

# **GAS Leak**

Genuinely Approachable Sudoku from the CtC Discord

Volume 20:

August 27 - September 30, 2022



The days are growing shorter and the evenings are growing chillier. Let's get cozy with more than a month's worth of GAS in this edition of GAS Leak! This one contains the puzzles from the final week of August - set by our friends from the GAPP team - plus all of September and a hearty serving of bonus puzzles. As always, you'll find a table of dinosaur names and time standards at the end of this document. Enjoy!

*Clover*

## August 27, 2022: Sudoku X

jovi\_al

Good now, everyone! Now that we've finished Alphabetical August we've done ourselves a silly little swap again! Feels good to stretch my legs again back in the GAS house, and they seem to have left the place nice and tidy! Hopefully I don't mess it up too bad.

Okay, enough dilly dally. Today's puzzle is a Sudoku X! Rules: Normal Sudoku rules apply. The two principal diagonals (marked) must contain the digits 1-9.

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

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

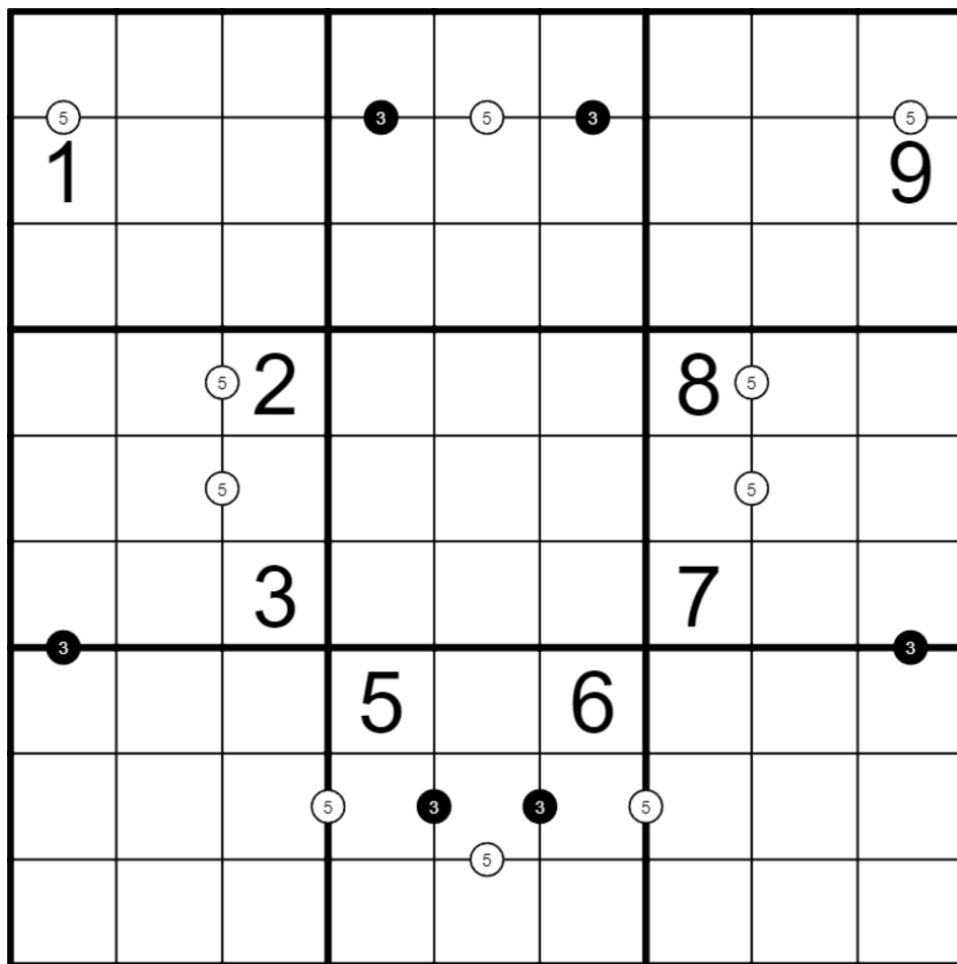
CtC: <https://tinyurl.com/ywrwyvpf>

## August 28, 2022: Gamma and Epsilon

Tyrgannus

Today's variant is one that GAS has covered before which made me very happy. I can claim no creation over any combination of ratio and difference, but I CAN say I named this particular combination which was chosen since one can get all digits 1-9 without any givens. There are givens in this puzzle since I was told GAS meant approachable 😊, but I am proud to present a puzzle that's so near and dear to me 😊

Today's GAS is a Gamma and Epsilon Sudoku! Rules: Normal sudoku rules apply. Cells separated by a black dot have a 1:3 ratio. Cells separated by a white dot have a difference of five. Not all dots are necessarily given. (No negative constraint)



F-puzzles: <https://f-puzzles.com/?id=2kaxq5tk>

CTC: <https://tinyurl.com/ykdhp9fy>

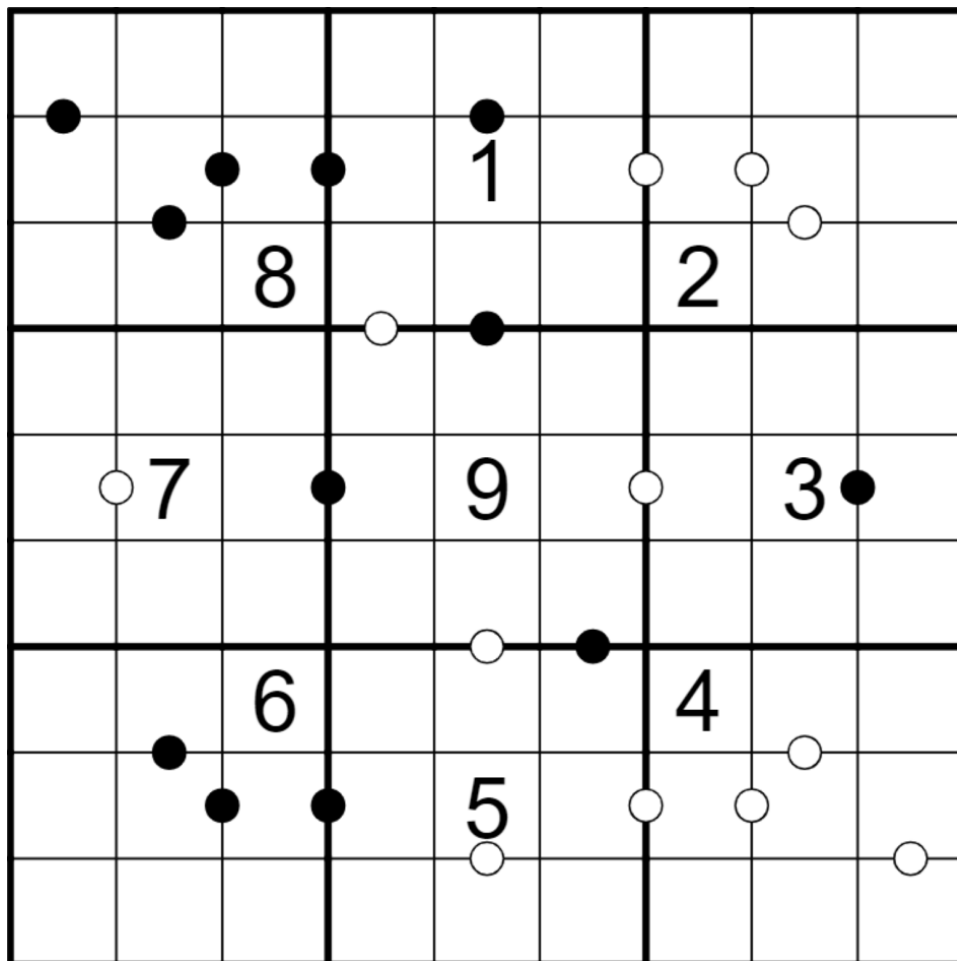
## August 29, 2022: Kropki Pairs

Freddie Hand

As a change from Tyrg's orthogonally reflectionally symmetric dots, today's dots are rotationally antisymmetric! I wonder if tomorrow's puzzle will be diagonally reflectionally asymmetric... wait, so is today's puzzle, and yesterday's... never mind.

Today's puzzle is an ~~Alpha and Beta Sudoku~~ a Kropki Pairs Sudoku!

Normal sudoku rules apply. Digits in cells separated by a white dot must be consecutive (have a difference of 1); digits in cells separated by a black dot must have a ratio of 2:1. (No negative constraint - other pairs of digits may also be consecutive or have a 2:1 ratio.)



Play on f-puzzles: <https://f-puzzles.com/?id=2eom2uqo>

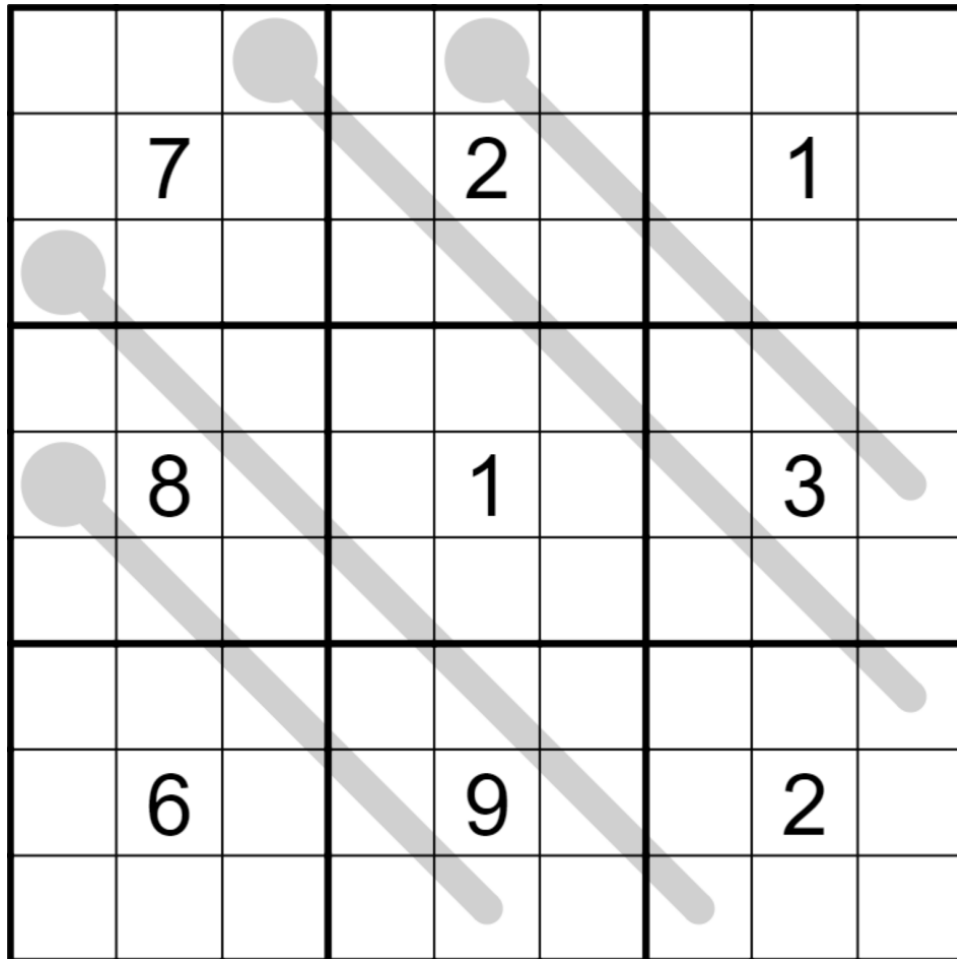
Play on CTC App: <https://tinyurl.com/2urndpps>

## August 30, 2022: Thermo

Eric Fox

Today's variant should be a familiar one: Thermo Sudoku!

Normal sudoku rules apply. Digits along a thermometer must increase (not necessarily consecutively), starting from the round bulb.



F-puzzles: <https://f-puzzles.com/?id=2zz6elfz>

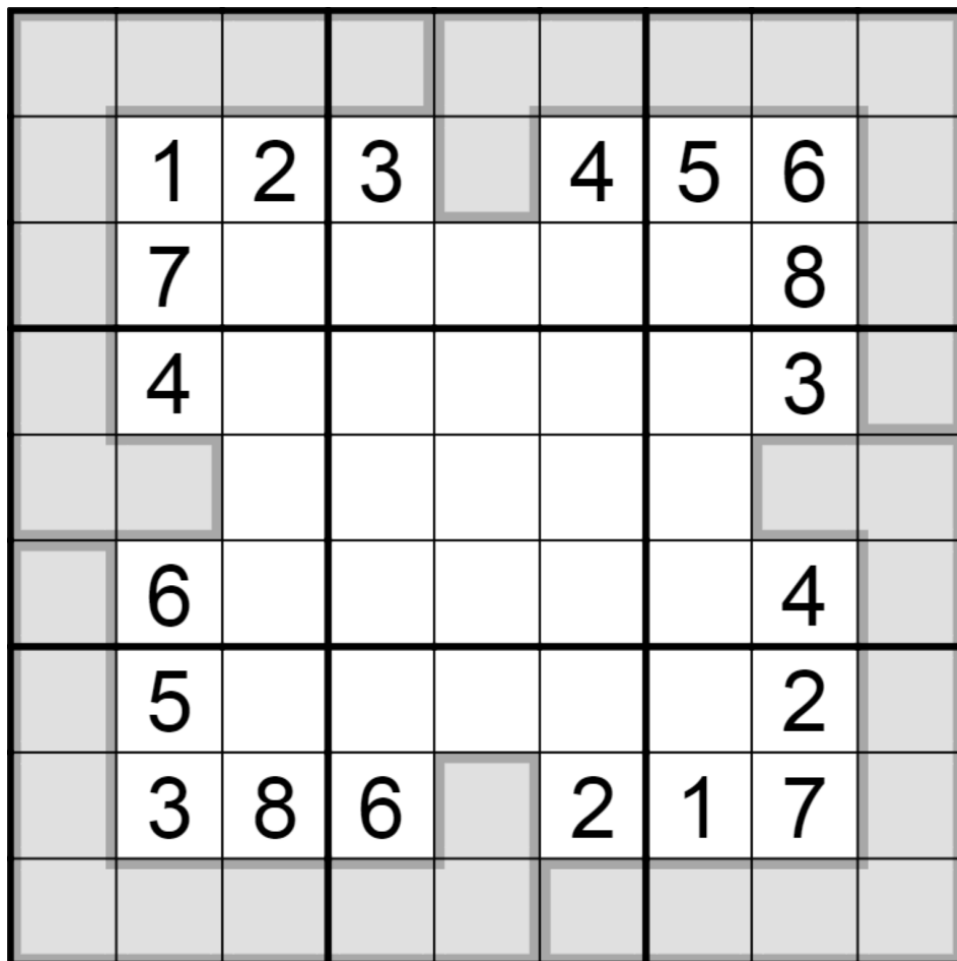
CTC: <https://tinyurl.com/5n8k3n3z>

## August 31, 2022: Extra Regions

shye

Hope you all had a fun August playing our guessing game, I'm the last surprise before you guys can settle back into the familiar comfort of the GAS pros.

Your regularly scheduled 'doku for today comes with Extra Regions! In addition to normal Sudoku rules, there are some outlined regions that each must also contain the digits 1 through 9



Solve on F-Puzzles: <https://f-puzzles.com/?id=2pxl9jme>

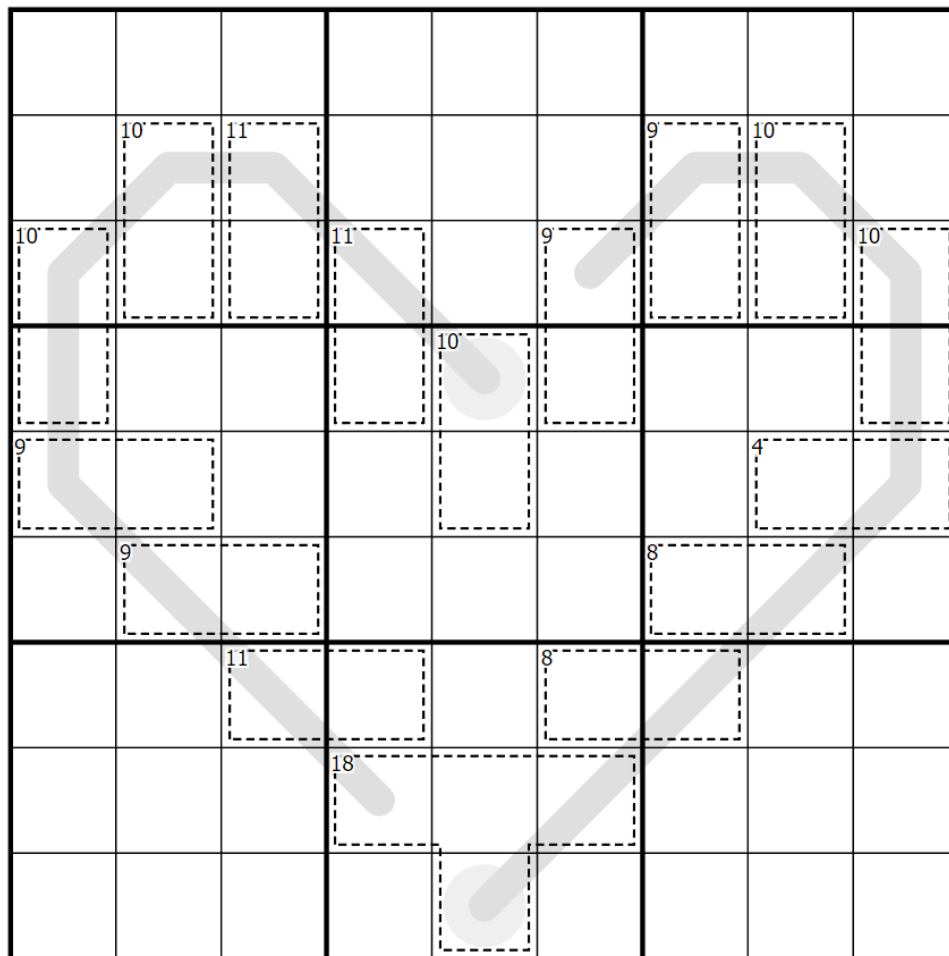
Solve on CTC app: <https://tinyurl.com/yh77mxka>

## September 1, 2022: GAS: Love and Thermos

Philip Newman

So sorry for the late posting today. Have you ever tried to book a last minute flight from GAPPland? And don't get me started on the weird layout of their airport. Give me the standard 9x9 layout of my gates, please.

Today's GAS is a Killer/Slow Thermo Sudoku! I set this a while ago, as you might have guessed from the layout... >\_> Normal sudoku rules apply. Digits in cages cannot repeat and must sum to the total given. Along slow thermometers, digits must not decrease going from bulb to tip. (Adjacent cells along a slow thermometer may contain the same digit, if allowed by other rules.)



*No f-puzzles link today! The cosmetics for the slow thermos cover up some of the cage totals.*

Play on CTC App: <https://tinyurl.com/ybf6mj9j>

Alternative CTC App Link: <https://bit.ly/3B6fjin>



## September 2, 2022: Classic Sudoku

Sam Cappleman-Lynes

After the mania of August, I thought it would be nice to return to our roots and have a nice calm Classic Sudoku today. Normal Sudoku rules apply - and that's it! Have fun solving 😊

For two party hats, solve this puzzle in 6:00 or less. For a single party hat, solve it in 11:00 or less. All other solvers will receive a relaxed richardoestesia 🦎

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

f-puzzles - <https://f-puzzles.com/?id=2of3zyqn>

CtC - <https://tinyurl.com/2w2w5dwa>

## September 3, 2022: Unicorn Sudoku

Clover

Today's GAS is a unicorn sudoku. I always try to do my research before creating a new GAS, and today, I've mined the internet for examples of the variant. Here are the results!

*7 And Unicorns Stole My Heart : Christmas Unicorn Sudoku Puzzle Book For 7 Year Old Girls - Easy Beginners Activity Puzzle Book For Those New To The Sudoku Puzzle Craze (Paperback)*

*Sudoku Unicorn Game: Sudoku help kids intelligence  
It provides ease in solving mathematics.  
Its contribution to brain development is great.*

*Unicorn is playing sudoku Essential T-Shirt:  
Do you love the number puzzle Sudoku? This unicorn too. If you are a fan of unicorns and Sudoku puzzles, then this design fits you perfectly.*

...nevermind, let's just see the puzzle.

Normal sudoku rules apply. For each 9 in the grid, every digit seen by that 9 by knight's move must be different. For instance, in this grid, r1c4 and r4c5 must be different, since they are both seen by the 9 in r2c6. (Note that a 9 may see another 9, as long as it doesn't see more than one of them.)

*The puzzle and solving links appear on the following page.*

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

f-puzzles: <https://f-puzzles.com/?id=2eg4lvox>

CtC: <https://tinyurl.com/c3fyx7yh>

## September 4, 2022: Two for One

Philip Newman

To make up for the horrifically late posting on Thursday, today I have two bonuses for you!

- ① Today's GAS, a Ratio Sudoku, is early! for me anyway
- ② Today's GAS, an X Sudoku, is also here! I know so many of you were disappointed by not getting an X Sudoku as a follow up to last month's V Sudoku...
- ③ Wait, a third bonus? That's right, I said I have two bonuses for you today... the third one is for later... >\_>

### Ratio

Normal sudoku rules apply. Digits in cells separated by a black dot must have a ratio of 2:1. (No negative constraint - other pairs of digits may also have a 2:1 ratio.)

### X

Normal sudoku rules apply. Digits in cells separated by an X must sum to 10. (No negative constraint - other pairs of digits may also sum to 10.)

*The puzzles and solving links appear on the following page.*

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

Ratio

Play on f-puzzles:

<https://f-puzzles.com/?id=2kvcj37z>

Play on CTC App:

<https://tinyurl.com/2pjh85jw>

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

X

Play on f-puzzles:

<https://f-puzzles.com/?id=2qu8jaa7>

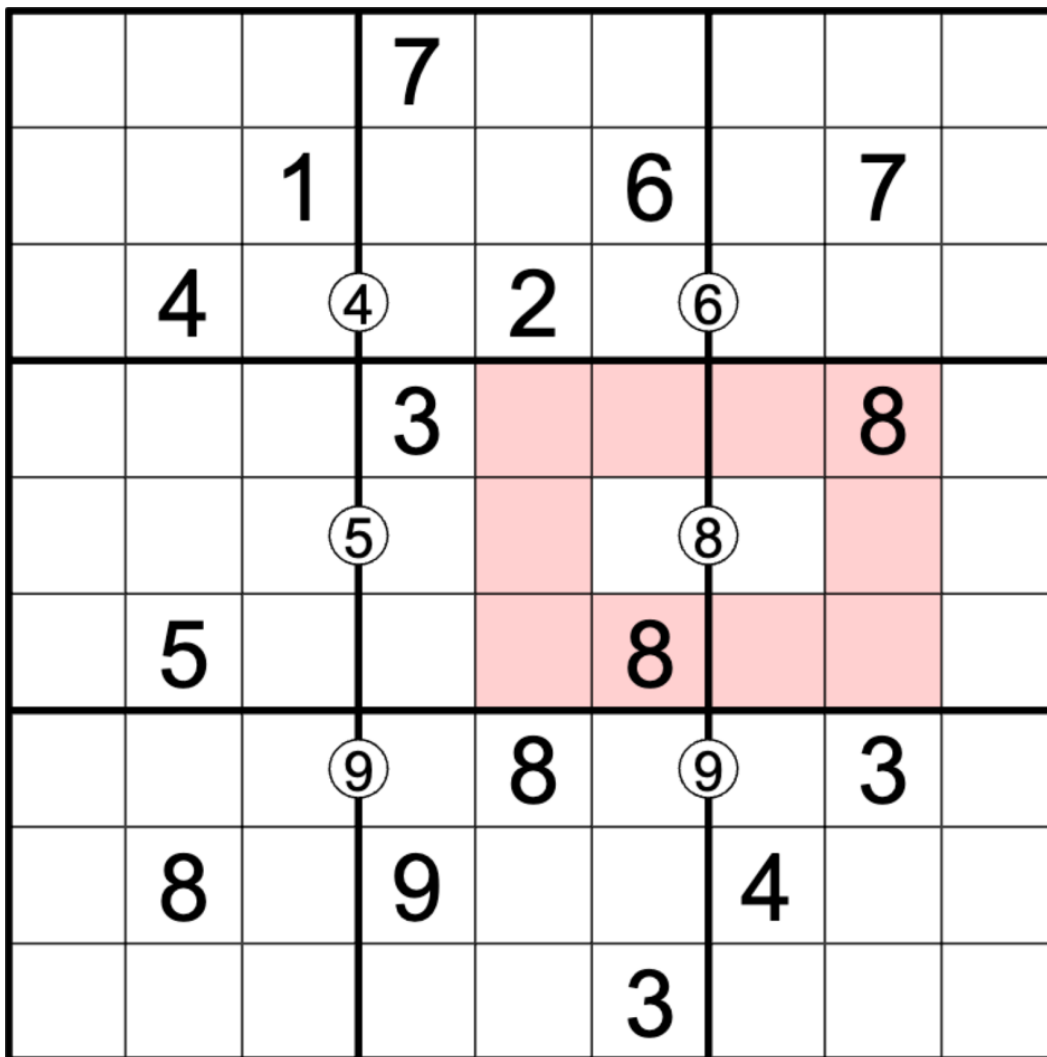
Play on CTC App:

<https://tinyurl.com/2a2fww9v>

## September 5, 2022: Count Different

Clover

Good morning, friends! I liked this puzzle so much, I put a ring on it. 💍 In today's **count different sudoku**, we count differently by skipping all of the numbers we don't like, like ~~7~~ and ~~4~~6 ahem. Normal sudoku rules apply. Also, if a white circle appears between two cells, the number in the circle tells you how many different digits appear in the surrounding ring of 10 cells. (An example "ring", surrounding the "8" domino, is highlighted in the image.)



f-puzzles: <https://f-puzzles.com/?id=2hd43ctw>

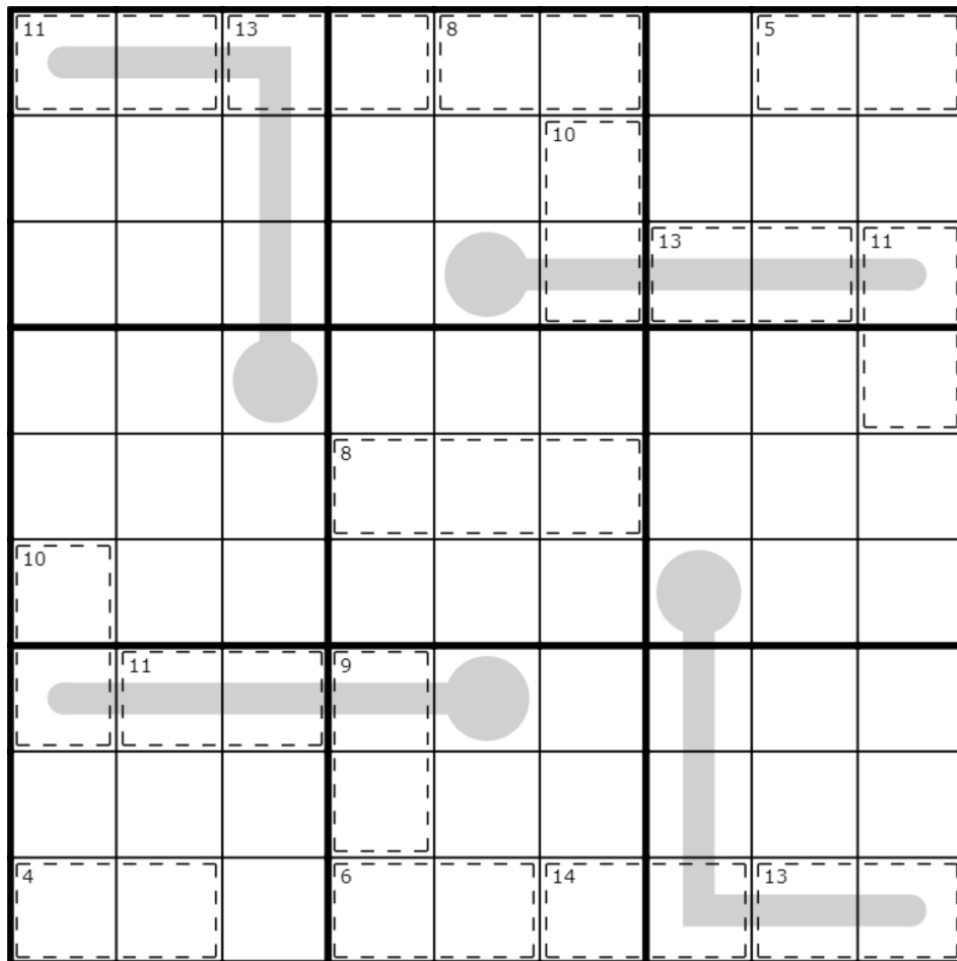
CtC: <https://tinyurl.com/4evm67rh>

## September 6, 2022: Killer Thermo

Sam Cappleman-Lynes

Good afternoon! Today's GAS is a Killer Thermo Sudoku, combining two of my favourite common variants 😊

Normal Sudoku rules apply. Numbers along thermometers must form an increasing sequence, starting at the bulb end. Numbers in cages must add up to the indicated total.



f-puzzles - <https://f-puzzles.com/?id=2gut4vwx>

CtC - <https://tinyurl.com/4h8b94mz>

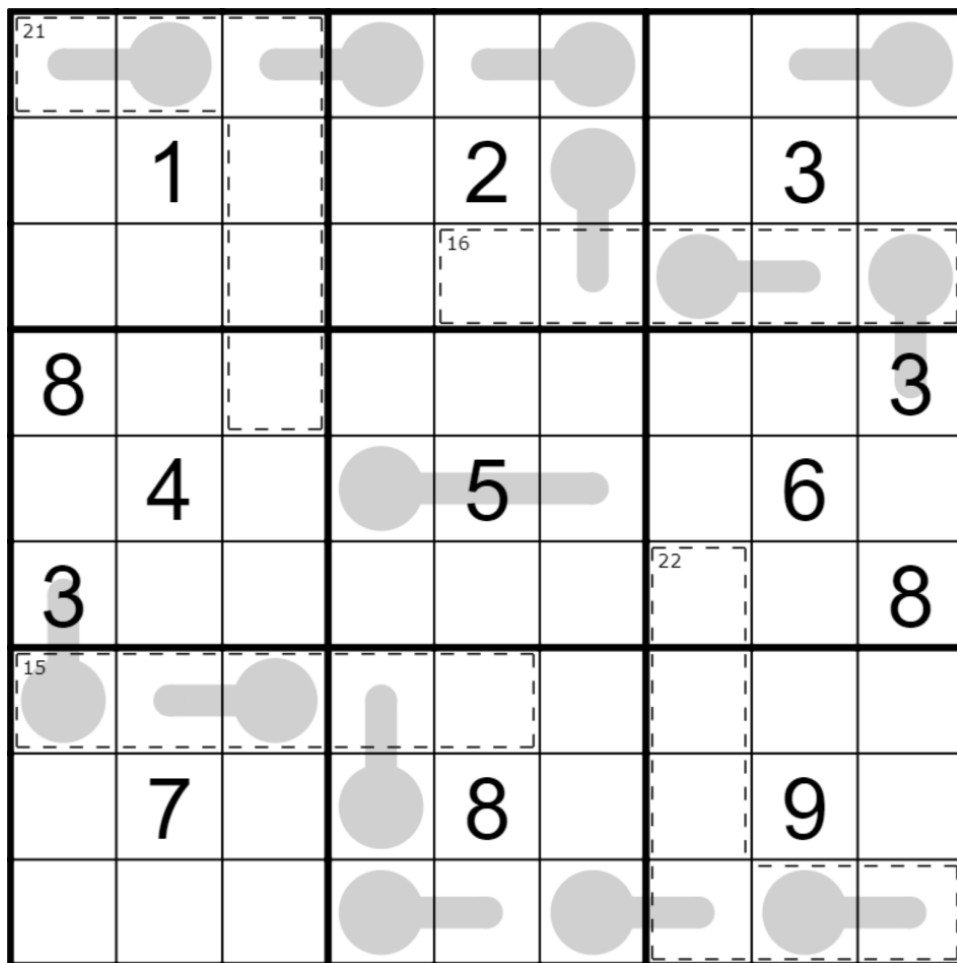
## September 7, 2022: Thermo Killer

Philip Newman

This was originally posted by “Sham Capplemon-Limes”, evil doppelgänger. The puzzle is an inversion of yesterday’s, with the placement of cages and thermos swapped.

Bad morning! Today’s GAS is a Thermo Killer (qu’est que c’est) Sudoku, combining two of your least favourite common variants.

Normal sudoku rules apply. Numbers in cages must add up to the indicated total, and cannot repeat. Numbers along thermometers must form an increasing sequence, starting at the bulb end.



f-puzzles - <https://f-puzzles.com/?id=2kqh7aeg>

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

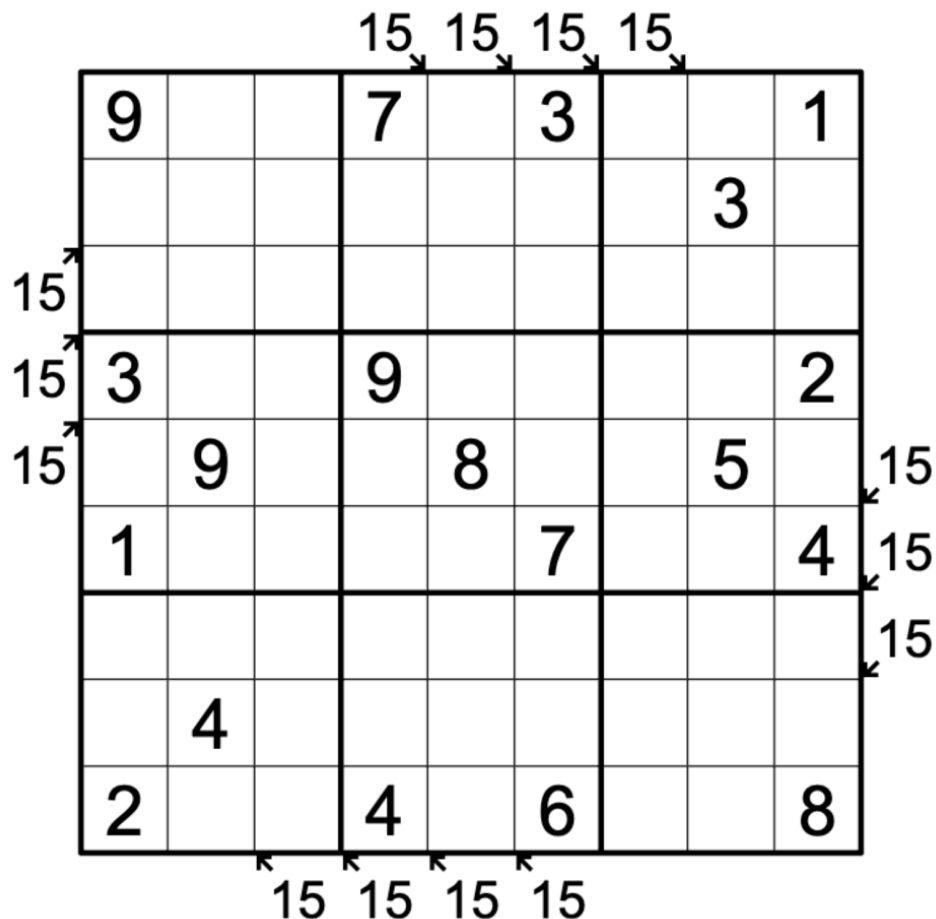


## September 8, 2022: Little Killer

Clover

Today's GAS hearkens back to a classic prank: get yourself three pigs, and label them One, Two, and Four. Release them in your school (or office, or prison). Sure, whoever's in charge of preventing fun will probably find the three pigs pretty quickly. But how long will they spend trying to figure out where pig number 3 is hiding? 🐷 🐷 🐷

I've conveniently labeled fourteen diagonals in this little killer sudoku as "15". Is there a fifteenth 15? I suppose you'll have to solve it to find out! Normal sudoku rules apply. Also, digits along a marked diagonal must sum to 15. Digits may repeat along a diagonal, as long as they follow sudoku rules.



f-puzzles: <https://f-puzzles.com/?id=2fhcg6by>

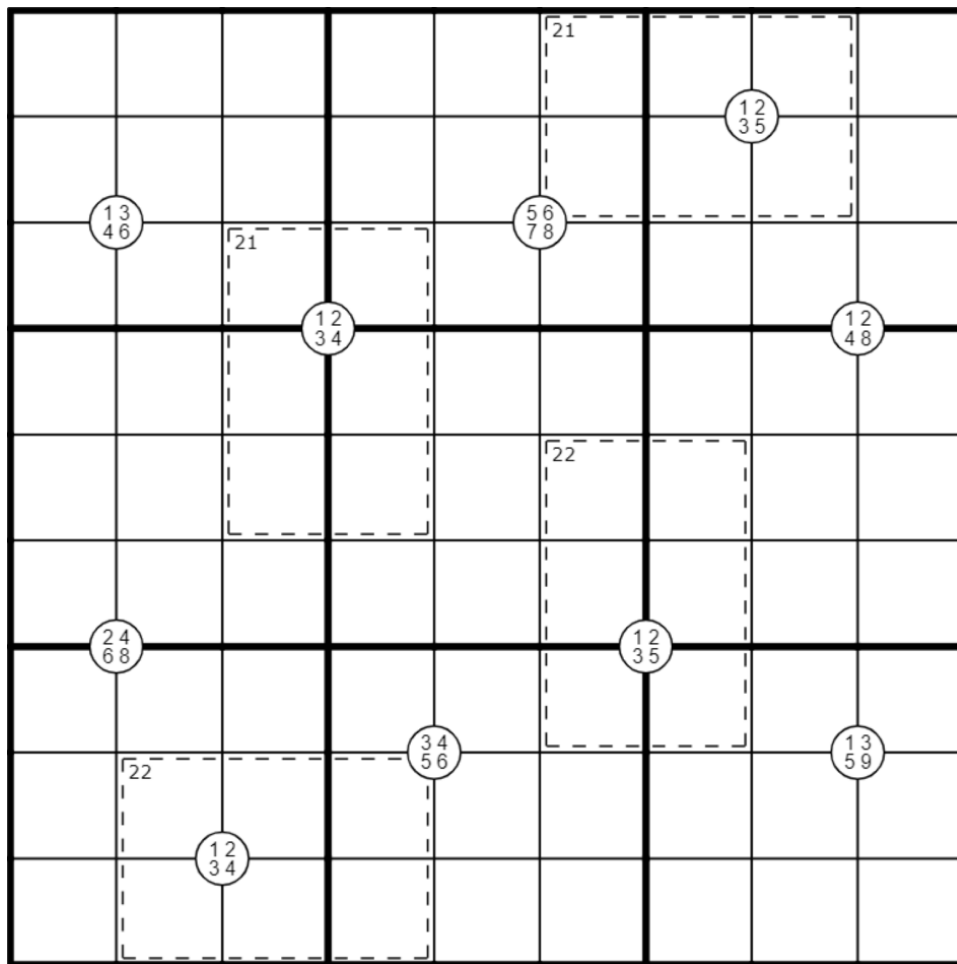
CtC: <https://tinyurl.com/3zpy2abd>

## September 9, 2022: Killer Quadruples

Sam Cappleman-Lynes

Today's GAS is not a Quadruple Killer, because that sounds like someone you really don't want to meet in a dark alley. No, it's much safer to call it a Killer Quadruples Sudoku. Well, maybe not much safer, but marginally better at least...

In this puzzle, normal Sudoku rules apply. Numbers in a cage cannot repeat and must add up to the given total. The numbers in a white circle must appear in the four cells around that circle.



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

CtC - <https://tinyurl.com/33xz86kx>

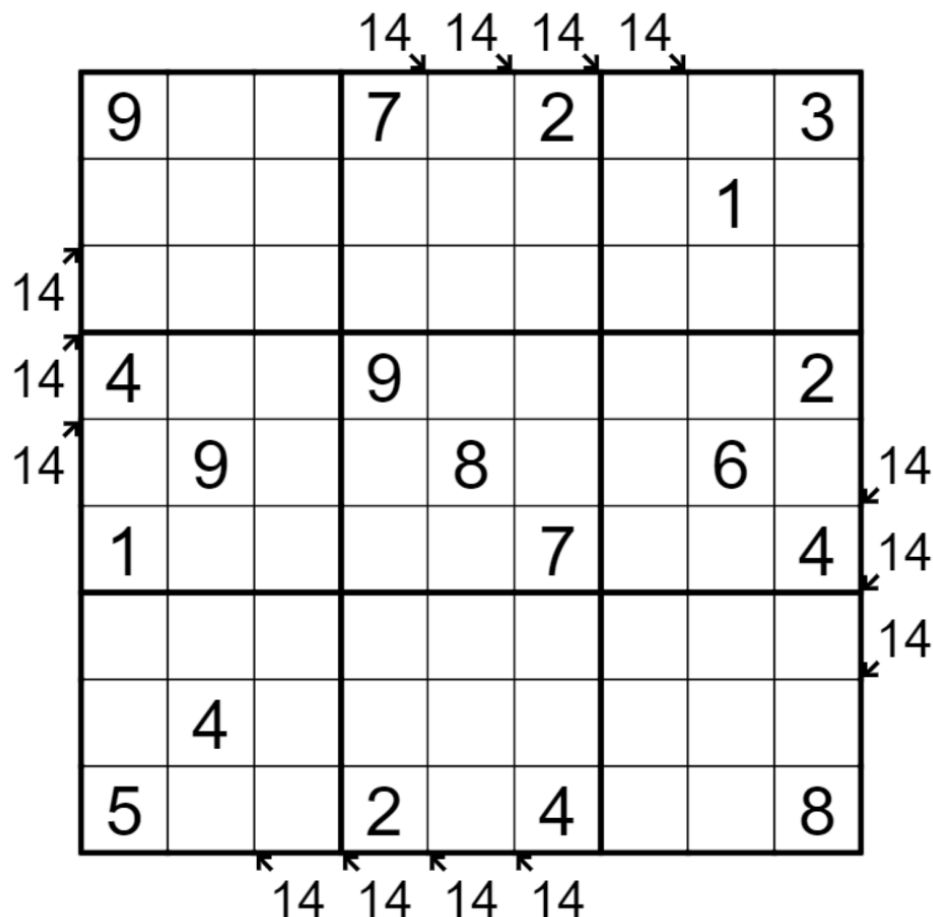
## September 10, 2022: The Countdown Killer

Philip Newman

The mystery of the missing 15 clue deepens! On Thursday, some nefarious fiend subtracted a clue from Clover's puzzle. Today, that same fiend has subtracted from all the remaining clues! Who is the killer?? Will we even follow up on this plot thread, despite not having any puzzles in testing that are remotely related? Does the title of the puzzle give away the killer, or is it just a red herring? Find out tomorrow, same GAS time (give or take a couple hours), same daily-sudoku-puzzles channel!

Today's GAS is a Little Killer Sudoku!

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



Play on f-puzzles: <https://f-puzzles.com/?id=2fusp822>

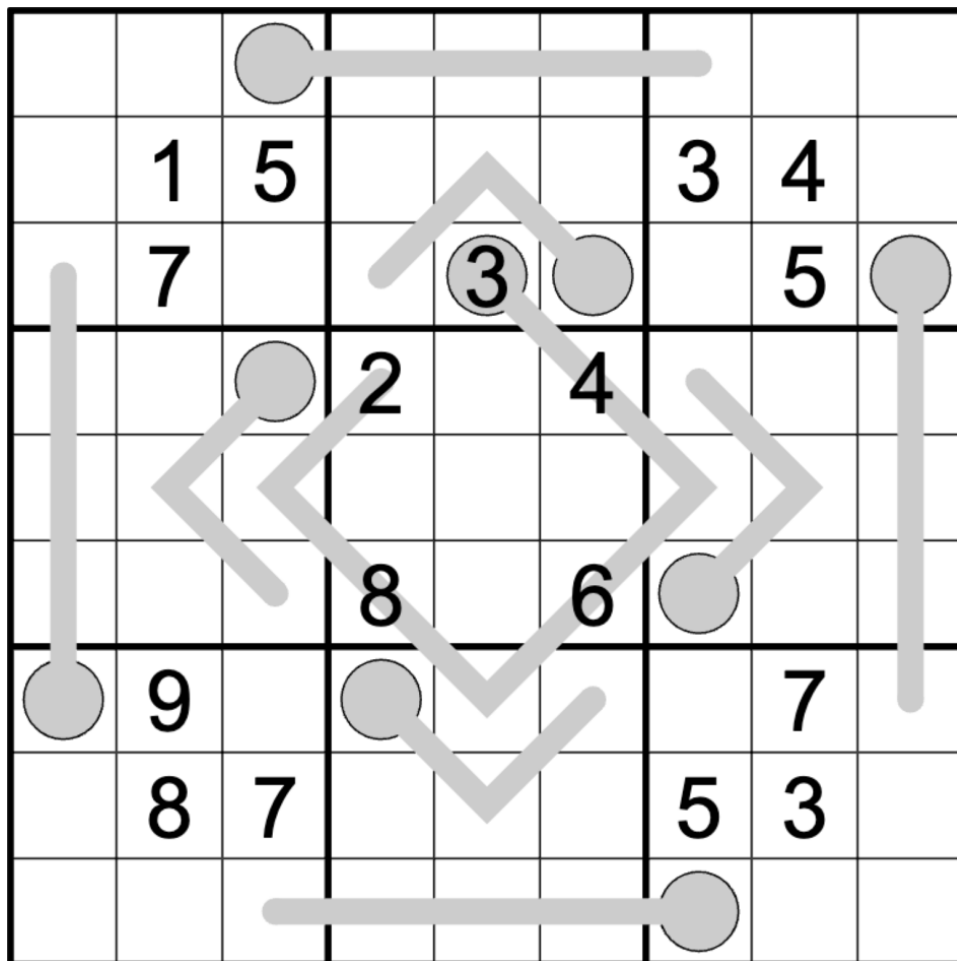
Play on CTC App: <https://tinyurl.com/255ez3rw>

## September 11, 2022: Count the Odd Ones

Clover

Today's GAS contains an odd number of odd digits, and an even number of even digits. What's more, each and every 3x3 region also contains an odd number of odd digits and an even number of even digits. And if you color the grid in a checkerboard pattern - starting with a 'black' cell in the top left corner - each digit appears an odd number of times on black cells and an even number of times on white cells. :mindblowingpuzzle: Type '!subscribe odd-even-sudoku-facts' for more funky parity facts!

Today's GAS is a **count the odd ones sudoku**! Normal sudoku rules apply. Also, if a digit appears in a circle, it tells you the total number of odd digits along the attached line (not including the digit in the circle itself, which may be odd or even.)



f-puzzles: <https://f-puzzles.com/?id=2mw45xql>

CtC: <https://tinyurl.com/5t2f3bwh>

## September 12, 2022: Extra Regions

Sam Cappleman-Lynes

Today's puzzle is a little later than usual because I've been a bit busy today! See if you can decrypt the second, spoilered, image to find out where I've been today.

Editor's note: here's the image referred to in the text! (Congrats, Sam!)



Today's GAS is an Extra Regions Sudoku. Normal Sudoku rules apply, and each grey region also contains every number exactly once.

*The puzzle and solving links appear on the following page.*

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

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

CtC - <https://tinyurl.com/2p85h2ux>

## September 13, 2022: Summetry

Philip Newman

In yesterday's live stream, someone asked what "GSP" is... Welcome to Sudoku Terminology 101!

GSP stands for "Gurth's Symmetrical Placement" (theorem), named after a forum user who developed the technique. GSP says: If a puzzle has symmetrically placed digits and/or constraints and it is known to have a unique solution, then the solution must be symmetrical in the same way. (If the puzzle has an asymmetrical solution, applying the symmetry of the givens/constraints will result in a second distinct solution. However, the unique symmetrical solution transforms to itself!) Here's an old CTC video explaining in detail: <https://www.youtube.com/watch?v=ac7Y97t2Wns>

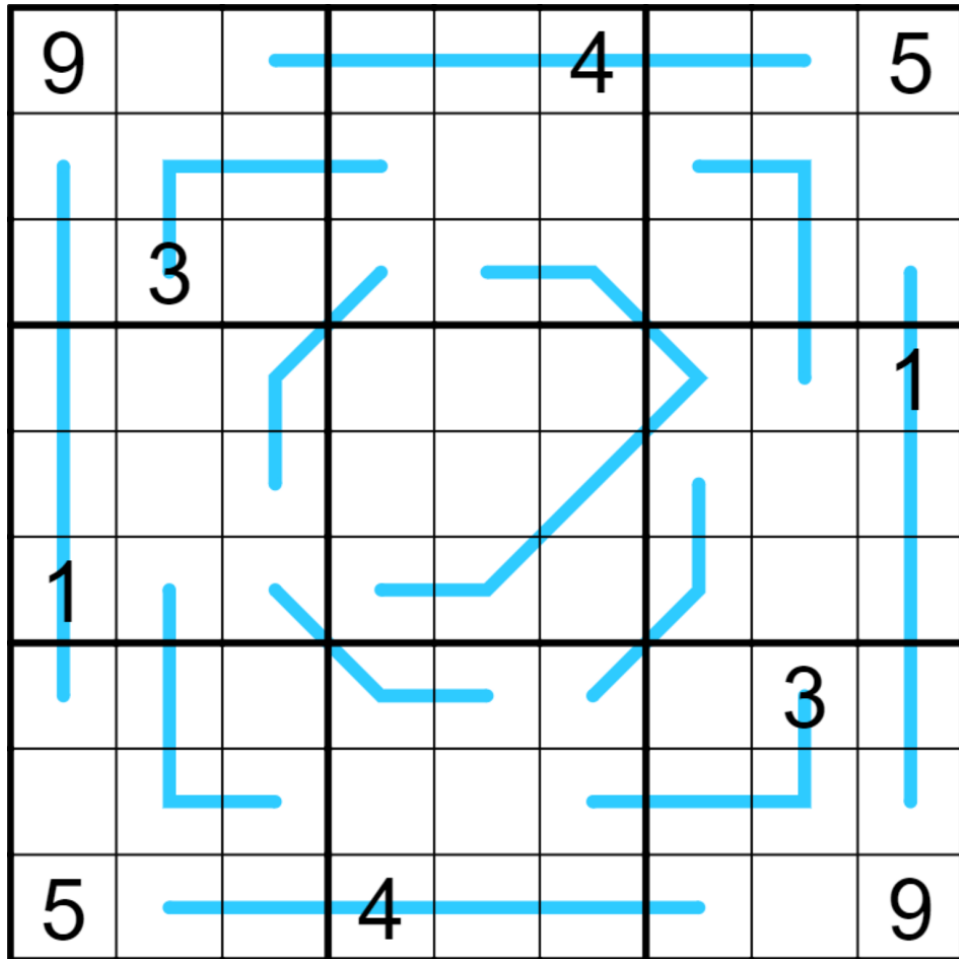
This is one of many "uniqueness" techniques which only apply if you know that the puzzle has a unique solution, and do not prove that the solution is unique. (No GAS puzzle will ever require a uniqueness technique! But they can certainly be useful for solving puzzles faster, when they apply.)

Today's GAS, a Region Sum Lines Sudoku, is not fully symmetrical, because of the line in box 5. So no GSP for you! (But you still may find the almost-symmetry very helpful...)

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,  $r1c3 = r1c4 + r1c5 + r1c6 = r1c7 + r1c8$ )

*GAS 101 Hint:* For breaking in, you may want to consider the lines on the edge of the grid - they are more restricted than they look at first! Can you figure out why?

*The puzzle and solving links appear on the following page.*



Play on f-puzzles: <https://f-puzzles.com/?id=2k5wlpat>

Play on CTC App: <https://tinyurl.com/yc36n8fv>



## September 14, 2022: Entropy

Clover

We're all slowly degenerating into an undifferentiated primordial sludge, along with the rest of the universe, so why not enjoy a bit of sudoku along the way?

Today's GAS is an entropy sudoku! Normal sudoku rules apply. Also, each 2x2 square of cells must contain at least one low digit (123), at least one medium digit (456), and at least one high digit (789).

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

f-puzzles: <https://f-puzzles.com/?id=2fkvlvl3>

CtC: <https://tinyurl.com/hp9tyrb3>

## September 15, 2022: Sam I Am Not

Philip Newman

It's me again! Where's Sam? Let the wild speculation commence!

- ① He was kidnapped by Sham Capplemon-Limes!
- ② He is taking some time off to grow a fantastic Sham Capplemon-Limes 'stache!
- ③ The Countdown Killer has struck again, reducing the GAS team from three to two!
- ④ Isn't it strange how neither clover nor Sam followed up on the mystery of the Countdown Killer? :suseyes:
- ⑤ Once per year, Sam must spend a week in a Hyperbolic Time Chamber in order to solve even faster.
- ⑥ I demanded I be allowed to post today so that my shameless ripoff clever nod to the layout of yesterday's puzzle would be appreciated.
- ⑦ Sam took a job as a paleontologist in order to invent discover more dinosaur names for us to use.
- ⑧ It was aliens.
- ⑨ This is the beginning of a wildly branching Choose Your Own Adventure sequel?

Today's GAS is an Arrow Sudoku!

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

*The puzzle and solving links appear on the following page.*



Play on CTC App: <https://tinyurl.com/2p953c5e>

## Clover

Normal sudoku rules apply.

Digits around a dot may repeat. If a digit in a consecutive pair repeats, it is counted both times. For instance, 4-5-5-7 has two pairs: 4/5 and 4/5 .

CtC: <https://tinyurl.com/ye24b4vd>

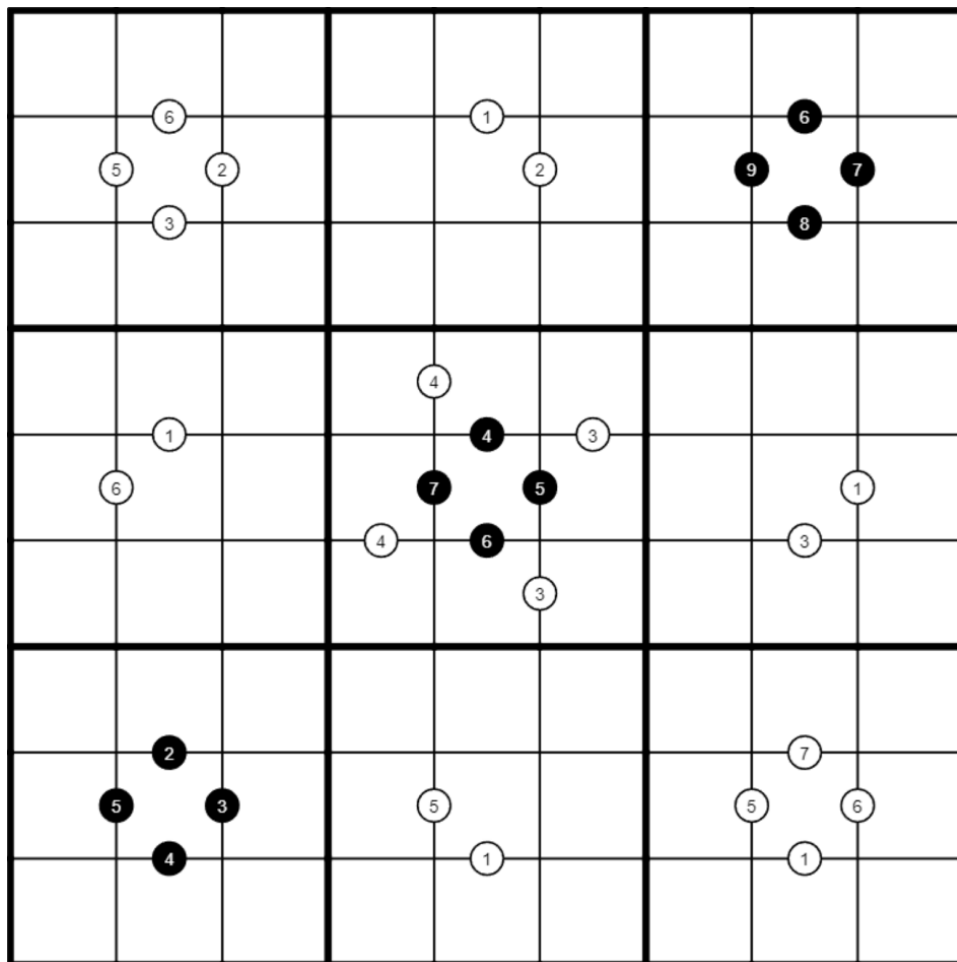
## September 17, 2022: Difference Ratio Sudoku

jovi\_al

Well then! I'm a bit late today! Normally when the GAS folks invite me over, I show up for the right meal. Unfortunately, breakfast has become lunch! Oh dear... well, I hope you enjoy this Difference Ratio Sudoku! And please forgive me for my tardiness!

Rules: Normal Sudoku rules apply. Digits separated by a black dot have a ratio of 1:X, where X is the number in the black dot. Digits separated by a white dot have a difference of N, where N is the number in the white dot.

Note that if you use dark mode, the colors of the dots will be inverted!



F-Puzzles: <https://f-puzzles.com/?id=2z79vhtv>

CtC: <https://tinyurl.com/4hc4wb7m>

## September 18, 2022: German Coin

Philip Newman

Today's intro is by #voice-chat-1, who were given the following prompt:

Need a name for today's GAS, wrong answers only

- 1 Bob
- 2 "wrong answers only"
- 3 Jupiter
- 4 Xenon
- 5 fido
- 6 Shell Shocked
- 7 Bone apple tea
- 8 somehow i don't think we made it easier for philip
- 9 Phillip Newman Enterprises Presents: Little Killer Sudoku

Great answers, and all totally wrong!

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.

*The puzzle and solving links appear on the following page.*

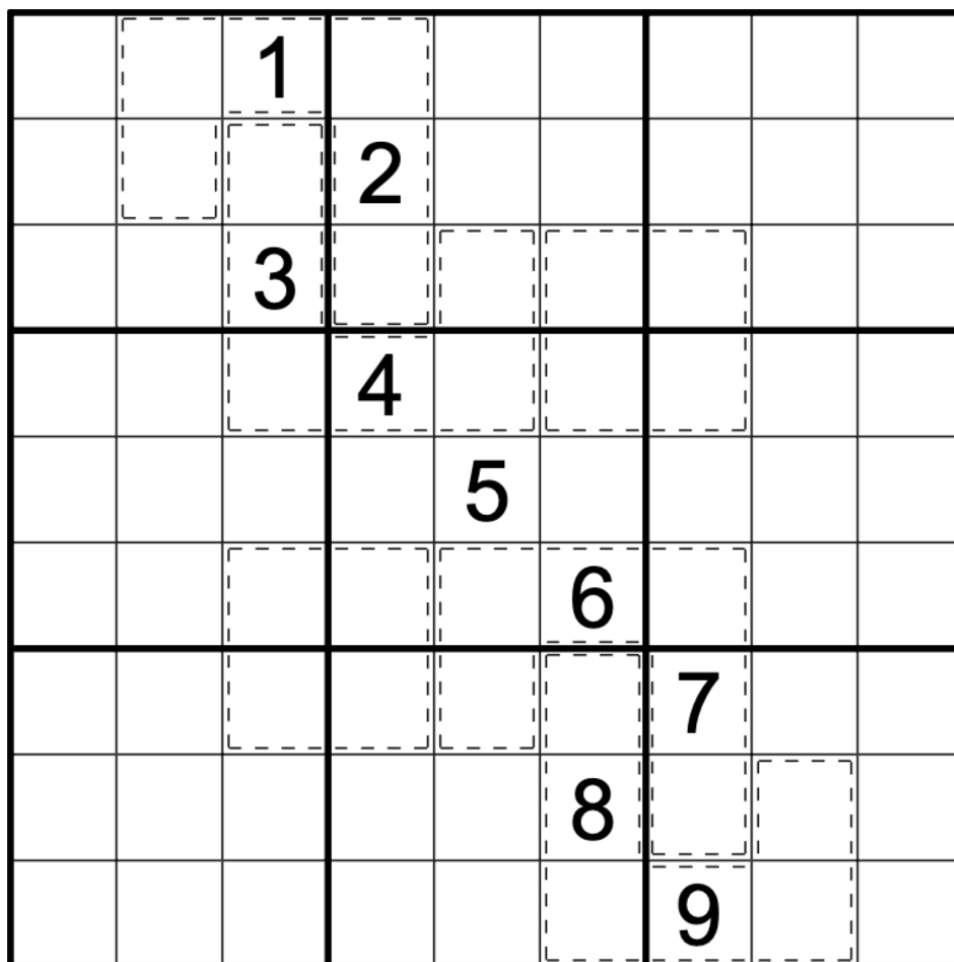


Play on CTC App: <https://tinyurl.com/ynh483wb>

## September 19, 2022: Cage Twins

Clover

Today's GAS is a **cage twins sudoku**. Normal sudoku rules apply. Also, every digit that appears in a cage must appear exactly twice in that cage.



f-puzzles: <https://f-puzzles.com/?id=2hc3cpsd>

CtC: <https://tinyurl.com/v56suh66>



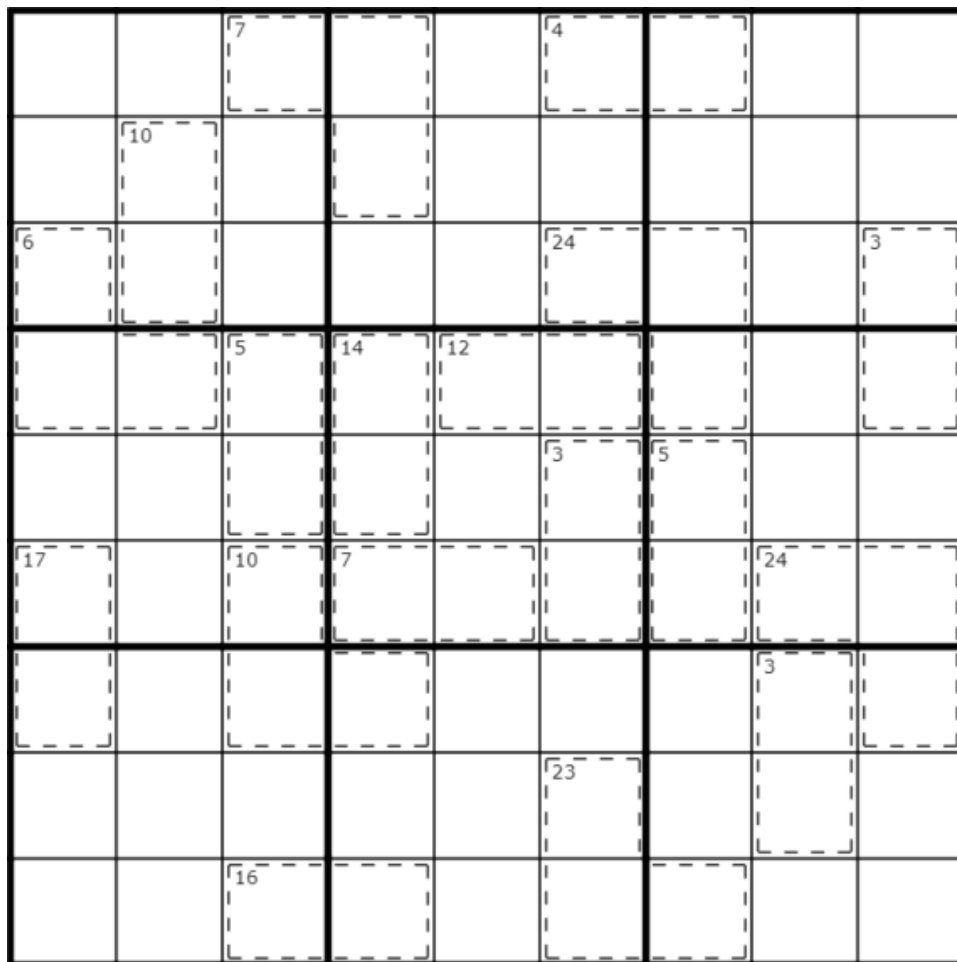
## September 20, 2022: Killer

Tyrgannus

Hello! Clearly and obviously my name is Sam Tyrgleman-Lynes, one of the three regular setters for GAS. Of course I am! And on this most normal of days I will post a puzzle in the channel that I clearly always post in. Yes, this is very familiar to me.

Today's GAS is a Killer Sudoku!

Rules: Normal sudoku rules apply. Digits in a cage cannot repeat and must sum to the total shown in the top left corner of the cage.



F-Puzzles: <https://f-puzzles.com/?id=2puaqqyo>

CTC: <https://tinyurl.com/yj44w9d5>

**September 21, 2022: “wrong answers only”**

Philip Newman

For today's intro, I thought I would ask a simple question: What is your favorite number?

- ☐ 1 7
- ☐ 2 3
- ☐ 3 8
- ☐ 4 4
- ☐ 5 5
- ☐ 6 13
- ☐ 7 9
- ☐ 8 42
- ☐ 9 None of the above

Today's GAS is a Classic Sudoku, so if your favorite number isn't an integer from 1 to 9 you're out of luck! Normal sudoku rules apply. And that's it!

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

Play on f-puzzles: <https://f-puzzles.com/?id=2zc66g7d>

Play on CTC App: <https://tinyurl.com/yc86bz8z>

## September 22, 2022: Clone Sudoku

Clover

The dinosaurs somehow got into the clone bay overnight - somebody left the gate open - and now they're overrunning the place like tribbles. Help a sister out and solve this clone sudoku? It won't solve the dinosaur problem, of course, but it'll reduce the number of unsolved sudokus floating around...

Normal sudoku rules apply. The two gray shapes contain exactly the same digits in the same positions. (Digits may repeat within gray shapes as long as they follow sudoku rules.)

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

f-puzzles: <https://f-puzzles.com/?id=2jmrhp6q>

CtC: <https://tinyurl.com/2wpjp9hc>

## September 23, 2022: Easy, Killer

Philip Newman

Sam is still missing! Where is he?!? Let the wild speculation resume!

- ① He played knick-knack on my thumb.
- ② Market, to market, to buy a fat hog.
- ③ Blind mice kidnapped Sam, signalling the start of their uprising against humanity.
- ④ Want of a nail the Sam was lost.
- ⑤ Little ducks went swimming one day, and pushed Sam in a lake.
- ⑥ Seven, eight, nine, ten, then Sam had to go again. Why did he have to go? Because he bit my finger, so.
- ⑦ For a secret, never to be told. Stop asking!
- ⑧ More meat than threescore men. He ate a cow, he ate a calf, he ate a butcher and a half.
- ⑨ In the bed, and the little one said, "Roll over! Roll over!" So they all rolled over and Sam fell out.

Today's GAS is a Killer Sudoku! Normal sudoku rules apply. Digits in cages cannot repeat and must sum to the total given.

7	<div>3</div>			<div>24</div>	<div>11</div>			9
	9		7				8	<div>4</div>
		6				7		
<div>10</div>							6	
<div>11</div>			<div>19</div>	<div>31</div>				
	8			<div>15</div>				
<div>7</div>		8				9		
	6			<div>10</div>	9		7	
						<div>6</div>		

Play on f-puzzles: <https://f-puzzles.com/?id=2gmo8yy6>

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

**September 24, 2022: 159**

Clover

Today's GAS is... *checks notes* 159 sudokus? Gosh, that's a lot of solving - better get started!

Ahem - it's actually a single 159 sudoku. We've done this variant in GAS before, but the rules are a little tricky to wrap your head around, so read carefully and feel free to ask questions before you start!

Normal sudoku rules apply. Also, each digit in the first column tells you where the "1" is located in its row. For instance, if there's a 3 in the first column, the "1" in that row must be located in the third cell from the left. Similarly, each digit in the fifth column tells you where the "5" is located in that row, and each digit in the ninth column tells you where the "9" is located in that row.

	7		5		3		1	
						2		
	1		3		9		5	
	5		1		7		9	
		8						
	9		7		5		3	

f-puzzles: <https://f-puzzles.com/?id=2e2zkum4>

CtC: <https://tinyurl.com/5n99r2uc>

**September 25, 2022:**

[normally fair] Philip Newman — 09/25/2022

@Daily Sudoku Solver

We previously determined that 42 is the objectively best number... so what about letters?

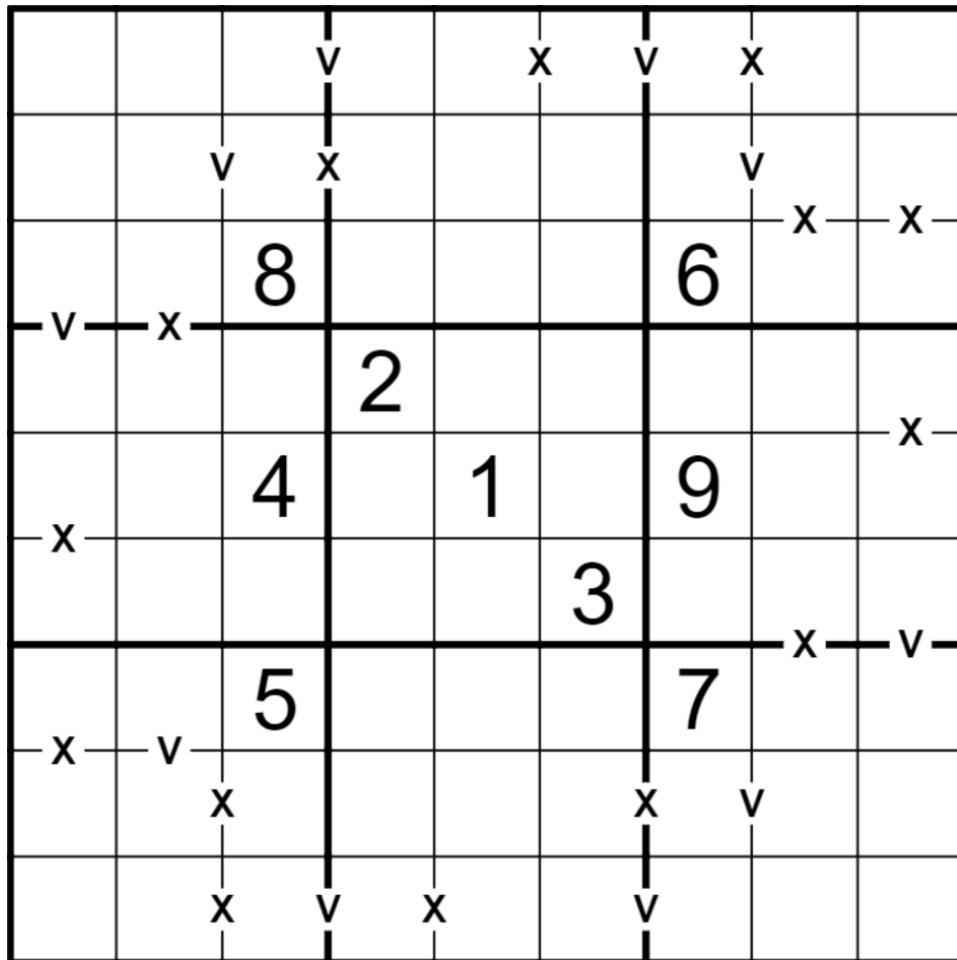
I. V            II. Þ            III. Π

IV. x          V. X            VI. Ö

VII. Ñ        VIII. ß

IX. When is the GAS Wordoku using all of these?

Today's GAS is an XV Pairs Sudoku! Normal sudoku rules apply. Digits in cells separated by a V must sum to 5; digits in cells separated by an X must sum to 10. (No negative constraint - other pairs of cells may sum to 5 or 10.)



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

Play on CTC App: <https://tinyurl.com/3fju9yry>

## September 26, 2022: Disjoint Groups

Clover

Today's GAS is a disjoint groups sudoku. For the six of you who didn't immediately stop reading and close this window in disgust, I'm assuming that's because you haven't heard of this notorious variant - here are the rules! 🙄

Normal sudoku rules apply. Also, the same digit may never appear in the same relative position in two different regions. For example, digits that appear in the top left of their 3x3 region may never be the same.

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

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

CtC: <https://tinyurl.com/5xfkzj2f>

## September 27, 2022: Ready Steady Bow

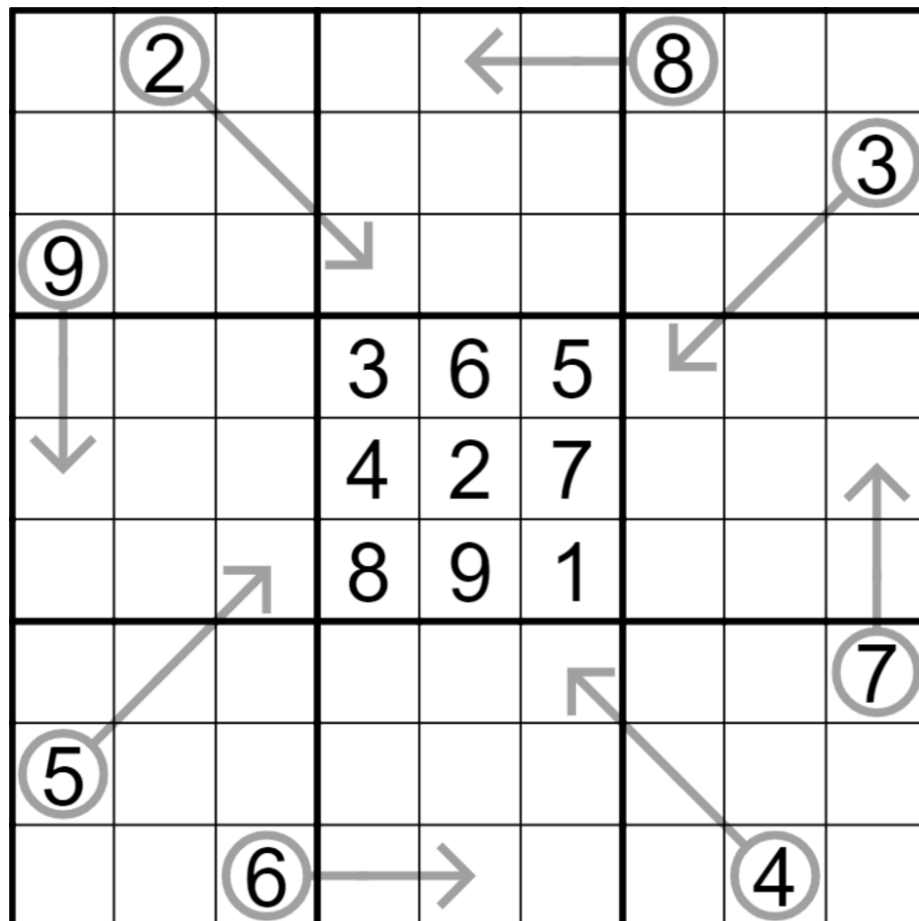
Philip Newman

Today's GAS, an Arrow Sudoku, is brought to you by the following sponsors:

- 1 Syzygy Slings and Arrows - for all your Arrow needs
- 2 The GAS Leek - now serving breakfast all day!
- 3 Arrow International Conglomerate
- 4 Rotating Eggs, LLC
- 5 Simon the Chai Man
- 6 :slowpao: ASMR
- 7 Sum One to Love Dating App
- 8 PencilMark, Inc.
- 9 Nine by Nine Inch Fails, my NIN cover band

The views expressed in this GAS are my own and do not represent those of the Sudokult or affiliates. Solver discretion is advised.

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



Play on f-puzzles: <https://f-puzzles.com/?id=2p6ee7yb>

Play on CTC App: <https://tinyurl.com/y74kbee7>



## September 28, 2022: Antiking

Clover

Today's GAS is an antiking sudoku. But you know, it hasn't always been called 'antiking' - previous names include 'untouch sudoku', 'no touch sudoku', 'no touchies sudoku', 'quit poking me sudoku', 'mom, make him stop poking me sudoku', and 'haha, I'm not touching you sudoku'. I'm sure you'll find a name for it that strikes your fancy!

Normal sudoku rules apply. Also, identical digits may not touch diagonally.

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

f-puzzles: <https://f-puzzles.com/?id=2qq3j7bz>

CtC: <https://tinyurl.com/m6jwcbmw>

## September 29, 2022: Odd-Even Pairs

bakpao

Unfortunately Sam has not yet returned from his break, and clover and Philip need some time to replenish their puzzle reserves every now and then too. We thought about calling in the GAPP team to help out today, but they seem to all be out on a birdwatching excursion... We wouldn't dare let you go a day without a puzzle though, so here I am!

Now, I know what you're thinking, "that bakpao fella doesn't ever set sudoku, does he?", and you're mostly right. Rest assured though, I made sure to read the wikiHow article "How to set a sudoku?"\* very carefully and to follow other basic rules like placing a 5 in r5c5 and a 3 in the corner. Surely it's a hit!

Today's GAS is a Capsules Sudoku, also known as Odd-Even Pairs Sudoku! Normal sudoku rules apply. Each capsule contains exactly one odd and one even digit.

\* don't actually follow this guide. If you're interested in learning how to set your own puzzles, check out the pins in #puzzle-setting instead, the resources there are much much better!

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

F-Puzzles: <https://f-puzzles.com/?id=2h9temul>

CTC: <https://tinyurl.com/yc5ctxvj>

## September 30, 2022: For KNT and jovi\_al

Philip Newman

Today's GAS is... what? Another Arrow Sudoku?? What's going on here?

- ① Philip is obsessed with arrows lately and can't stop making them.
- ② Philip is trapped working in an arrow sudoku factory.
- ③ Philip took another crazy hard puzzle with no givens and added givens to make it GAS.
- ④ Philip is running out of ideas for lists, and this is one.
- ▼ Philip enjoys making you all do a little math.
- ⑥ Philip has a new motto in testing which is relevant to this puzzle - when posting something that might be too hard, the question to answer is: Tweak, Leak, or Give 'em a Week?
- ⑦ What's in the box??
- ⑧ Signs point to yes.
- ⑨ Some of the above.

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

*The puzzle and solving links appear on the following page.*



Play on CTC App: <https://tinyurl.com/4x62t45v>

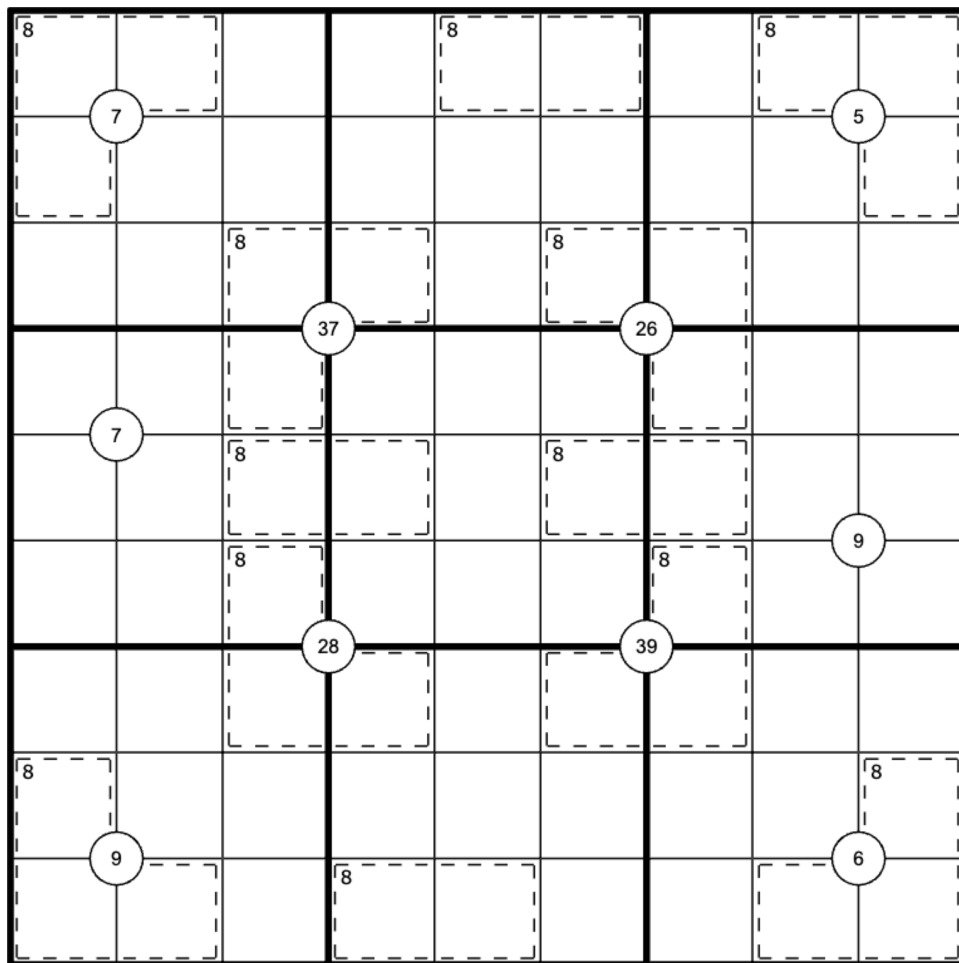
## Bonus 1: Killer Quadruples

Sam Cappleman-Lynes

Normal sudoku rules apply.

Digits in a cage may not repeat and must sum to the indicated total.

If a white circle appears at the intersection of four cells, the digit(s) in the circle must appear somewhere in those four cells.



f-puzzles: <https://f-puzzles.com/?id=2ery3lby>

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

## Bonus 2: Vault

Clover

Normal sudoku rules apply. If a digit appears anywhere within a cage, it must not appear in any cell orthogonally adjacent to that cage (outside of the cage), and vice versa. For instance, if r4c4 contains a 5, then no cell orthogonally touching the top left cage may contain a 5. Digits may repeat in a cage.

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

f-puzzles: <https://f-puzzles.com/?id=2hnhq8yz>

CtC: <https://tinyurl.com/2s3p85mc>

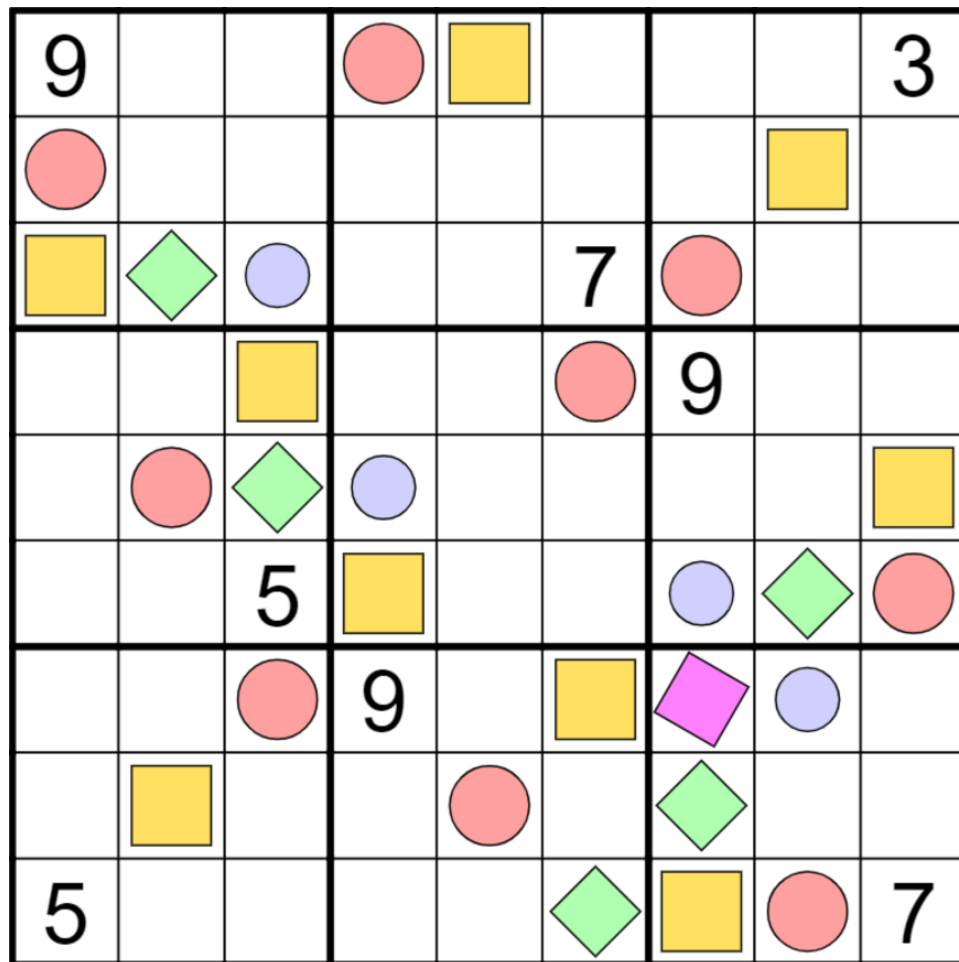
### Bonus 3: Lucky Charms

Philip Newman

Normal sudoku rules apply. Colored shapes are "lucky charms". Each shape represents a consistent digit throughout the grid; different shapes must represent different digits. The digit in each shape must also equal the number of neighboring cells which contain a digit that differs from its own value by at most 1.

For example, if a lucky charm contains a "2", then every time that lucky charm appears in the grid, you know that exactly two of its eight surrounding cells contain a 1, 2, or 3. A 6 lucky charm means that of the eight surrounding cells, exactly six of them contain a 5, 6, or 7.

All possible lucky charms are given (but you shouldn't need this information to solve the puzzle).



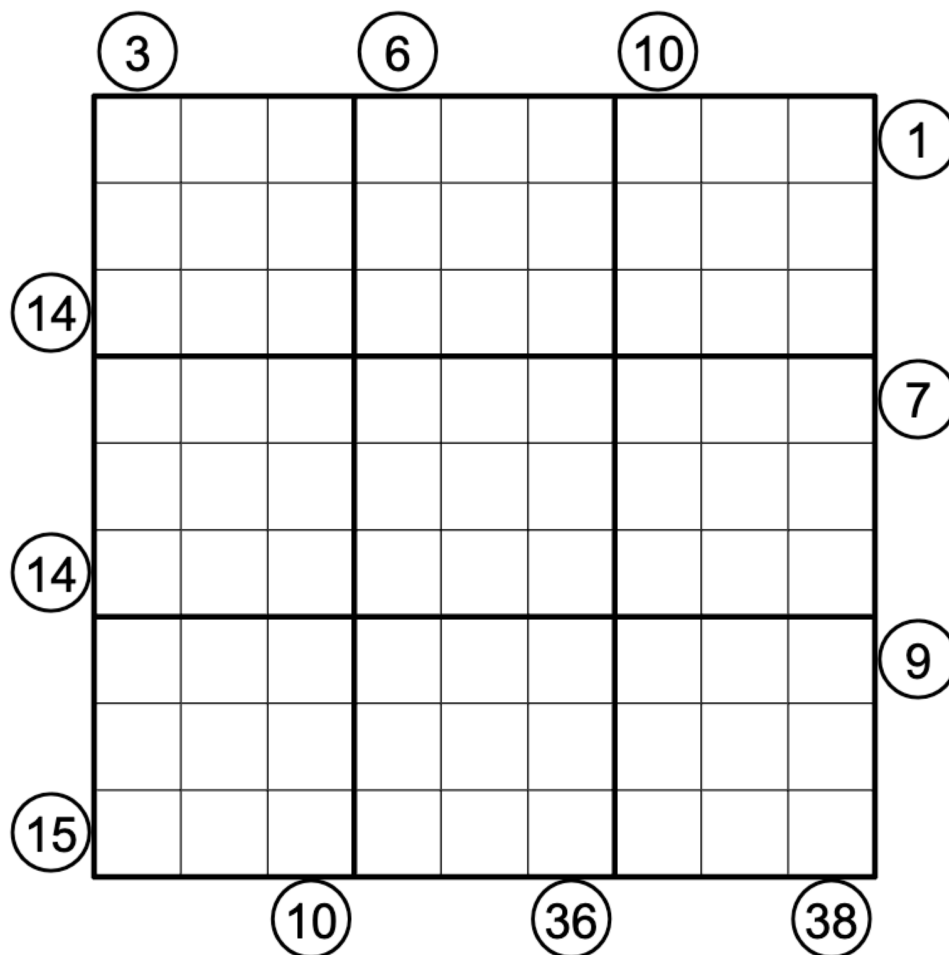
f-puzzles: <https://f-puzzles.com/?id=2kxnhqyn>

CtC: <https://tinyurl.com/bdeh9ye3>

#### Bonus 4: X-Sums

Philip Newman

Normal sudoku rules apply. A clue outside of a row or column tells you the sum of the first X digits in that row or column (starting from the direction of the clue), where X is the digit in the cell closest to the clue. For instance, if a “15” clue appears to the left of a row, then the row could start with “3 8 4” (X=3 and the first 3 digits sum to 15) or “5 1 3 4 2” (X = 5 and the first 5 digits sum to 15), etc.



f-puzzles: <https://f-puzzles.com/?id=2l2kdlje>

CtC: <https://tinyurl.com/328zsebe>



## jovi\_al

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

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

### Bonus 6: Long Capsules

bakpao

Normal Sudoku rules apply. Each capsule contains the same number of odd and even digits.

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

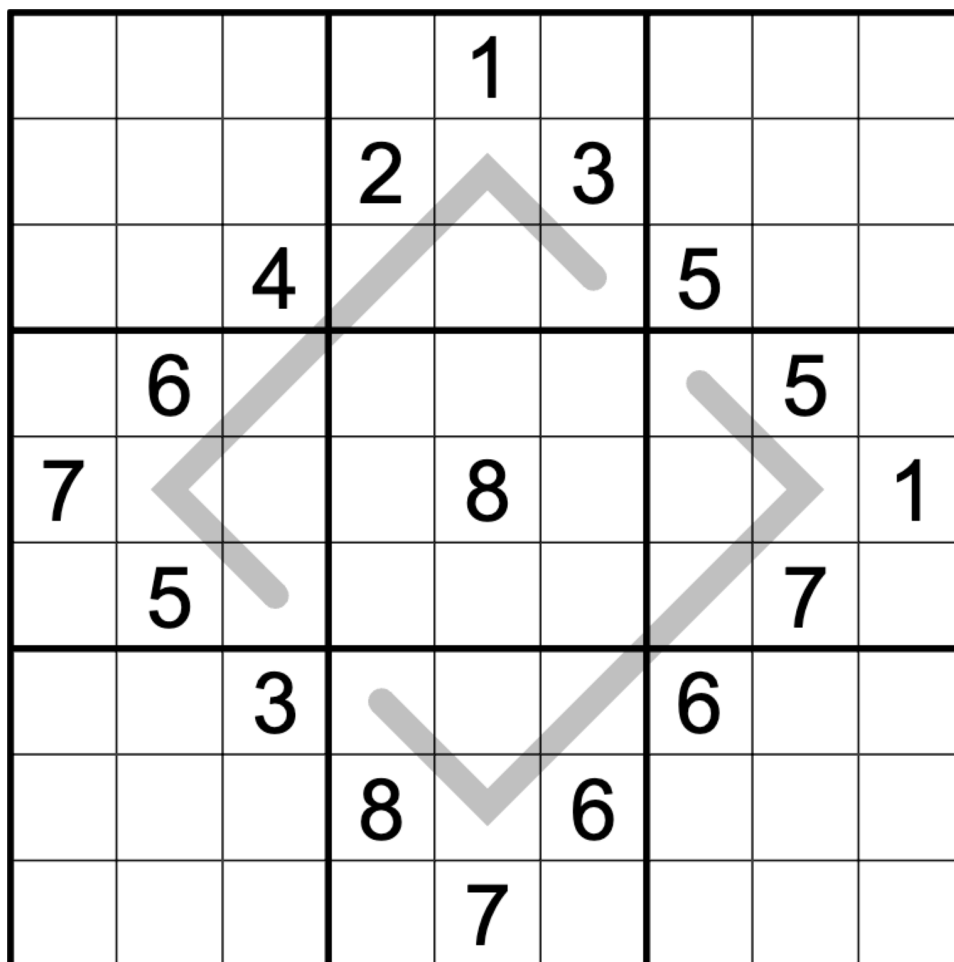
f-puzzles: <https://f-puzzles.com/?id=2jsny39r>

CtC: <https://tinyurl.com/ysa9ky3y>

### Bonus 7: Palindrome

shye

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



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

CtC: <https://tinyurl.com/2y8wjpyr>

## Time Benchmarks

	Two party hats	One party hat	Today's dinosaur:
August 27, 2022	5:00	11:00	swapped stegosaurus
August 28, 2022	7:00	11:00	gaming edmontonia
August 29, 2022	7:00	12:30	dotty delapparentia
August 30, 2022	8:30	18:00	ascending aucasaurus
August 31, 2022	9:00	17:00	extravagant epidexipteryx
September 1, 2022	9:00	17:00	affectionate aeolosaurus
September 2, 2022	6:00	11:00	relaxed richardoestia
September 3, 2022	6:00	12:00	unique uberabatitan
September 4, 2022	X:00 (both puzzles combined)	XX:00 (both puzzles combined)	multiplied mussaurus
September 5, 2022	7:00	13:00	numerable nanuqsaurus
September 6, 2022	7:00	13:00	preferred parasaurolophus
September 7, 2022	8:00	15:00	abhorred adeopapposaurus
September 8, 2022	7:00	13:00	cheeky cumnoria
September 9, 2022	6:30	12:00	frightening fulgurotherium
September 10, 2022	6:00	12:00	lesser lufengosaurus
September 11, 2022	8:00	15:00	parasitic psittacosaurus
September 12, 2022	6:30	12:00	expectant eocarcharia
September 13, 2022	7:00	13:00	jubilant jaklapallisaurus asymmetrica
September 14, 2022	6:00	11:00	disorderly dahalokely
September 15, 2022	7:30	15:00	lost lourinhasaurus
September 16, 2022	8:00	15:00	deferential delapparentia
September 17, 2022	6:00	11:00	beautiful brontosaurus
September 18, 2022	8:00	15:00	triangulated trigonosaurus
September 19, 2022	7:00	13:00	two torvosauruses
September 20, 2022	7:00	13:00	kind kritosaurus

September 21, 2022	6:30	13:00	vintage vouivria
September 22, 2022	6:30	11:30	stealthy shanag
September 23, 2022	6:30	12:30	blissful blikanasaurus
September 24, 2022	6:30	11:30	overabundant overosaurus
September 25, 2022	The average of V and X minutes	XV minutes	additive abditosaurus
September 26, 2022	6:00	11:00	disjointed dracorex
September 27, 2022	7:00	13:00	multi-level marketed macronaria
September 28, 2022	7:00	13:00	touchable tawa
September 29, 2022	7:00	13:00	charming chungkingosaurus
September 30, 2022	9:00	10080:00	capricious caulodon