

The Twelve Days of Sudoku
5th Day of Lessons and Puzzles

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

The Loneliest Number

Author's Quick Note:

Today is a lighter day in text form, because the puzzle is heavier in logic while also quite beautiful. The solution path starts from focusing on the given numbers for 1 to identify a pointing pair, to identify an x-wing, to finally identify some singles. It all ends up having a forced path solution for at least 4 digits, of the form ABBC where two of that set add up to the third. We could put together a CB radio and fit into one of the apparent groups in Ready Layer One. How is that possible? The magic of Snyder Sudoku with a very narrow solving path at the start of the solution.

The provocative question we'll pose today, going back to the comments on purposeful ordering of the digits to go with the logical challenge, is how much slower would you be on this puzzle if:

- A. We removed the title; or
- B. We made the 1's into 6's or a different digit; or
- C. If we scrambled the grid through isomorphic transformation like swapping rows or columns.

Silicon-based "intelligence" would follow a program without much bias if coded right so the isomorphisms don't matter. I suspect human eyes may trick us as we seek out beauty in this world and that can help sometimes with the logic.

The very best puzzles I know how to write are those where the solver feels they have been inside my head as they follow a carefully laid path and each discovery is another gift in both directions for the solver-construction relationship. I expect some of you should feel that way after solving this puzzle and I wouldn't feel as lonely as I do as I had some meet-up plans cancelled last minute. Please send some thanks in form of thumbs up/FAVE on the puzzle, comments where you were surprised, or even respond to some of the challenges and radical suggestions offered here.

Author's Original, Longer Note (unedited for tone):

With yesterday's puzzle, I told the story of hearts, and of respect shared between two puzzle designers through compelling and interesting sudoku designs sparking new ideas in my head.

With today's puzzle, I'm trying to tell a story. This is a goal I have with every puzzle. Whether simple or involved, I want to share some joy with the puzzle solver. Perhaps leaving an extra reward for them to find, so that when they notice that thing you left hidden for them to find and they also enjoyed finding it, they'll send you a message and you continue a dialogue as two and not as one.

Sudoku is a lonely puzzle. The word sudoku comes from the longer phrase "Sūji wa dokushin ni kagiru" which means roughly "the numbers must be single" but where "single" is actually the word for bachelor or unmarried person (dokushin). I translate sudoku as "The numbers are bachelors". Sadly, Dr. Sudoku is still doku. And for another future YouTube video on the sudoku fad I can tell the story of how my very first interview after winning the World Sudoku Championship in Prague was with a sex advice columnist who went to different hobbyist events and would ask questions like "how do you use {hobby = sudoku} in the bedroom?" I sometimes joke that I worked at Google so I could downrank the search results for that interview. I expect it is the irrelevance of the interview that led to its true downranking after 17 years.

I don't know that every puzzle can share different meanings of love. I have written what I think is still the only successful [sudoku-based wedding proposal](#). And I've written puzzles people still tell stories about and that sense of connection to the author's mind is more what I strive to achieve. I want to be a muse, and to find muses in this space.

I do know I've never met a computer-generated Sudoku puzzle I want to solve, as there is no constructor to have a conversation with and no reasoning behind the grid worth two bits anyway. The best generators do curate for the difficulty of steps and rate appropriately, possibly use some geometries that aren't just symmetric but that is rare.

Still, even those generators will become predictable over time as they won't allow certain things that fall outside their design rules. So I'm a lonely human waiting for any intelligence from the numbers of computer generators around me. Can deep generative models explore a lot of sudoku space, with some labels of the 100-1000 "interesting" puzzles and millions of "no" to find gold?

We don't need to start that big. I'll accept connecting to human intelligence today in the form of conversation with people who can solve this puzzle in my intended way and enjoyed the challenge. My (metaphorical) reward for those few is all the riches we've earned from puzzle design at Grandmaster Puzzles which must be a lot.* To claim the reward, it may help to know my public key which is my PIN, for the vast trove of riches, takes the form ABBC with two of those numbers (A/B/C) summing up to the remaining one but I won't reveal which is which. My private key (the bank account number) will be shared with anyone who can send me an interesting sudoku alongside the PIN.

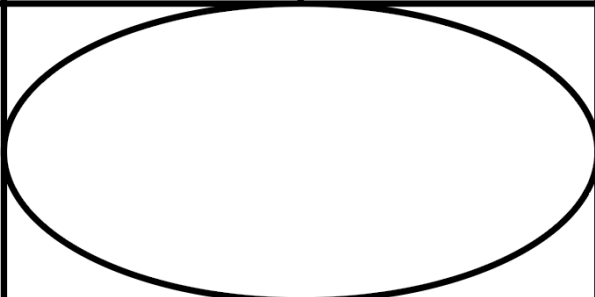
If this series is partially about design rule mistakes, maybe my life rule mistake is caring about how good apps are and their user experience. Yes I know we don't have good apps for our great puzzles, or even a mobile-friendly website, or a solution for about three different user id systems. Our digital presence is probably irrelevant which is why plagiarizing a lot of my puzzles doesn't draw attention commercially. To be honest, I probably get stuck in the details. Some weeks I am still trying to solve for an error that happened months before I was born, in May 1979. Where's the time machine to go back and help Howard? I love and hate ~~Sudoku~~ Number Place so much!!!

** Well, in your estimation of our vast riches you might have missed expenses like all the money lost and strife caused through typical situations in the world of puzzles. Like there is a specific Dutch object placement puzzle whose name is important and that I really love, and some iPhone app developer plagiarized just about every hand-crafted puzzle on the internet of that style including dozens of my own many years ago, making it into an app called Parks Seasons where the pay content is bullshit computer generation after the plagiarized and interesting free stuff. I couldn't get anyone to care to mark it as plagiarized content or to take it down despite inquiries, and lawyers cost the equivalent of millions of computer-generated sudoku license fees so I have to live through years of the Parks app existing. And then, when under a new name we get daily hand-crafted puzzles of this app online again in 2024 under the name Queens, some commenters are "isn't that just Parks?" At least most recognized the original name from the Dutch designers, but even this obsession with other solvers with chess pieces when so many other things including one fifth of NYC are Queens is astonishing, and no I didn't name the game, and no I'm not claiming to have invented something new, I'm just*

creating fun puzzles that can again be plagiarized when LinkedIn doesn't have an archive of grids and people make their own apps to present an archive of the grids.

One lesson you'll learn if you are in my situation is that besides lawyers, therapists also earn a lot more than puzzle designers. Not sure about wannabe comedians, but my angry faces are sometimes really me smiling at the absurdity of it all, as I sit here seeing "No Exit" to the trials and tribulations.

If you do love our puzzles, and are willing to "plagiarize" our GMPuzzles content but pay a "bribe" to us with some other conditions like plagiarizing our names at the same time alongside the puzzles, there may be an app that we could both agree to not sue on. I'd take a step up to the plate to work on it myself, but I have to both pay the lawyer(s) / therapist(s) and deal with new nonsense like a cease-and-desist request from a former media giant now mostly game company who thinks my recent visual sudoku experiences including putting a circle near some squares are too close to their upcoming "Connections-Doku" game (shown below), where we've told them we have far more than the one connection going on and Connections isn't even theirs to begin with but they insist we've breached something they created and they have more lawyers than the number of computer-generated sudoku I can make in a day, or so it seems.

Laurie	Halliwell	Billie	Carly
Perabo			John
Campbell	Davis	"Rowdy" Roddy	Cherie