

Mijnenveger – Full Solution Guide

This is a full solution guide to my puzzle *Mijnenveger*, and so spoilers are ahead.

Rules

- Normal sudoku rules apply: Place the digits 1 to 9 once each in every row, column, and 3x3 box
- **Dutch Whisper Minesweeper:** A digit in an orange circle counts how many of the (up to 8) cells that touch the circle orthogonally or diagonally contain a digit that differs by at least 4 from the digit in the circle

Solve Path

- Looking at box 1, the mines on the border can only be from 123 as they see at least 3 digits within the box
- Hence these are from 123
- Looking at box 2, a mine in the center of a box must be a 3

123	23							
12				3				
			3	5		6		

- R1C1 can only see 1 cell that is at least 5, so this is a 1, and this resolves the 2 and 3 in box 1
- Can pencilmark 789 next to the 3, and 456 in the remaining cells, with the 6 next to the 2

1	3	89	4	89	6	5	7	2
2	7	89	89	3	5	14	⁶ 146	⁶ 146
56	56	4	127	127	127	3	89	89
	89		89					
			3	5		6		

- R7C1 can only be 3 by sudoku and count
- This can only take one more 789 from column 2, so R6C1 and R8C1 are from 789
- Can colour 89 pairs to better describe which 89 goes where
- R3C7 needs to take two further 789s from row 3 and row 4, and these can only be 7s in R3C6 and R4C7

1	3	89	4	89	6	5	7	2
2	7	89	89	3	5	14	⁶ 146	⁶ 146
56	56	4	12	12	7	3	89	89
	89		89			7		
			3	5		6		
789								
3	1							
789					3			
					3			

- Can pencilmark 7 in box 5, which makes R6C1 an 89 which is pink
- R7C6 can't be from 89. 9 in a circle is impossible. 8 is possible but it would be surrounded by 1234s and this would place too many 1234s in column 5
- Can roughly place pink 89 in box 7, box 8, box 6

1	3	89	4	89	6	5	7	2
2	7	89	89	3	5	14	⁶ 146	⁶ 146
56	56	4	12	12	7	3	89	89
	89		89			7		
			3	5		6		
89			7	7				
3	1							
789					³ 389			
					³ 389			

- Forces pink 89 into R7C7, which makes this 8
- This is surrounded by 1234 on all sides
- Places many of the remaining 8s and some 9s

1	3	9	4	8	6	5	7	2
2	7	8	9	3	5	14	⁶ 146	⁶ 146
56	56	4	12	12	7	3	89	89
	9		8			7		
			3	5		6	8	8
8			7	7	124	124	1234	
3	1				24	8	24	
79	8				3	124	124	
					8			

- Can place 9 in column 7, box 7, box 8, box 5, box 6, box 3 and resolve the remaining 8s

1	3	9	4	8	6	5	7	2
2	7	8	9	3	5	14	⁶ 146	⁶ 146
56	56	4	12	12	7	3	9	8
	9		8			7		
			3	5	9	6	8	
8			7	7	124	124	1234	9
3	1			9	24	8	24	
9	8				3	124	124	
					8	9		

- By count, R7C6 must be 2 as it can't see 4 89s and isn't 3 by sudoku
- By count R6C8 must be 3 as it already sees 3 89s
- Resolves some digits by sudoku

1	3	9	4	8	6	5	7	2
2	7	8	9	3	5	14	⁶ 16	⁶ 146
56	56	4	12	12	7	3	9	8
456	9	3	8	26	14	7	⁵ 125	⁵ 145
47			3	5	9	6	8	14
8	⁵	⁵	⁷ 267	⁷ 267	14	124	3	9
3	1			9	2	8	4	
9	8				3	12	12	
4567					8	9		

- 2 in R7C6 means R6C5, R8C5 aren't from 67
- Resolves more by sudoku

1	3	9	4	8	6	5	7	2
2	7	8	9	3	5	14	⁶ 16	⁶ 146
56	56	4	2	1	7	3	9	8
45	9	3	8	6	14	7	⁵ 25	⁵ 145
47	24	127	3	5	9	6	8	14
8	⁵	⁵	7	2	14	14	3	9
3	1	567	56	9	2	8	4	⁷ 567
9	8	567	56	4	3	2	1	⁷ 567
456			1	7	8	9	56	3

- 7 in box 7 points into box 4
- Resolves many more digits by sudoku getting us down to a deadly pattern

1	3	9	4	8	6	5	7	2
2	7	8	9	3	5	4	6	1
5	6	4	2	1	7	3	9	8
4	9	3	8	6	1	7	2	5
7	2	1	3	5	9	6	8	4
8	5	6	7	2	4	1	3	9
3	1	⁵⁷	⁵⁶	9	2	8	4	⁷ 67
9	8	⁵⁷	⁵⁶	4	3	2	1	⁷ 67
6	4	2	1	7	8	9	5	3

- By count, R7C9 can't be 7 due to the 3 in the mine in box 6

1	3	9	4	8	6	5	7	2
2	7	8	9	3	5	4	6	1
5	6	4	2	1	7	3	9	8
4	9	3	8	6	1	7	2	5
7	2	1	3	5	9	6	8	4
8	5	6	7	2	4	1	3	9
3	1	7	5	9	2	8	4	6
9	8	5	6	4	3	2	1	7
6	4	2	1	7	8	9	5	3