

Corgi – Full Solution Guide

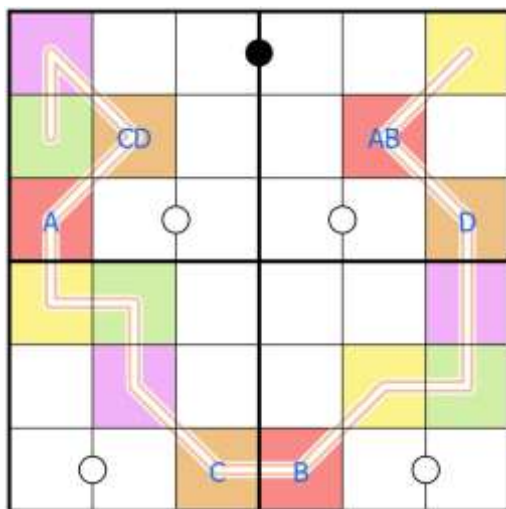
This is a full solution guide to my puzzle *Corgi*, and so spoilers are ahead.

Rules

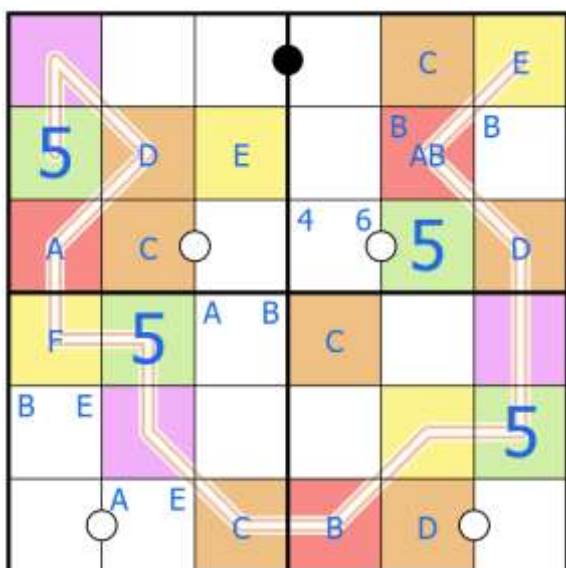
- **Quattroquadri**: Place the digits 1 to 9 such that digits do not repeat in any row, column, or 3x3 box
- **Tentropy**: A run of 5 cells along an orange Tentropy line must contain one digit from each of the pairs that sum to 10, i.e. one from (1, 9), one from (2, 8), one from (3, 7), one from (4, 6), and the digit 5
- **Anti-Queen**: No digit may repeat a Queen's move (in chess) away
- **Kropki**: A white dot separates consecutive digits. A black dot separates digits where one is double the other

Solve Path

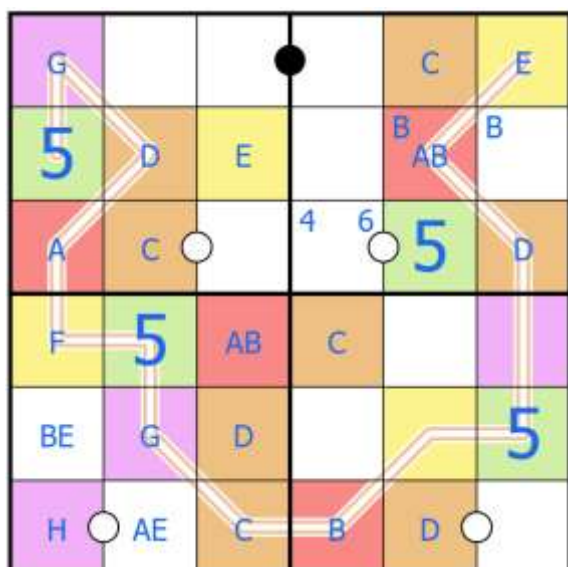
- We can shade the line in 5 colours
- One of these colour sets is entirely the digit 5
- Red and orange have two cells which see each other on a diagonal so these aren't the 5s and can be arbitrarily given letters



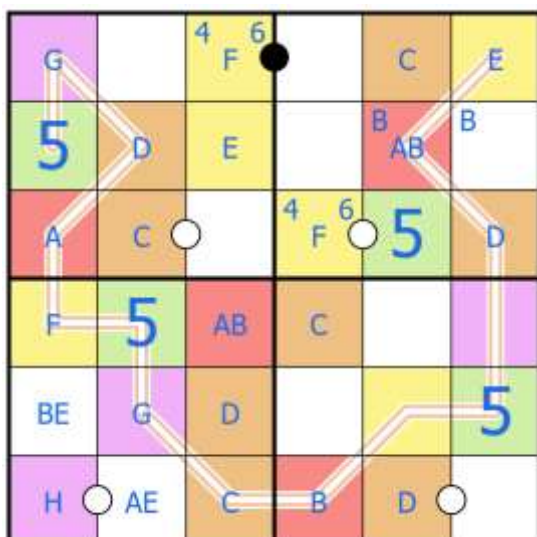
- Consider whether pink is 5. If so, there is nowhere to place 5 in box 2
- Similarly, if yellow is 5, there is nowhere to place 5 in box 1
- Green therefore is 5, and limits 5 in box 2



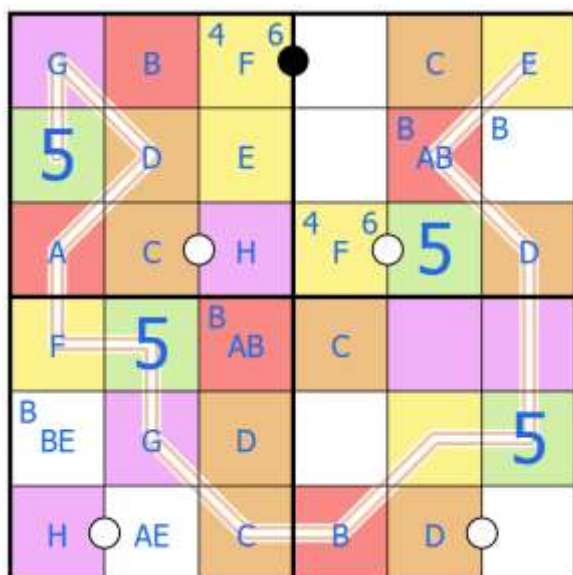
- R1C6 sees 5 and both flavours of red, orange and yellow, so this is pink
- We can arbitrarily give these remaining letters of G and H



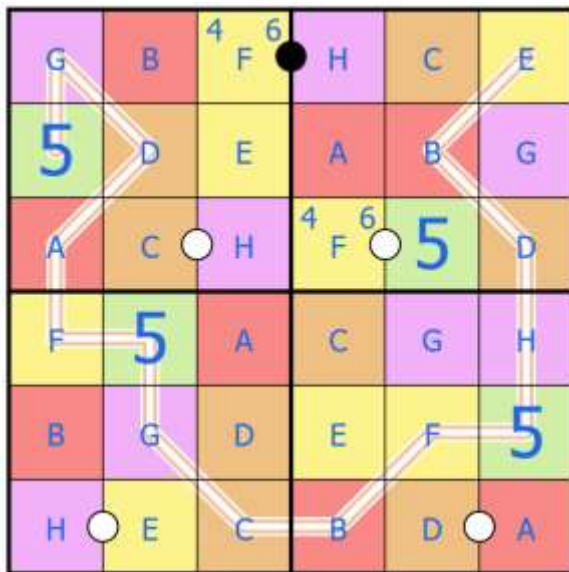
- R3C4 sees pink, red, orange and 5, so this is yellow and is F
- Places F in R1C3



- B is limited to two places in box 3, and both of these see R3C3, so B is placed in box 1
- R4C5 sees a both flavours of red, yellow and orange, so is pink



- Where is R4C6 in box 2? It can only go in R1C4, making it H
- Last big deduction which then allows the whole grid to be coloured and lettered



- Yellow and pink are connected by a black dot, and also a white dot in box 3
- Hence these need to be an even/odd pair, making yellow 6 and pink 3
- Following the kropki and X pairs on the tentropy line we can resolve all the digits

