

01

FAR SIZEDOKU

1	← 5 →	2
↑	↑	↑
8	9 →	6
↓	↓	↓
4	← 7 →	3

One recurring theme in many Sudoku variants involves comparing elements based on size, most commonly by revealing which elements are larger or smaller in adjacent cells. Often a greater than symbol or arrow is used, showing which of the two cells must contain the larger number. Here, we take a different approach. In the following Far Sizedoku, arrows point from cells with larger entries to cells with smaller entries if and only if the larger entry is two or more than the smaller entry.

We do not make this choice to increase difficulty. In fact, we are actually giving away quite a bit of information about the cells that lack arrows between them, as those must contain consecutive numbers. It is true that this arrowless informa-

tion is nondirectional, but size can often be ascertained from other nearby cells. One main advantage of our construction here is that instead of two clue possibilities between cells, we now have three, since lack of an arrow is its own form of clue. Thus the number of situations that one can encounter is much larger. Using these types of clues, the variety increases in the sense that there are simply more questions inside each cage that can be asked.

One may be curious about our choice of placing arrows when an entry is two or more than its neighbor instead of picking a larger number. If we consider these puzzles here to be a “two” Far Sizedoku, revealing arrows when the distance is two or more, we could ask what happens when that number increases. Indeed, there are a number of choices which make for interesting puzzles. With “three” Far Sizedoku we lose the ability to identify consecutive numbers, producing harder situations overall. Giving away arrows when the distance is four or more immediately determines the entries of any three descending cells linked together by arrows, as those must contain nine, five, and one. One can make very hard puzzles that still have unique solutions using a size of five, however, with size six the entries of some specific cells must be revealed for a unique solution. We require more such clues as the number grows further, and eventually end up with a normal Sudoku once the distance is too far to allow for any arrows at all.

8					4
			2		
		4	8		
		9		2	
	6			4	
		5		7	
		8	4		
		6			
6					7

01 - 1

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