# **GAS** Leak

Genuinely Approachable Sudoku from the CtC Discord Volume 7: October 5, 2021 - October 24, 2021



Good morning, friends! In celebration of the seventh edition of GAS Leak, here are some GAS statistics:

Solvers receiving daily pings: 1,656

Dinosaurs earned: 11,146 Single hats earned: 12,822 Double hats earned: 6,254

Most popular dinosaur: vulcanodon, used four times!

Unique sudoku variants used in GAS: 70 Sudoku variants *invented* for GAS: 3 Most used variant: thermo, used in 13 puzzles

This document compiles puzzles 121 through 140, plus a trio of bonus puzzles that weren't quite right for the regular channel. Time standards and daily dino names appear on the last page. Enjoy!

- Clover

#### October 5, 2021: Gamma and Epsilon

Sam Cappleman-Lynes

Oops! I must have been very confused when I set this puzzle because I simply could not remember what the dots in Kropki are supposed to signify. I took a guess at it but I don't think I got it quite right.

In this Gamma and Epsilon Sudoku, normal Sudoku rules apply. Digits separated by a black dot must be in a 1:3 ratio and digits separated by a white dot must have a difference of 5. There is no negative constraint.



f-puzzles: <u>https://f-puzzles.com/?id=yeddajmn</u> CtC: <u>https://tinyurl.com/yvtskrnb</u>

#### October 6, 2021: Nein Nines

Philip Newman

We here at Groovy Attractive Setters, Inc. strive to produce the highest quality puzzles each and every day for you. That's why it's so frustrating to be continually plagued by localization issues. Today's puzzle is supposed to have nine 9s in it... after all, there should be nine of every digit in a sudoku, right? Unfortunately... well, you can see what happened in the title.

Can you help us fix this tragic error in today's Classic Sudoku?

Normal sudoku rules apply. And that's it!

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

Play on f-puzzles: <u>https://f-puzzles.com/?id=y2seypeu</u> Play on CTC App: <u>https://tinyurl.com/k4wfy4xv</u>

### October 7, 2021: Quadruples

Clover

Good morning! Today's GAS is a buy one (digit), get one free sudoku. For a limited time only, with every digit you purchase, you'll receive a SECOND DIGIT absolutely free! But you have to act fast, because supplies are limited. So pick up that phone and solve! Solve! Solve!

Normal sudoku rules apply. Digits in a white circle must appear in the four cells surrounding that circle. (If a digit appears twice in a white circle, it appears twice in the four cells surrounding that circle.)



f-puzzles: <u>https://f-puzzles.com/?id=ydjth6p5</u> CtC: <u>https://tinyurl.com/7nnmxze3</u>

#### October 8, 2021: Extra Regions

Sam Cappleman-Lynes

Good afternoon! Today's GAS is a buy nine (regions), get four free sudoku. For a limited time only, with every nine regions you purchase, you'll receive FOUR MORE REGIONS absolutely free! But you have to act fast, because supplies are limited. So pick up that phone and solve! Solve! Solve!

Normal sudoku rules apply. Each of the grey regions must also contain each digit exactly once.

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

f-puzzles: <u>https://f-puzzles.com/?id=yzyud5fw</u> CtC: <u>https://tinyurl.com/9ydk2vy9</u>

#### October 9, 2021: Buy One Get Three Free Sudoku Extravaganza! Philip Newman

Editor's note: Philip posted *four* tiny puzzles for the October 9 GAS! 6x6 sudoku has the same rules as 9x9, except that it only uses the digits 1 through 6. The flavor text and rules for all four puzzles appear on this page; the puzzles themselves appear on the following page.

I want to apologize for the deceitful business practices of my fellow setters. I'm sure you all read "get four free sudoku" and were disappointed to only find a single puzzle to solve.

Here at Phil's Nerd Snipe Barn (a division of Groovy Attractive Setters, Inc.), our motto is "I've never met a challenge I didn't spend way too many hours working on". Ok, we definitely need a snappier slogan, but the important thing for you is that today is a genuine Buy One\* Get Three Free Sudoku extravaganza!

Normal sudoku rules apply...

Arrow: Digits along an arrow must sum to the circled total.

**Palindrome**: Digits along a grey line must form a palindrome (read the same from either direction).

**Renban**: Digits along a purple line must form a set of consecutive digits with no repeats (in any order).

**Between Line**: 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=yfnr6vnl (Arrow) https://f-puzzles.com/?id=ydsoe6hc (Palindrome) https://f-puzzles.com/?id=yjkskgud (Renban) https://f-puzzles.com/?id=ygqv8k3a (Between Line)

Play on CTC App:

https://tinyurl.com/6rm7fj9n (Arrow) https://tinyurl.com/85n3paay (Palindrome) https://tinyurl.com/s36dxbma (Renban) https://tinyurl.com/xx6pe5k2 (Between Line)

# October 10, 2021: Odd Sum Pair

Clover

The seasons are changing here in Middle of Nowhere. A crisp breeze is blowing, the scent of bonfires fills the air, and the leaves on the sudokus are turning red and orange.

In this odd sum pair sudoku, normal sudoku rules apply. Also, the two digits on either side of a small dot (of any color!) must sum to an odd value. Not all possible dots are necessarily provided.



f-puzzles: <u>https://f-puzzles.com/?id=yfntu9jl</u> CtC: <u>https://tinyurl.com/yn8r37hp</u>

#### October 11, 2021: Max Odd/Even Run

Sam Cappleman-Lynes

Oddly, even I find it odd that even though this seems like a natural rule to consider, I haven't even been able to find a single example of it existing previously. The odd Sudoku here and there even resembles it a little bit, but even so, none of them are quite the same. How odd. Or even.

In this Max Odd/Even Run Sudoku (catchy name, I know), normal Sudoku rules apply. Digits outside the grid indicate the length of the longest run of consecutive cells in that row or column which are either all even or all odd. There might be one or more runs with that length.



f-puzzles: <u>https://f-puzzles.com/?id=ykyg5ktn</u> CtC: <u>https://tinyurl.com/3f7dc45z</u>

#### October 12, 2021: Tatooine Classic

Clover (as "Nilip Phewman")

Editor's note: Philip was without an internet connection for a few days, so we shuffled our turns. *Or did we*? Over the next three days, each of us posted a puzzle in the style of one of the other two setters, posing as their evil doppelganger. The actual authors are shown here, along with the original flavor text.

the sound of slightly unhinged laughter fills the air...

muahAhahahAHHHahahahha ahahahhAHhaa. Good morning! It is I, eeeeeeevil sodoku setter NILIP PHEWMAN, and your puny "discord channel about approachable sudoku" is MINE!!!

I have DONE AWAY with your precious "Philip Newman." If you ever want to see him or his little "puzzles" again, there's only one way to defeat me, and like any good supervillain, I'm going to tell you exactly what you have to do:

Solve this EeeEEEEEeeeeeeevil puzzle. Normal sudoku rules apply. And that's it!

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

Play on f-puzzles: <u>https://f-puzzles.com/?id=ygwkqkma</u> Play on CtC app: <u>https://tinyurl.com/47jprf2s</u>

#### October 13, 2021: Kropki Pairs

Sam Cappleman-Lynes (as "velcro!")

ominous boss-fight music is heard starting up in the background...

You fools! You fell right into my trap! While you were all busy dealing with that pathetic Nilip Phewman, I, the real mastermind, was preparing to unleash something the likes of which you've never seen! You'll have to solve this puzzle if you ever want to see your GAS setters again!

(But to make it a fair fight, I'll tell you the rules. I'm not that evil...)

Normal Sudoku rules apply. Digits separated by a white dot must be consecutive. Digits separated by a black dot must be in a 1:2 ratio. Digits not separated by a dot may be consecutive, in a 1:2 ratio, or neither.



CtC: https://tinyurl.com/35kat8h4

#### October 14, 2021: Making Lemonade

Philip Newman (as "Sham Capplemon-Limes")

Note for new solvers: When this puzzle was originally posted, a lot of solvers had questions about the rules! I've slightly edited the rules shown below to address those questions; Philip's original text is preserved in #daily-sudoku-puzzles.

They say good things come in threes... well so do EVIL DOPPLEGANGERS bwahahaha. *mine is an evil laugh* 

If you want to see your GAS setters again, you know what you have to do. That's right, send me \$15,000, payable by... wait, those do-gooders already did that bit? Twice?? Fine. You can solve this sour puzzle instead.

#### LEMON SUDOKU bwahahaha

Normal sudoku rules apply. Digits in each group of yellow highlighted cells must sum to the total given in the two cells surrounded by the yellow cells (read left-to-right or top-to-bottom); digits may repeat in yellow cells as long as they follow sudoku rules.

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

Play on f-puzzles: <u>https://f-puzzles.com/?id=ygfd6qy5</u> Play on CTC App: <u>https://tinyurl.com/en5d3byw</u>

#### October 15, 2021: Shamrock

Philip Newman

You did it! You defeated all of our evil triplets\* and somehow that also fixed my internet!

Did you know that the "Sham" in Shamrock is from the Irish word for clover\*\*? Obviously, this ties in perfectly to the shenanigans from the last few days. Also it's 22 weeks until St. Patrick's Day 2022, so... yeah, it's a reach, just go with it.

Today's GAS is a nice, quiet stroll along some thematically shaped green lines - an Irish Whispers Sudoku, if you will.

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

\* Oh, you thought they were just our twins? No, we all have a Lawful Evil triplet and a Chaotic Neutral triplet. Or maybe I'm the Chaotic Neutral one.

\*\* Actually the "r" is as well, but never mind that.



Play on CTC App: <u>https://tinyurl.com/22bp2x9s</u>

#### October 16, 2021: Exclusion Clover

This sudoku is exclusive. It has its breakfast croissants airlifted from Paris straight to its private yacht every morning. Its butlers have smaller butlers to assist with their buttling. It went to Fyre Festival. This solve is only for those with highly refined tastes. An exclusion sudoku, as it were. And no, you may not sit at its lunch table.

Normal sudoku rules apply. A digit in a white circle may not appear in the four cells immediately surrounding that circle.



f-puzzles: <u>https://f-puzzles.com/?id=yg6xa3kr</u> CtC: <u>https://tinyurl.com/th9ytp37</u>

#### October 17, 2021: Classic

Sam Cappleman-Lynes

Does your puzzle ever do something that just makes you want to tut, roll your eyes, and sigh "Classic Sudoku"? 🙄

This puzzle contains the digits 1 to 9 once each in every row. Classic Sudoku 🙄

This puzzle also contains the digits 1 to 9 once each in every column. Classic Sudoku

And what's more, it also contains the digits 1 to 9 once each in every box. Classic Sudoku 🙄

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

f-puzzles: <u>https://f-puzzles.com/?id=yjy673dp</u> CtC: <u>https://tinyurl.com/2uv8vvab</u>

#### October 18, 2021: Summometers

Philip Newman

Editor's note: The CtC solving link doesn't display the arrows in this puzzle. If you solve in CtC, remember that every arrow is also a thermo, running from the tip of the arrow to the bulb.

No fun intro today, sorry all! Brutal weekend\*.

Today's (interesting) GAS is a Thermarrow Sudoku, where all the arrows are also thermos, and vice versa! Normal sudoku rules apply. Digits along arrows must sum to the circled total. Digits along thermometers must increase from bulb to tip (equivalently, decrease in the direction of the arrow).

\*Week, really. I could easily fill an intro whining about it, but instead you get this mysterious footnote.



Play on f-puzzles: <u>https://f-puzzles.com/?id=yjtxd5zm</u> Play on CTC App: <u>https://tinyurl.com/5xz3p6x9</u>

#### October 19, 2021: Even Count

Clover

Have you ever found yourself wondering how many even numbers there are? I know of at least seven. <br/>
Luckily, in this puzzle, you'll only need four of them. It's another ruleset I haven't seen before (which is certainly not to say it doesn't exist), so let's call it Even Count Sudoku.

You know, like this.

Normal sudoku rules apply. A value in a circle tells you how many of the four cells surrounding that circle contain even digits. (The even digits around a circle don't have to be different from each other, as long as they follow sudoku rules.)



f-puzzles: <u>https://f-puzzles.com/?id=yfaoez4l</u> CtC: <u>https://tinyurl.com/3uvbefcu</u>

#### October 20, 2021: Killer

Sam Cappleman-Lynes

Did you know that over 3000 deaths occur annually as a result of freak accidents involving dominos? Neither did I, and if I had done, I would have thought twice about putting so many of them in this puzzle. Some of these ones are particularly vicious as a result of the unusually large (for a domino) numbers written on them, which is what gives this Sudoku variant its name.

In this Killer Sudoku, normal Sudoku rules apply. Additionally, digits within a marked cage must sum to the value written in the corner of the cage.

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f-puzzles: <u>https://f-puzzles.com/?id=yzxmq53x</u> CtC: <u>https://tinyurl.com/vtmf6tv3</u>

#### October 21, 2021: TOWTCBBAR

Philip Newman

Did you know yuor brian is pterty good at raideng setcennes with jemblud wrods as lnog as the frist and lsat leretts are in the rhigt palces? At laset, I hpoe taht is unervlislay ture, or smoe of you will be vrey cosnufed by tihs.

Wudnol't it be intensetrig to alppy taht to sokudu?

Today's GAS is a combo of Between Line and Renban!

Normal sudoku rules apply. Digits along a line must have values strictly between the values in the circles on the ends of that line. Additionally, digits along a line, including the circles, must form a set of consecutive digits with no repeats (in any order - for example, 1324 would be a valid order, but 1235 would not since it is missing a 4).



Play on f-puzzles: <u>https://f-puzzles.com/?id=yg3tnbg8</u> Play on CTC App: <u>https://tinyurl.com/nasejkyv</u>

#### October 22, 2021: Arrow Clover

I found today's GAS in a bottle that floated up to me as I was walking along the beach. It was printed on tattered parchment with a cryptic note hastily scribbled on the reverse, a note which I have reproduced in full here:

Follow the arrows to find a treasure beyond your wildest imaginings. X marks the spot.

Also, normal sudoku rules apply, and digits along an arrow sum to the value in the adjoining bulb. Digits along an arrow may repeat as long as they follow sudoku rules. I don't know what any of that means, but I felt like writing it. I'm lonely over here on this mysterious deserted island full of buried treasure, okay?



f-puzzles: <u>https://f-puzzles.com/?id=yf349rgw</u> CtC: <u>https://tinyurl.com/37sv5css</u>

#### October 23, 2021: Consecutive Pairs

Sam Cappleman-Lynes

Here we sit, day after day, placing endless digits in endless grids. And yet I bet you never give any thought to how the digits feel about it, do you, you monster? Well digits have feelings, too. They have hopes and aspirations and yet they suffer this arbitrary placement at the hands of people like you, and for what?! No more! The digits will take a stand!

Actually, I've just heard from the spokesperson of the digits' union and mostly the digits are concerned about their holiday allowance. They quite enjoy the puzzles, it turns out. We should be able to sort something out.

Meanwhile, in this Consecutive Pairs Sudoku, normal Sudoku rules apply. Additionally, cells separated by a white dot must contain consecutive digits. Cells not separated by a dot may or may not contain consecutive digits.



f-puzzles: <u>https://f-puzzles.com/?id=yevgnbvc</u> CtC: <u>https://tinyurl.com/kfrypbm7</u>

#### October 24, 2021: Slasher

Philip Newman

A murder has taken place! Some nefarious enemy has gotten their hands on the Negative Diagonal Knife of Secrets (+45 Damage). Fortunately, they only managed to stabby stab one of our many dopplegangers, who committed the fashion blunder of wearing a red shirt to work.

The killer seems to have left a trail of clues to follow... or rather, two such trails. One leads to the north, in the direction of the Hat Hoard, while the other leads south, toward the Dino Domiciles. Should you:

1 Investigate the Hat Hoard?

2 Investigate the Dino Domicile?

3 Help the killer by murdering another doppleganger, there are too many of them anyway?

Normal sudoku rules apply. Digits in cages cannot repeat, and must sum to the total given.



Play on f-puzzles: <u>https://f-puzzles.com/?id=ygfjf4mf</u> Play on CTC App: <u>https://tinyurl.com/w5svuvv2</u>

## Bonus 1: Quadro

Clover

Normal sudoku rules apply. Each 2x2 area of cells must contain at least one odd and at least one even digit.

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

f-puzzles: <u>https://f-puzzles.com/?id=yhyk27k7</u> CtC: <u>https://tinyurl.com/kxzdxxyb</u>

#### Bonus 2: Odd Labyrinth

Sam Cappleman-Lynes

Normal Sudoku rules apply. There must be at least one orthogonally-connected path of odd digits leading from r1c1 to r9c9.

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

f-puzzles: <u>https://f-puzzles.com/?id=yjd6gqxz</u> CtC: <u>https://tinyurl.com/54696e96</u>

#### Bonus 3: Pianissimo v2

Philip Newman

Normal sudoku rules apply.

Normal German Whispers rules apply: adjacent digits along a green line must differ by at least 5.

Normal minimum rules apply: a digit in a grey square must be lower than all orthogonally adjacent digits.

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f-puzzles: <u>https://f-puzzles.com/?id=ygnezpes</u> CtC: <u>https://tinyurl.com/vny9bncw</u>

# **Time Benchmarks**

	One party hat	Two party hats	Today's dinosaur:
October 5, 2021	13:30	08:30	confused caudipteryx
October 6, 2021	10:00	05:00	German galeamopus
October 7, 2021	11:00	06:30	as-seen-on-tv aralosaurus
October 8, 2021	11:00	07:30	bargain bagaceratops
October 9, 2021	17:00 (all puzzles combined)	10:00 (all puzzles combined)	commercial comahuesaurus
October 10, 2021	11:00	06:00	autumnal aardonyx
October 11, 2021	15:00	09:00	parity-aware pinacosaurus
October 12, 2021	09:00	05:00	wicked wendiceratops
October 13, 2021	13:30	08:00	villainous vulcanodon
October 14, 2021	12:00	06:00	goateed giraffatitan
October 15, 2021	17:03	09:00	Irish isanosaurus
October 16, 2021	13:00	07:00	rarefied rugops
October 17, 2021	09:00	05:30	exasperated edmontosaurus
October 18, 2021	13:00	07:00	mercurial maxakalisaurus
October 19, 2021	13:00	07:00	enumerated euhelopus
October 20, 2021	15:00	09:00	at-risk avimimus
October 21, 2021	15:00	08:00	jemblud janenschia
October 22, 2021	09:00	05:00	piratical poekilopleuron
October 23, 2021	08:30	05:30	unionised utahraptor
October 24, 2021	10:00	05:00	deductive demandasaurus