

GAS Leak

Genuinely Approachable Sudoku from the CtC Discord
Volume 2: June 27, 2021 - July 16, 2021



It's now been 40 days of Genuinely Approachable Sudoku, and we've gone from just a handful of solvers to nearly a thousand. Much credit is due to Mark from Cracking the Cryptic, who's started sharing videos of his GAS solves. Thanks, Mark, for sending so many new solvers our way!

You'll see some unusual sudoku variants in this volume of GAS Leak, but the ground rules are the same as they've always been. 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

June 27, 2021: Classic
Philip Newman

Normal sudoku rules apply.

	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	

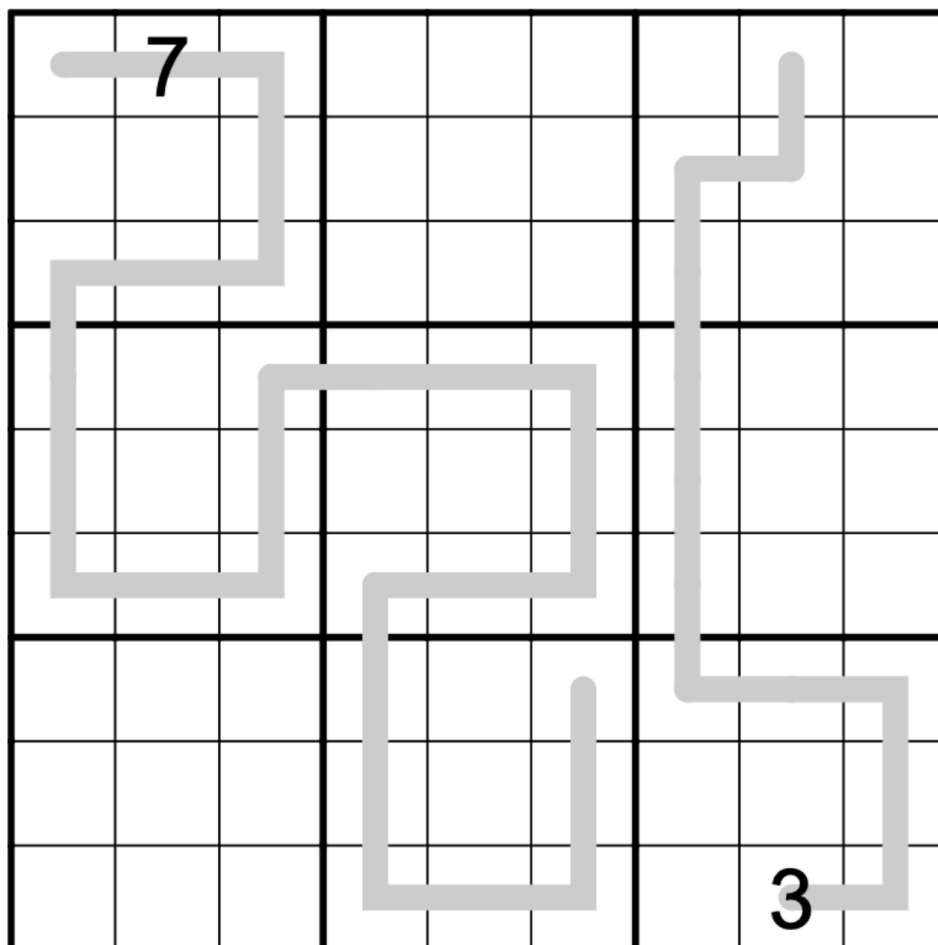
f-puzzles: <https://f-puzzles.com/?id=ydwsjmbv>

CtC: <https://tinyurl.com/a9zujuzc>

June 28, 2021: German Whispers

Clover

Normal sudoku rules apply. Along a grey line, digits differ from their neighbors by at least 5. Digits along a grey line may repeat as long as they follow all other rules.



f-puzzles: <https://f-puzzles.com/?id=yghxy2yn>

CtC: <https://tinyurl.com/49vptpps>

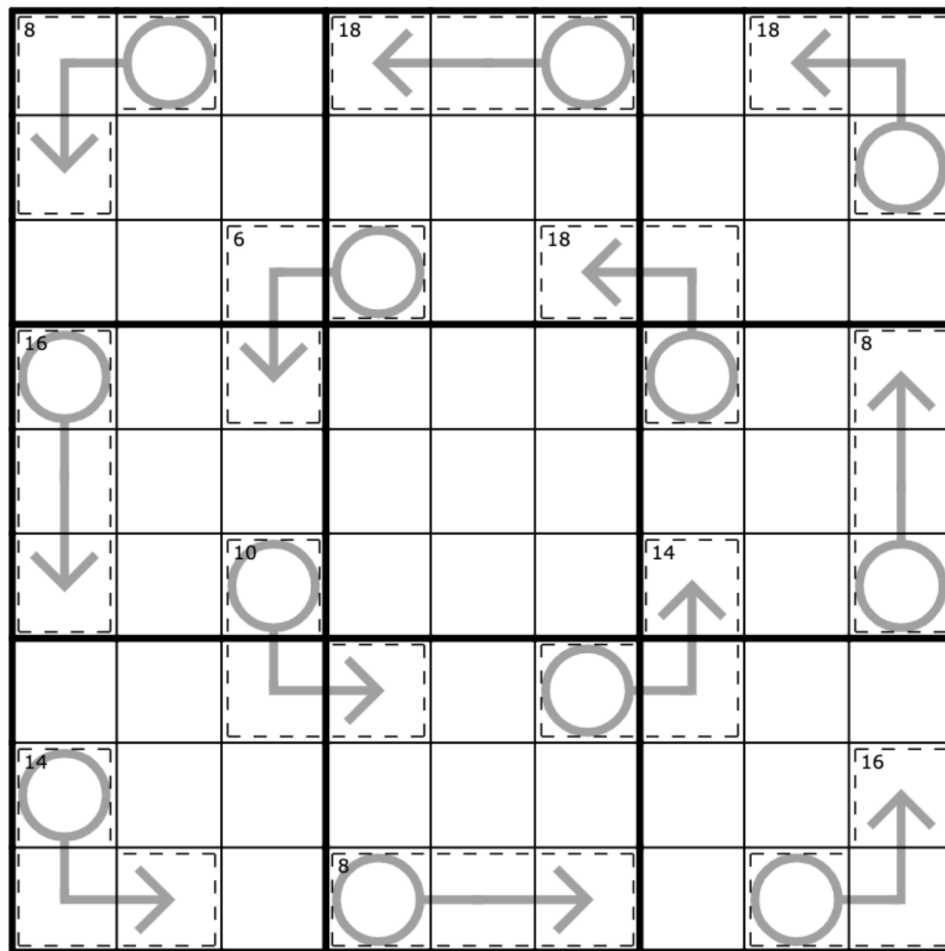
June 29, 2021: Killer/Arrow

Sam Cappleman-Lynes

Normal Sudoku rules apply.

Digits in marked cages must sum to the indicated total, and cannot repeat within a cage.

Digits along an arrow must sum to the digit in the adjoining circle.



f-puzzles: <https://f-puzzles.com/?id=ye4eztcy>

CtC: <https://tinyurl.com/3aevvch8>

June 30, 2021: Antiking

Philip Newman

Normal sudoku rules apply. Digits that touch each other, even diagonally, cannot be equal.

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

f-puzzles: <https://f-puzzles.com/?id=yf2np9f3>

CtC: <http://tinyurl.com/3wcducr9>

July 1, 2021: Sandwich

Clover

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

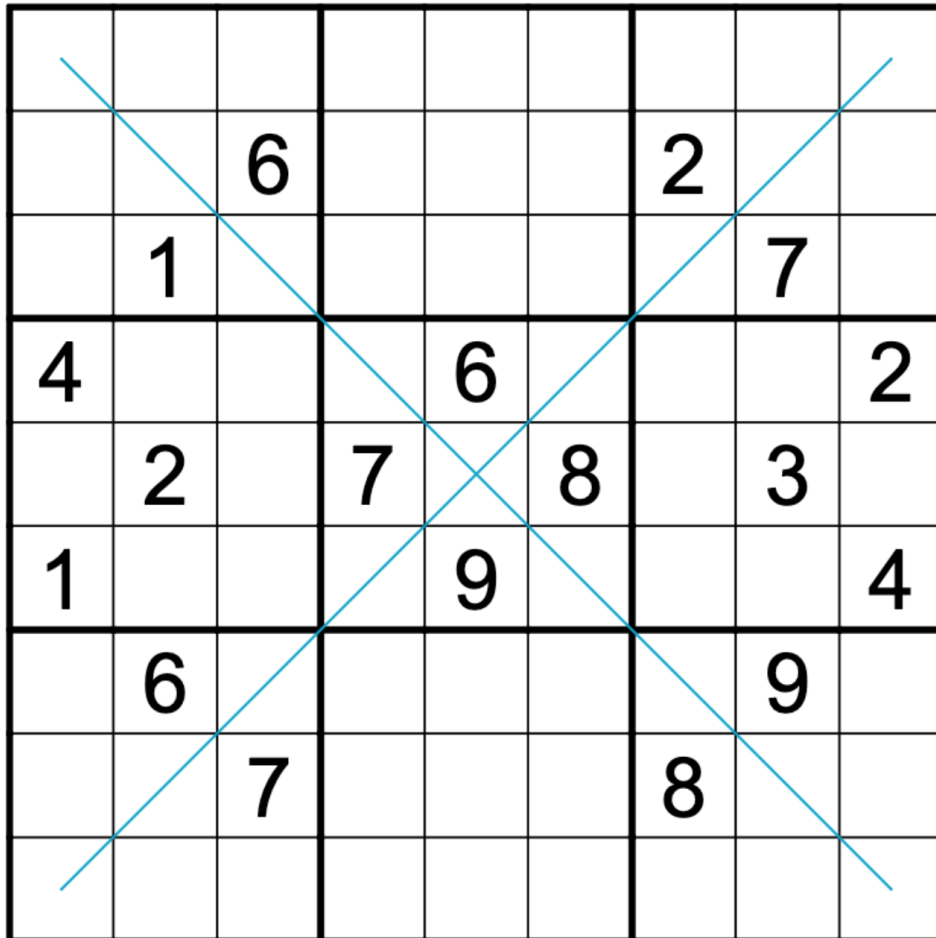
	35		6		21			20
35								
			8				3	
0					2			
21					1			
				4		8		
			6				2	
		3						7
9								

f-puzzles: <https://f-puzzles.com/?id=yzhd73ke>

CtC: <https://tinyurl.com/faz3djr2>

July 2, 2021: Antidiagonal
Sam Cappleman-Lynes

Normal Sudoku rules apply. In addition, each marked diagonal contains only three distinct digits.



f-puzzles: <https://f-puzzles.com/?id=yfwqp86c>
CtC: <https://tinyurl.com/axckwzwy>

July 3, 2021: Antiknight

Philip Newman

Normal sudoku rules apply. Cells separated by a (chess) knight's move cannot contain the same digit.

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

f-puzzles: <https://f-puzzles.com/?id=yfa6an4o>

CtC: <https://tinyurl.com/52h8wx73>

July 4, 2021: GAS Who?

???

On July 4, the daily GAS consisted of three smaller, but slightly trickier, puzzles. Solvers had a chance to guess which of the three setters had created each sudoku: anybody who guessed all three correctly earned a bonus party hat. In case you'd also like to guess, I haven't provided the setters' names here. Instead, you can find them in very small print at the bottom of the time benchmarks page.

Killer

Normal 6x6 sudoku rules apply. Digits in a cage may not repeat and must sum to the total shown.

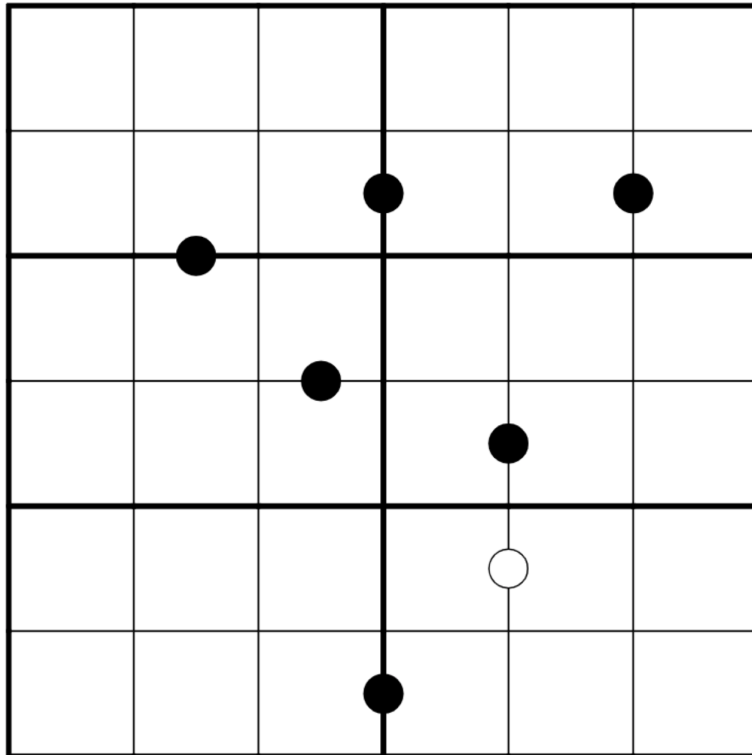
			6		
12				7	
		7			
10				8	
		9			

f-puzzles: <https://f-puzzles.com/?id=yfd8ywmy>

CtC: <https://tinyurl.com/y3w4cv9k>

Kropki Pairs

Normal sudoku rules apply. Also, a white circle between two cells shows that the digits in those cells are consecutive (i.e., they differ by 1). A black circle shows that the digit in one of the cells has twice the value of the other. Not all possible circles are given.



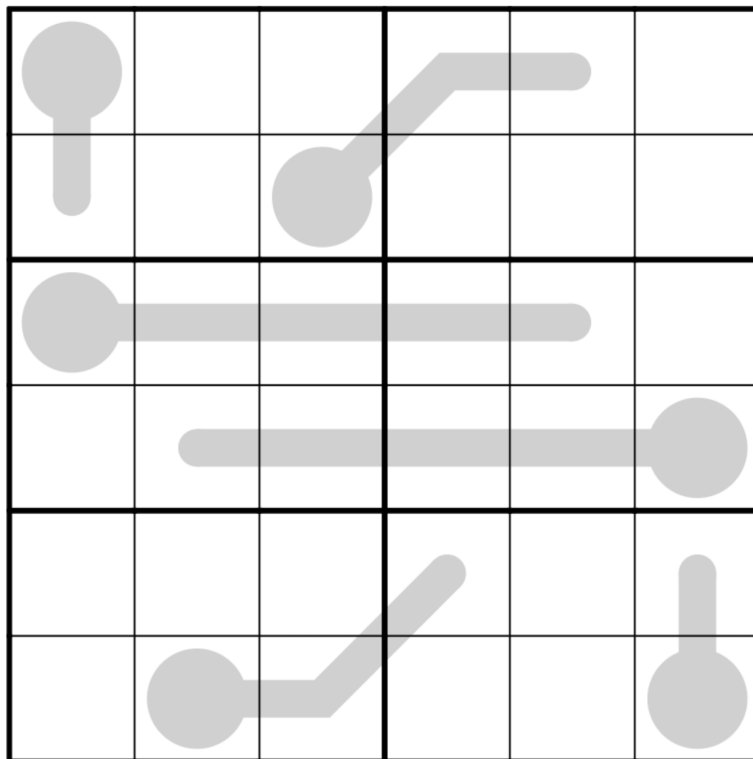
f-puzzles: <https://f-puzzles.com/?id=yzsmdvtf>

CtC: <https://tinyurl.com/2pp764jv>

Thermo

Normal sudoku rules apply. Some thermometer shapes are in the grid; digits must be strictly increasing from the round bulb to the flat end.

Note for new solvers: 'strictly' increasing just means that the digits always have to increase and can't repeat along the thermo. It doesn't necessarily mean they have to be consecutive.



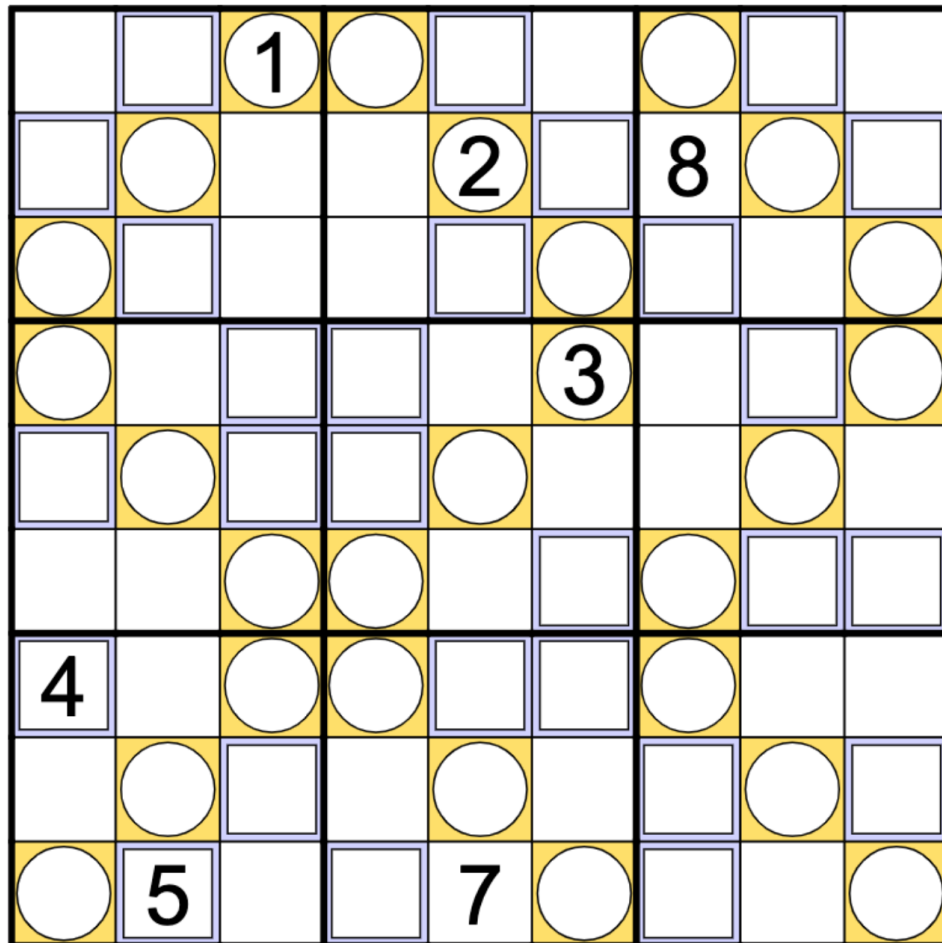
f-puzzles: <https://f-puzzles.com/?id=yf6lgq44>

CtC: <https://tinyurl.com/hykk55dw>

July 5, 2021: Trio

Clover

Normal sudoku rules apply. All 1s, 2s, and 3s are marked with (orange) circles. All 4s, 5s, and 6s are marked with (blue) squares.



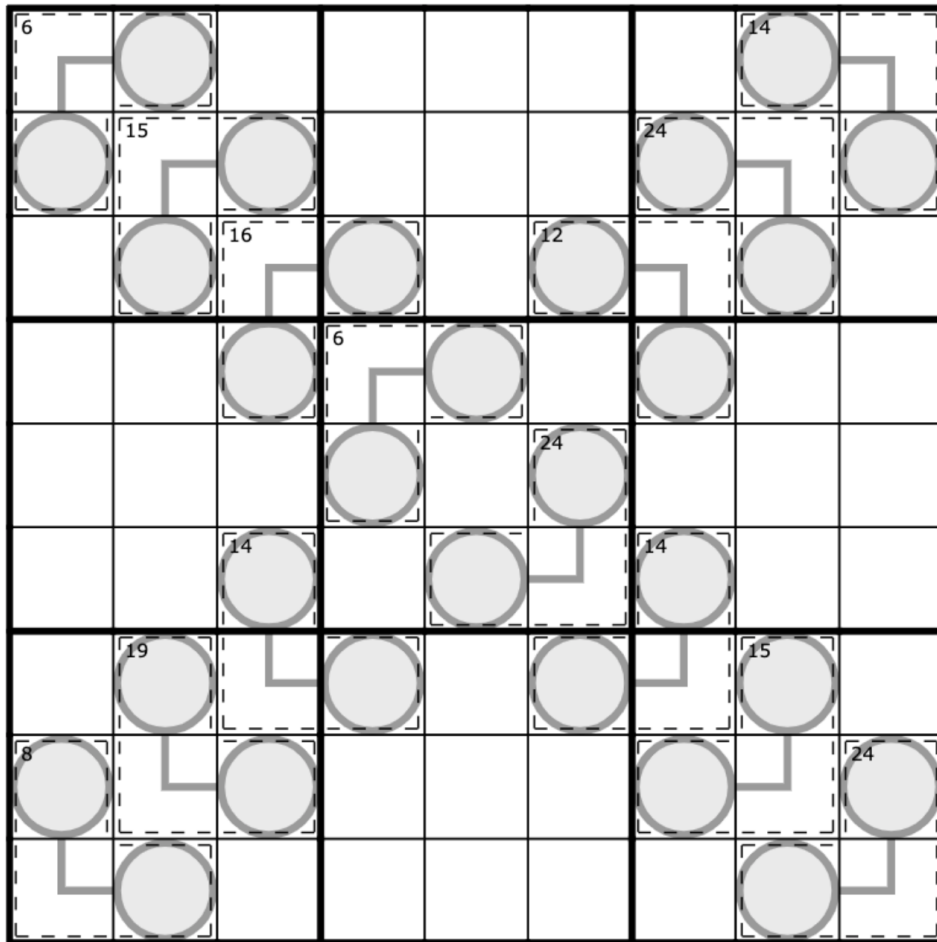
f-puzzles: <https://f-puzzles.com/?id=yh5uxu73>

CtC: <https://tinyurl.com/yh738k7v>

July 6, 2021: Between Lines / Killer

Sam Cappleman-Lynes

Normal Sudoku rules apply. Digits in a cage cannot repeat and must sum to the total in the top left corner. The values of digits appearing on a line connecting two circles must be strictly between the values of the digits in the two circles.



f-puzzles: <https://f-puzzles.com/?id=yexyoc36>

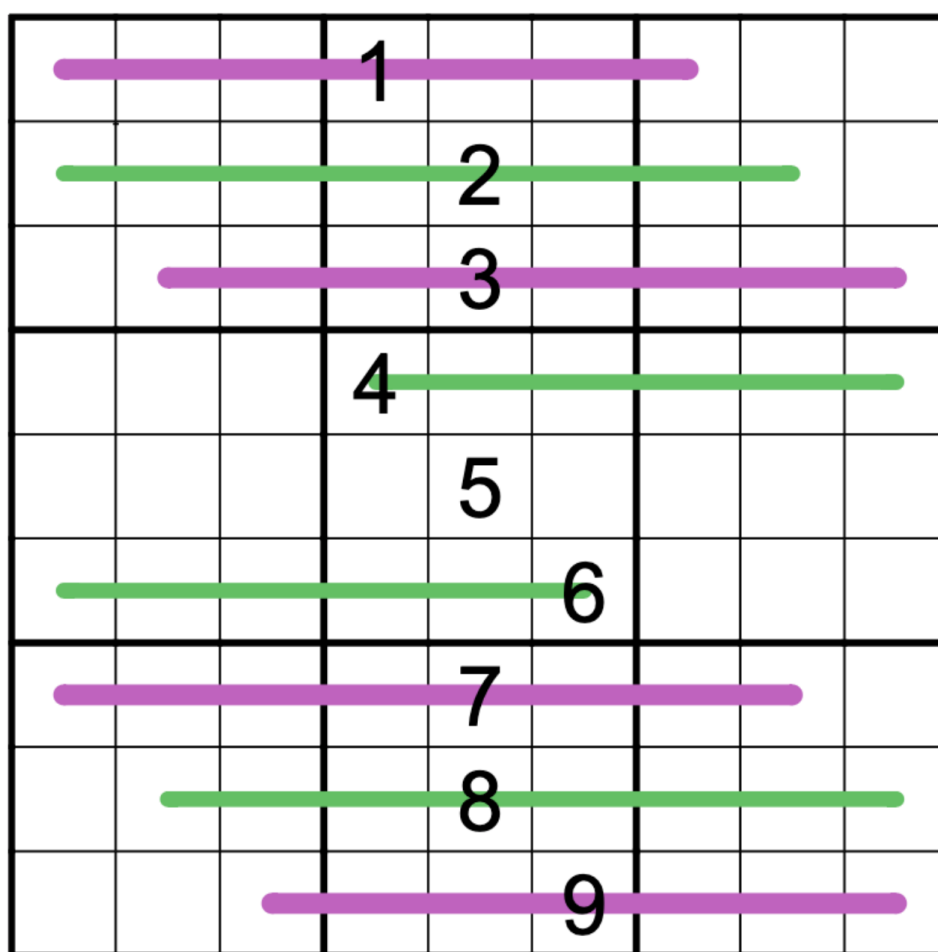
CtC: <https://tinyurl.com/ydvr99j3>

July 7, 2021: Renban / German Whispers

Philip Newman

Normal sudoku rules apply. Digits along a purple (renban) line must form a set of consecutive digits with no repeats (in any order). Along a green (German Whispers) line, digits differ from their neighbors by at least 5.

Colorblind-friendly versions of this puzzle are also linked below. In these versions, the German Whispers lines are marked with cages labeled G, and the renban lines are marked with cages labeled R.



f-puzzles: <https://f-puzzles.com/?id=ydlfqh6q>

f-puzzles (colorblind friendly): <https://f-puzzles.com/?id=yhbx9b57>

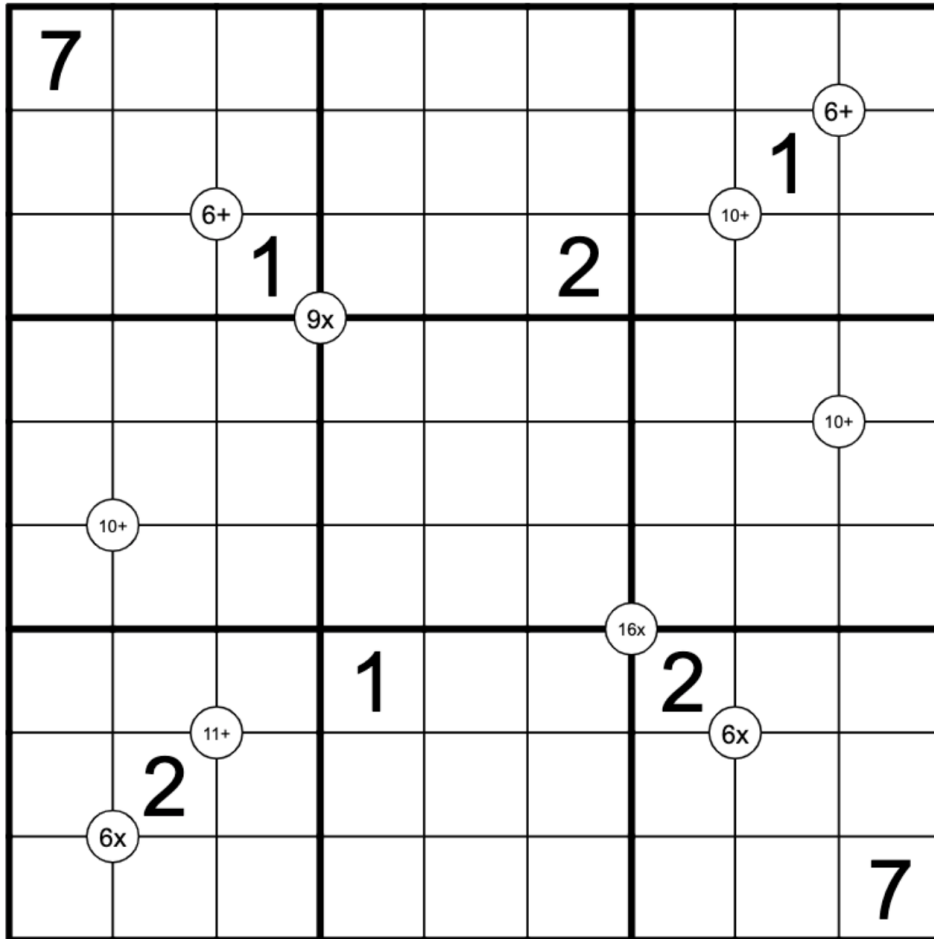
CtC: <https://tinyurl.com/ye9ewk9w>

CtC (colorblind friendly): <https://tinyurl.com/2pvct23f>

July 8, 2021: Mathrax

Clover

Normal sudoku rules apply. Also, there are white circles in the grid that contain a number and a math operation. When that operation is applied to each of the diagonally opposite pairs of digits surrounding the circle, the result is always equal to the number in the circle.



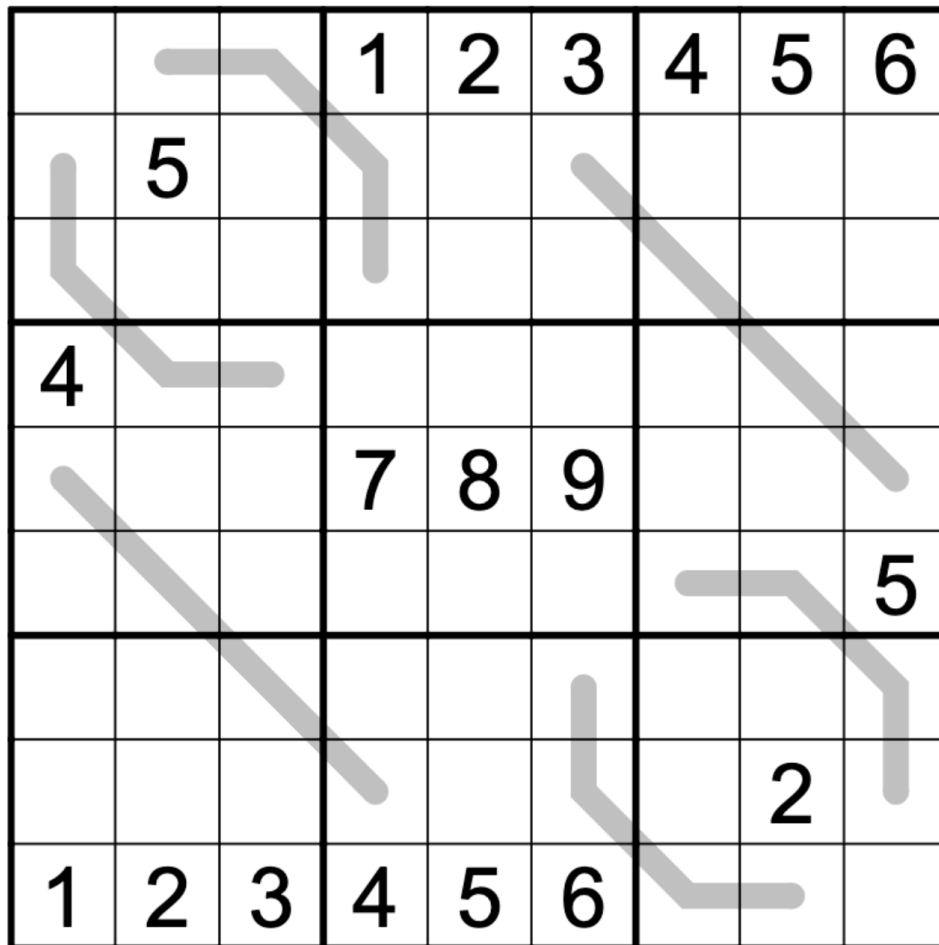
f-puzzles: <https://f-puzzles.com/?id=yjnkzvve>

CtC: <https://tinyurl.com/k54pbzbj>

July 9, 2021: Palindrome

Sam Cappleman-Lynes

Normal Sudoku rules apply. Additionally, each grey line must form a palindromic sequence; that is, it reads the same in both directions.



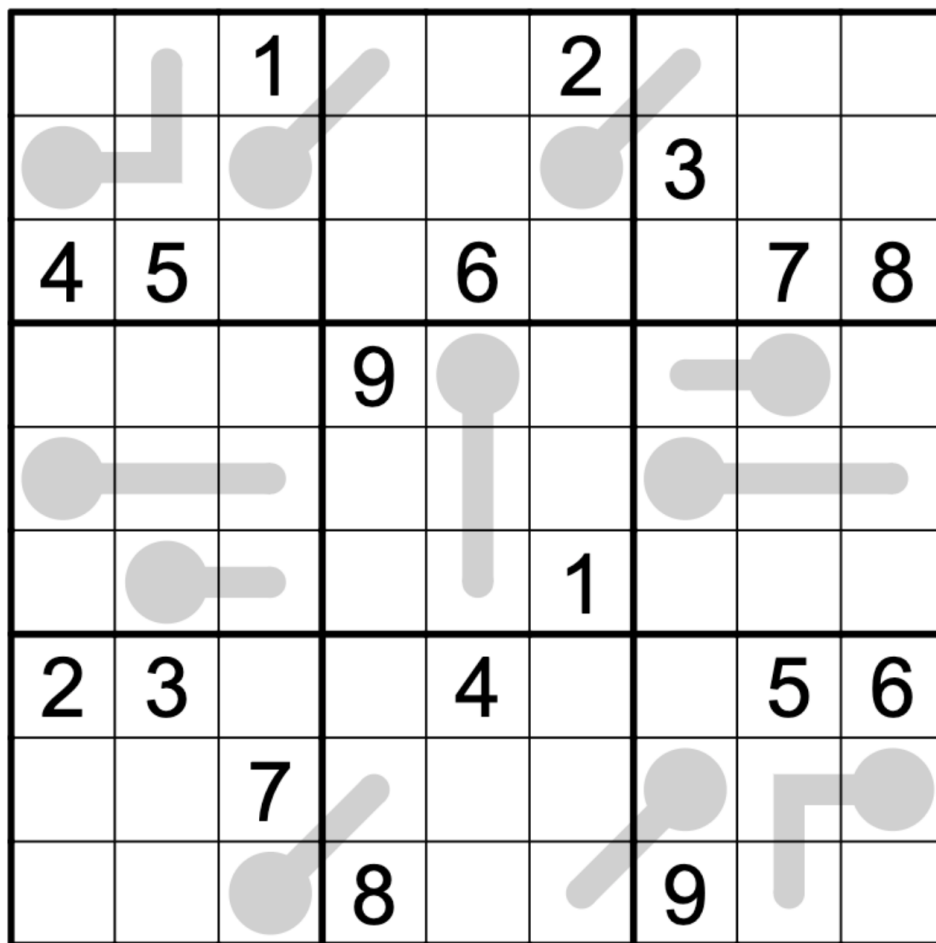
f-puzzles: <https://f-puzzles.com/?id=ydww6ww9>

CtC: <https://tinyurl.com/3sn56b8f>

July 10, 2021: Thermo

Philip Newman

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



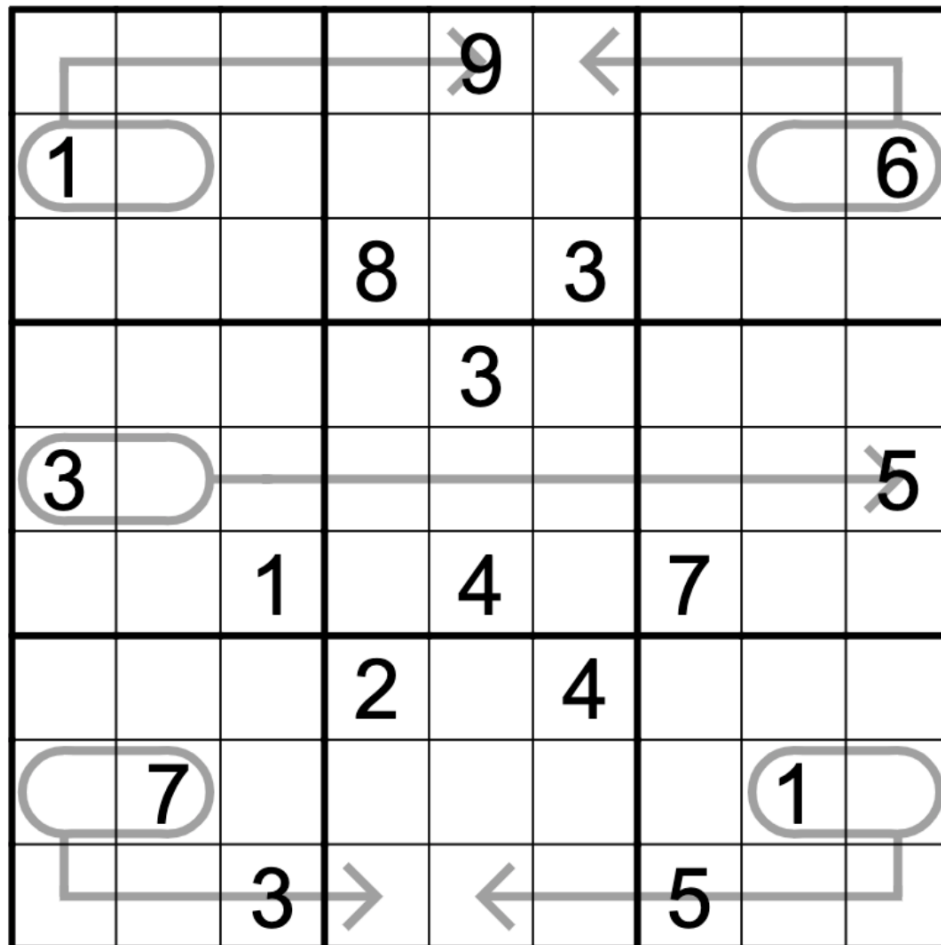
f-puzzles: <https://f-puzzles.com/?id=ye25tsgu>

CtC: <https://tinyurl.com/yp9ussxu>

July 11, 2021: Arrow

Clover

Normal sudoku rules apply. Digits along an arrow sum to the value in the adjoining circle, which should be read as a two-digit number from left to right.

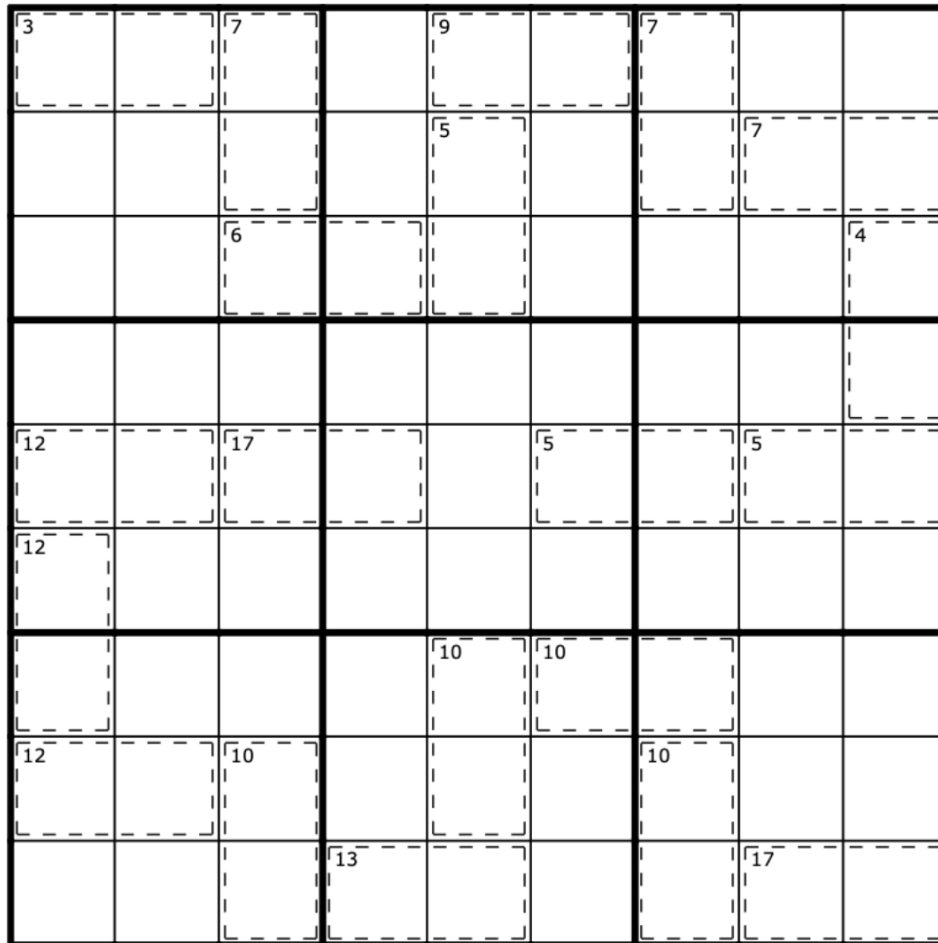


f-puzzles: <https://f-puzzles.com/?id=yh6pvxwd>

CtC: <https://tinyurl.com/vbcf5wds>

July 12, 2021: Killer
Sam Cappleman-Lynes

Normal Sudoku rules apply. Digits in cages must not repeat and must sum to the total in the top-left corner of the cage.



f-puzzles: <https://f-puzzles.com/?id=yjzh68cc>
CtC: <https://tinyurl.com/64dkapvm>

July 13, 2021: Odd/Even

Philip Newman

Normal sudoku rules apply. Digits in grey circles must be odd. Digits in grey squares must be even.

	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=ygktglbb>

CtC: <https://tinyurl.com/28ud6hra>

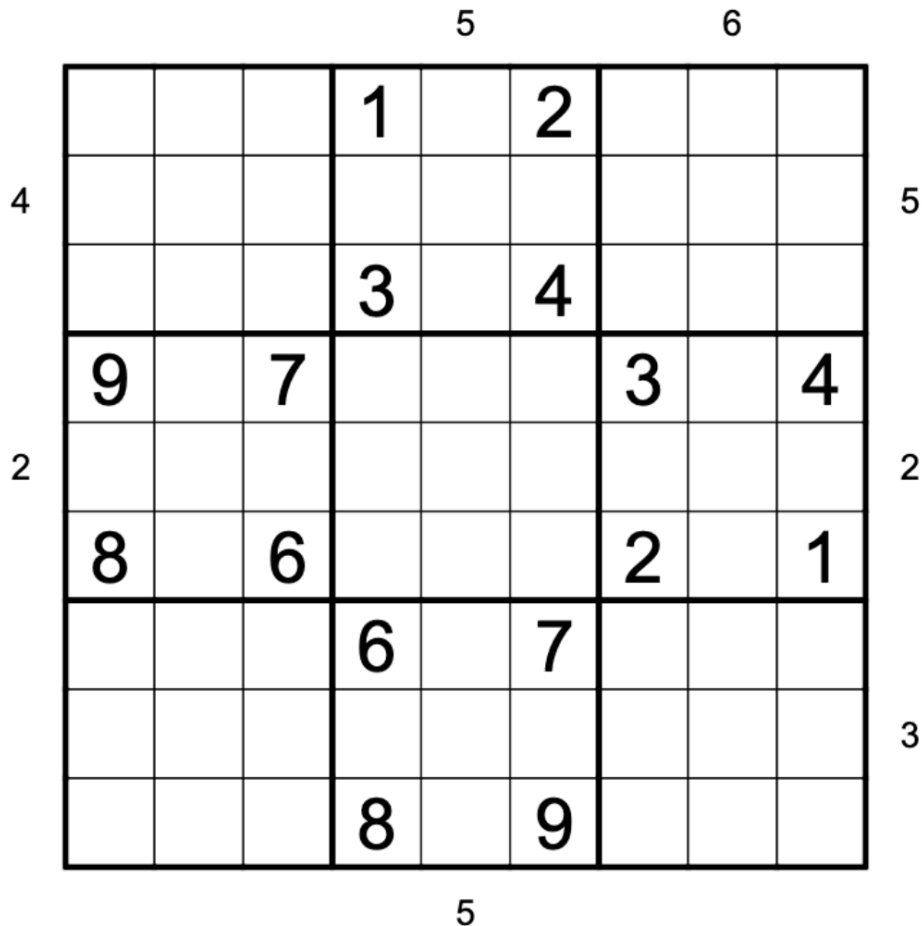
July 14, 2021: Skyscraper

Clover

Normal sudoku rules apply.

The digits in the grid symbolize the heights of buildings, from 1 (shortest) to 9 (tallest). A clue outside of the grid tells you how many buildings can be seen when looking in a straight line from that direction. A taller building blocks all shorter buildings behind it from view.

For instance, if a row contains the digits 1 4 3 6 7 9 2 5 8, then five buildings (1, 4, 6, 7, 9) can be seen when looking from the left, and two buildings (8, 9) can be seen when looking from the right.



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

CtC: <https://tinyurl.com/3wwt5vba>

July 15, 2021: Clock
 Sam Cappleman-Lynes

Normal Sudoku rules apply. In addition, there are several digital displays in the grid; each of these must contain a valid time in 24-hour format. For example, 19:47 and 23:41 would both be fine but you can't have 17:82 or 31:45.

Note for new solvers: clock times after midnight begin with 00:00, not 24:00.

⌚	:	⌚				3	4
		⌚	:	⌚			5
4	6			⌚	:	⌚	
			7				
⌚	:	⌚	8	⌚	:	⌚	
				9			
	⌚	:	⌚			6	9
5			⌚	:	⌚		
6	7			⌚	:	⌚	

f-puzzles: <https://f-puzzles.com/?id=yzdrpww9>
 CtC: <https://tinyurl.com/ydeujzsd>

July 16, 2021: Classic

Philip Newman

Normal sudoku rules apply.

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

f-puzzles: <https://f-puzzles.com/?id=yzvwhpo9>

CtC: <https://tinyurl.com/mbya43sw>

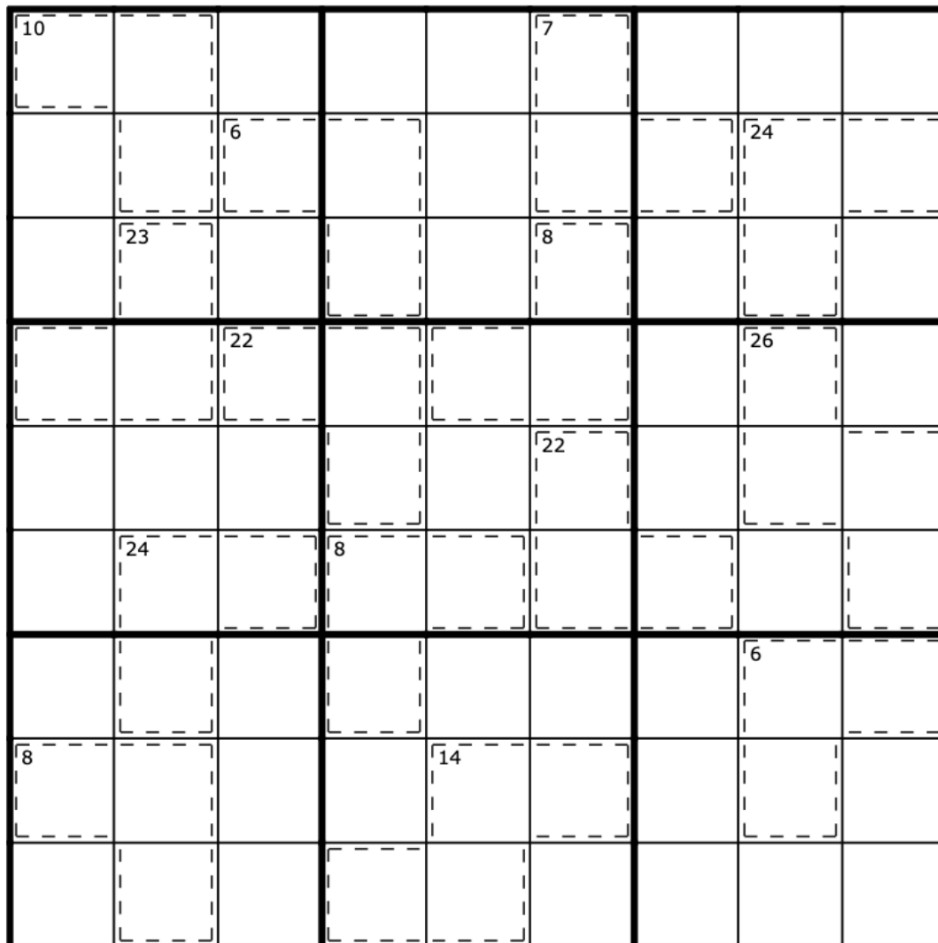
Bonus Puzzles

We're getting the hang of setting truly approachable puzzles, but there are always a few that take the testers longer than expected to solve. In each GAS Leak, we publish our favorite rejected puzzles for you to try with no time limit. You'll find them on the next three pages.

Bonus 1: Killer

Clover

Normal sudoku rules apply. Digits in a cage may not repeat and must sum to the value in the top left corner of the cage.



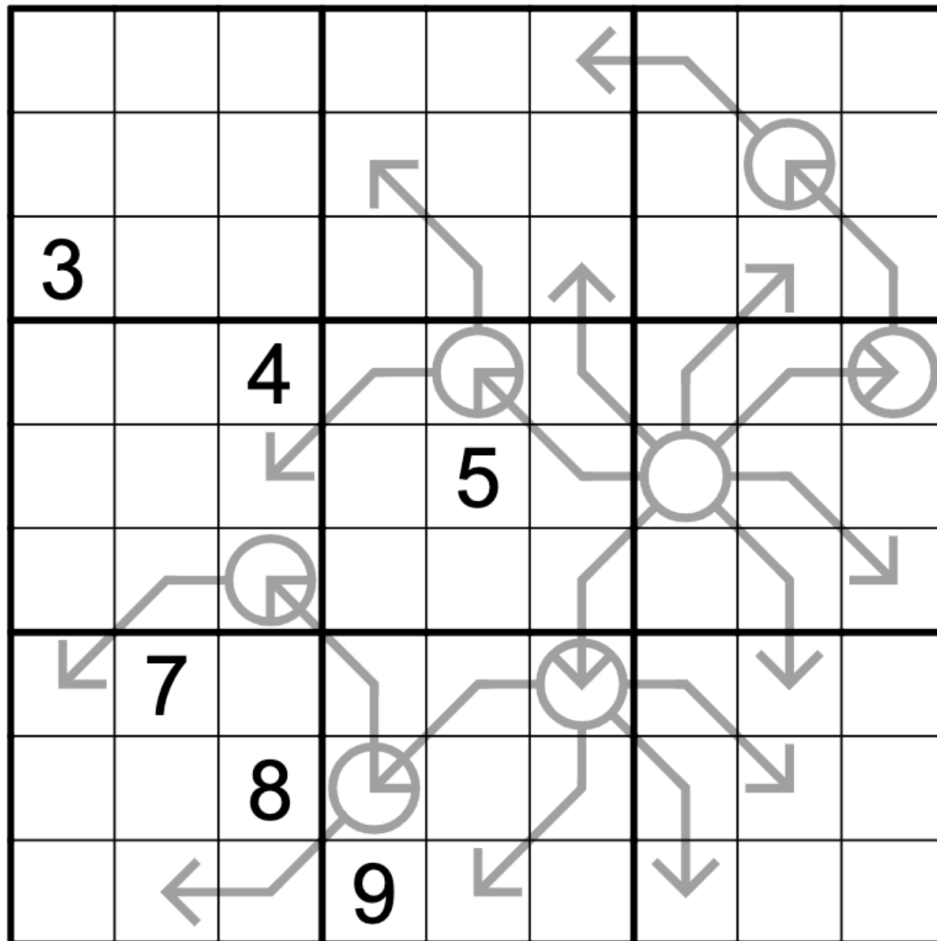
f-puzzles: <https://f-puzzles.com/?id=yedmcjeu>

CtC: <https://tinyurl.com/bafer7n8>

Bonus 2: Arrow

Philip Newman

Normal sudoku rules apply. Digits along an arrow must sum to the value in the adjoining circle. Digits along an arrow may repeat as long as they obey sudoku rules.



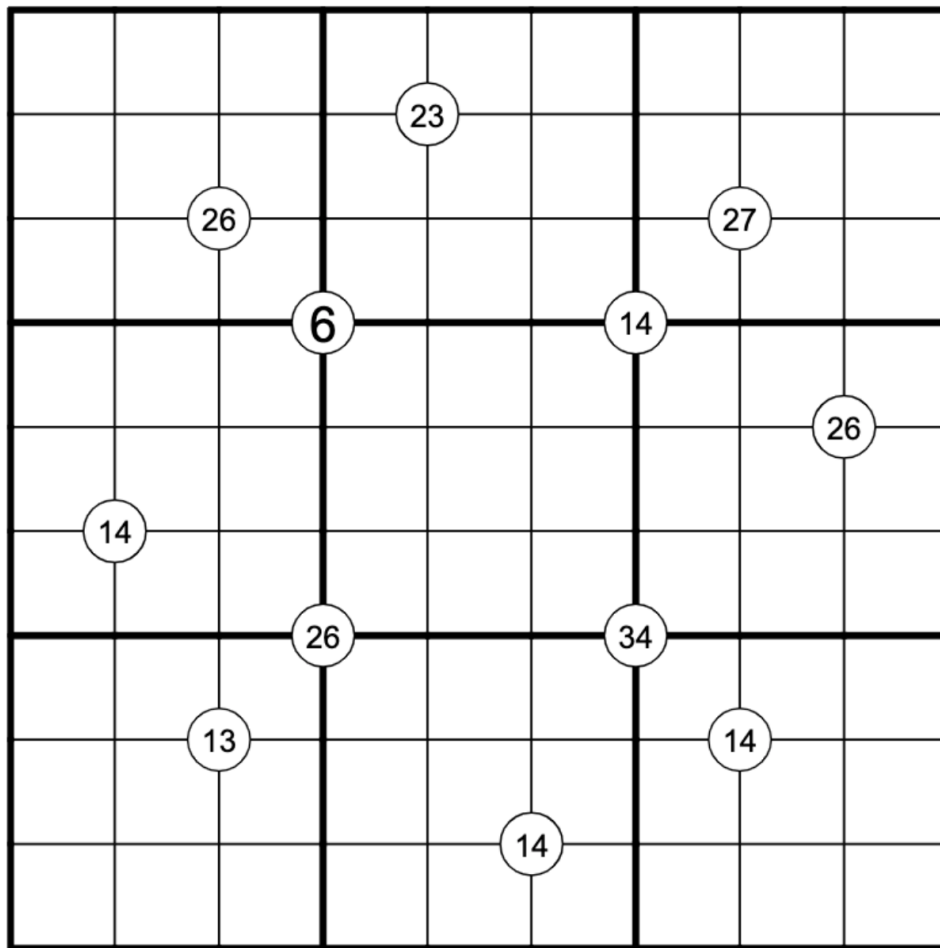
f-puzzles: <https://f-puzzles.com/?id=yfggg2xh>

CtC: <https://tinyurl.com/4t43nzme>

Bonus 3: Group Sums

Sam Cappleman-Lynes

Normal sudoku rules apply. In addition, some white circles appear in the grid. The four digits surrounding a white circle must sum to the value in the circle. Digits surrounding a circle may repeat as long as they obey sudoku rules.



f-puzzles: <https://f-puzzles.com/?id=yz565xqw>

CtC: <https://tinyurl.com/tkzbe76n>

Time Benchmarks

	One party hat	Two party hats
June 27	10:00	5:00
June 28	12:00	6:30
June 29	12:00	7:30
June 30	15:00	9:00
July 1	14:00	8:00
July 2	16:00	9:30
July 3	15:00	9:00
July 4	20:00 (all puzzles combined)	12:00 (all puzzles combined)
July 5	8:00	5:00
July 6	12:00	7:30
July 7	10:00	6:00
July 8	8:30	5:30
July 9	11:30	7:00
July 10	15:00	8:00
July 11	10:00	6:00
July 12	11:30	7:30
July 13	10:00	5:30
July 14	16:00	9:00
July 15	15:00	9:30
July 16	10:00	5:00