Kawasaki Ninja ZX-6R – Solution Guide
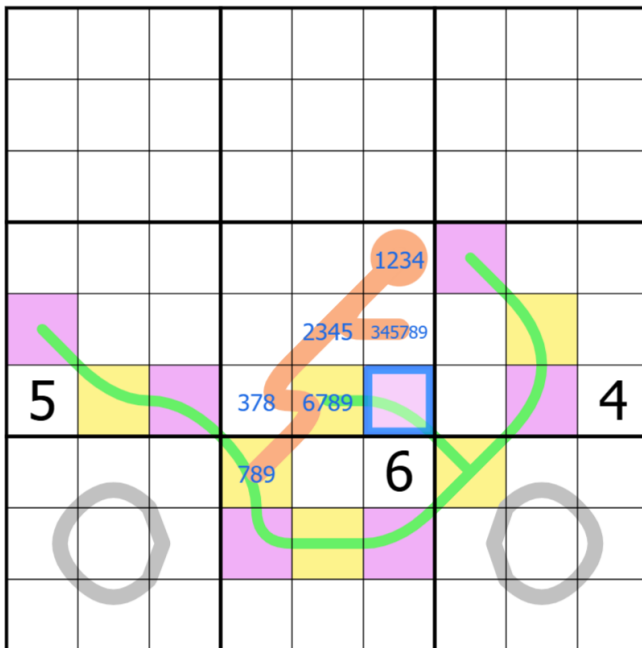
This is a full solution guide to my puzzle *Kawasaki Ninja ZX-6R*, and so spoilers are ahead.
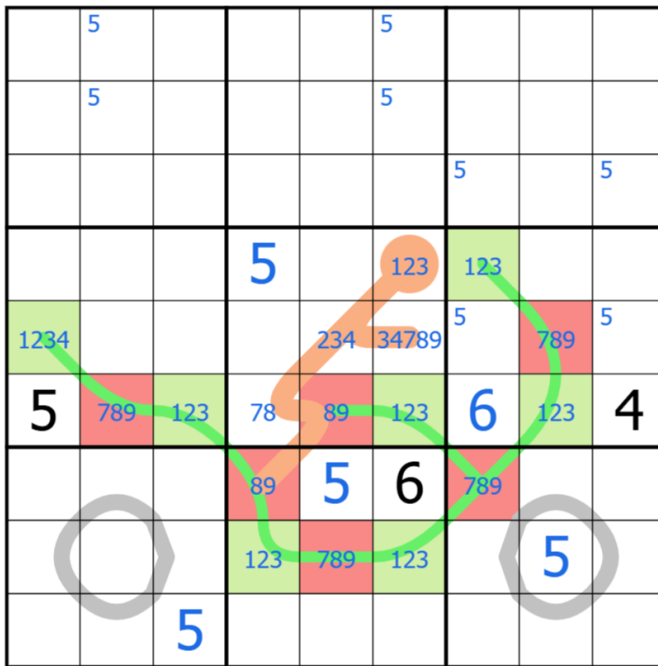
Rules

- Normal sudoku rules apply: Place the digits 1 to 9 once each in every row, column, and 3x3 box
- **Anti-Knight:** Cells a knight's move apart (in chess) can't contain the same digit
- **German Whispers:** Adjacent cells on a green line must have a difference of at least 5
- Ten Line: The grey lines must be split into one or more non-overlapping contiguous groups that sum to 10
- **SLOW Thermo:** Digits along the thermometer must stay the same or increase from the bulb end
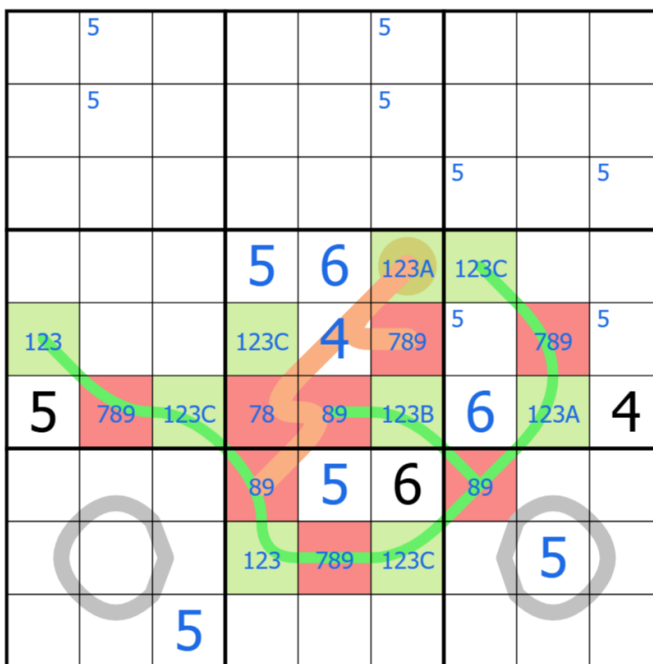
Solve Path

- By the thermo in box 5 and the givens, R6C5 is at least 6
- Colouring the whisper allows high/low colouring
- The ten lines in box 7 and 9 must be two dominoes, as a 1234 set will break R8C4 or R8C6

- Pencilmark the cells on the whisper, gives lots of 123 triples and 789 triples. A lot of cells can't contain 6 or 4 because both neighbours see each other by knight's move, e.g. R8C6
- 5 is limited in box 7 as it can't go on the 10 line, and we can map some 5s around the grid, specifically in to R4C4, limiting R4C6

- Lettering the 123 triples shows that R7C7 sees all three flavours of 123, so this cell must be at least 8

- Lettering the 789 triples shows that R6C4 is the same digit as R7C7
- Hence this digit must be 8

- Can map some 7, 8 and 9s around the grid, and reduce any 123 triple next to a 3 to a 12 pair
- 7 in box 9 is limited, and it appears on the ten line
- This means that 3 is also on the ten line
- All possible locations for 3s see R6C8 by anti knight, so this is also 12, meaning R6C6 is 3
- 4s and 6s can also be mapped on to the ten line in box 9

- R8C2 is a naked 8, placing 6 and 9 onto the ten line in box 7, which means 1 and 4 is also on the ten line
- Box 4 and 6 can be pencilmarked

- R7C1 sees a 12 pair by anti-knight making this 3, and lots of the digits in rows 4 thru 9 can be resolved

- Sudoku to finish, specifically R3C6 is a naked 9

1689	5 2359	34679	467	123	5 589	279	134	2689
1689	5 25	467	47	13	5 589	79	34	269
189	239	3479	67	23	9	5 259	14	5 268
4	39	39	5	6	2	1	8	7
2	6	8	1	4	7	3	9	5
5	7	1	8	9	3	6	2	4
3	4	2	9	5	6	8	7	1
69	8	69	2	7	1	4	5	3
7	1	5	3	8	4	29	6	29

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