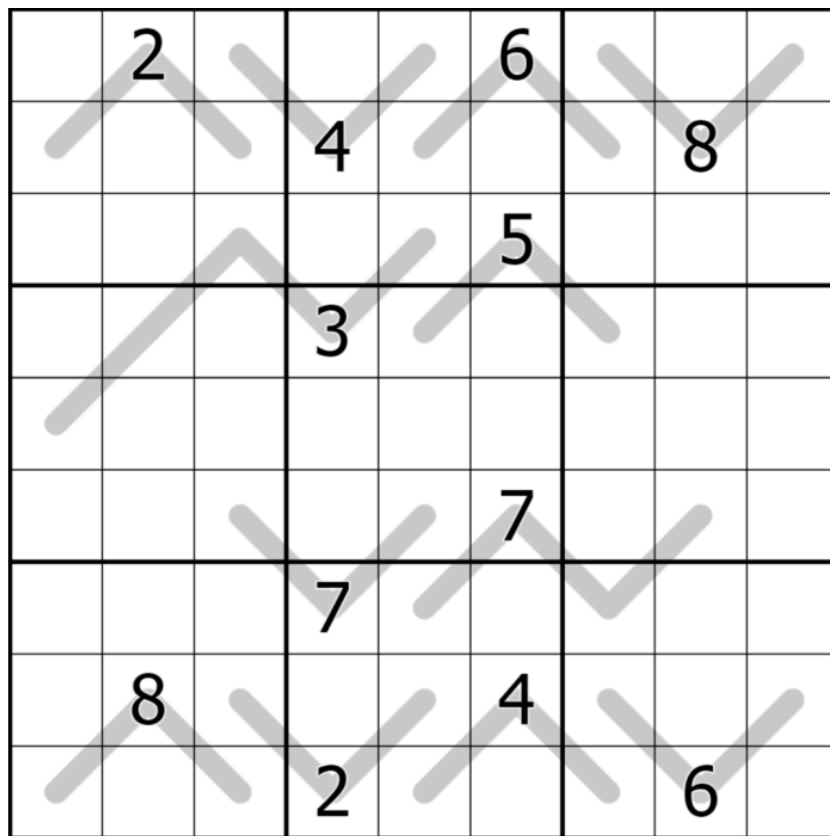
December 26, 2024: Diagonal Consecutive

by clover!

Edit: here's the walkthrough for Philip's "Strider"! <https://youtu.be/R8HUNToxCvQ>

Good morning, friends! I'm not feeling well after the holiday festivities, so the walkthrough will have to wait for another day. Here's today's GAS: a **diagonal consecutive sudoku**!

Normal sudoku rules apply. Pairs of digits **directly** connected by a diagonal line are consecutive. Not all possible lines are given.



SudokuPad: <https://sudokupad.app/wz6pe1twwh>

December 27, 2024: Christmas Rules Everything Around Me

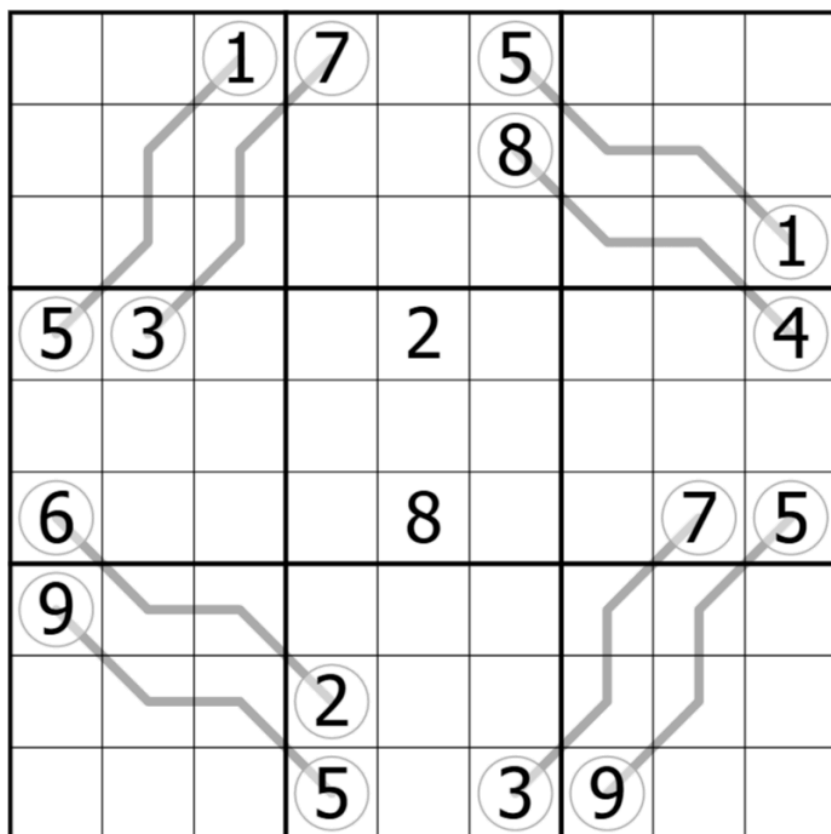
by Bill Murphy

Walkthrough for Diagonal Consecutive: <https://youtu.be/U2Z2ZW689qk>

Fresh off the pozzl press, some ripe oc! Don't believe me? The url says so!

Today's GAS is a **Between Lines Sudoku**!

Normal Sudoku Rules Apply. Digits along lines must be numerically between the digits in the circles at the end at each line.



<https://sudokupad.app/38a7ripeoc>

December 28, 2024: A Nine in the Dot

by Philip Newman

Walkthrough of "Christmas Rules Everything Around Me" by Bill:

<https://youtu.be/P9s-lz7yD3w>

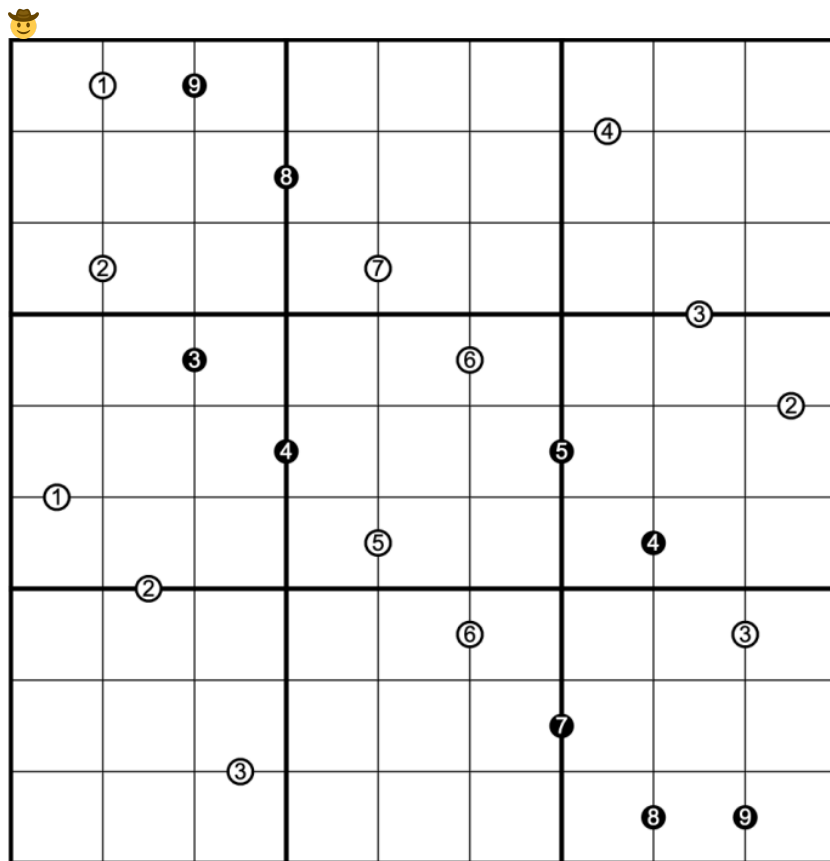
Today's GAS is a **Difference/Ratio Pairs Sudoku**!

I'm on the road! Things might not be up to my usual standard of formatting and posting way late.

Normal sudoku rules apply.

Difference Pairs: Digits in cells separated by a white dot must have the difference given.

Ratio Pairs: Digits in cells separated by a black dot must have the ratio given.



Play on SudokuPad: <https://sudokupad.app/j5nkh53oyx>

Play on f-puzzles: <https://f-puzzles.com/?id=n7pmtbfc>

Bonus outtake!

[Little Killer] <https://sudokupad.app/kfbzkugmav>

December 29, 2024: Two More Sudokus

by clover!

Walkthrough for Philip's "A Nine in the Dot": https://youtu.be/dw8Hn_2e2FU

The walkthrough for Philip's 12/25 puzzle, "Strider", has also been edited into the corresponding post!

Today I've set you **two** sudokus, to make up for the delayed walkthrough video on Boxing Day. But these aren't just two ordinary puzzles, no: they're as different as they could possibly be!

Normal 6x6 sudoku rules apply in each of the two grids. Also, the same digit must never appear in the same cell in both grids.

					3
6	4				
					4
				2	1
5					

1	2				
					5
					6
4					
				6	3

SudokuPad: <https://sudokupad.app/z18ro8pfkz?setting-conflictchecker=0>

December 30, 2024: And to all, a GAS night

by Bill Murphy

Walkthrough for Two More Puzzles: <https://youtu.be/6blfqV5X3cw>

Today's Intro is just a bunch of extra content:

Walkthrough for a very good puzzle of mine I did, it's not GAS, definitely too hard for leak, don't say I didn't warn you: <https://youtu.be/jHMIT-H9jW8>

Revealed myself to be the Santa for @James Sinclair and did a dynamic fog puzzle (i'll be real, not ever probably gonna do it again)
<https://beta.sudokupad.app/amu7stkzs1?setting-foganim=1>

Speaking of extra, here's a lil **extra regions sudoku** to tide you over til I see you in again in 2025.

Put the digits 1-9 once each in each box, row, column and shaded region.

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

<https://sudokupad.app/7j6x3m5fg0>

December 31, 2024: Flight to the Four

by Philip Newman

Walkthrough of "And to all, a GAS night" by Bill:

<https://youtu.be/jFvvytKKZ0o>

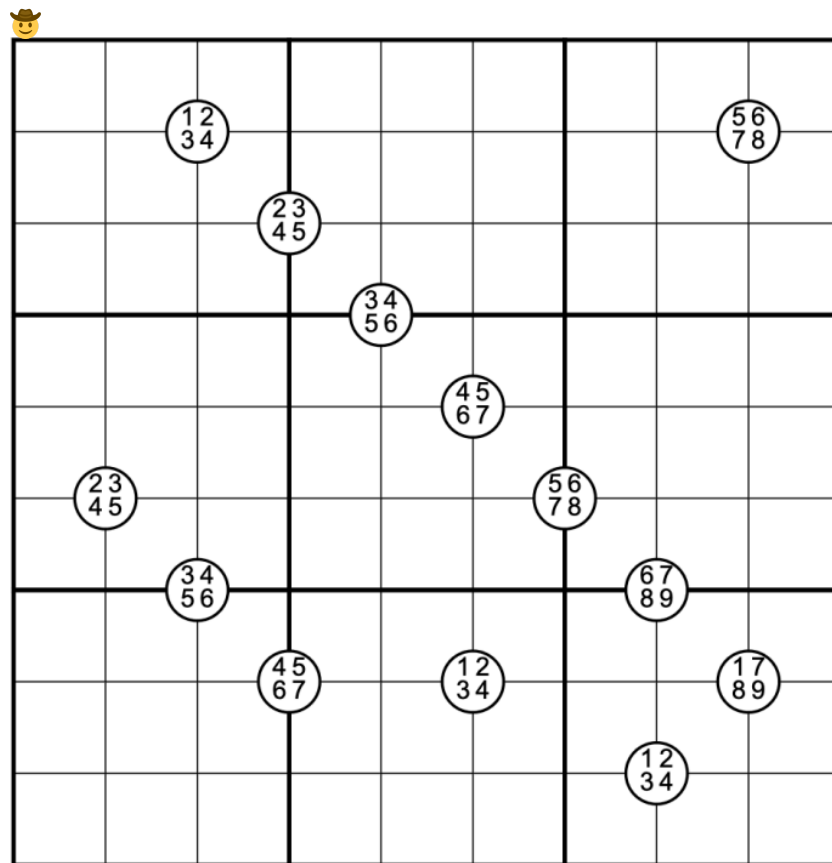
And so, we come to the end of another year, and the end of Book 1 of The Lord of the Rings...
Happy New Year, and may the stars shine upon your faces!

Today's GAS is a **Quadruples Sudoku**!

I'm on the road! Things might not be up to my usual standard of formatting and posting way late.

Normal sudoku rules apply.

Quadruples: Digits in corner circles must appear in the surrounding four cells, in some order.



Play on SudokuPad: <https://sudokupad.app/philip-newman/20241231-flight-to-the-four>

Play on f-puzzles: <https://f-puzzles.com/?id=2s4enuhr>

Bonus 1: Ordered Cages

Clover

Normal sudoku rules apply. Read the contents of each cage as a 2-digit number, from left to right or top to bottom. The clue in the corner of each cage indicates the order of these numbers, from lowest to highest. For instance, 1 indicates the lowest of the 2-digit numbers. None of the 2-digit numbers are equal.

1		2		5				
	6		7		8			6
9							18	15
	10					8		
4	3	4				11		
							12	
2		13		14		16		
			17		19		20	

<https://sudokupad.app/yxjtimwbyw>

Bonus 2: Sandwich

Clover

Normal sudoku rules apply. Clues outside of the grid indicate the sum of the digits "sandwiched" between the 1 and the 9 in that row or column.

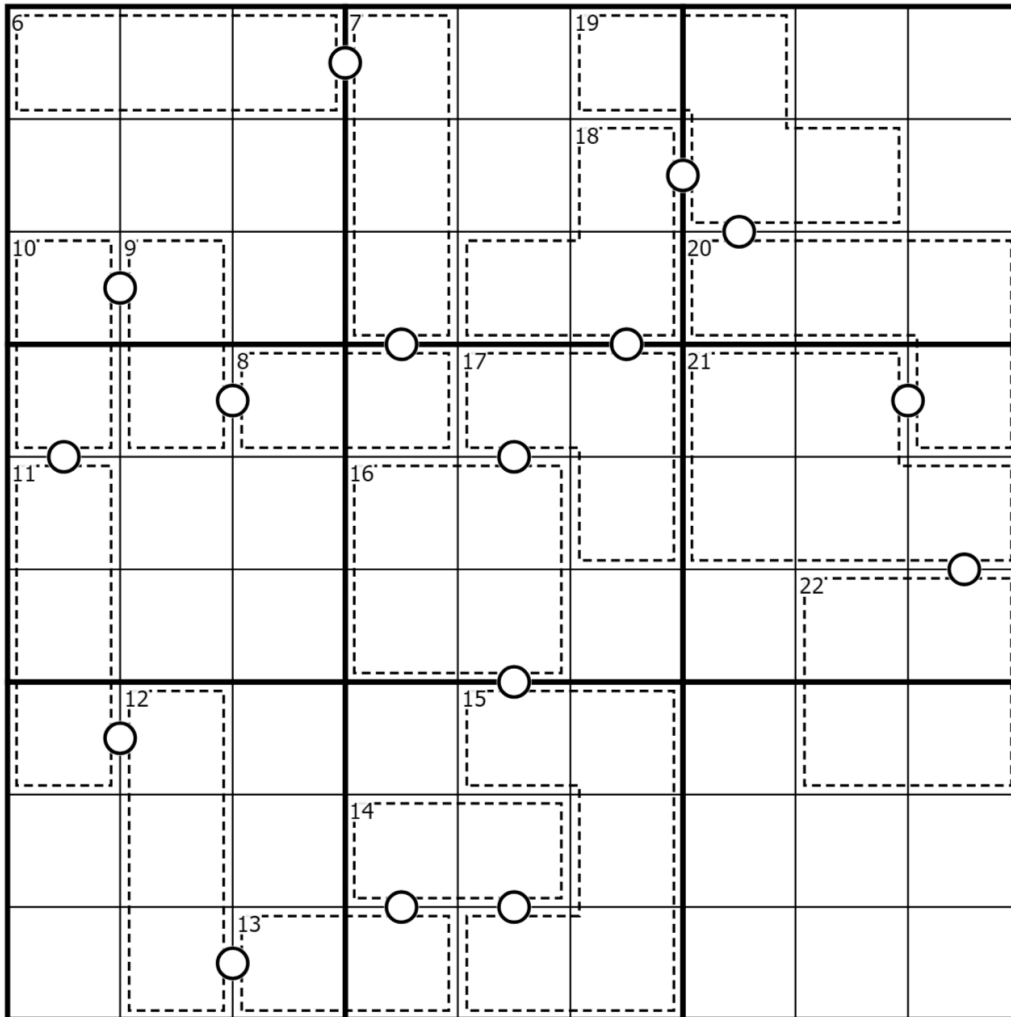
	11		7	10		10	10		7
2	1								
8						1			
6					9				
5									
2									
6									
5					1				
7				9					
3									9

<https://sudokupad.app/65xlas9gzy>

Bonus 3: lol, lmao even

Bill Murphy

Normal sudoku rules apply. Digits separated by a white dot must be consecutive. Digits in cages must not repeat and must sum to the small corner total, where given.



<https://sudokupad.app/9ad7x0tg9t>

Bonus 4: Wild One

Bill Murphy

Normal Sudoku Rules Apply. Consecutive digits can't be orthogonally adjacent to each other.

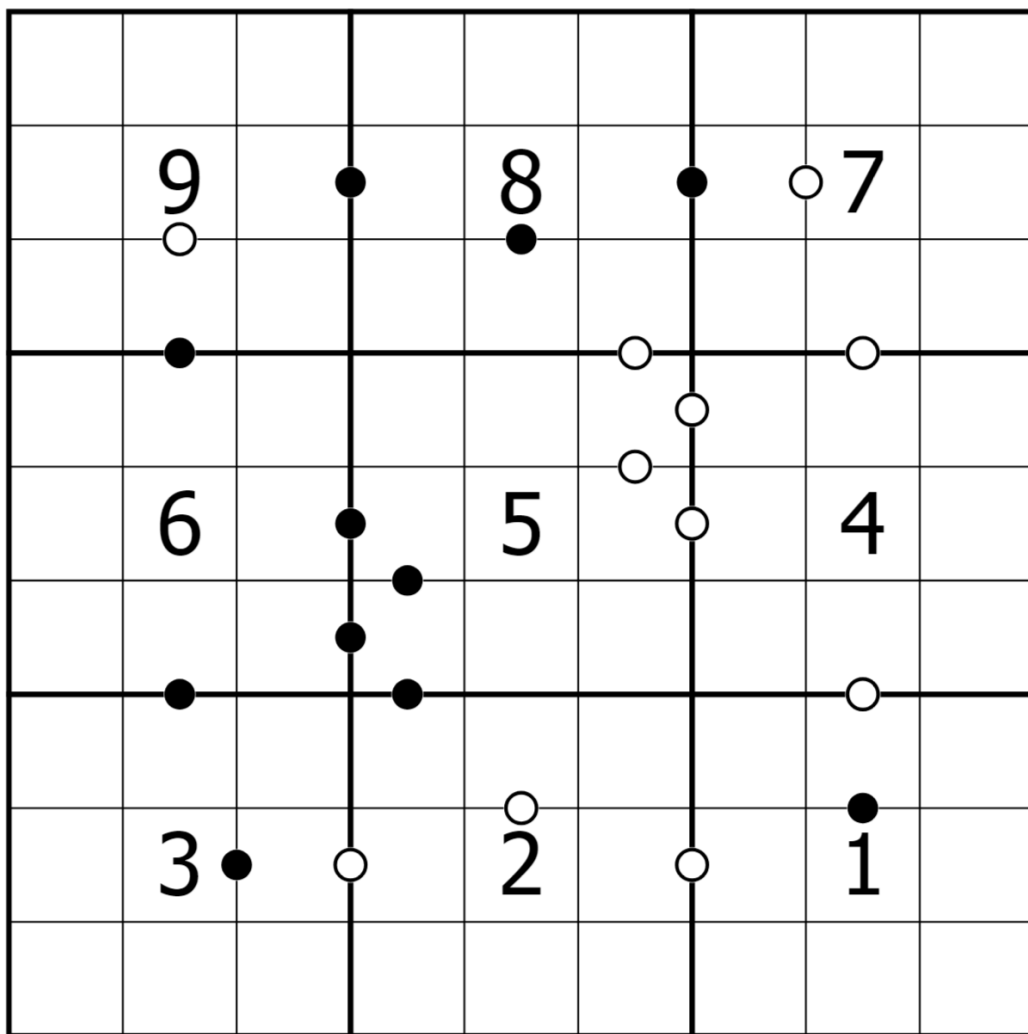
4			5			6		
	6			7			8	
		5			6			7
3			4			5		
	2			3			4	
		4			5			6

<https://sudokupad.app/6l50h26ey6>

Bonus 5: Kropki Pairs

Philip Newman

Normal sudoku rules apply. Digits separated by a white dot are consecutive; digits separated by a black dot are in a 1:2 ratio. Not all possible dots are necessarily given.



<https://sudokupad.app/10r9e0siaz>

Time Benchmarks

	 Two party hats	 One party hat	 Today's dinosaur:
Dec 1, 2024	11:00	20:00	Adaptable Acrotholus
Dec 2, 2024	8:00	16:00	Mature Musankwa
Dec 3, 2024	6:30	12:00	next-door Nqwebasaurus
Dec 4, 2024	6:30	12:00	covered Cetiosauriscus
Dec 5, 2024	6:00	11:00	maximal Monkonosaurus
Dec 6, 2024	7:00	13:00	Maximal Monkonosaurus
Dec 7, 2024	10:00	25:00	Recovering Riojasaurid
Dec 8, 2024	6:30	12:00	Dutch Dysalotosaurus
Dec 9, 2024	7:00	13:00	Cab Savannasaurus
Dec 10, 2024	6:30	12:30	Not-enough-time Nhandumirim
Dec 11, 2024	6:30	12:00	uninformed Uteodon
Dec 12, 2024	6:30	12:00	Promotional Planicoxa
Dec 13, 2024	10:00	20:00	Bastillic Bagualosaur
Dec 14, 2024	6:00	11:00	pear-shaped Peloroplites
Dec 15, 2024	8:30	15:00	Delayed Dryptosaurus
Dec 16, 2024	8:00	16:00	Prickly Plateosaurian
Dec 17, 2024 ¹	7:30	14:00	victorious Variraptor
Dec 18, 2024	9:30	18:00	Snowy Paluxysaurus Paluxysaurus
Dec 19, 2024	7:00	13:00	Goofy Gigantoscclus
Dec 20, 2024	7:00	13:00	missing-link Minmi
Dec 21, 2024	8:00	15:00	StereoGuanlong
Dec 22, 2024	9:00	18:00	Vibing Vulcanodontid
Dec 23, 2024	8:00	15:00	merry Mantellodon
Dec 24, 2024	7:30	14:00	Gift-Wrapped Gilmoreosaurus
Dec 25, 2024	8:00	20:00	Luminous Limaysaurine
Dec 26, 2024	6:00	11:00	yawning Yandusaurus
Dec 27, 2024	7:00	13:00	Hungover Hungarosaurus
Dec 28, 2024	9:00	18:00	Tangled Tichosteus
Dec 29, 2024	5:30	10:00	duplicated Dubreuillosaurus
Dec 30, 2024	9:00	17:00	Additional Adasaurus
Dec 31, 2024	8:00	16:00	Elven Epanterias

¹ Today you earn tahiti hats instead of party hats.

Hints and other spoiledred texts

Hints for December 7, 2024:

GAS 101 Hints:

- 1 This is not a puzzle where the variant is all resolved quickly and then can be ignored. You will need to do some sudoku in between!
(The next hint is the type of thing you might need to look for with the variant, and the third is more explicit about where to look, spoilers for those who want to choose their own adventure.)
- 2 Other than the "easy" deductions that you get directly from the ruleset, some of the clues in this puzzle are resolved by determining that there is only one place for the clued digit. There is a helpful restriction that is not immediately obvious for figuring out these placements: Unless the clue is a 1, the cell next to the clue can never contain a 1 or the clue digit.
- 3 You can immediately resolve the clues at the top, as well as the 4 and 5 on the right, the 3 and 4 on the left, and the 5 and 6 at the bottom.
The clues to look at next are the 8 and the 2s. Each of these only has one possibility for X. (If you have more than one possibility, check that you haven't missed some basic sudoku!)
- 4 There is no advanced sudoku technique needed! (But it's also not trivial after the clues.)

Spoiler for December 19, 2024:

There's something in this puzzle that will leave you scratching your head. It's ok, Bill didn't understand either. You're welcome to guess why, though.

Hint for December 21, 2024:

GAS 101: By now we've done a lot of thermometer puzzles and our audience are familiar with the concept of "Goodliffing" aka labelling every possible candidate along the thermometer. For a slow thermometer, you can do the same, but if the digit can be the same along a slow thermo, you should repeat the same center marks from the previous cell. Eg if the first two cells of a thermometer do not see each other, you would give them both 1234 center marks etc.