# *Downright Handsome – Full Solution Guide*

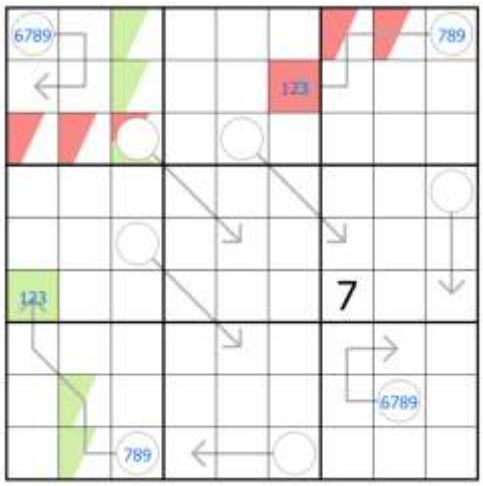
This is a full solution guide to my puzzle *Downright Handsome*, and so spoilers are ahead.

**Rules**

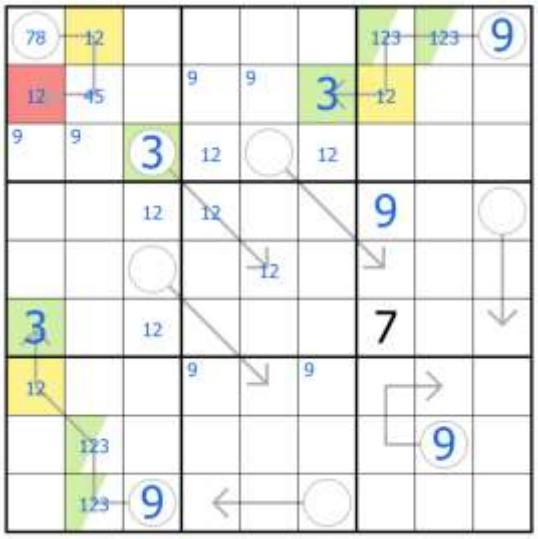
- Normal sudoku rules apply: Place the digits 1 to 9 once each in every row, column, and 3x3 box
- **Arrows**: Digits along an arrow sum to the digit in the connected circle

**Solve Path**

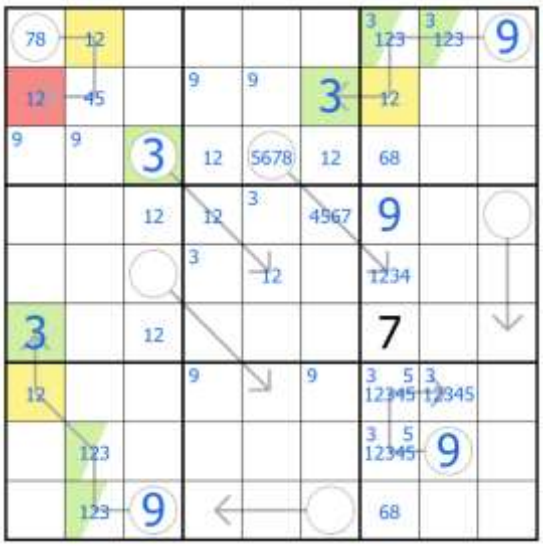
- A four cell arrow must have a repeated digit as 4 different digits sum to at least 10, hence we can roughly place R2C6 in box 1 and box 3, and similarly R6C1 in box 3 and box 7
- The repeated digit is no more than 123



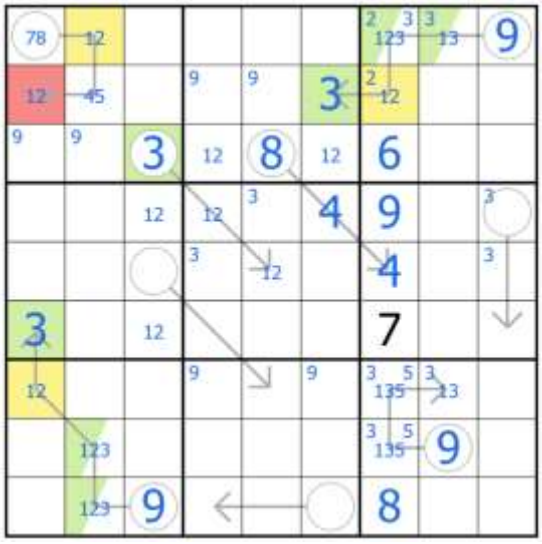

- The 3 cell arrow in box 1 must contain two digits from 123, so if red and green are different then the box 1 arrow is impossible to fill
- Hence red and green are the same, and in box 1 they are placed in R3C3
- As this is in an arrow circle, it must be a 3, placing 12 pairs in box 5, 9s in the circles in box 3 and 7
- Places 9 in box 9
- Remaining cells on the arrows in box 3 and 7 are from 123, and 12 pairs are placed in row 3 and column 3
- Arrow in box 1 can't be 9, and without containing a 3 it must be 124 or 125 summing to 7 or 8
- The 12 pairs in that sum can be roughly placed




- R4C6 is min 4, makes R3C5 from 5678 and R6C7 from 1234
- Yellow 12 is completely absent from the arrow in box 9, which means this is not 126, so it contains a 3 and is from 12345
- Gives a 12345 quint in C7




- The 5 of the 12345 quint in C7 is on the arrow in box 9, making this a 135 arrow
- Leaves 4 in R5C7, making this an 844 arrow
- 3 in column 9 is roughly placed



- 4 is placed in row 6, resolving the arrow in box 1
- 1 is roughly placed in box 6
- R6C4 is from 56, making R7C5 from 123

- Row 7 has a 123 triple, making R7C7 a 5
- Places 5 in column 3
- Box 6 arrow contains both 1 and 3. 1 and 3 summing to 4 is not possible by sudoku, leaves 1 and 2 summing to 3
- Places 2 in box 9

- Yellow is not on the box 9 arrow, so this must be 2
- 5 is on the row 9 arrow
- By available options, R9C4 is from 45 and R9C5 is from 13

- Gives 13 pair in column 5, making R5C5 a 2
- 3 in R9C5 does not work, as isn't 3 and 2 summing to 5, or 3 and 5 summing to 8. Hence this is 1

- R5C3 arrow now forced to be 3 and 5 summing to 8
- Resolves the row 9 arrow

- Sudoku to finish