



The NINETEENTH by Brandon Mcphail & Sean Kelly

NURIKABE

Nurikabe is a pencil and paper puzzle, so pull out something to write with. Your goal is to shade in cells in the grid until all of the following conditions are met:

1. A cell containing a number cannot be shaded in.
2. Two cells are **touching** if they are directly above, below, to the left, or the right of each other. Two cells are **contiguous** if they are connected by pairs of touching cells.
3. Each numbered cell describes the number of contiguous white cells in which it is contained. Each area of white cells must contain exactly one number.
4. There cannot be any 2 by 2 blocks of shaded cells.
5. All of the shaded cells must be contiguous.

While these rules may sound at first a bit complicated, there are some immediate strategies that result:

- If a cell contains a 1, shade in its four neighbors.
- If a numbered cell is diagonally adjacent to another numbered cell, shade in the two cells that touch both numbered cells.
- If two numbered cells lie in the same row or column and are separated by only a single white cell, shade in that cell.

I recommend drawing a dot in the cells that you know *must* be white. Below is an example of a problem and its solution. Two Nurikabe puzzles are presented to the left. The second one should be a bit harder. Each has a unique solution.

		1		2
3				
	2	2		
	2		2	

→

		1		2
3				
	2	2		
	2		2	

Even Pythagoras could do this.

1							2
			2				
						3	
	4		3				3
	1						
		2		1			
	2		4				
							1
	1		2				

2							2
				2			
	2		7				
				3		3	
		2				3	
2		4					
	1			2		4	

Composite blocks
 Can you find 1000 composite numbers in a row (eg. 99, 100, 101, ...)?
Even Aristotle could do this.

So what if Freud can do it??

<i>Even Freud could do this.</i>	Easy	Think you know the answer?
<i>Even Pythagoras could do this.</i>	Not easy	For more info on these puzzles, go to
<i>Even Aristotle could do this.</i>	More challenging	http://www.reed.edu/~mcp_hailb/quest/
<i>Even Kant could do this.</i>	This is a hard problem.	“You’re only given a little spark of madness. You mustn’t lose it.”
<i>Even Ray Mayer could do this.</i>	Go ask him for help.	– Robin Williams

Questions? Blitz: puzzles@reed.edu