

# SUNDAY STUMPERS + GIANT PUZZLES

## **GRANDMASTER PUZZLES**



## Have a Cracking New Year! by Thomas Snyder

Rules: Classic Sudoku Rules. Some arrow shapes are in the grid; the sum of the digits along the path of each arrow must equal the digit in the circled cell (digits can repeat on an arrow). Some thermometer shapes are in the grid; the digits along the thermometer must be strictly increasing from the round bulb to the flat end. Some rectangular cages are in the grid marked by dashed lines; the sum or product of the digits in these cages must be either 20 or 21. Finally, some arrows are given outside the grid; the sum or product of the digits along these marked diagonals must be



## Linking 200 Cells by Prasanna Seshadri

**Grids 1-2:** Follow regular LITS rules. Between the two LITS grids, the corresponding white cells can never both be shaded, while the corresponding gray cells must be identical in the three 200-shaped regions.

Use the LITS solutions and your ingenuity to discover the needed constraints for Grids 3-4. For Grid 3, you will find that some gray circles must change color to white or black.

**Grid 3:** Follow regular Balance Loop rules. Additionally, the loop must cross itself if it passes through a gray circle. The loop must go straight through the gray circle both times; in one direction the path behaves as if the circle is white with equal loop lengths, and in the other direction the path behaves as if the circle is black with unequal loop lengths. It is not required that the loop pass through all of the gray circles (but it must pass through all white and black circles).



Grid 4: Follow regular Yajilin rules.

When taken together, the grids yield a short final answer! Send this (less than five character) string to hiddencontest@gmpuzzles.com by March 14th, 2021 to be eligible to win an e-book by Prasanna Seshadri.

Grid 1 LITS	Grid 3 BALANCE LOOP (CRISSCROSS)
Grid 2	Grid 4
LITS	<b>YAJILIN</b>

## Contest Puzzle: Linking 200 Cells by Prasanna Seshadri

w	C20	-	W	4	C15	W	C12	R4	C14	В	R2	-	C15	3	W	R1	C14	4	W														
2	в	в	R2	СЗ	C2	R7	в	3	C2	-	C16	w	C19	В	C18	8	6	R5	R4		 												
СЗ	R9	СЗ	R4	6	в	6	C4	R1	В	в	R6	-	R6	R5	W	W	R5	w	C10		 											 	
R5	R4	4	8	6	C4	В	W	W	8	W	R2	R7	-	C15	W	C5	R5	C12	-		 	 A	L				R			0			
R5	R1	C20	w	R3	C4	R3	-	C8	R2	4	C7	W	6	В	-	R2	C13	C2	C4		 			N	(	0		G	T		Y		
R3	4	-	в	C14	4	C7	4	R6	-	8	W	C6	R3	-	R6	В	W	-	w		 	 	A		(	J		2			0		
w	C6	R1	R9	R10	в	C8	R9	В	2	12	6	4	3	В	-	В	R7	12	-		 	 L		N			•						
C6	5	В	C2	w	C3	6	В	C1	W	СЗ	C10	C8	R4	W	W	C1	4	C11	R8		 	 										 	
R5	-	В	R5	-	C14	В	-	В	C1	R10	w	-	R3	R5	C12	R6	W	R4	-		 	 											
В	C14	R5	C14	-	R5	C14	-	C9	R8	W	-	C4	6	C5	W	6	C11	R4	w		 												
C5	R5	0	D	СЗ	R9	R1	R	C2	C17	R3	3	-	-	R	R2	C7	-	-	U														
C5 R5	R5 R10	0	D -	C3 R7	R9 C17	R1 -	R 4	C2 R2	C17 U	R3 0	3 C4	- D	- C4	R R6	R2 -	C7 U	- C12	-	U 2														
C5 R5 R	R5 R10 6	0 - C3	D - 3	C3 R7 5	R9 C17 U	R1 - -	R 4 2	C2 R2 D	C17 U R7	R3 0 C18	3 C4 0	- D R7	- C4 7	R R6 R	R2 - -	C7 U 2	- C12 C19	- - R2	U 2 R5														
C5 R5 R C1	R5 R10 6 2	0 - C3 C7	D - 3 L	C3 R7 5 R3	R9 C17 U C3	R1 - -	R 4 2 C1	C2 R2 D C4	C17 U R7 U	R3 0 C18 3	3 C4 0 3	- D R7 R2	- C4 7	R R6 R C4	R2 - - C3	C7 U 2 4	- C12 C19 R6	- 2 - R2 L	U 2 R5 C13			N	В				L			H			
C5 R5 R C1 R9	R5 R10 6 2 U	0 - C3 C7 D	D - 3 L	C3 R7 5 R3 R5	R9 C17 U C3 C6	R1 - - -	R 4 2 C1 R1	C2 R2 D C4 R10	C17 U R7 U C20	R3 0 C18 3 D	3 C4 0 3 L	- D R7 R2 C17	- C4 7 1	R R6 R C4 L	R2 - - C3 R3	C7 U 2 4 R	- C12 C19 R6 R3	- R2 L	U 2 R5 C13 U			N	В	N		Y	L	C	U	H	G		
C5 R5 C1 R9 1	R5 R10 6 2 U R4	0 - C3 C7 D C5	D - 3 L 1 2	C3 R7 5 R3 R5 C11	R9 C17 U C3 C6 3	R1 - - - R4	R 4 2 C1 R1 C6	C2 R2 D C4 R10 R1	C17 U R7 U C20 R6	R3 0 C18 3 D D	3 C4 0 3 L R3	- D R7 R2 C17 R6	- C4 7 1 -	R R6 R C4 L R	R2 - C3 R3 U	C7 U 2 4 R C7	- C12 C19 R6 R3 C5	- R2 L 7 C18	U 2 R5 C13 U			N	B ?	N		Y	L	C	U	H	G		
C5 R5 C1 R9 1 C4	R5 R10 6 2 U R4 L	0 - C3 C7 D C5 D	D - 3 L 1 2 C20	C3 R7 5 R3 R5 C11 U	R9 C17 U C3 C6 3	R1 - - - R4 -	R 4 2 C1 R1 C6 R4	C2 R2 D C4 R10 R1 U	C17 U R7 U C20 R6 -	R3 0 C18 3 D D C11	3 C4 0 3 L R3 C14	- D R7 R2 C17 R6 C3	- C4 7 1 - - R7	R R6 R C4 L R R5	R2 - C3 R3 U 2	C7 U 2 4 R C7 L	- C12 C19 R6 R3 C5 0	- R2 L 7 C18 2	U 2 R5 C13 U 1 C3			N	B ? C	N		Y G	L ?	C Y	U	H ?	G		
C5 R5 C1 R9 1 C4 R8	R5 R10 6 2 U R4 L -	0 - C3 C7 D C5 D -	D - 3 L 1 2 C20 C7	C3 R7 5 R3 R5 C11 U R6	R9 C17 U C3 C6 3 - C9	R1 - - R4 - 0	R 4 C1 R1 C6 R4 C7	C2 R2 D C4 R10 R1 U 1	C17 U R7 C20 R6 -	R3 0 C18 3 D C11 4	3 C4 0 3 L R3 C14 2	- D R7 R2 C17 R6 C3	- C4 7 1 - R7	R R6 C4 L R5 C2	R2 - C3 R3 U 2 R10	C7 2 4 R C7 L C2	- C12 C19 R6 R3 C5 0 C5	- R2 L 7 C18 2 L	U 2 R5 C13 U 1 C3 R2			N	B ? C	N		Y G	L ?	C Y	U	H ?	G		
C5 R5 C1 R9 1 C4 R8 C18	R5 R10 6 2 U R4 L -	0 - C3 C7 D C5 D - C20	D - 3 L 1 2 C20 C7 R1	C3 R7 5 R3 R5 C11 U R6 L	R9 C17 U C3 C6 3 - C9 2	R1 - - R4 - R4 - 0 C19	R 4 C1 R1 C6 R4 C7	C2 R2 D C4 R10 R1 U 1	C17 U R7 C20 R6 - - C2	R3 0 C18 3 D C11 4 R3	3 C4 0 3 L R3 C14 2 D	- R7 R2 C17 R6 C3 - R7	- C4 7 - R7 - R7 -	R R6 C4 L R5 C2 2	R2 - C3 R3 U 2 R10 C6	C7 2 4 R C7 L C2 D	- C12 C19 R6 R3 C5 0 C5 R8	- R2 L 7 C18 2 L R5	U 2 R5 C13 U 1 C3 R2 L			N	B ? C	N		Y G	L ?	C Y	U	H ?	G		

# 30th Birthday Surprise by Prasanna Seshadri Theme: The Journey

Castle Wall	Country Road	Balance Loop
Inner Cave	Tapa- Like Loop	Slither- link
Masyu	Maxi Loop	Yajilin

Draw a single non-intersecting loop that can enter/exit each of the nine subgrids any number of times so long as it follows the specific rules for each type given below (special notes given for combination puzzle in italics). Some letters are given in each subgrid. Within each subgrid, identical letters must have identical loop path characteristics (i.e., follow one of six possible paths, or be an unused / shaded cell). Across different subgrids, identical letters must have different loop path characteristics. The letters G and J (which appear just once each) are to be considered together and must have different loop path characteristics. A chart is given with the puzzle to help track this information.

Castle Wall: The subgrid contains bordered or colored cells that cannot be part of the loop. Black cells must be outside the loop; white cells (with heavy borders) must be inside the loop. Numbers and arrows refer to the total sum of the lengths of loop segments in the given direction up to the border cells of the Castle Wall subgrid; loop segments passing the bold edge of the subgrid do not count.

Country Road: The loop must enter and exit each bold region exactly once. If a number clue is given in a region, that number indicates the exact number of cells used by the loop in the region. Unused cells cannot be orthogonally adjacent across different regions within the Country Road subgrid (this no unused cell adjacency rule does not apply to cells in subgrids adjacent to the Country Road).

Balance Loop: The loop must pass through all cells with circles; the loop may either go straight or turn at each circle. All white circles must have loop segments of equal length extending from both sides of the circle before turning. All black circles must have loop segments of unequal length extending from both sides of the circle before turning. Numbers, where given, indicate the sum of the loop segment lengths on both sides of the circle. (Note that the total counts are not affected by other circles being crossed before turning and include any segments that cross the subgrid border.)

Inner Cave: (Variation of "Cave" puzzle counting) The loop must pass through all cells in this subgrid except for any blackened cells. An Inner Cave numbered clue represents the total count of full grid lines seen in all four directions from the clue, including lines that extend past the bold borders into other subgrids. Circle clues can be either inside or outside of the loop.

Tapa-Like Loop: Clues inside the subgrid represent the number of neighboring cells visited by the loop; if there is more than one number in a cell, each number should be represented with a separate loop segment. Clues do include the count of loop segments for cells outside the subgrid.

Slitherlink: Numbers inside a circle indicate how many of the cell edges touching that circle are part of the loop. (This is a grid-based reformatting of the familiar Slitherlink style to make compatible with the other styles in this puzzle.)

Masyu: The loop must pass through all cells with circles. The loop must go straight through the cells with white circles, with a turn in at least one of the cells immediately before/after each white circle. The loop must make a turn in all the black circles, but must go straight in both cells immediately before/after each black circle. These turning rules still apply if the loop path goes outside the subgrid.

Maxi Loop: The loop must pass through all cells in this subgrid. If a number clue is given in a bold region, that number indicates the total count of cells passed through by the largest connected loop section(s) in the region.

Yajilin: Blacken some white cells so the loop passes through all remaining white cells. Blackened cells cannot share an edge with each other. Some cells are outlined and in gray and cannot be part of the loop. Numbered arrows in such cells indicate the total number of blackened cells that exist in that direction in the grid. Numbered arrows only apply to cells within the subgrid, and blackened cells have no effect on cells outside of the subgrid.

Γ		-			-	F	-		F	ī
			1		-			1↓		
Γ		0†							Π	Γ
Γ			Π		₽					
Г	-	-		1				2		F
Π		3				Ρ		Г	Ρ	Γ
Γ		-	-	_	-	F	-			













## 30th Birthday Surprise by Prasanna Seshadri Theme: The Journey

From Prasanna: "This puzzle is meant to be a culmination of 10 years of authoring puzzles. I want to especially thank GMPuzzles for accommodating these special puzzles every year even if it may not have fit the regular schedules. I also see this puzzle as a "reset" of sorts, and I'll get back to simple ideas to celebrate my next few birthdays, and then see where that takes me. These last 10 years have been a fantastic experience and I'd like to take this moment to thank the puzzle community as a whole for being a huge part of my journey."

The subgrid letters represent the last 9 birthday surprises from Prasanna:

2012 = TWENTY-ONE PUZZLES https://prasannaseshadri.wordpress.com/2012/03/02/puzzle-no-62-82-my-birthday-puzzles/

2013 = KNAPP DANEBEN TAPA

https://prasannaseshadri.wordpress.com/2013/03/02/puzzle-no-313-knapp-daneben-tapa-birthday-special/

2014 = STATUE PARK

https://www.gmpuzzles.com/blog/2014/03/statue-park-prasanna-seshadri32/

#### 2015 = BIRTHDAY LOOP

https://www.gmpuzzles.com/blog/2015/03/birthday-loop-prasanna-seshadri/

## 2016 = CASTLE WALL (WITH TOWERS)

https://www.gmpuzzles.com/blog/2016/03/castle-wall-with-towers-by-prasanna-seshadri/

## 2017 = TAPA AND YAJISAN-KAZUSAN

https://www.gmpuzzles.com/blog/2017/03/birthday-surprise-puzzle-prasanna-seshadri/

## 2018 = CANAL VIEW AND SPECIAL CLUES

https://www.gmpuzzles.com/blog/2018/03/birthday-surprise-puzzle-prasanna-seshadri-2/

## 2019 = SANDWICH CONS SUDOKU

https://www.gmpuzzles.com/blog/2019/03/birthday-surprise-sudoku-by-prasanna-seshadri/

#### 2020 = SWIVELLING SERPENT

https://www.gmpuzzles.com/blog/2020/03/swivelling-serpents-birthday-surprise-by-prasanna-seshadri/



A B C D E G/J H I K L N O P R S T U V W Y Z







## Anti-Pi Sudoku by Serkan Yürekli

Classic Sudoku Rules. Also, no two of 3, 1, and 4 can appear in adjacent cells. Some cages are marked by dashed lines; the sum of the digits in each cage must equal the value given in the upper-left corner of that cage (digits cannot repeat inside a cage). Some arrows given outside the grid indicate the sum of the digits along that diagonal path (digits can repeat on a diagonal). The value of any ungiven sum in either a cage or an arrow must not be a number composed solely of the digits 3, 1, and 4 (like 4, 11, 14, 31).



# Statue Park (Half and Half) by JinHoo Ahn

Rules: Standard Statue Park rules. Also, there are some given cages with dashed lines. In each cage, exactly half of the total number of cells must be occupied by pentominoes.





## Example

# Statue Park (Half and Half) by JinHoo Ahn

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## Slitherlink (Cipher; Even Rows/Columns) by John Bulten

Rules: Standard Slitherlink rules. The letters A, M, O, and Y stand for different digits from 0 - 3. Also, an even number of cells in each row and in each column must be inside the loop.



From Here to Maternity

# TomTom (Cipher) by Serkan Yürekli

Rules: Standard TomTom rules. Also, the letters F, A, T, H, E, R, S, D, Y represent different digits from 0-9. Identify which letters stand for which digits and then solve the TomTom. Multi-digit clues cannot start with a 0. (Note: The /S cage is a division



cage with value "S"; the slash sign is used instead of the normal division symbol for aesthetic purposes.)



{1-9}



Father's Day

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# Kakuro (Subset) by Prasanna Seshadri

Rules: Standard Kakuro Rules. Also, whenever two multi-digit entries intersect and the set of digits in one entry is a subset of the set of digits in the other entry, the cell preceding each of those entries (either giving the entry's clue or indicating that the entry is unclued) is shaded in gray. A shaded cell may be shaded because of its Across entry, Down entry, or both. Any clue cell that is not shaded does not have a multi-digit entry intersecting its Across or Down entries with a shared subset of digits. Any set of digits is considered a subset of itself.





Example by Serkan Yürekli



# Japanese Sums (Cipher) by Murat Can Tonta

Rules: Place the digits from 1 to 9 in some of the cells, so that no digit is repeated in any row or column. Also, all numbers are encrypted with J, A, P, N, E, S, U, M, H, D letters and each letter represents a different digit from 0 to 9. Numbers on the outside of the grid indicate the sums of adjacent digit groups in that row or column, in order. Each sum is separated by at least one unused cell. Single-digit clues cannot be a 0, and also multi-digit clues cannot start with a 0. A question mark indicates a sum value of unknown size, and can be single- or multi-digit.



Hidden

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# Hungarian Tapa by Palmer Mebane

Rules: Shade some empty cells black to create a single connected wall. Cells with numbers cannot be shaded, and the shaded cells cannot form a 2×2 square anywhere in the grid. Each row and column must contain eight shaded cells (four for the example). Place a number from 1 to 8 (1-4 for the example) into each shaded cell so that each number appears once in each row and column.

Numbers in a cell indicate the sums of the numbers of consecutive shaded blocks in the neighboring cells. If there is more than one number in a cell, then there must be at least one white (unshaded) cell between the black cell groups. Numbers on the shaded cells can repeat in a sum.









## Hungarian Tapa by Palmer Mebane



## \*\*\*\*

Four Corners of Four

{1-8}

# Star Battle (Double) by Murat Can Tonta

Rules: Standard Star Battle rules. Also, there are some shaded cells in the grid and those cells either contain two stars or none. (In a gray cell with two stars, none of the adjacent cells sharing an edge or corner can have any stars.)







Example by Serkan Yürekli

# Star Battle (Double) by Murat Can Tonta



Stars

## Killer Sudoku by Prasanna Seshadri

Rules: Classic Sudoku Rules. Also, the sum of the numbers in each cage must equal the value given in the upper-left corner of that cage. Numbers cannot repeat inside a cage.





24	 		 27		
19	30		 	15	
	 			,	16
			35		
19	32				
			15		
					27
30	25				
	 	,			

Y Go Extra?

# XV Sudoku by Murat Can Tonta

Rules: Standard Sudoku Rules. Also, whenever the numbers in two adjacent cells sum to exactly 10 or 5, an X or V is placed on the edge between cells reflecting the Roman numerals for 10 or 5. All adjacent cells not marked with an X or V cannot add up to 10 or 5.



Pairs

## Kurotto by Murat Can Tonta

(This puzzle, of moderate difficulty, is paired with the XV Sudoku Sunday Stumper as it uses the same clues)



Pairs