You Can't Park Here – Full Solution Guide

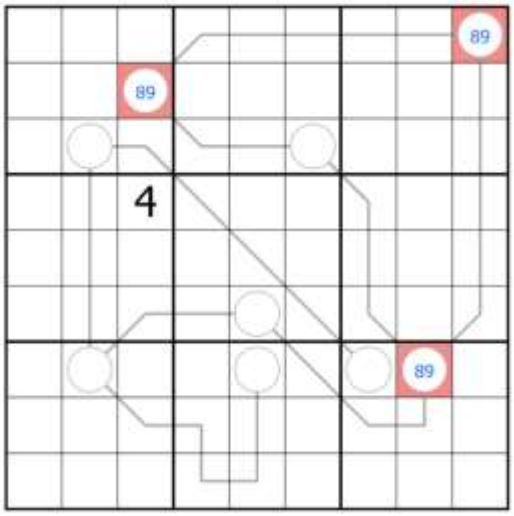
This is a full solution guide to my puzzle *You Can't Park Here*, and so spoilers are ahead.

Rules

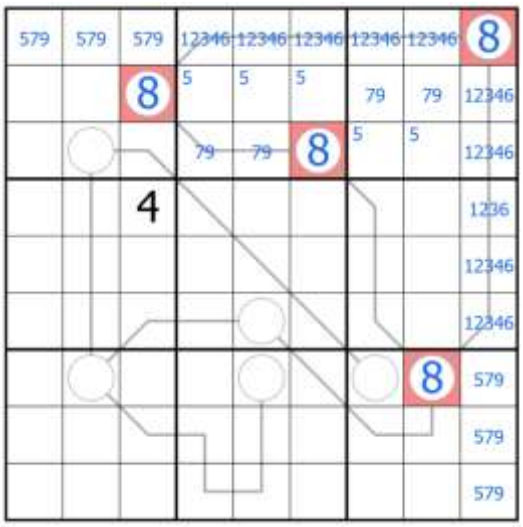
- Normal sudoku rules apply: Place the digits 1 to 9 once each in every row, column, and 3x3 box
- **Double Arrows**: Digits on a grey line have the same sum as the sum of the digits in the two connected circles

Solve Path

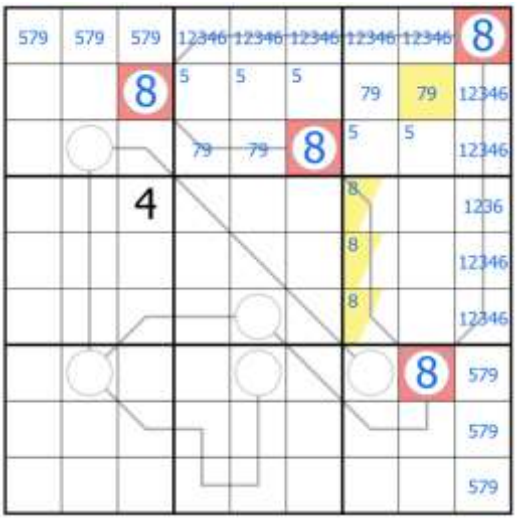
- Where is R2C3 in row 1? It can't go in its own box, and if it went on the line then we could cancel the numbers from both sides of the equation which leaves R1C9 to be the sum of 4 different digits which is not valid. Hence R2C3 is the same digit as R1C9
- By similar argument, R7C8 is also the same as R1C9
- The sum of 5 digits on the line in row 1 is at least 15, hence R2C3 is 8 or 9



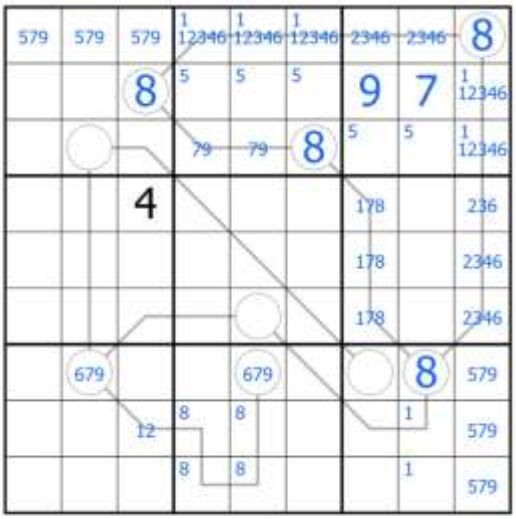
- Where is R2C3 in row 3? If it went on the line then the remaining numbers in row 3 box 2 would be the same digit. Hence R2C3 is the same as R3C6
- By the two cell line in box 2, R2C3 etc. are 8s, and the composition of the lines is fixed



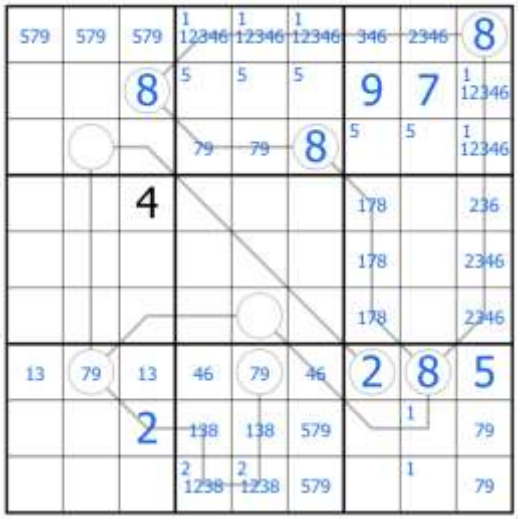
- 8 is on the line in column 7 in box 6
- Where is R2C8 in box 6? It is also on the line



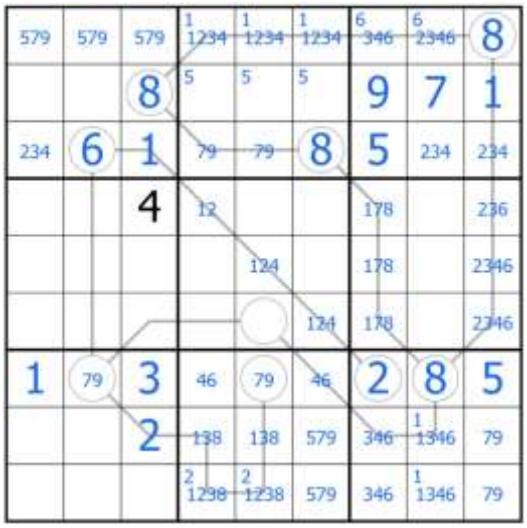
- By math, R2C8 is 7, and the line in box 6 is 178
- 1 in box 3 is in column 9
- 1 in box 9 is in R8C8 or R9C8
- 8 is also forced onto the line in box 8. Min maxing this line gives one degree of freedom, with the circles being 69 or 79



- 1 has to go on the line in box 8 otherwise the total gets too big
- This means that 1 in row 7 is off the line, makes R8C3 a 2
- The remaining cells are minmaxed, so 79 pair in circles in row 7, 1238 on the line in box 8, 13 pair in row 7
- 2 in row 7 is R7C7



- By maths R3C2 is at least 5, and by available digits this can only be 6
- Forces 1 in R3C3, and 124 in the line in box 5



- 1 is forced onto the line in box 4
- If R7C2 were 9, then the remaining cells on the line in box 4 would sum to 14, which is only 59 or 68 which are invalid based on the circles
- Hence R7C2 is 7, resolves some 79 pairs
- 139 is the only option that works on the line in box 4

- Sudoku follows
- 7 has only two places in box 5

- If R6C4 were 7, then R6C3 and R6C5 would be the same digit.
- If R6C3 were 7 then R6C4 and R6C5 would be the same digit
- Places 7 in box 5 and column 3

- Considering R6C5, 3 is invalid as the other two cells can't sum to 10, 8 is invalid as the other cells can't sum to 15
- Makes 56 pair in row 6

- Considering options leaves only R6C4 as 8
- (Or 1238 quad formed in column 4, makes R1C4 a 4)

- Places 6 in box 8, 4 in box 2, 4 in boxes 8 and 5, and other sudoku follows

- By maths, R8C7 and R8C8 sum to 10, can only be 46 pair

- This resolves all remaining sudoku using singles, or pairs/triples in rows 456