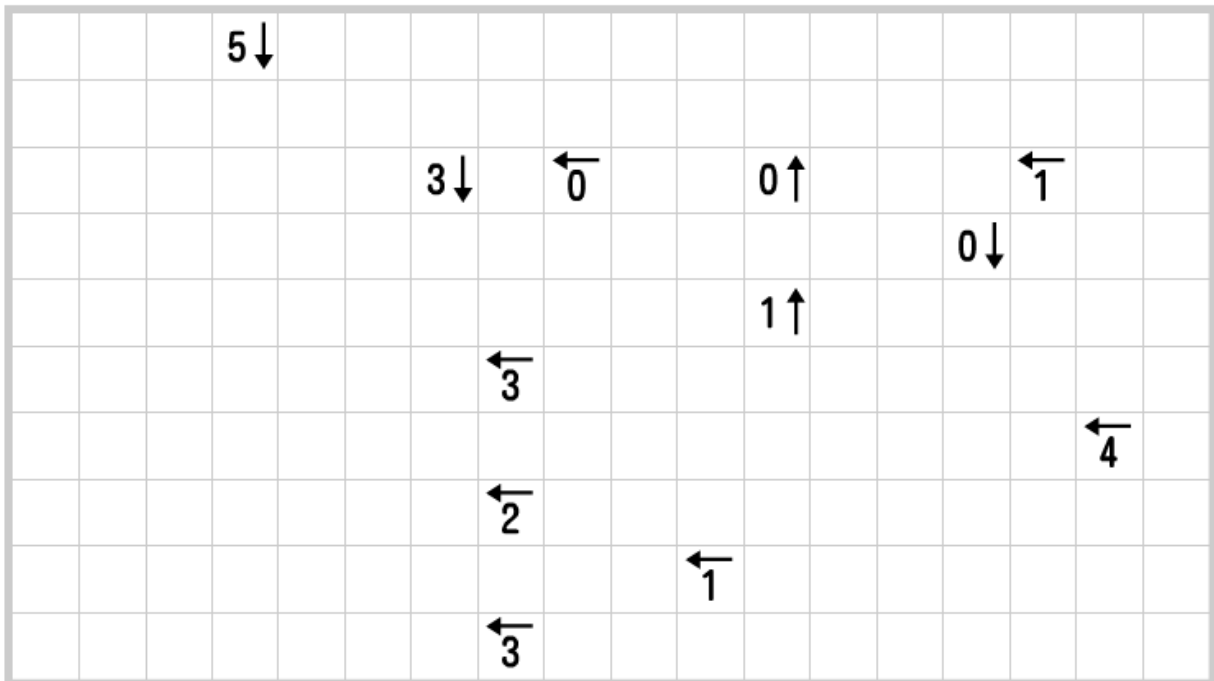
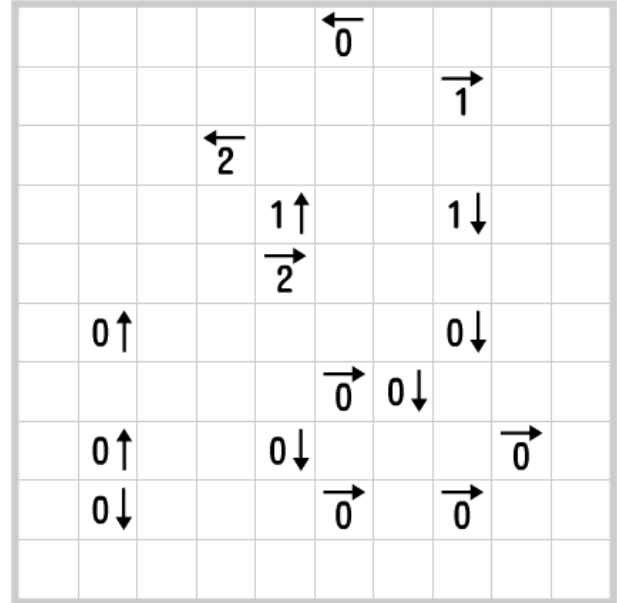
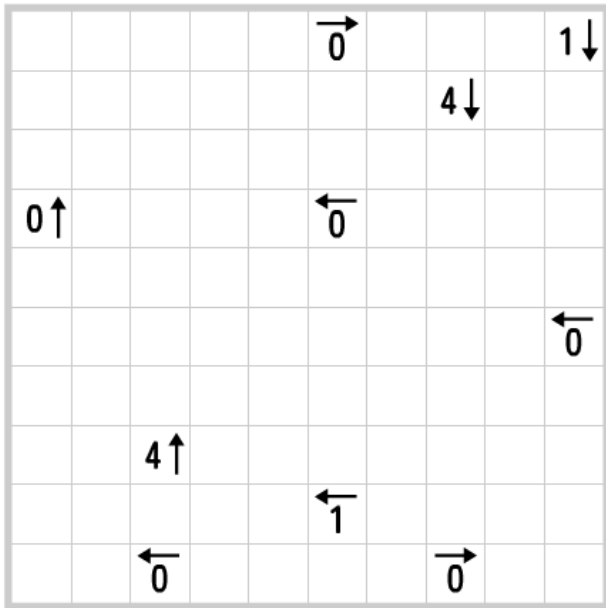
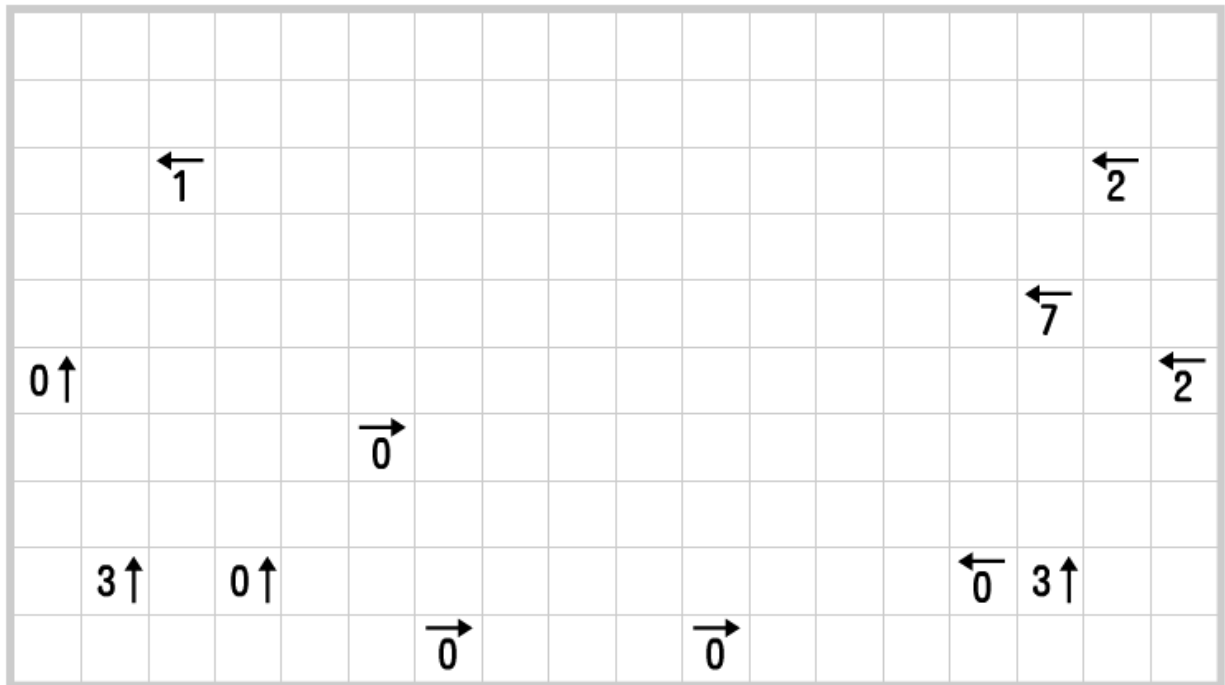
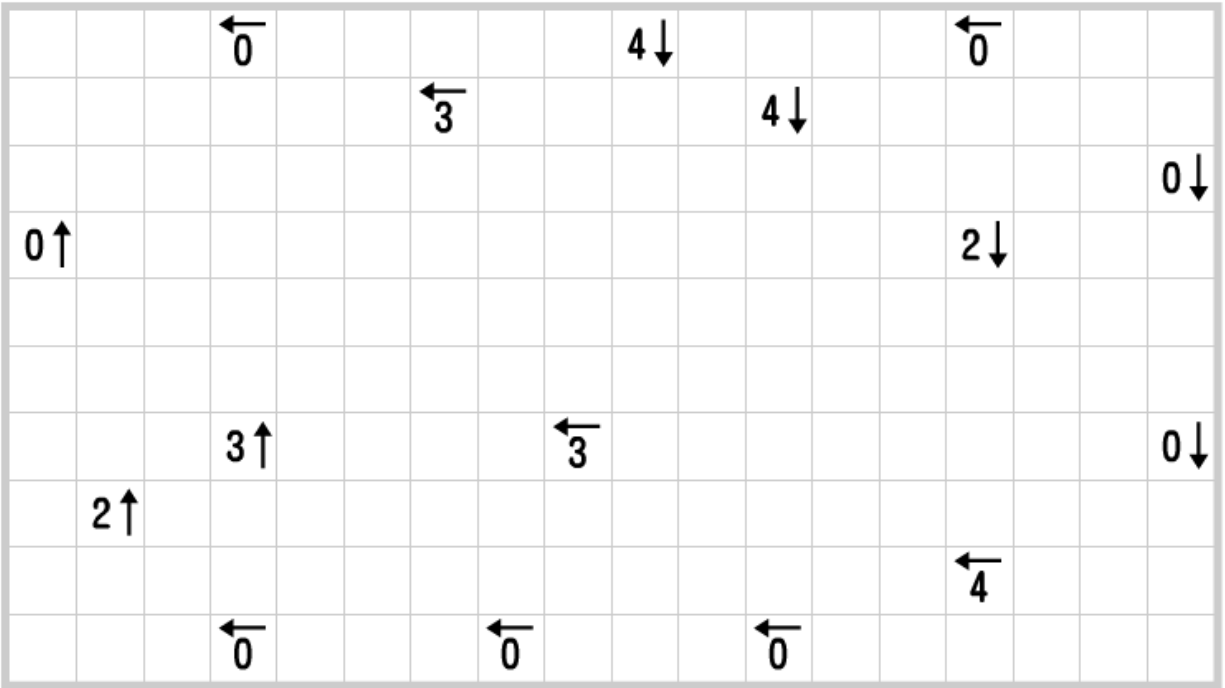
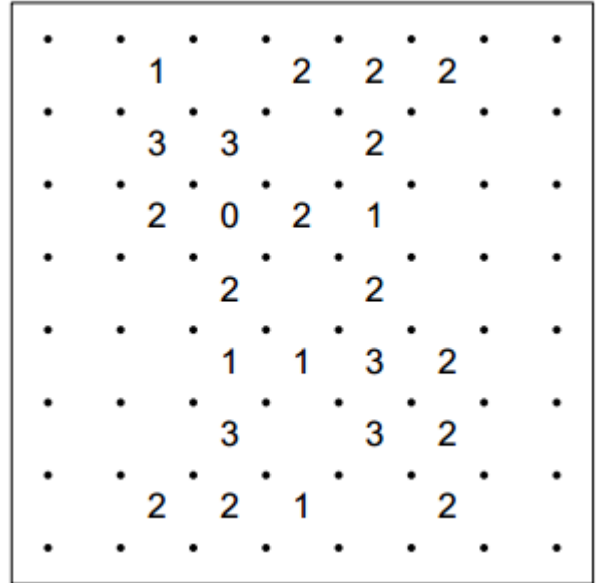
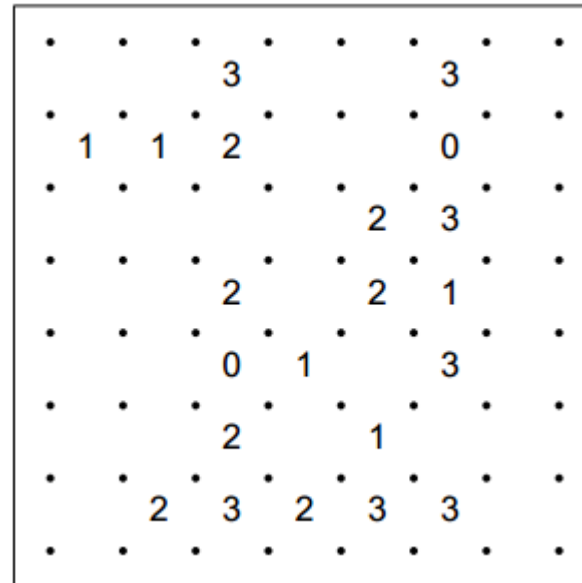
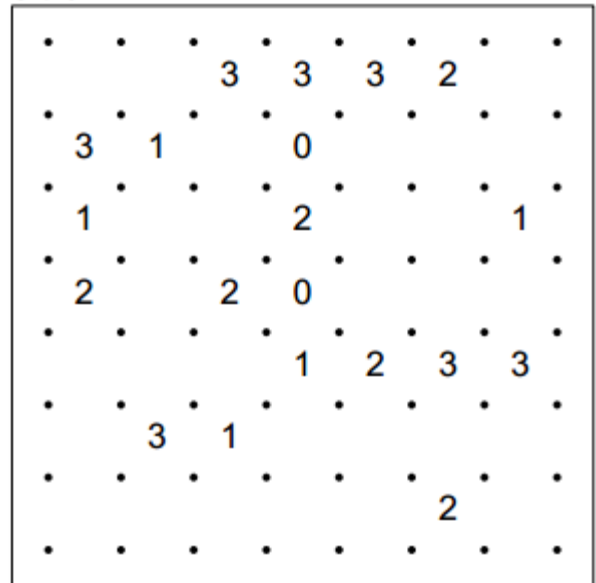
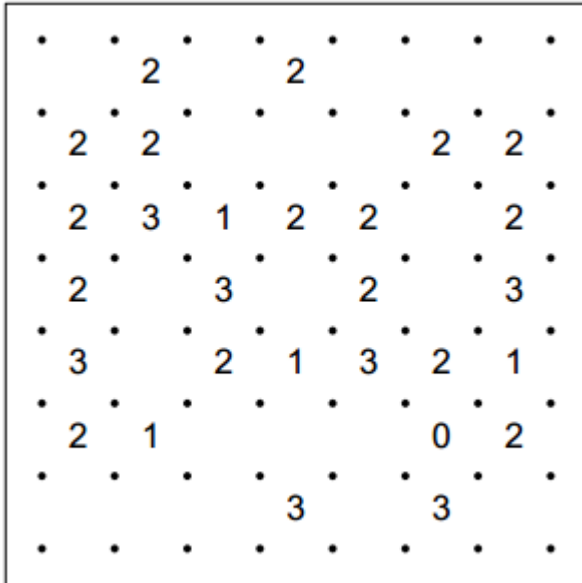
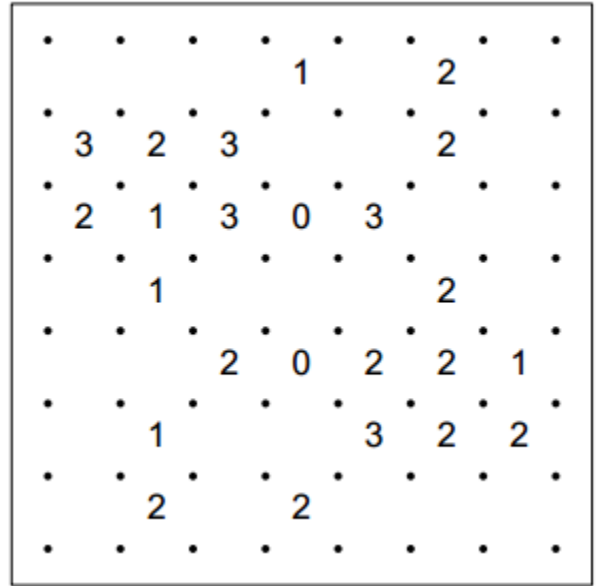
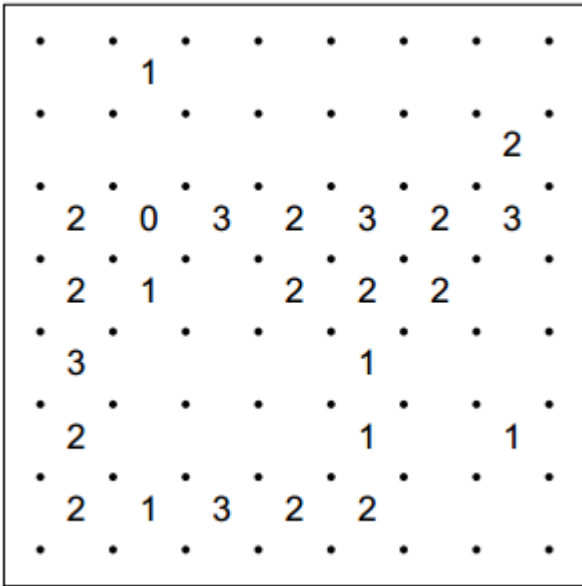


Further Beyond Sudoku: Using Logic Puzzles to Develop Mathematical Reasoning

Breeden Pickford-Murray
The Bay School of San Francisco







1	2	2	0						
0					0		3		
1					1			3	
1	3	3	3		0				
0			1			1			
	2			1				3	
		2		2	0	1		2	
2		3						3	
	3	0						3	
				0	1	0		1	

		3		3		3	1		2
3	0					1		3	
		3	3					3	
0		1		2		1			2
			3		2				2
3	3			2		1			3
2			3		0		3		3
		2				1	3		
	2			3				3	2
2			1	3		3		2	

		3		3		0			3		3		1	
1				2		3		3	1		0		3	
1				1		2				1	2			0
	3			3			1			3		2		2
3		2		3			2			3		3		1
2		3		3			0			3		0		2
	3		1			2				2			3	1
2				0		1				3		2		3
1				3		0		3	2		3		1	3
	3		1			2				2		1		2

		0	1		1		0		3	3		2		2		1	2
1					2			3			2			0			2
			1		2							2			3		
	2		2			3		0	3		3				3		1
2			0		1		1			2		2		1			1
2			3		2		1			1		1		2			1
	3			2		2		1	1		3			0		1	
			1		2							1		2			
3				1			1			3			2				3
	0	2		1		3		1	0		3		0		1	0	

Five NCTM participants ran a race.

1. Sadie came two places behind Christopher, but did not come in last.
 2. Justin lost to Ashli, but beat Shauna.
 3. Christopher did not come in first, Sadie did not come in last.
- What place did each person come in?
 - Explain how you solved this puzzle, and prove that your answer is the only one that will work, using the statements above to support your argument.