## Team Round 2: This or That Sudoku Team Name: \_\_\_\_\_ Team Members: \_\_\_\_\_

## 16\*100 points

There are 8 pairs of variants based on similar visual presentation of variants. Each pair of variants consist of two puzzles with the same given digits that will uniquely solve based on the respective variant rules.

Additionally, there is a cyclic ordering of these variant pairs, in which overlapping digits between the final solutions of the 2 puzzles in a variant pair is passed onto the next variant pair's grids, including the initial given values. Additionally, overlapping digits can only be passed forward once. In other words, overlapping digits amongst grids within the same variant pair either came from the variant pair that immediately preceded, or originates organically from solving/was an original given, and thus would be passed to the next set of variants. The only exception is that given digits ALWAYS pass forward to the next pair, even if the preceding had the same pair in that position.

4.1a	Antiknight Sudoku 100 Points
4.1b	Antiking Sudoku
4.2a	Sandwich Sums Sudoku 100 Points
4.2b	X-Sums Sudoku 100 Points
4.3a	Clone Sudoku
4.3b	Anti-Regions Sudoku
4.4a	Fortress Sudoku
4.4b	Odd/Even Sudoku 100 Points
4.5a	Thermo (unlabeled) Sudoku 100 Points
4.5b	Renban Sudoku 100 Points
4.6a	Outside Sudoku
4.6b	Skyscraper Sudoku
4.7a	German Whispers Sudoku 100 Points
4.7b	Palindrome Sudoku
4.8a	Consecutive Sudoku
4.8b	Multiple Dot Sudoku

Antiknight: Digits a chess knight's move away from each other cannot be the same. Antiking: Digits a chess king's move away from each other cannot be the same.

Sandwich Sums: The number on the outside indicates the sum of the numbers between 1 and 9 in that row or column.

X-Sums: The number on the outside indicates the sum of the first n numbers in that row or column, where n is the first number in the grid in that direction.

Clone: Numbers in corresponding locations in pairs of shapes must be the same. \*Note, there is one extra region that is not a clone

Anti-Regions: Numbers may not repeat in a region.

Fortress: Numbers in a shaded (circle or square) cell must be greater than its adjacent non-shaded neighbors. ALL LOCAL MAXIMUM SQUARES ARE SHADED. Odd/Even: Numbers in circle-shaded squares must be odd, and numbers in square-shaded squares must be even.

Thermo (unlabeled): Numbers are strictly increasing from one end of each line to the other. Renban: Numbers on each line are from a consecutive set of numbers though not necessarily in order.

Outside: Numbers on the outside must appear in the first three cells of that row or column from that direction.

Skyscraper: Numbers on the outside refer to the number of "skyscrapers" visible from that direction in that row or column, where digits are the heights of skyscrapers and shorter skyscrapers are hidden behind taller skyscrapers.

German Whispers: Adjacent numbers on the lines must differ by at least 5.

Palindrome: The numbers on lines must be palindromes – the two ends must have the same number, the second-to-ends must have the same number, etc.

Consecutive: Pairs of numbers marked with dots must be consecutive.

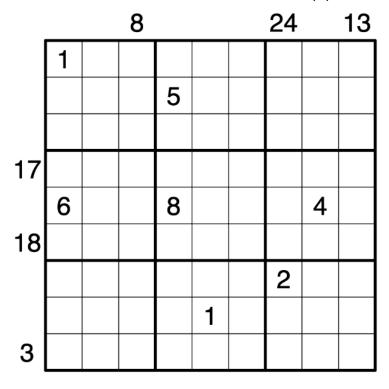
Multiple Dot: Pairs of numbers marked with dots indicate that one is a multiple of the other. ALL POSSIBLE DOTS ARE GIVEN THAT SATISFY THE CONDITIONS IN THE CONSECUTIVE AND THE MULTIPLE DOT GRIDS, RESPECTIVELY. The lack of a dot implies that NOT both are satisfied – either it is consecutive in the consecutive and not a multiple in the multiple grid, vice versa, or neither.

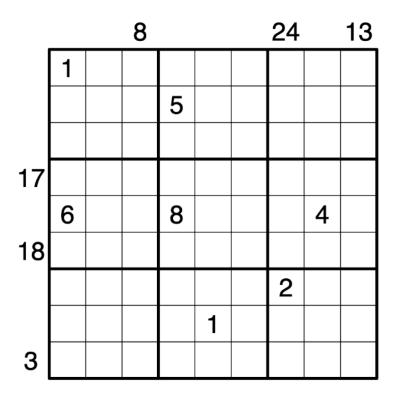
## Antiknight and Antiking (1)

	4			8	7	3
8	9				2	
		3				
						5
3				5		
7				9	5	
			8			9

	4			8	7	3
8	9				2	
		3				
						5
3				5		
7				9	5	
			8			9

Sandwich Sums and X-Sums (2)





Clone and Anti-Regions (3)

				_	_			
1			   					
	 							  -  -
				1		6		
							! !	
	6	1	3				9	
		 	3 2			4		6
		2		 		1		
				1				
			-					
1			   	1				
1			 		) 			¬
1						6		- - - - - - - - -
1						6		¬
1						6		
1						6		
1	6		3			6	9	
1	6	1	3 2			4	9	6

Fortress and Odd/Even (4)

	9		6	4	
				4 5	
9		3			
				2	
	0		6	1	
	9		6	4	
	9		6	4 5	
9	9	3	6	<b>4 5</b>	
9	9	3	6	5	
9	9	3	6	4 5 2	
9	9	3	6		
9	9	3	6		
9	9	3	6		

Thermo (unlabeled) and Renban (5)

6	3 2	9				9
6	3					9
6	3					9
6		9				9
6		9		3		9
6		9		1		
6				-  -		
6						
1 1	7				9	
3						
	1	2				
	<u> </u>					
				4		9
	H	9				
6	3				9	
3	2					
3	2					

Outside and Skyscraper (6)

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

German Whispers and Palindrome (7)

			7				
8							
					7		
	8						
		6		7		8	
					2		8
		8					
8			7				
8			1				
8			1		7		
8	8		1		7		
8	8	6	1	7	7	8	
8	8	6		7	7	8	
8	8	6		7	7	8	8

Consecutive and Multiple Dot (8, cycles to 1)

