

# **GAS Leak**

Genuinely Approachable Sudoku from the CtC Discord  
Volume 3: July 17, 2021 - August 5, 2021



Welcome to the third edition of GAS Leak! We've had a completely ordinary last couple of weeks: attempted hypnotism-by-puzzle, a record-breaking heat wave that melted our diagonals, an influx of rotating sauropods, and a visit from the not-so-evil twin of a notorious CtC-featured sudoku. If you really want to know, then keep reading: by popular request, I've included the GAS intro texts, and the official dinosaur names, in this edition of GAS Leak.

As always, on the **last page of this document**, you'll find a table of time benchmarks for each puzzle. To earn **two party hats**, finish the puzzle within the faster time benchmark. To earn **one party hat**, finish the puzzle within the slower time benchmark. And anybody who just finishes (whether you have a slower time, or simply don't record your time at all) will receive a lovely collectible **dinosaur**.

Happy solving!

- *Clover*

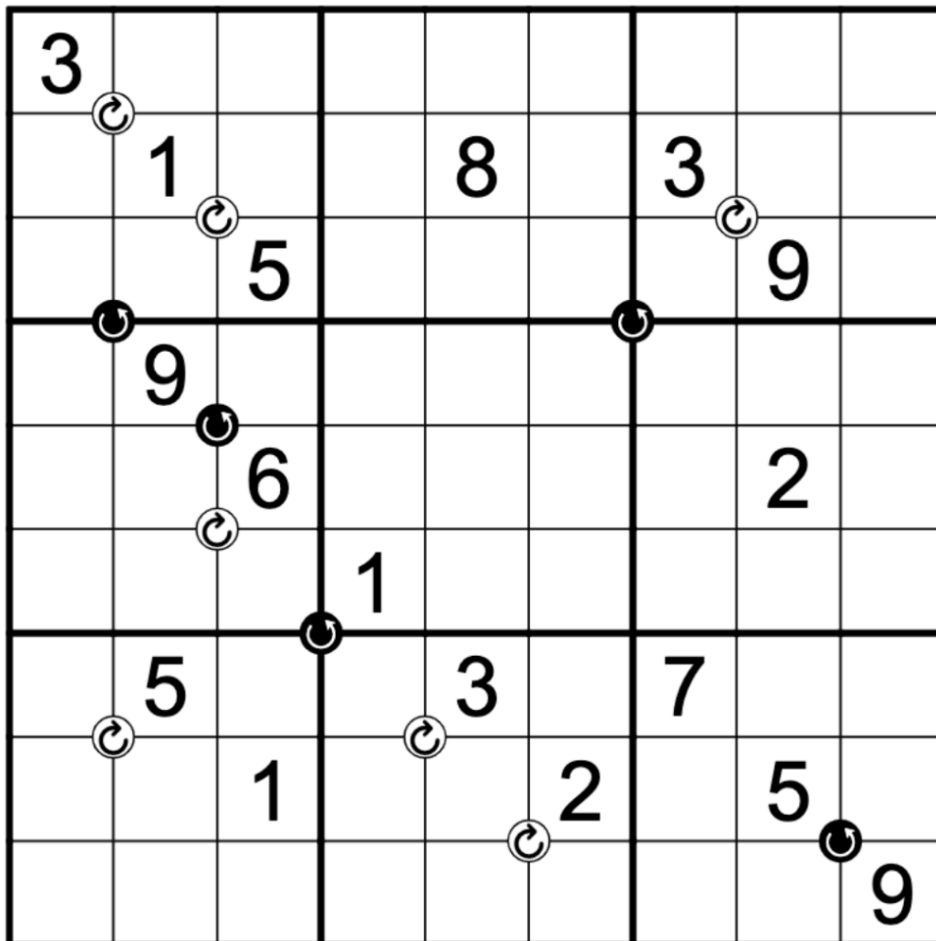
## July 17, 2021: Clock Faces

Clover

Back in my day, we didn't have any of this fancy-schmancy digital clock nonsense. We walked uphill two miles each way in the snow to find out what time it was, and our clocks went *clockwise* and we liked it.

In this clock face sudoku, normal sudoku rules apply. Also, there are some black and white dots in the grid. The four digits surrounding a white dot have to increase as you go clockwise (the correct starting point is up to you to figure out.) The four digits surrounding a black dot have to increase as you go counterclockwise. Helpful arrows have been provided to show the direction in which the digits increase, just in case you forget which way clockwise is (hi, Sam.)

Note for experienced solvers: there is no negative constraint in this puzzle.



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

CtC: <https://tinyurl.com/79rvk55h>

**July 18, 2021: Renban**  
 Sam Cappleman-Lynes

I heard everyone's got a thing for Renban Sudoku right now! In a callback to the very first GAS, I've got one for you today. No additional constraints this time, just some given digits, some renban lines, and nothing else.

For those who are new or who need a refresher on the rules, normal Sudoku rules apply, and in addition, each marked line must contain a non-repeating set of consecutive digits, in any order. For example, a line could contain the digits 3524 from one end to the other, or 5867.

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

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

CtC: <https://app.crackingthecryptic.com/sudoku/MtMdMRTTRH>

## July 19, 2021: Personal Space

Philip Newman

Don't let your sudoku catch any digital diseases! Protect yourself from counting cooties!  
Mask up and maintain a 6-cell distance from this Non-Consecutive GAS!

Normal sudoku rules apply. Orthogonally adjacent cells cannot contain consecutive digits.

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

f-puzzles: <https://f-puzzles.com/?id=yj35gyg6>

CtC: <https://tinyurl.com/3e2dfc8e>

## July 20, 2021: Irregular

Clover

We regret to inform you that your regular GAS will not be posted today. Luckily, I have an irregular GAS that should be just as nice 😊

In this irregular sudoku, everything works the same way as in ordinary sudoku, except that the regions aren't necessarily square shaped. Place the digits 1 through 9 in the grid so that each digit appears exactly once in each row, column, and irregularly shaped region. *Funky!*

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

f-puzzles: <https://f-puzzles.com/?id=ygcce8w4>

CtC: <https://tinyurl.com/a2thm7yd>

## July 21, 2021: Bent Diagonals

Sam Cappleman-Lynes

We're in the middle of summer and I accidentally left this Sudoku out in the sun - now the diagonals have melted and gone all droopy. Luckily I've been able to salvage it and make a puzzle out of the remains.

Today's puzzle is a Bent Diagonal Sudoku. Normal Sudoku rules apply, and additionally there are four marked bent diagonals in the grid. Each of those four bent diagonals must contain a full set of the digits 1-9.

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

CtC: <https://app.crackingthecryptic.com/sudoku/d2THtpfPJB>

## July 22, 2021: Badge

Philip Newman

*Let me just quickly read the rules...*

Today's GAS is a Killer Sudoku...

*WHAT? No way. Well, sorry. The rules are - as far as I can tell - normal killer sudoku rules...*

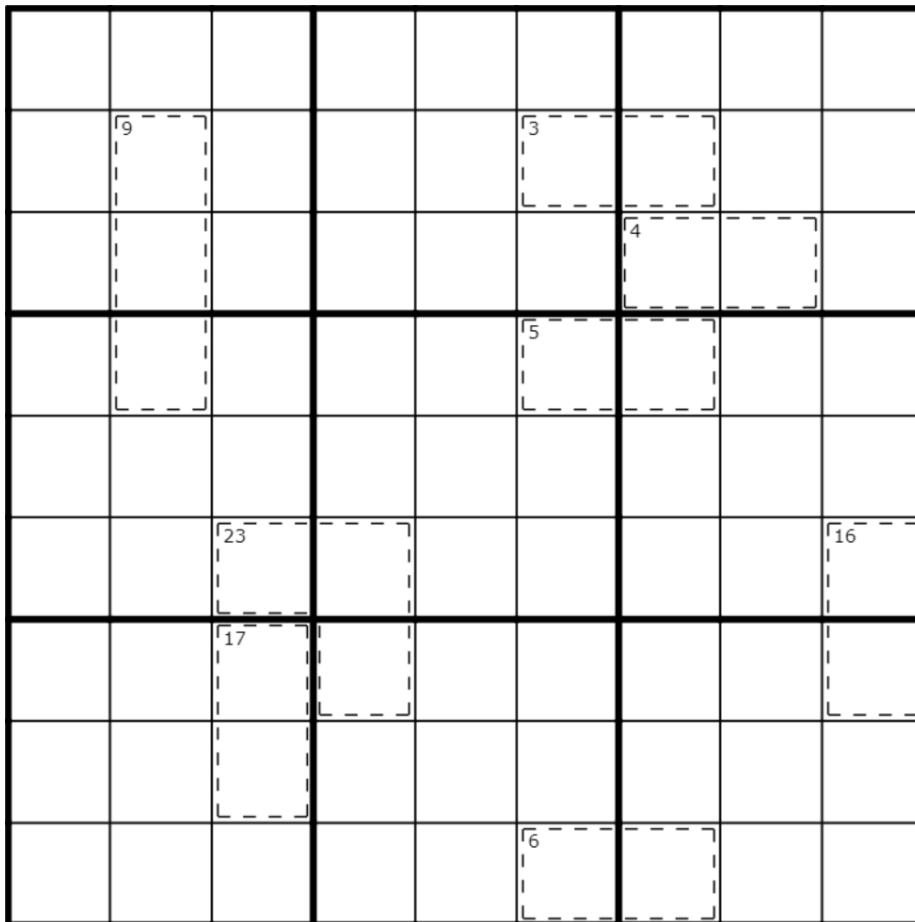
Normal sudoku rules apply. Digits cannot repeat in cages, and must sum to the total given. (And that's it!)

*Hang on... No, this is absolute... I almost swore there. This is absolutely not possible.*

(Not only is this one possible, it's Genuinely Approachable!)

*I'll do the usual thing, I'll spend a couple of minutes looking at this, in hope rather than expectation...*

Setter's note: This sudoku is based on another much tougher, and equally minimal, killer cage sudoku, also by Philip! Check it out here: <https://www.youtube.com/watch?v=ejhtYYvUs5M>



f-puzzles: <https://f-puzzles.com/?id=yg87d92b>

CtC: <https://tinyurl.com/8zznmdcs>



## July 23, 2021: Search Nine

Clover

### MISSING : REWARD

LOST: a nine (9). Missing since July 23 - Answers to *9, nine, negen, 九, sembilan, three squared*. If found, please text +001 (402) 200-5266 for a reward!

Setter's note: if you texted the above phone number on the day this GAS was posted, you'd receive a mysterious bonus puzzle (reproduced on the next page). Texting it now probably won't work; it's just here for historical purposes!

In this **search nine sudoku**, standard sudoku rules apply. Also, digits in arrow cells tell you how far it is to the digit 9 in that direction. For instance, if a 1 appears in an arrow cell, there will be a 9 immediately next to that cell, in the direction the arrow is pointing. If a 2 appears in an arrow cell, there will be a 9 two steps away, and so on.

1		↓				↓		5
3		↓				↓		7
5				→				9
	5		→					
		←				←		
					←			
			↑		6			
			↑	5	↑			
	↑	↑	4		↑	↑	↑	

f-puzzles: <https://f-puzzles.com/?id=yzcr66ch>

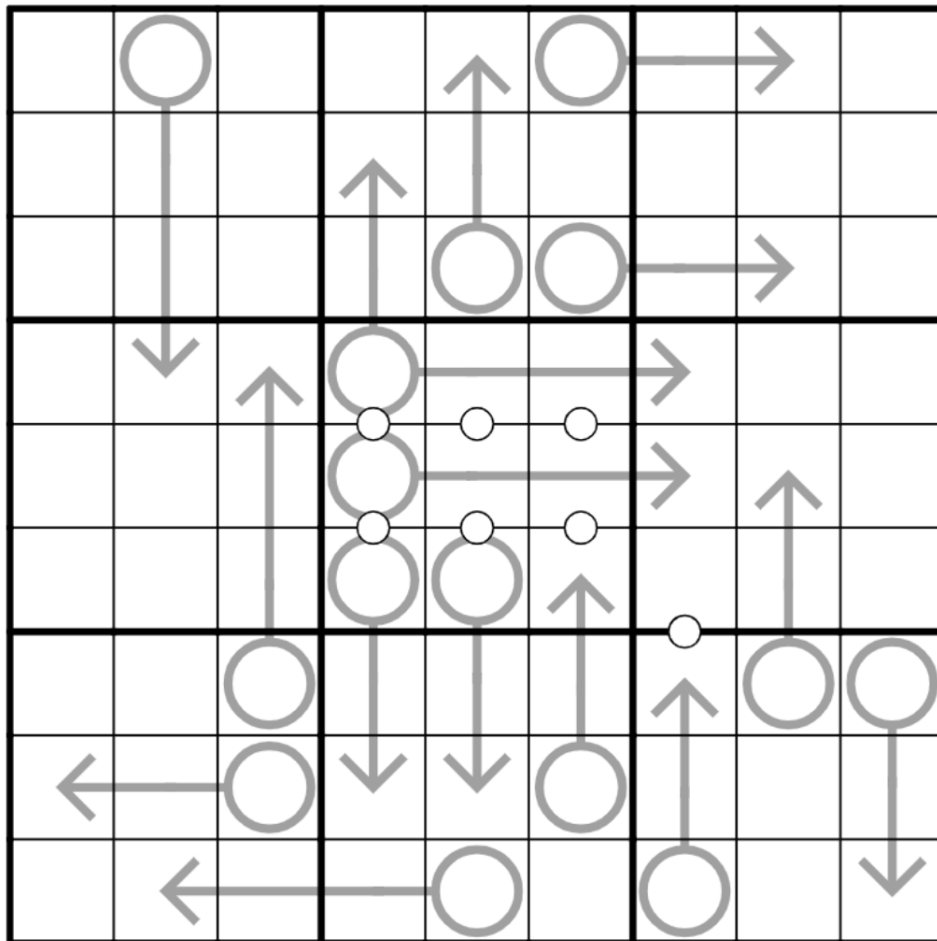
CtC: <https://tinyurl.com/bxnsbvsx>

# July 23, 2021: Mysterious Bonus Sudoku

Clover

Normal sudoku rules apply. Digits on either side of a white dot are consecutive. Digits along an arrow sum to the value in the adjoining circle.

Setter's note: Don't be alarmed! This puzzle was a special bonus and is a bit harder than most GAS puzzles.



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

## July 24, 2021: Consecutive Circles

Sam Cappleman-Lynes

Thanks for your help in finding our missing 9 yesterday. It's safe and well and receiving some much-needed TLC. Please speak to Clover about claiming your reward.

Today's GAS continues my pattern of introducing variants that I don't believe have been seen on this server before with this Consecutive Circles Sudoku. Normal Sudoku rules apply, and for each of the circles in the grid, the cells it passes through must contain a sequence of consecutive digits in order - the start point and direction must be determined.

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

CtC: <https://app.crackingthecryptic.com/sudoku/j7qqn66P3L>

## July 25, 2021: Youthful Squares

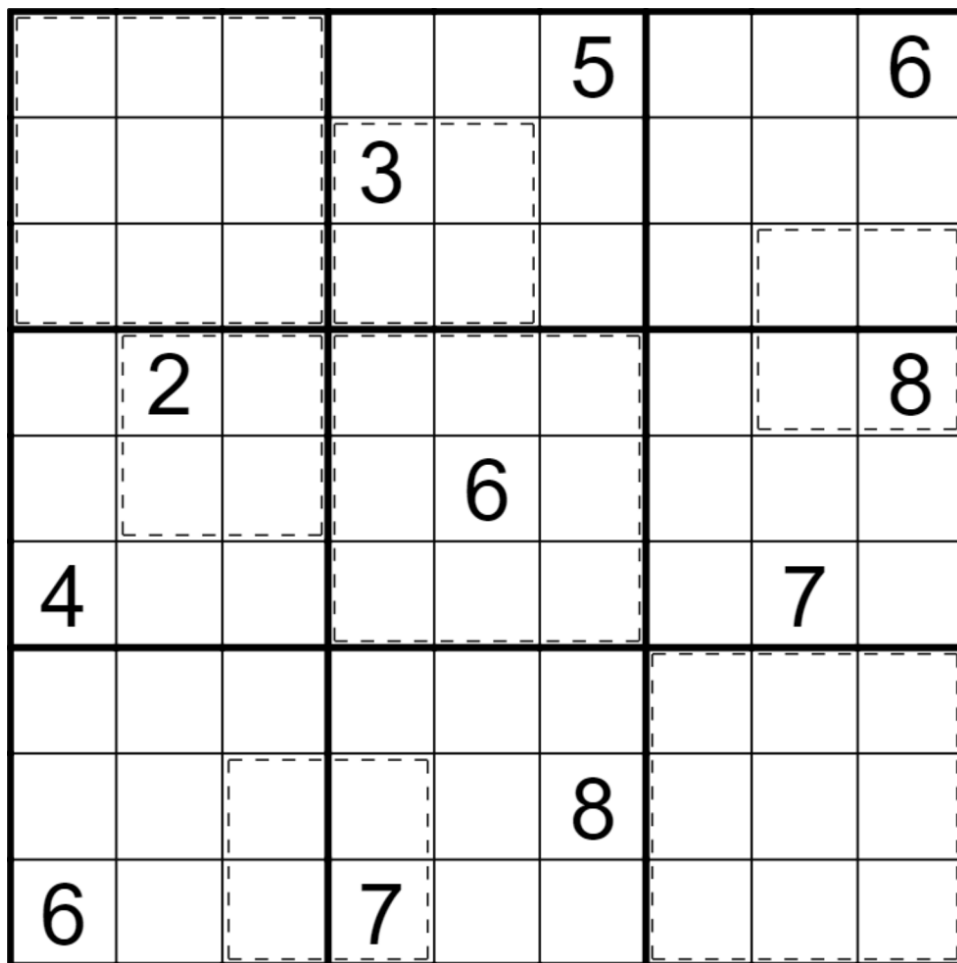
Philip Newman

Do some variants leave you feeling like you're running in circles? Do you yearn for a simpler time, when the only shapes in your sudoku were squares? Do you need a third rhetorical question for this intro to feel complete? There's hope... Ask your doctor whether Young Tableaux GAS is right for you.

Normal sudoku rules apply. Within cages digits cannot repeat, and must increase from left to right (in rows) and top to bottom (in columns).

(This variant was recently introduced by Tharn; check out Simon's solve of "Standard Young Tableaux" if you haven't already! <https://www.youtube.com/watch?v=WPAj-Qget-4> )

*Young Tableaux Sudoku. From the makers of One-a-Day GAS Extended Release and Tatoonie Fish Oil. Because you're worth it.*



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

CtC: <https://tinyurl.com/edvrt976>

## July 26, 2021: Consecutive Pairrow

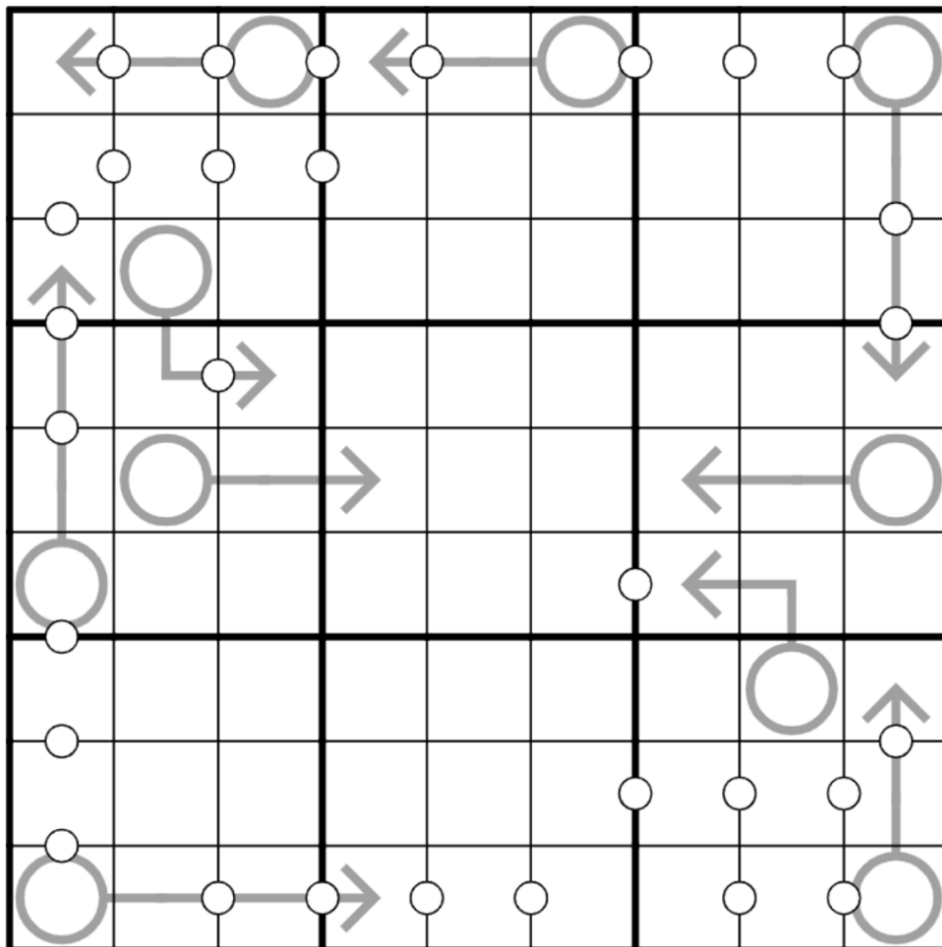
Clover

When you mix jeans and leggings, you get jeggings. When you mix a Labrador and a noodle, you get a Labradoodle. When you mix a fish and a duck, you get ██████████.

And when you mix a pear and a sparrow - no, sorry, when you mix a pair of wheelbarrows - no no no, what I mean to say is, *consecutive pairs and arrows* - you get today's GAS, a **consec-pairrow sudoku**.

*If it's not called this I riot.* - Philip

Normal sudoku rules apply. Digits along an arrow sum to the value in the adjoining circle. Digits on either side of a white dot must be consecutive (not all white dots are given).



f-puzzles: <https://f-puzzles.com/?id=yfk3atnu>

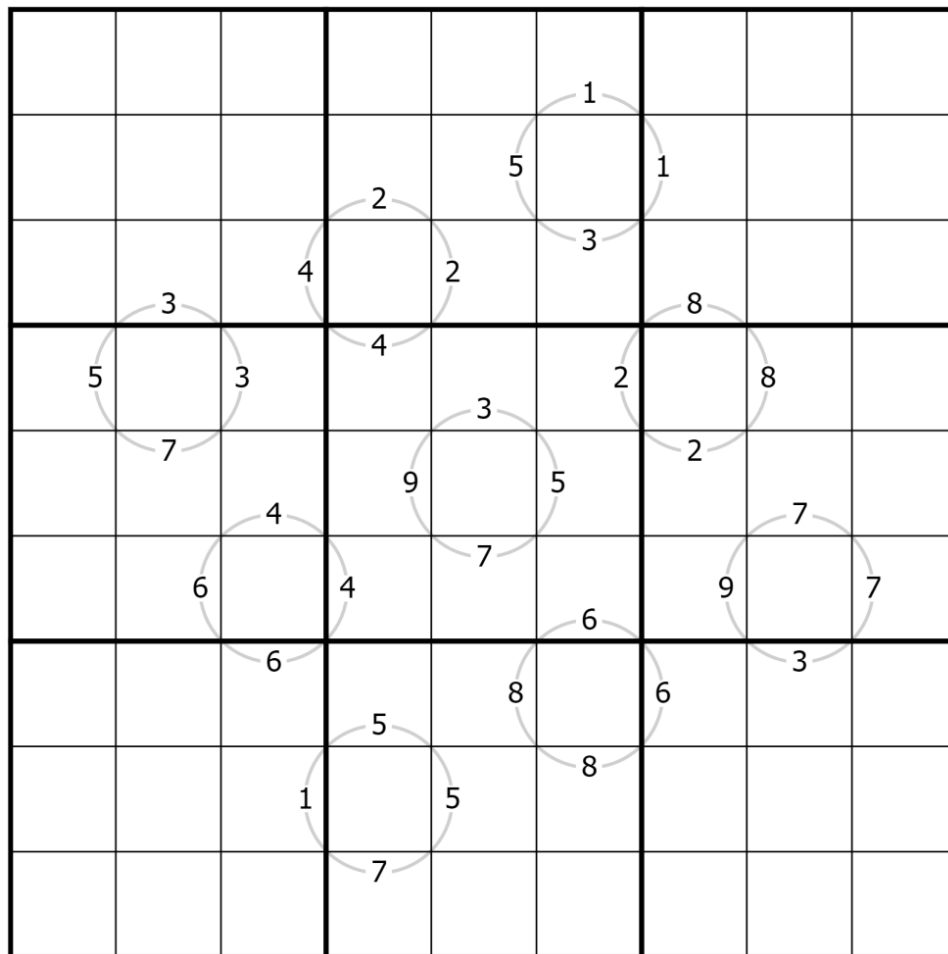
CtC: <https://tinyurl.com/3ydkdrv>

**July 27, 2021: Wheel**  
 Sam Cappleman-Lynes

You spin me right round, baby, right round, like a record, baby, right round, round, round...

Let's hope you all manage to get into the groove while solving today's GAS. I've dug up another uncommon variant for you to try your hand at and today's puzzle is a Wheel Sudoku. Normal Sudoku rules apply, and in addition, each of the circles in the grid (passing through four cells) is marked with the right digits in the right order - but you might need to rotate each wheel into a different position first.

Note for new solvers: be careful! The circles can't be flipped horizontally or vertically, although they can be rotated clockwise or counterclockwise.



CtC: <https://app.crackingthecryptic.com/sudoku/4r2BpLTLNG>

## July 28, 2021: Begun It Has

Philip Newman

Do you ever want to just stay in bed in the morning and let someone else fix breakfast for the kids? Need a ping pong opponent who is perfectly matched to your skill level? Have too much to do at work and wish you could clone yourself to get it done in half the time (or less)?

This Clone Sudoku won't help with any of that. But it is Genuinely Approachable, so there's that.

Normal sudoku rules apply. Blue/caged regions are clones of each other (must contain the same digits in the same order).

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

f-puzzles: <https://f-puzzles.com/?id=yeb89yqt>

CtC: <https://tinyurl.com/nk6ctb7w>

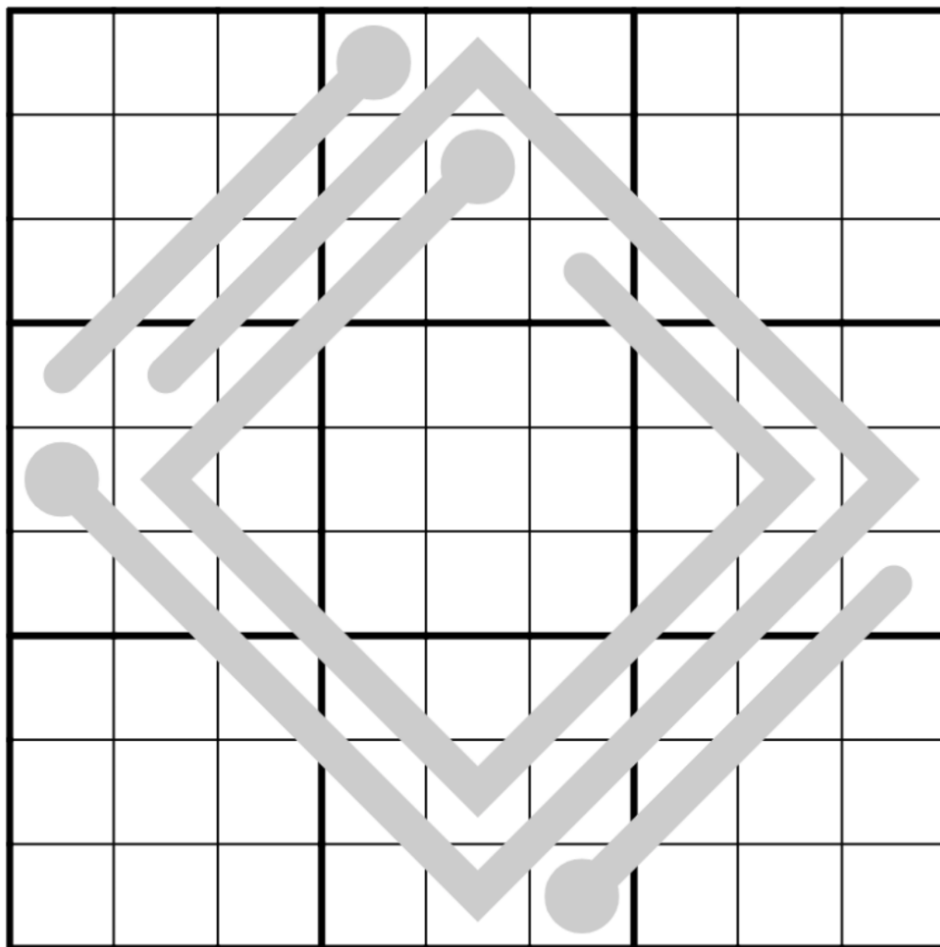
## July 29, 2021: Slow Thermo

Clover

Please look directly into the GAS. Relax and allow your mind to wander. If you find yourself becoming distracted, simply return your attention to the GAS.

You are starting to feel very sleepy. In a moment, you will hear me snap my fingers, and you will enter a state of heightened sudoku solving.

You will enter the digits 1 through 9 into the grid, so that each row, column, and 3x3 box contains each digit exactly once. Digits along each slow thermometer will never decrease (starting from the circular bulb end), but may repeat, as long as they follow other sudoku rules. For instance a slow thermometer could contain the digits 3 3 3 5 6 6 8 9 9, in that order.



f-puzzles: <https://f-puzzles.com/?id=ygqa5x9w>

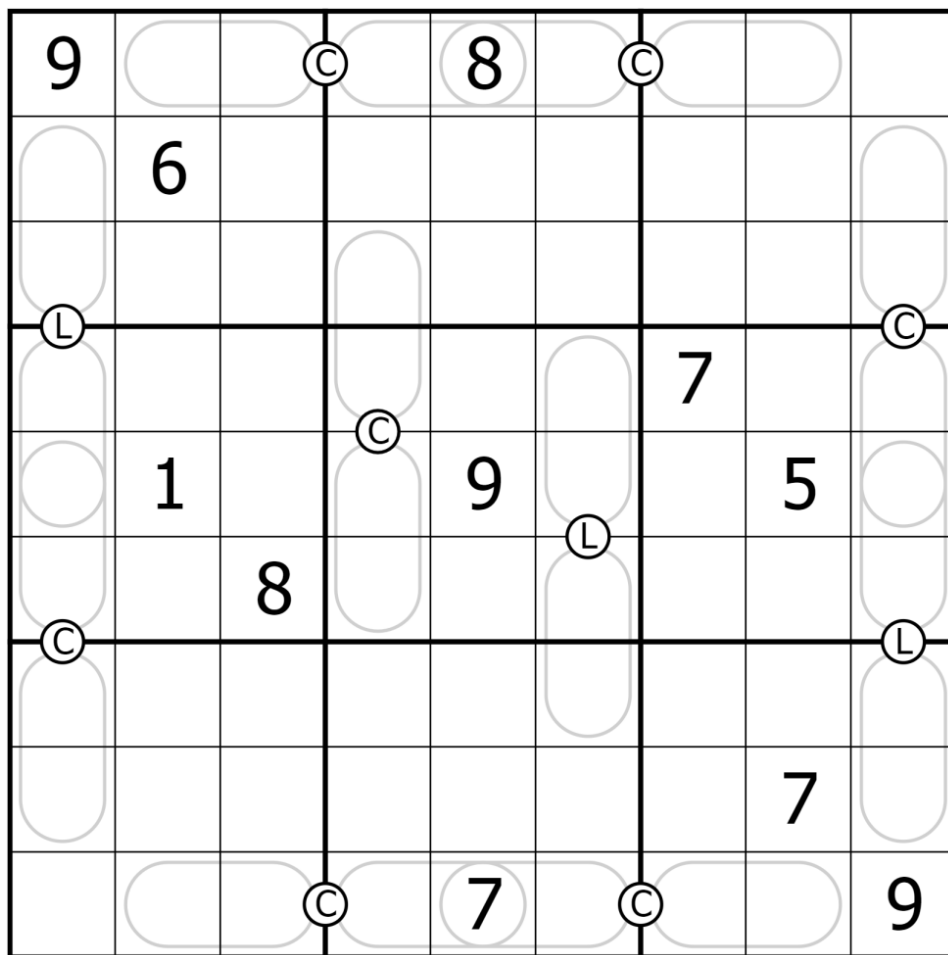
CtC: <https://tinyurl.com/2rjfkdva>



**July 30, 2021: CL**  
Sam Cappleman-Lynes

After Clover's little stunt with the hypnosis yesterday, I felt the need to massage my own ego a little, so I've themed today's GAS around me! You may have heard of XV Sudoku, but what you may not have noticed is that the initials of my surname are two far superior Roman numerals, representing 100 and 50 respectively.

In this CL Sudoku, normal Sudoku rules apply, and additionally, the two-digit numbers either side of a C must sum to 100 and those either side of an L must sum to 50. There is no negative constraint.



f-puzzles (no pills): <https://f-puzzles.com/?id=yf9qhec5>

CtC (with pills): <https://app.crackingthecryptic.com/sudoku/Q43b3PtDDR>

## July 31, 2021: Stroking My Ego

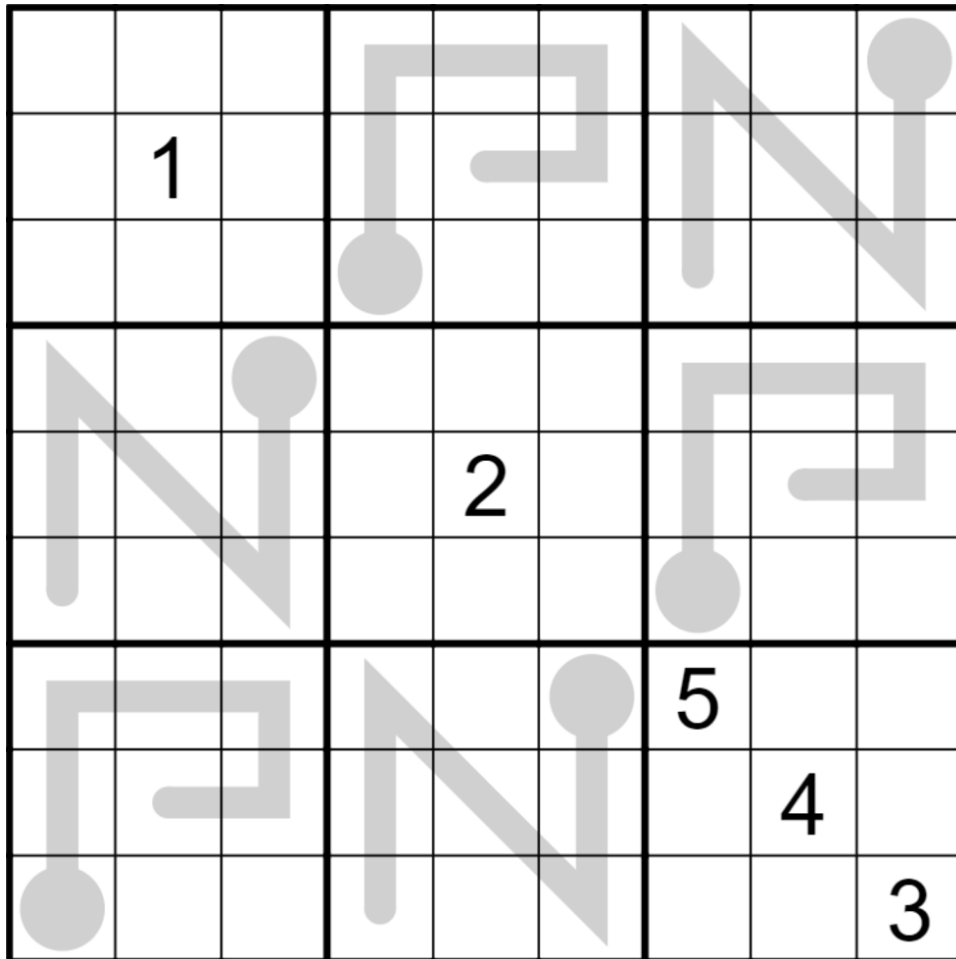
Philip Newman

I just want to apologize for the shenanigans of my fellow setters the past couple days. Trying to hypnotize you into playing favorites? Putting initials into a puzzle? I would never stoop to such tactics. All I'm here for is to give you a nice enjoyable GAS, and to make you feel good, not myself.

Hopefully the actions of Clover and Sam haven't caused my subconscious to do something so selfish. You'll let me know if anything untoward has slipped through, won't you?

Today's puzzle is a Thermo Sudoku! We've done a few of these, but as a reminder:

Normal sudoku rules apply. Digits along thermometers must increase from bulb to tip.



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

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

## August 1, 2021: Consecutive Pairs

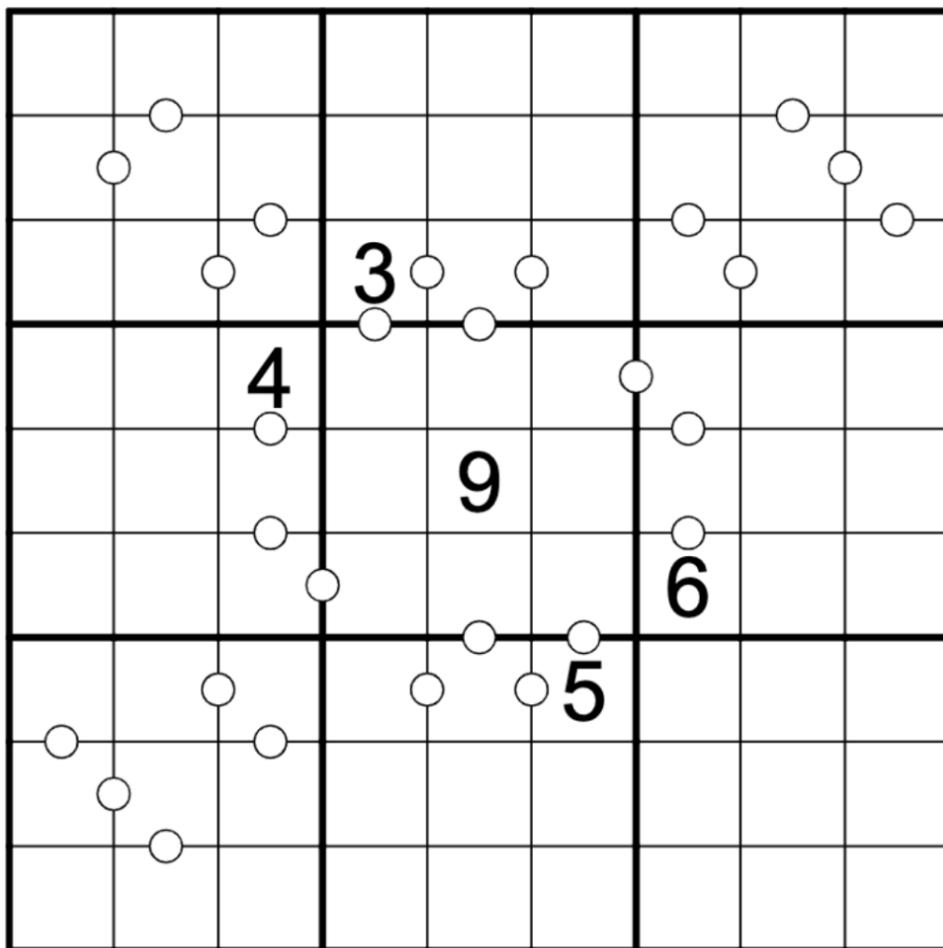
Clover

Setter's note: this GAS involved a channel-wide game of 'name as many unique pairs of objects as possible.' It's finished now, but I've left the original text here!

Good morning, friends! Today, you have a rare chance to earn a bonus hat for your bonus head!

First step: solve this nice approachable consecutive pairs sudoku. Normal sudoku rules apply. Also, the digits on either side of a white dot must be consecutive. Not all possible dots are necessarily given.

Next, when you post your result, name something that comes in pairs for one bonus hat. No repeats allowed! If you name something that's been named by a previous solver, you get a bonus nothing instead of a bonus hat. Sorry, I don't make the rules. *Wait...*



f-puzzles: <https://f-puzzles.com/?id=yfco729t>

CtC: <https://tinyurl.com/3zv9utxv>

## August 2, 2021: Outside

Sam Cappleman-Lynes

It's the height of summer (sorry, southern friends) and you're all sat in here doing puzzles! I can't say I blame you, I do the same. But why not make the most of the summer weather and solve this Sudoku Outside?

*\*checks notes\**

Oh. My mistake. Slight mix-up there. Let's try again...

Why not solve this Outside Sudoku? Normal Sudoku rules apply, and each digit that appears outside the grid must be placed somewhere in the first three cells in the corresponding direction.

	78	34	56	369	147	258	23	56	78	
23										89
45										67
67										12
789										456
123										789
456										123
34										56
56										78
78										23
	45	67	89	258	369	147	67	12	45	

f-puzzles: <https://f-puzzles.com/?id=ygd8uwm9>

CtC: <https://tinyurl.com/24ktt57x>

**August 3, 2021: 129 Snowflake**

Philip Newman

It's Christmas in July!

*Psst, it's not July any more, dummy.*

Well, it would have been had I not been hypnotized into posting that thermo on Saturday...

Today's GAS is a Classic Sudoku. Normal sudoku rules apply. And that's it!

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

f-puzzles: <https://f-puzzles.com/?id=yg4wek2a>

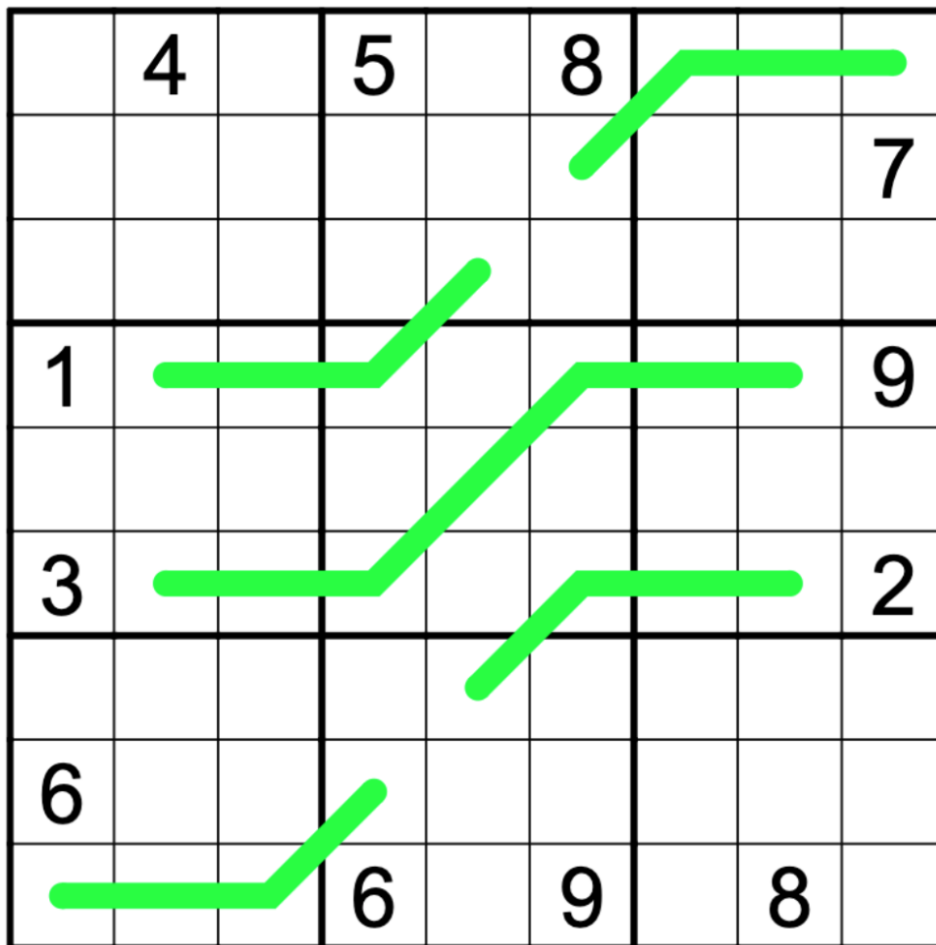
CtC: <https://tinyurl.com/zdevva6w>

## August 4, 2021: Creasing

Clover

You might be overwhelmed by this GAS. Or you might be underwhelmed. Or more likely, you'll just be whelmed. It's not an increasing sudoku, and it's not a decreasing sudoku, it's just a creasing sudoku.

Normal sudoku rules apply. Also, each green line works like a thermometer: the digits increase along the line, going from one end of the line to the other. However, you have to figure out which end is the low end and which is the high end. Don't get too plussed or grunted - this sudoku is really quite ruly and sensical!



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

CtC: <https://tinyurl.com/43m73m9x>

## August 5, 2021: Round Off

Sam Cappleman-Lynes

Do you struggle with mathematical variants? Does the very thought of having to use arithmetic to solve your puzzle bring you out in a cold sweat? Well then I have the puzzle for you!

In my considered opinion, the problem with maths is that there are just too many numbers. And as any schoolchild will tell you, the easiest numbers are the multiples of 10. And so, in this puzzle, those are the only numbers that are allowed to appear. Any non-compliant numbers will be dealt with in an unforgiving and brutal manner.

In this Round Off Sudoku, normal Sudoku rules apply. Additionally, cages show you the result of rounding the two-digit number that they contain (read left-to-right or top-to-bottom) to the nearest multiple of 10. If a number ends in 5, it is rounded up.

10				60			20	
60	80			40		80		70
30		40			90		70	
30				40				30
	90					90		
				60				
40							30	

f-puzzles: <https://f-puzzles.com/?id=yhuxu9nl>

CtC: <https://tinyurl.com/pc8c2cw7>

### Bonus 1: Hats Wearing Dinos

Philip Newman

Normal sudoku rules apply. Connected regions of grey cells contain the digits 1-9 once each. Green cells are "friendly" - the digit in a green cell matches the number of the row (counting top to bottom), the column (counting left to right), or the box (box 1 is top left, box 2 is top middle, etc.).

3						6		4
				9				
				7				
				2				
5		1						8

f-puzzles: <https://f-puzzles.com/?id=ygw2frkz>

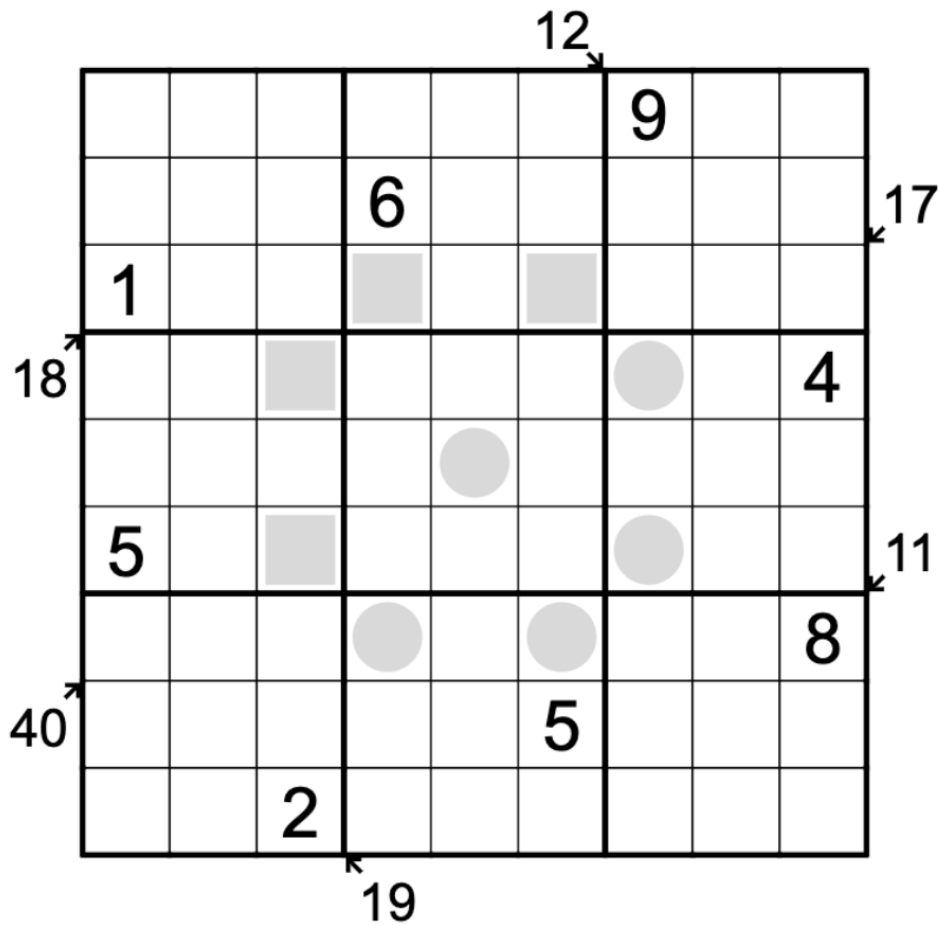
CtC: <https://tinyurl.com/5aejndjj>



## Bonus 2: Odd/Even Little Killer

Clover

Normal sudoku rules apply. Grey circles must contain odd digits, and grey squares must contain even digits. Digits along a marked diagonal must sum to the value indicated. Digits along a diagonal may repeat as long as they obey all other rules.



f-puzzles: <https://tinyurl.com/225ecjt4>

CtC: <https://tinyurl.com/4rb3v4td>

### Bonus 3: Podium

Sam Cappleman-Lynes

Normal Sudoku rules apply. Digits on each podium must strictly increase in the order bronze (bottom-right), silver (bottom-left), gold (top). The digit on the base of each podium plays no role.

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

CtC: <https://app.crackingthecryptic.com/sudoku/3HfTmRh6m9>

# Time Benchmarks

	One party hat	Two party hats	Today's dinosaur:
July 17	15:00	9:30	old-fashioned opisthocoelicaudia
July 18	15:00	9:30	linear lambeosaurus
July 19	13:00	7:00	immunized isisaurus
July 20	9:00	5:30	oddball ostafrikasaurus
July 21	16:00	10:00	overheating oviraptor
July 22	14:00	7:00	minimal malawisaurus
July 23	13:00	7:30	concealed camptosaurus
July 24	9:00	5:30	circular carnotaurus
July 25	12:00	6:30	young yunnanosaurus
July 26	11:00	6:00	tongue-tied tyrannoceratops
July 27	14:00	9:00	spinning saurolophus
July 28	13:00	7:00	duplicated dicraeosaurus
July 29	12:30	7:00	hypnotized harpymimus
July 30	12:00	7:30	egotistical elaphrosaurus
July 31	10:00	5:00	philosophical phuwiangosaurus
August 1	13:00	7:30	consecutive carcharodontosaurus
August 2	9:00	5:00	sunbathing scelidosaurus
August 3	14:00	7:00	august amargasaurus
August 4	14:00	8:00	effable eustrepsodylus
August 5	15:00	9:00	approximate aragosaurus