

# 100 Rubik's Cube Sudoku Puzzles

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*Sudoku for cubers*

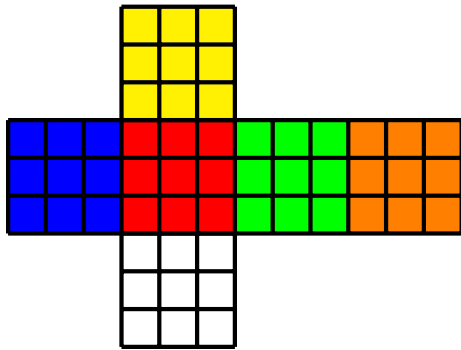
Made by **Zixing Wang**

# Preface

## Rules

Cube Sudoku is to fill colors in a  $3 \times 3 \times 3$  Rubik's cube with the Western color scheme. Once the puzzle is solved, this means that the state is solvable by legal moves (that is, without taking the cube apart again).

## Western color scheme



## Solutions

Each problem has only one solution. Solution can be accessed after each problem. You can apply the scramble in the solution to your Rubik's cube with yellow on the top and red on the front.

## Acknowledgement

Thanks to Xi'an Jiao Tong University Rubik's Cube Club, for providing the idea of "Cube Sudoku".

## Github link

<https://github.com/nbwzx/CubeSudoku>

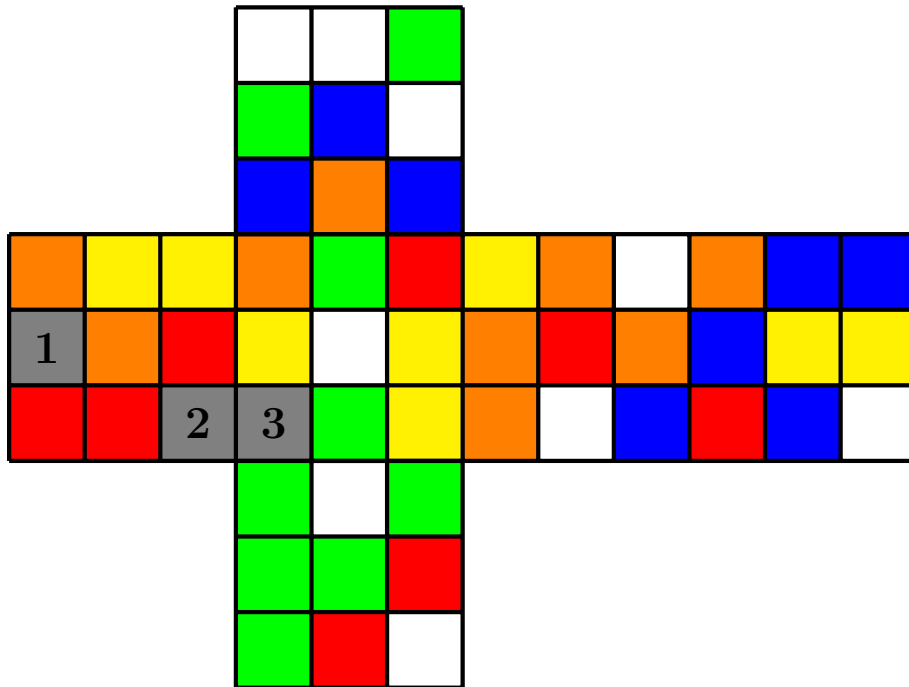
## Contributors

Zixing Wang

## License

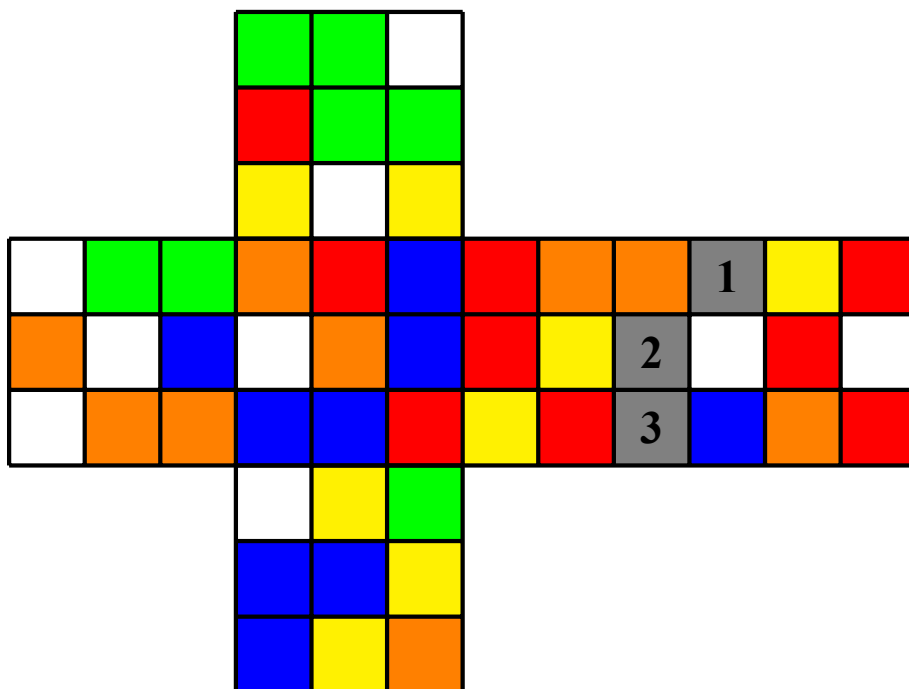
MIT License

**No. 1      Difficulty: ★**



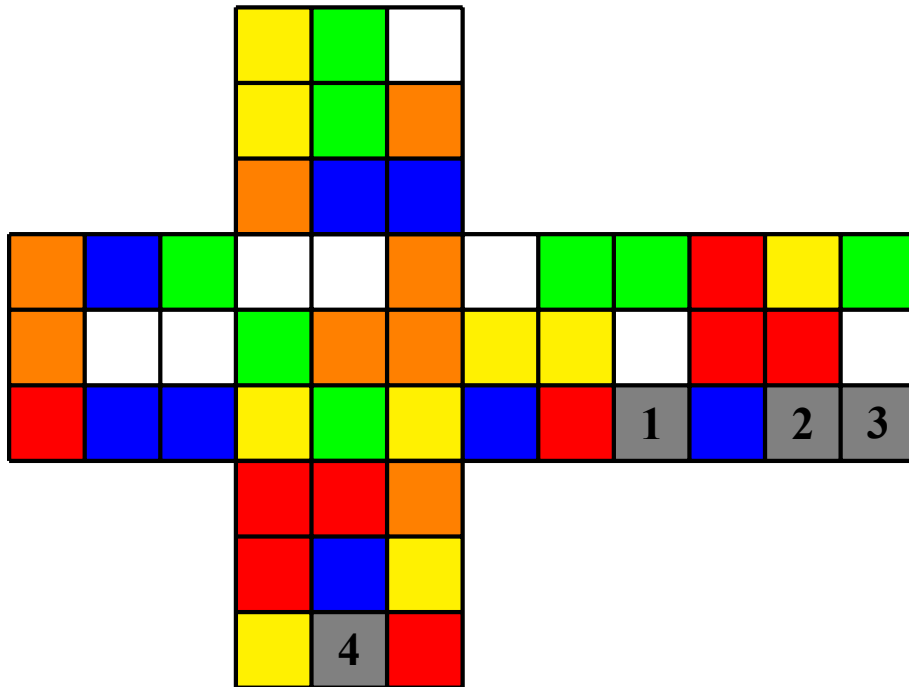
**Solution 1: F R L U' L U D' R' D2 L F2 U B' U D' F' D2 R' L' B' Fw Uw'**

**No. 2      Difficulty: ★**



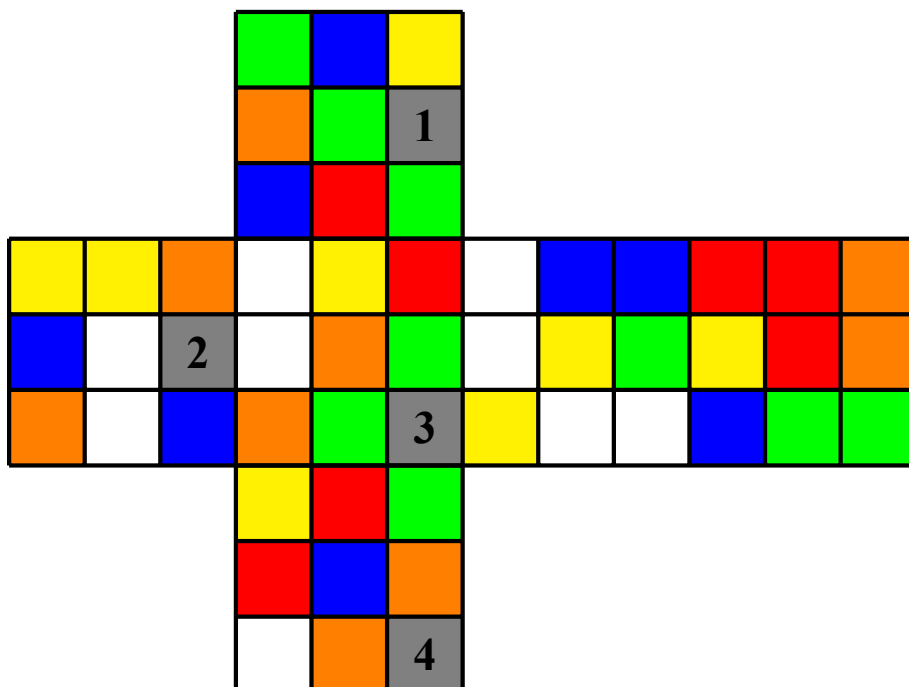
**Solution 2: D2 R' L2 U D' B' L B L2 F2 D' F' U2 L2 F' U' D L' D2 U' Fw' Uw2**

**No. 3      Difficulty: ★**



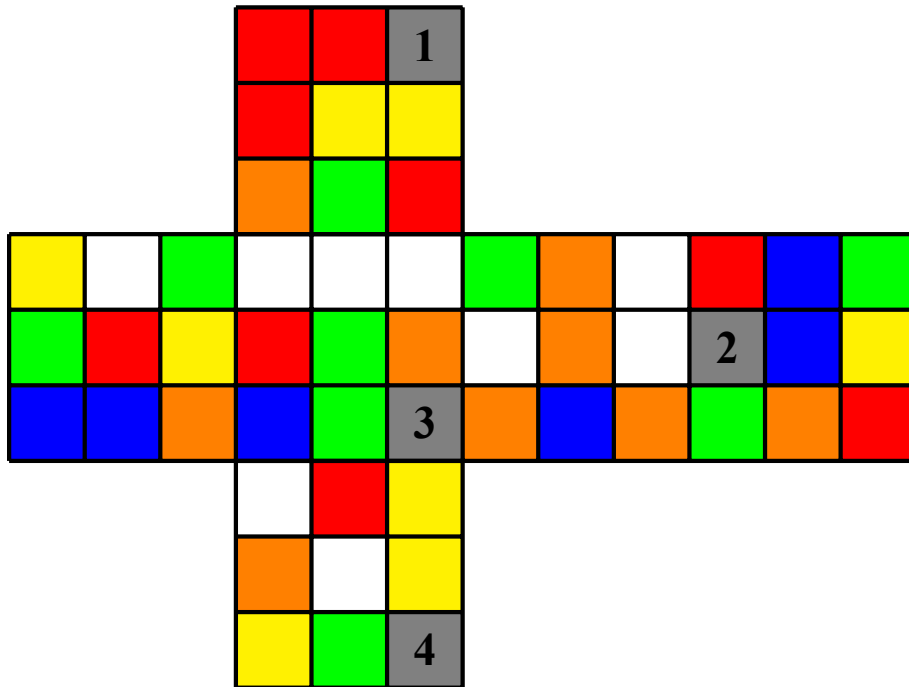
**Solution 3: B R F' L B F' U' B2 L' U L' D L2 U' B F' D2 U B' D2 Fw' Uw2**

**No. 4      Difficulty: ★**



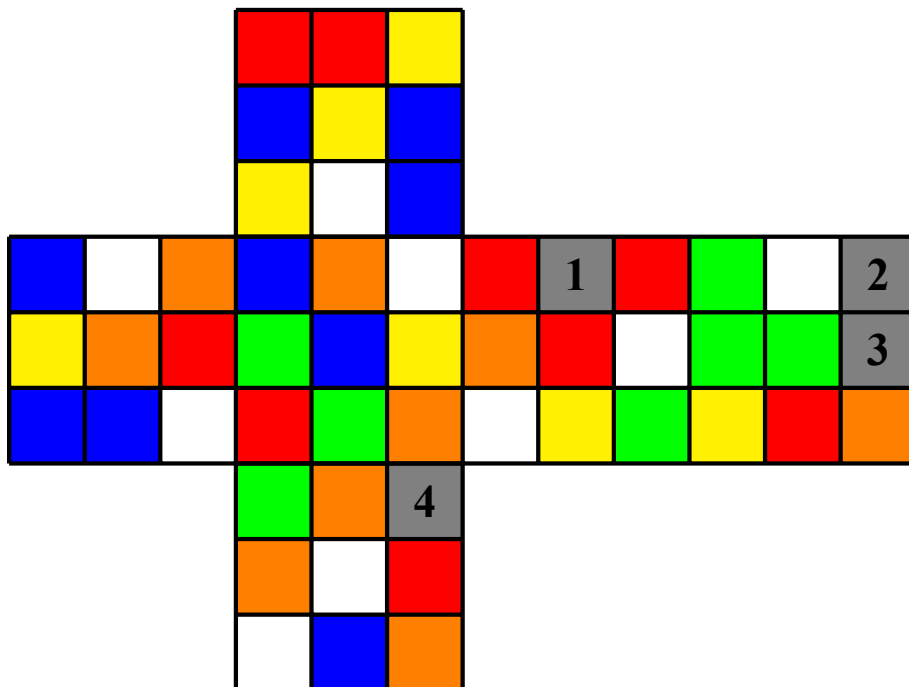
**Solution 4: B2 R' B' U F' B' U2 D' L' B2 U2 F' D' L' B2 D' B2 U B' F2 Fw' Uw2**

**No. 5      Difficulty: ★**



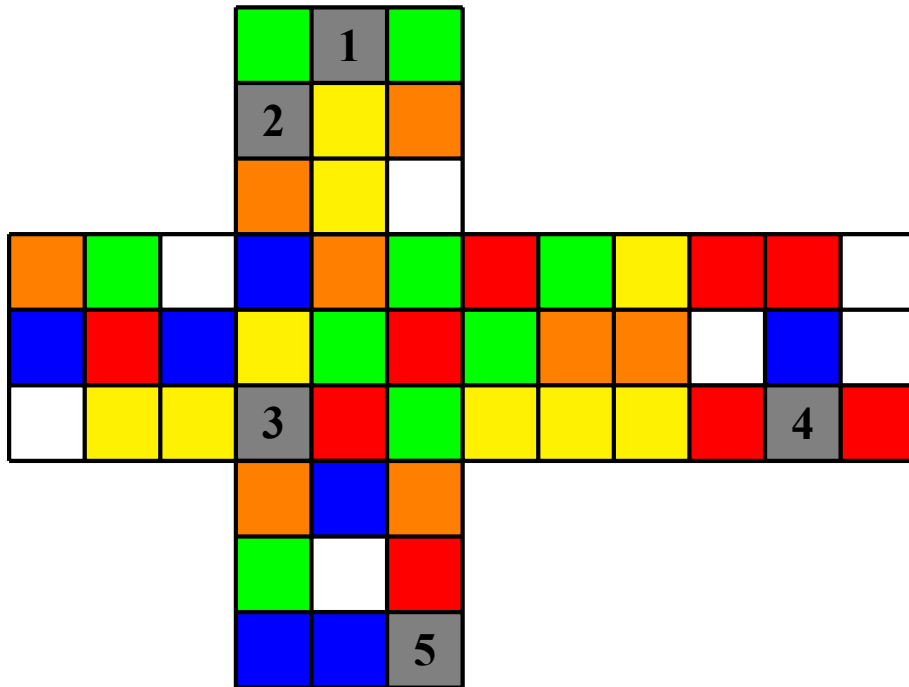
**Solution 5: U D2 B R B' R2 D R U R' U R2 D2 R2 L B L2 R B R2 Uw**

**No. 6      Difficulty: ★**



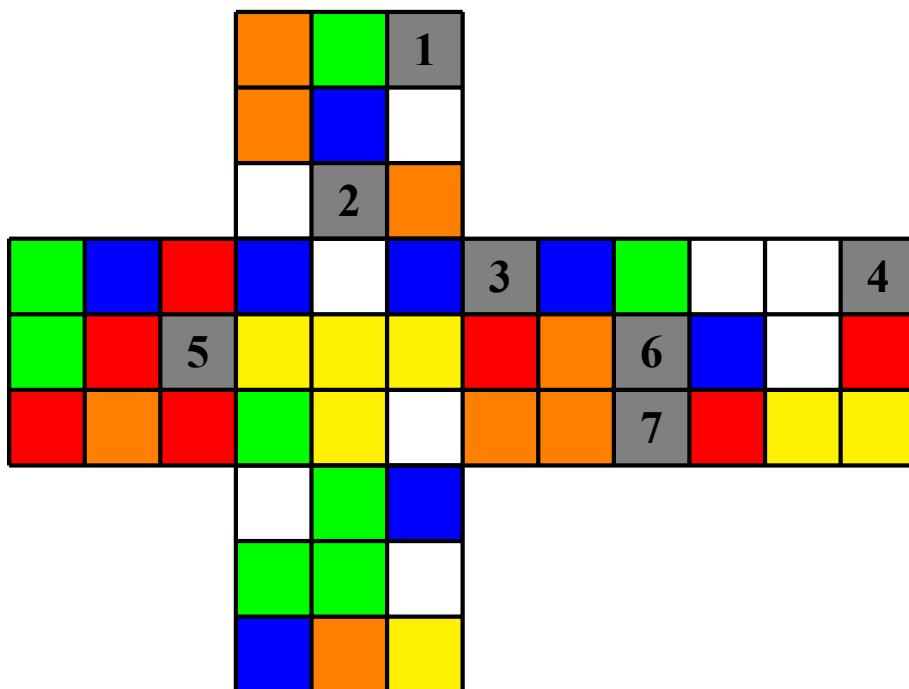
**Solution 6: R2 L2 F2 L' U L2 U' F2 D' U2 R2 L F' U2 D' F D B R' F' Uw'**

**No. 7      Difficulty: ★**



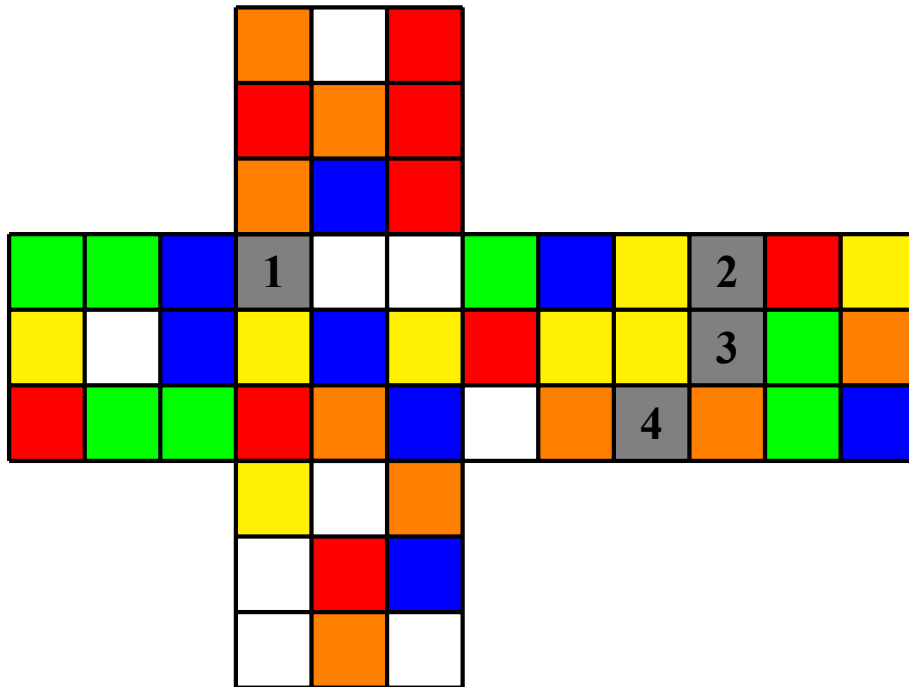
**Solution 7: B' D2 F' R' D2 F' U F2 D' L2 F U2 D L2 R B D' R2 F U Uw**

**No. 8      Difficulty: ★**



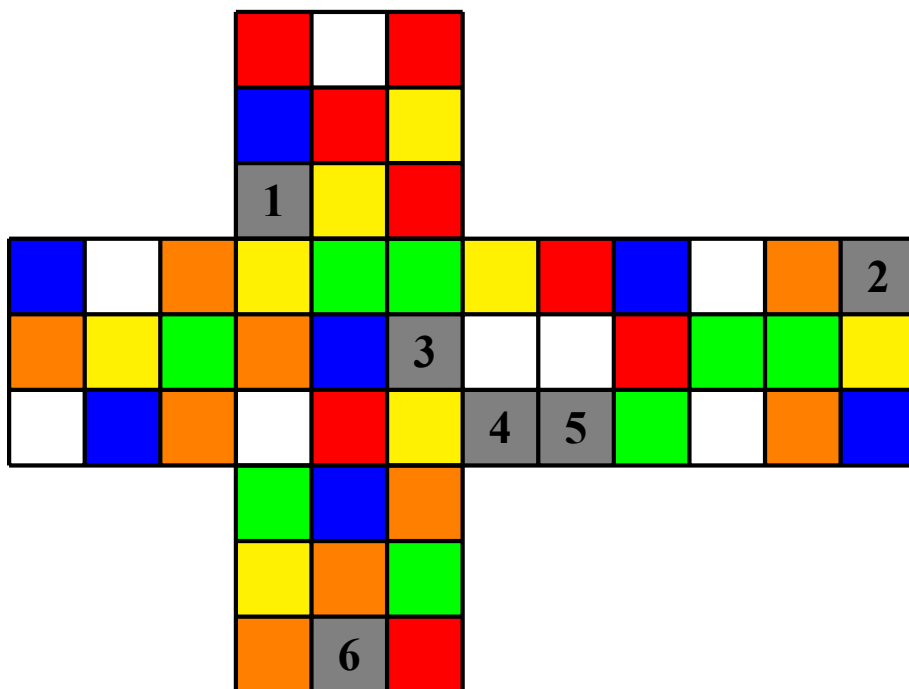
**Solution 8: U2 R' B F' D U' B2 L U2 D' L' U' L2 F' L' U F2 U' L2 U Fw Uw**

**No. 9      Difficulty: ★**



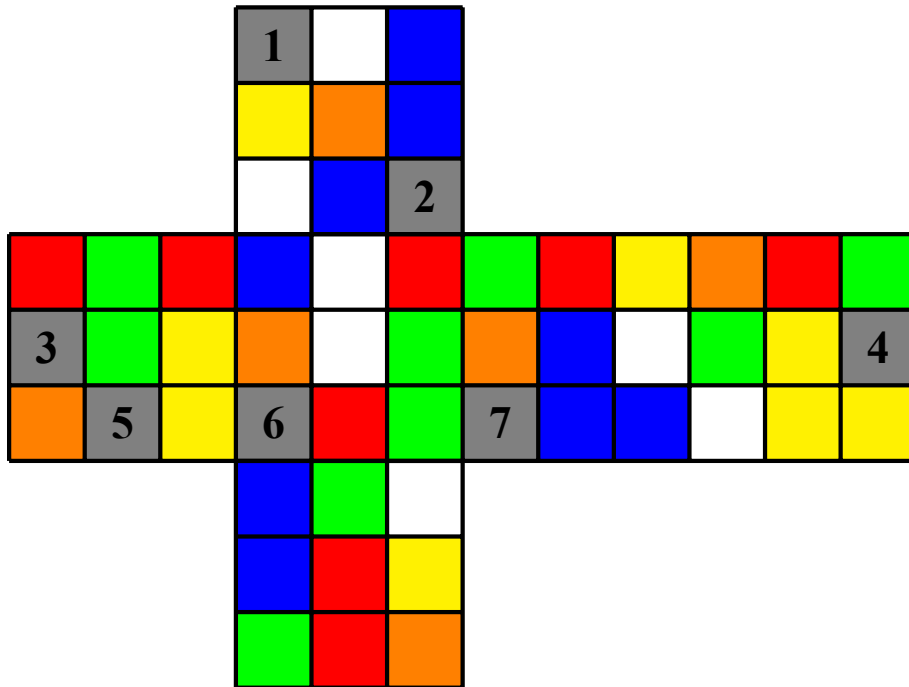
**Solution 9: F2 D' U2 R2 L U' B' L' B' D2 R D R F B U2 R2 F2 R2 B2 Rw' Uw'**

**No. 10      Difficulty: ★**



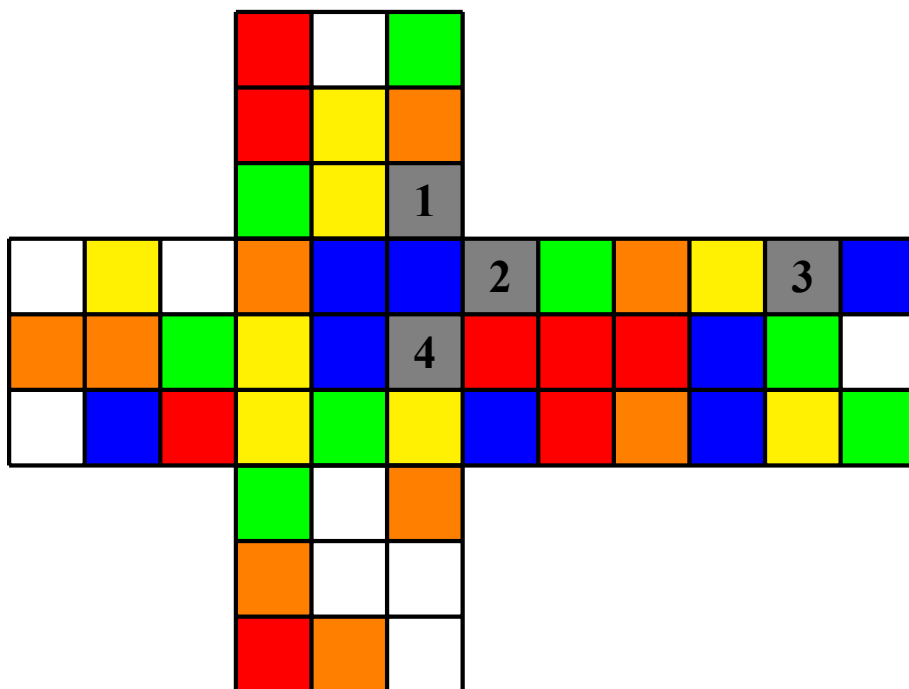
**Solution 10: L D2 L' F B' L F2 D R U' F L U' R B' D2 R B2 L2 B' Rw Uw'**

**No. 11      Difficulty: ★**



**Solution 11: R2 L D L2 U R D' L D U2 B L R' B D2 B L D' U' B' Rw' Uw2**

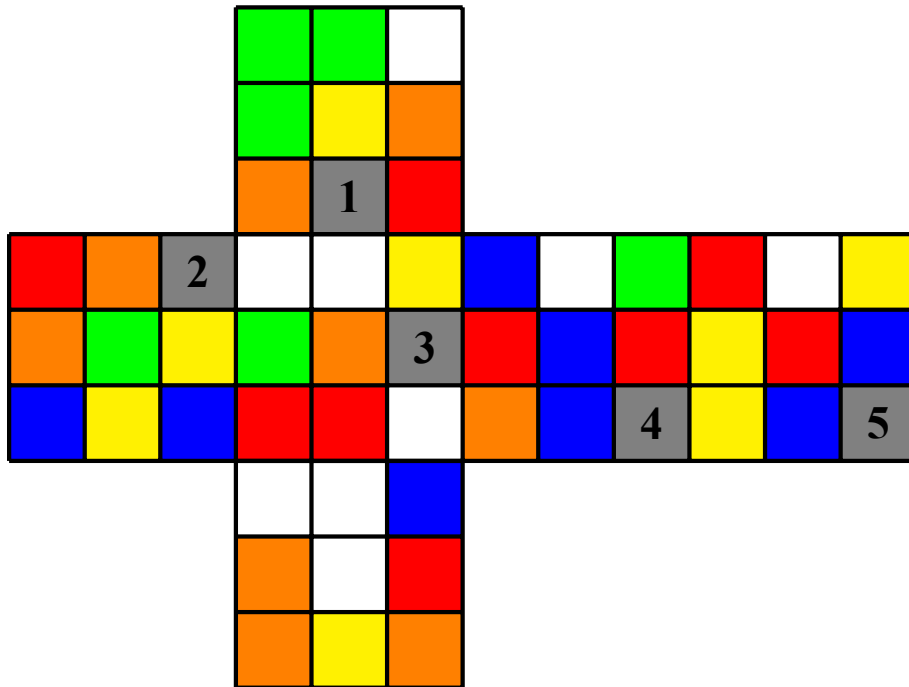
**No. 12      Difficulty: ★**



**Solution 12: R2 L' F2 L U2 F2 D U L2 F2 R' U' F2 U' R F2 R' L U2 B' Uw'**

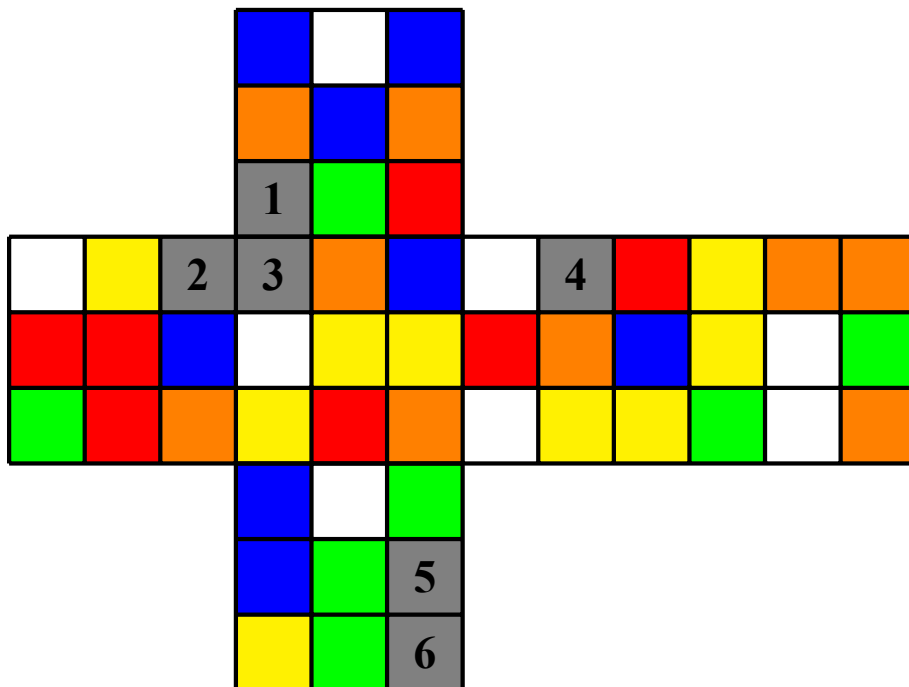


**No. 13      Difficulty: ★**



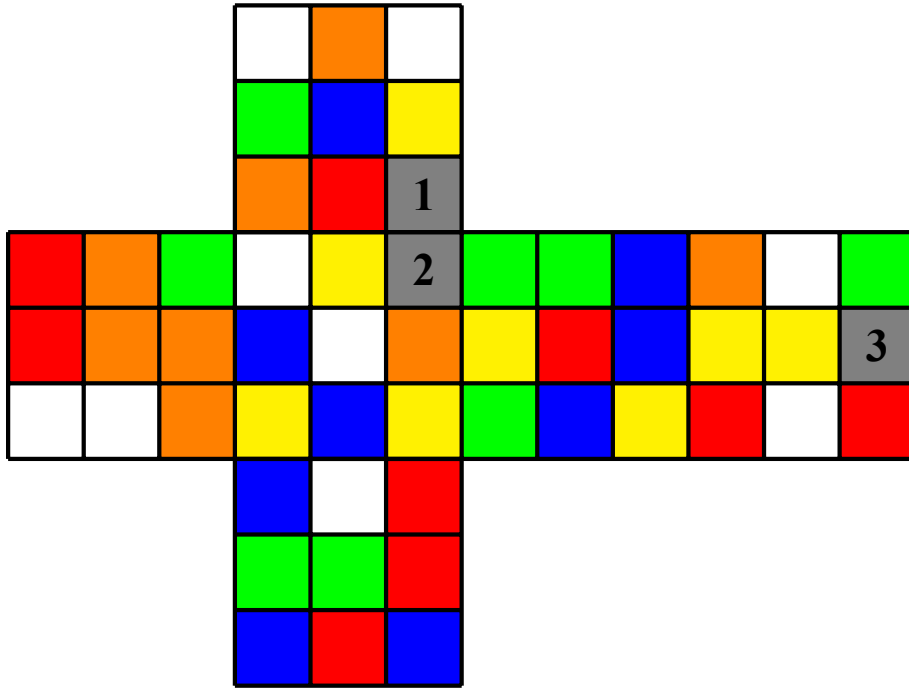
**Solution 13: B2 R2 B U2 L2 U2 D2 B2 R F2 D2 U' L2 D F2 B L2 D2 F2 L Uw2**

**No. 14      Difficulty: ★**



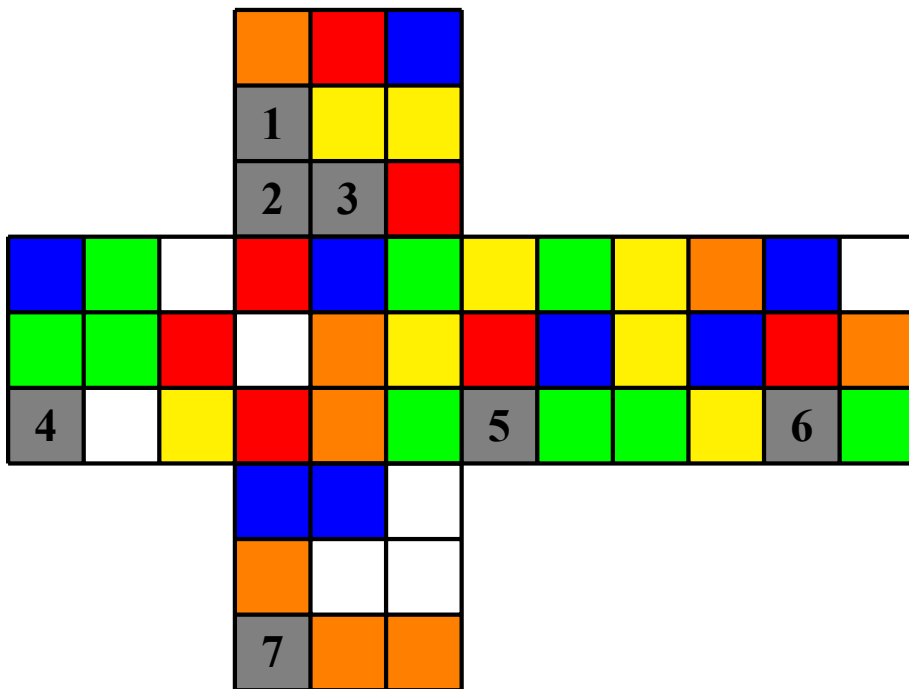
**Solution 14: R D2 U R B' R U L2 B2 L' F L F' R F' B L2 F' L2 F Fw Uw**

**No. 15      Difficulty: ★**



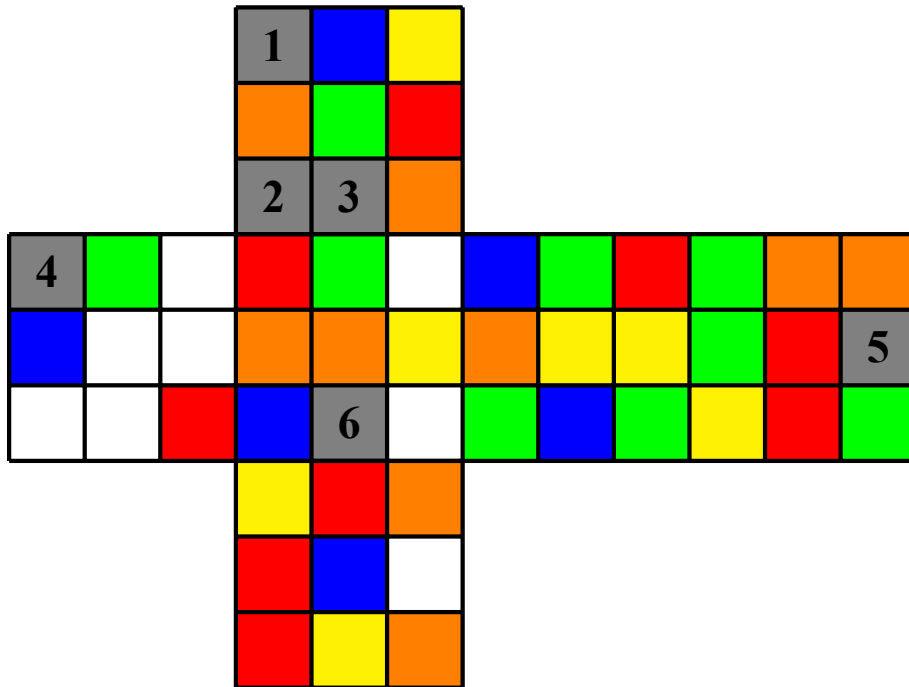
**Solution 15:** B' D F2 B' U2 B L2 D' B' D R2 D' B' R2 B' R' B' R' U F2 Fw Uw'

**No. 16**      **Difficulty: ★**



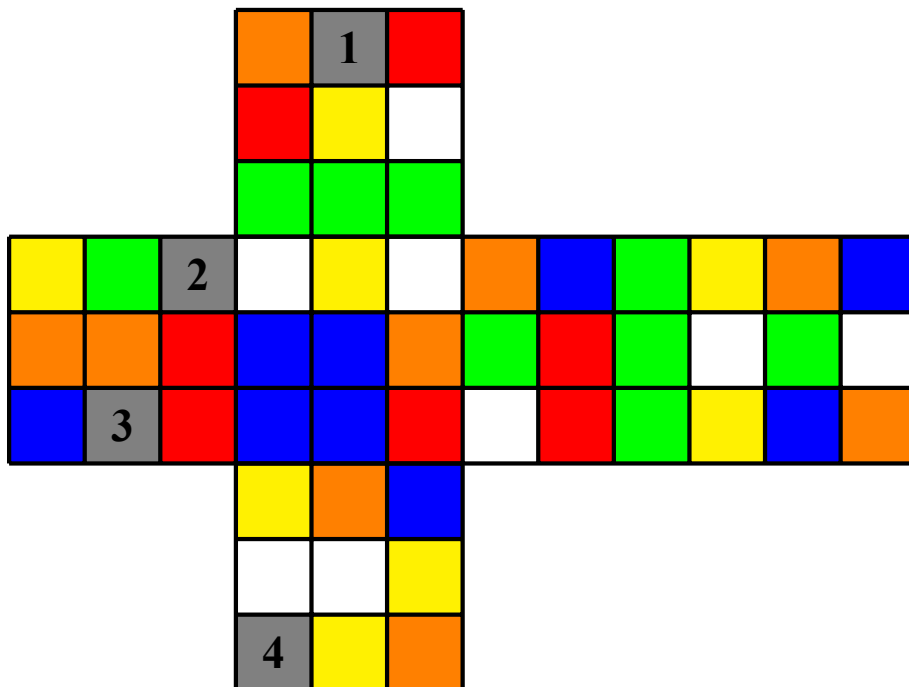
**Solution 16:** L' U D' B2 F R2 U' B R D2 L' U B F' R' D2 F2 L' D2 F2 Uw2

**No. 17      Difficulty: ★**



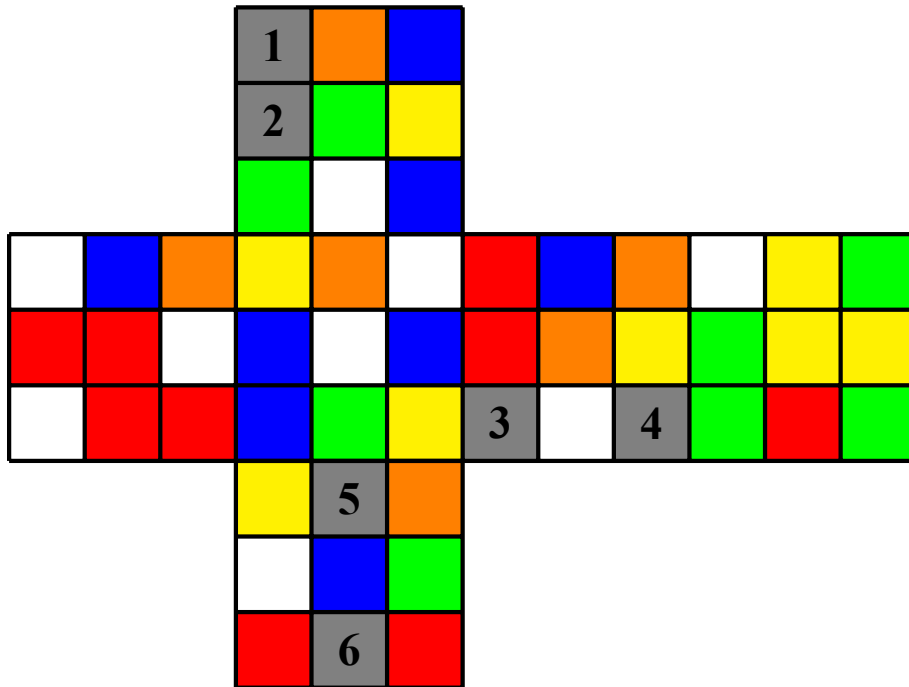
**Solution 17: R2 D2 R F' B2 U2 L2 B' R' L F' U' B F R2 D' U2 L' U' B2 Fw' Uw2**

**No. 18      Difficulty: ★**



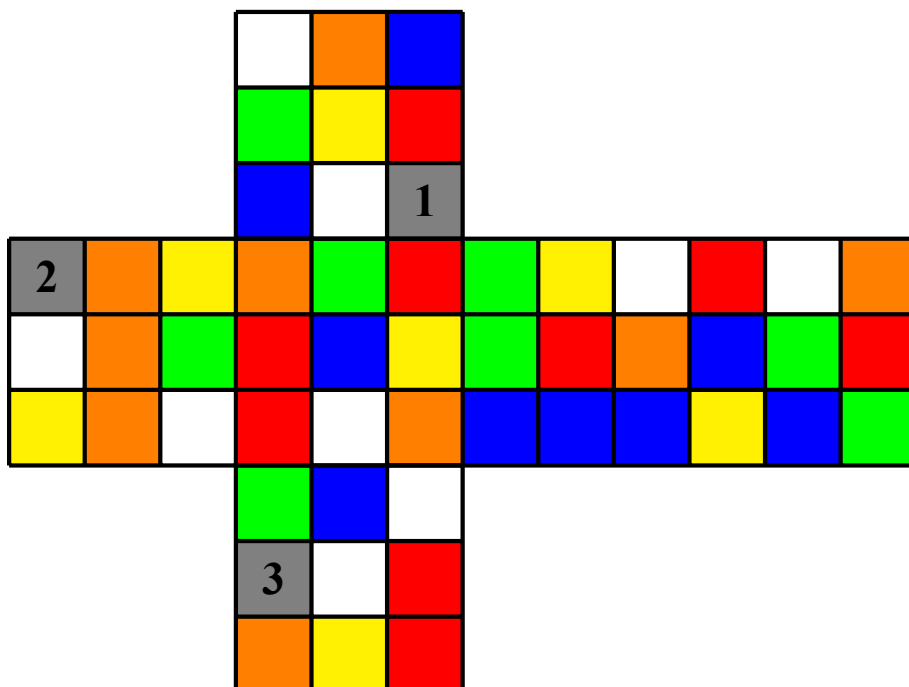
**Solution 18: B D F' R L F R D2 U' B F2 R' F L' U2 L D' B' D' L Uw'**

**No. 19      Difficulty: ★**



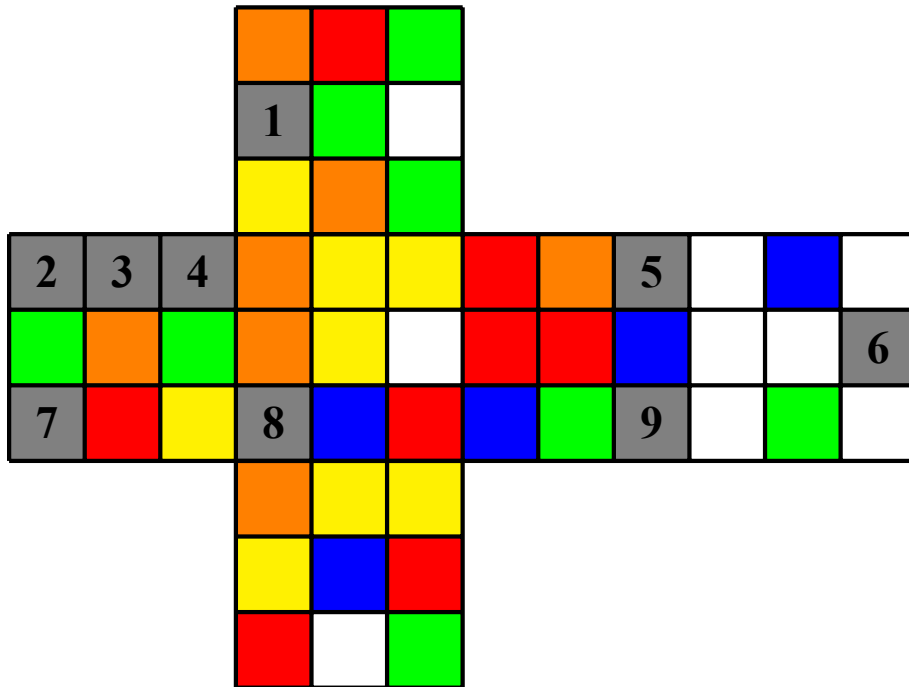
**Solution 19: R2 D2 U' B' U F' R' U D2 R2 U2 B L2 F B' U2 R2 L2 B L' Fw' Uw**

**No. 20      Difficulty: ★**



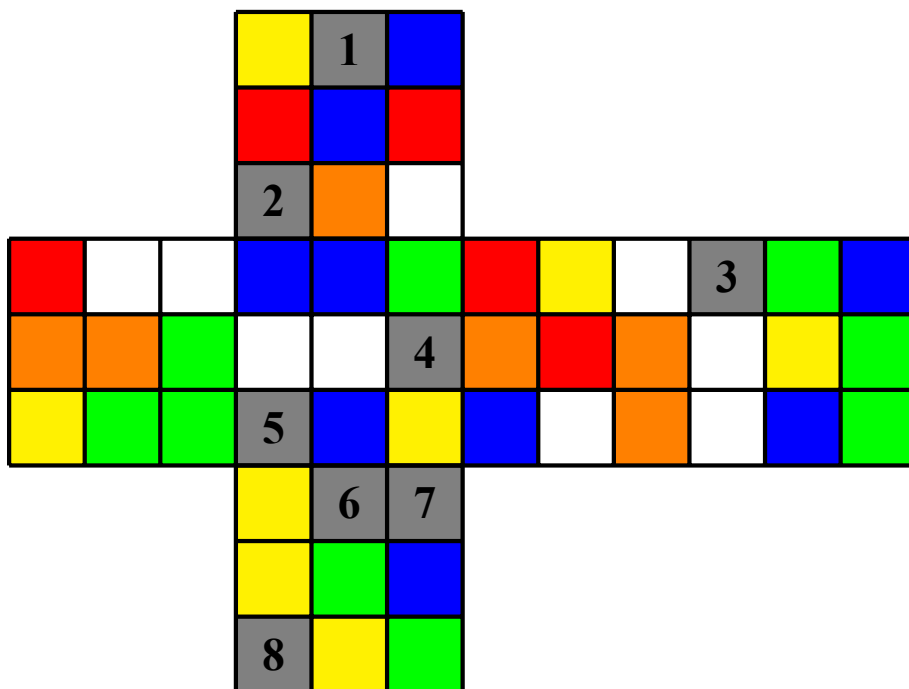
**Solution 20: U2 L2 U L U B' L2 F R F' B2 L2 D' F' B2 U L R' B2 L2 Uw'**

**No. 21      Difficulty: ★★**



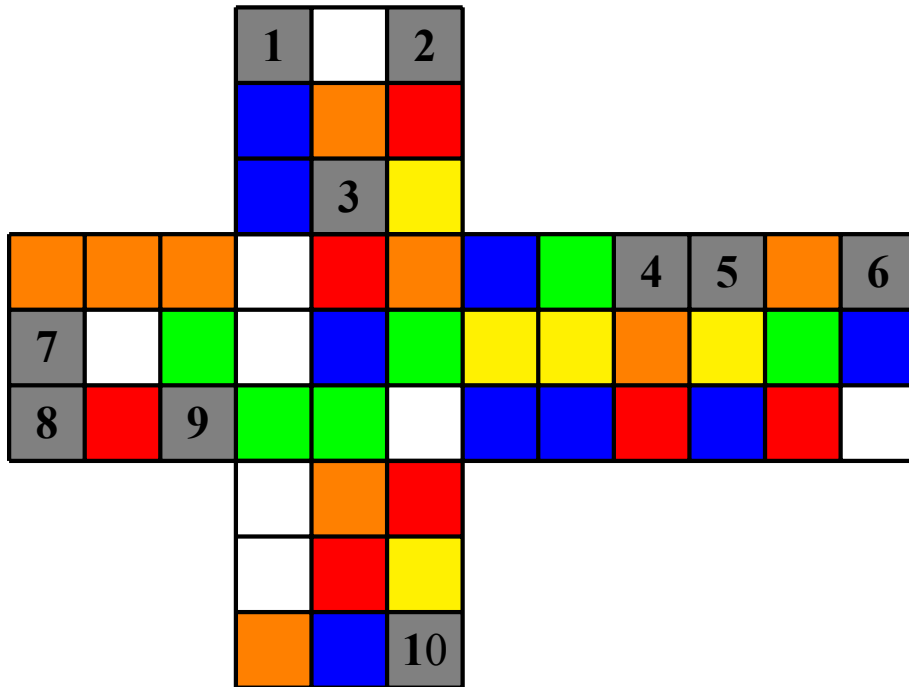
**Solution 21: F2 L' U' B' U R2 F' U2 R' F' D' L2 B R' F' U2 B2 F' U D' Fw' Uw'**

**No. 22      Difficulty: ★★**



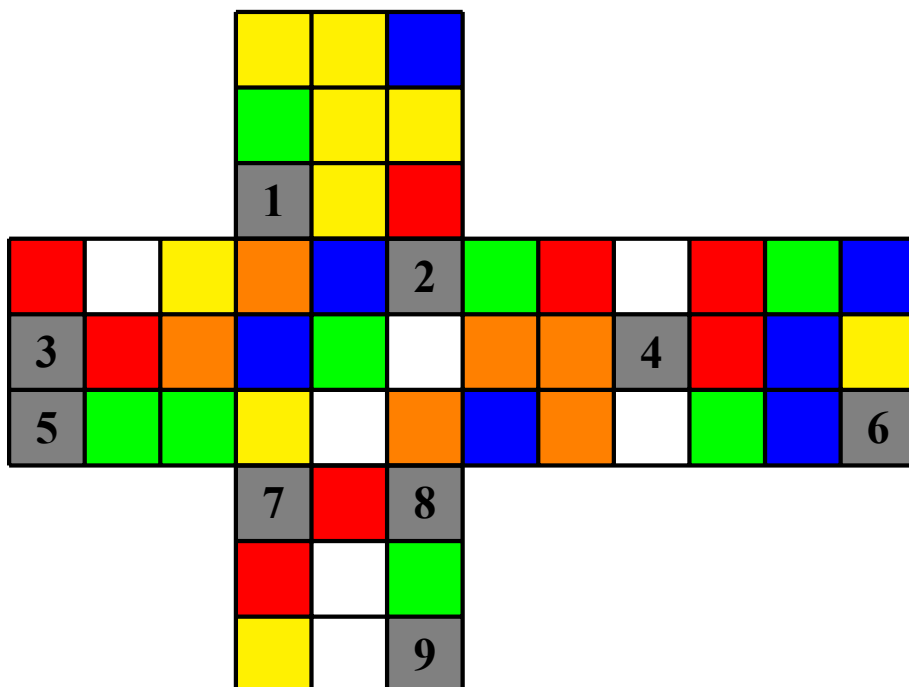
**Solution 22: R L' D2 L2 U D' F U' R2 B R U B2 R2 D' B' L2 F R' L' Fw Uw'**

**No. 23      Difficulty: ★★**



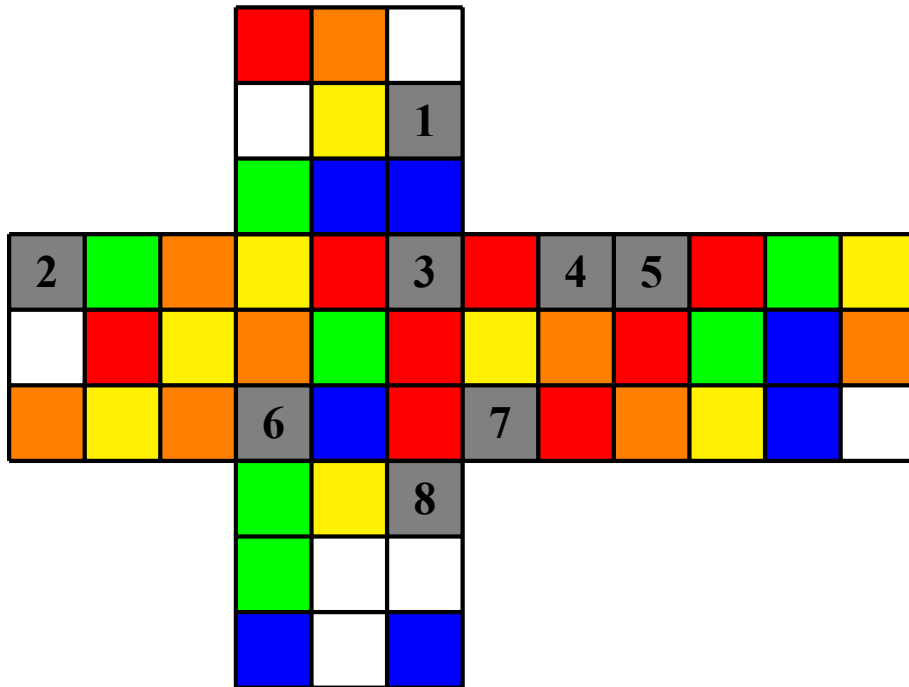
**Solution 23: F' D R2 F' L D' R B2 R U B F' R U' R2 L2 U2 F' U2 D2 Rw' Uw'**

**No. 24      Difficulty: ★★**



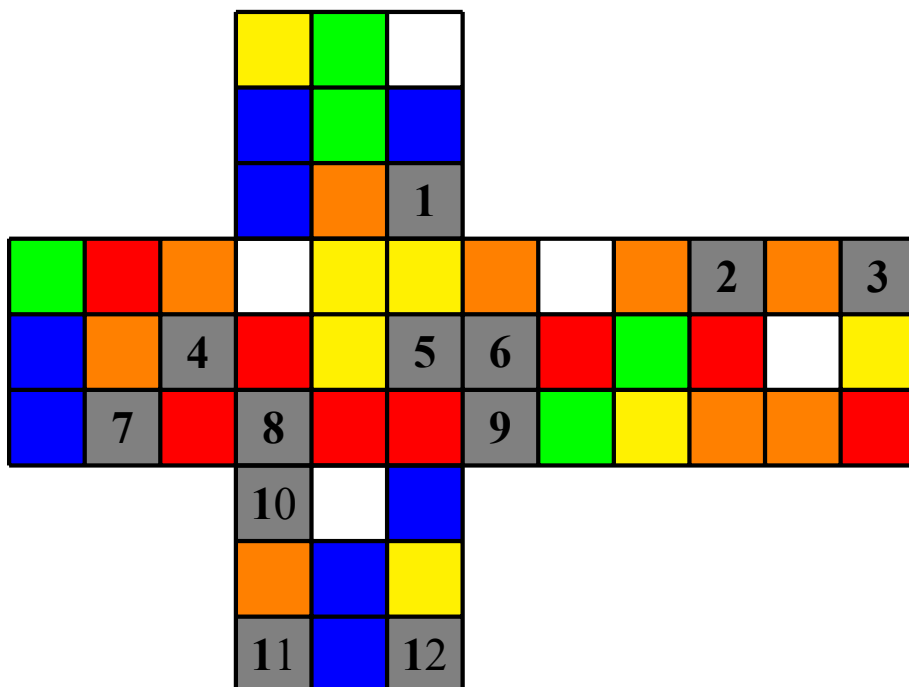
**Solution 24: R F' B2 R' F' B' D B L2 B' R2 B2 D2 U' B' U' B L' R2 F2 Uw**

**No. 25      Difficulty: ★★**



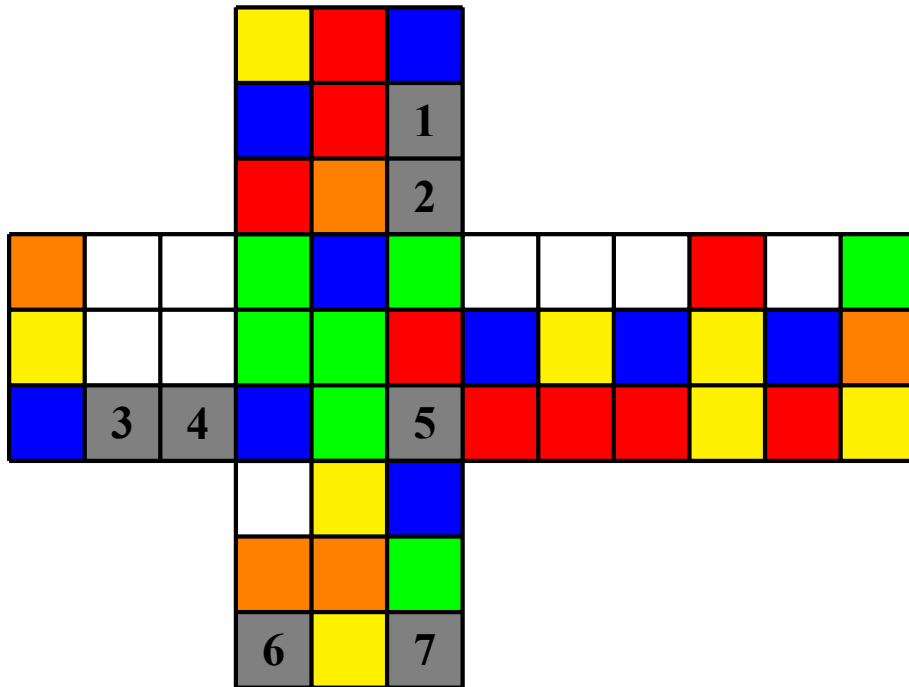
**Solution 25: R2 D2 U F2 D' R2 U2 R B R' F R2 F' B R' B2 L2 U' D2 L Uw**

**No. 26      Difficulty: ★★**



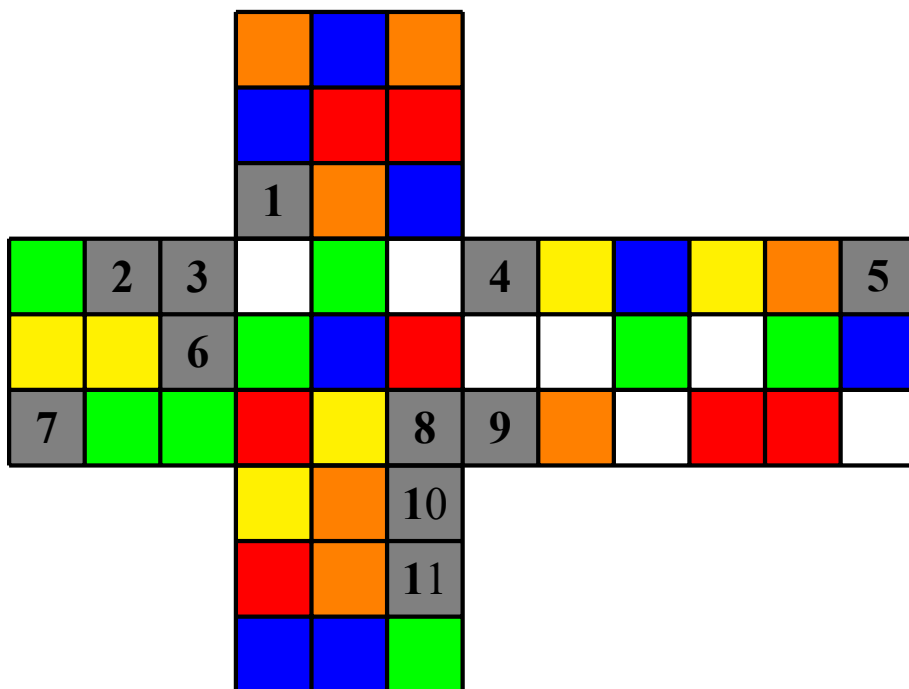
**Solution 26: L2 R D2 U' F2 L' B D U L' F' R' F2 R2 L B L D2 U' L' Fw' Uw'**

**No. 27      Difficulty: ★★**



**Solution 27: B D2 L2 R' B' U' R' F2 L' U2 R D U L' F2 U' L2 U2 B F Rw Uw**

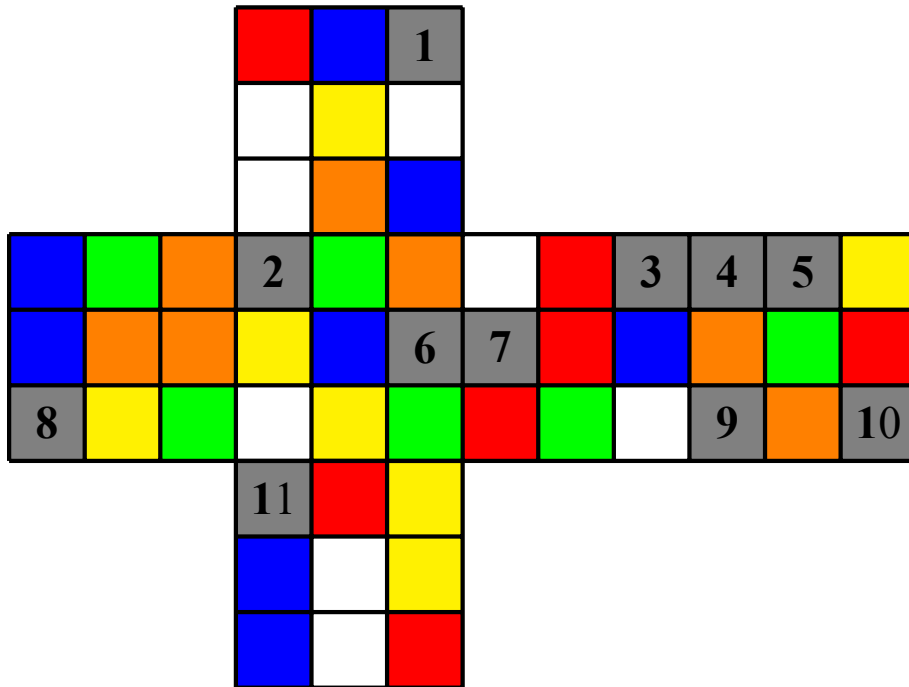
**No. 28      Difficulty: ★★**



**Solution 28: U' F B' D U' R2 F R L2 U D B' D F' D R2 L D' R U2 Rw Uw'**

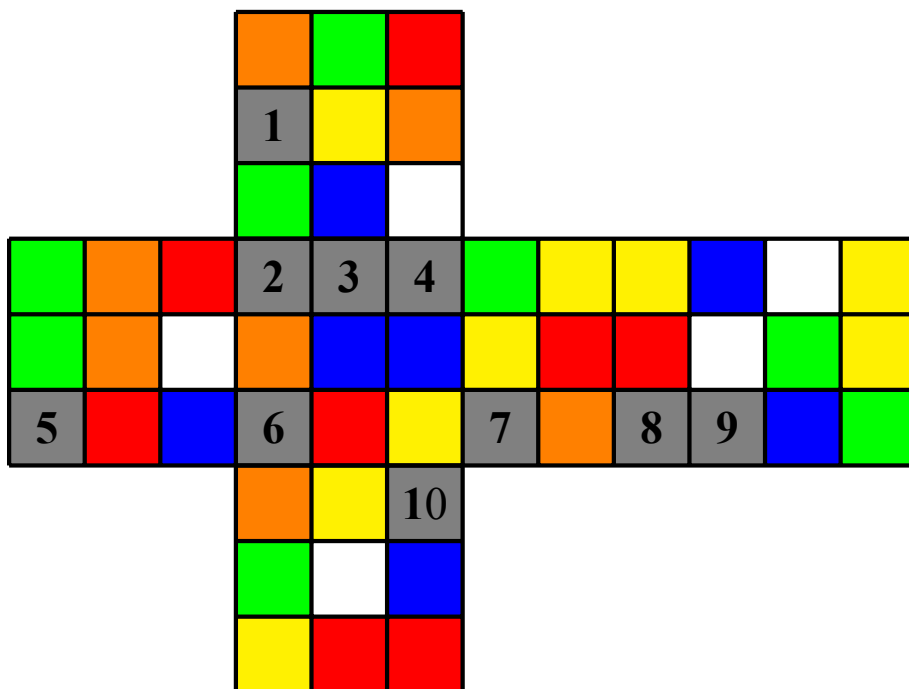


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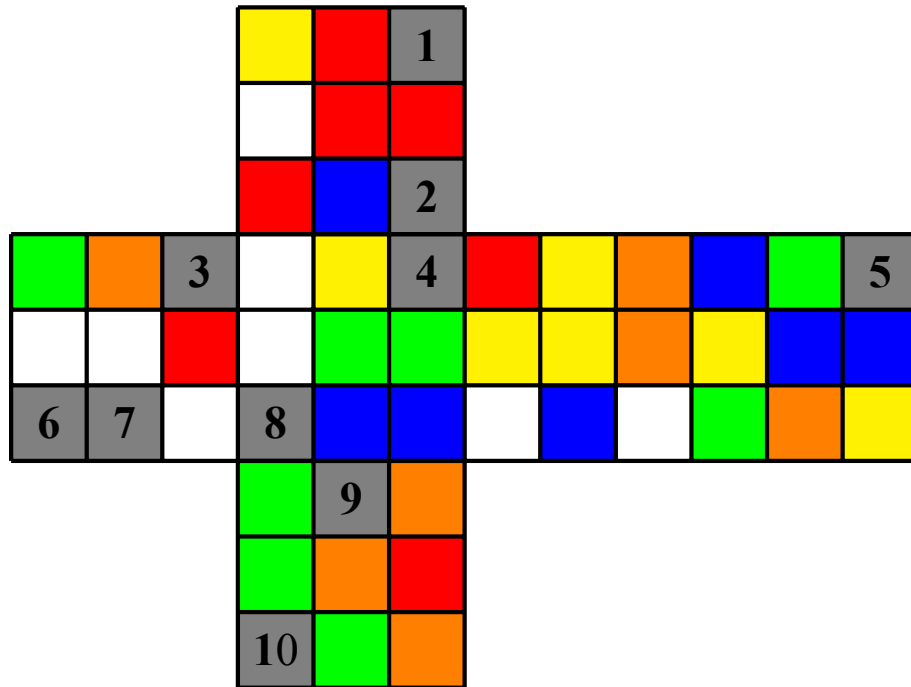
**Solution 29: F R2 U2 R' U' F2 R2 D2 B D' B' F' D B2 D' B' U2 B' D' R Uw'**

**No. 30      Difficulty: ★★**



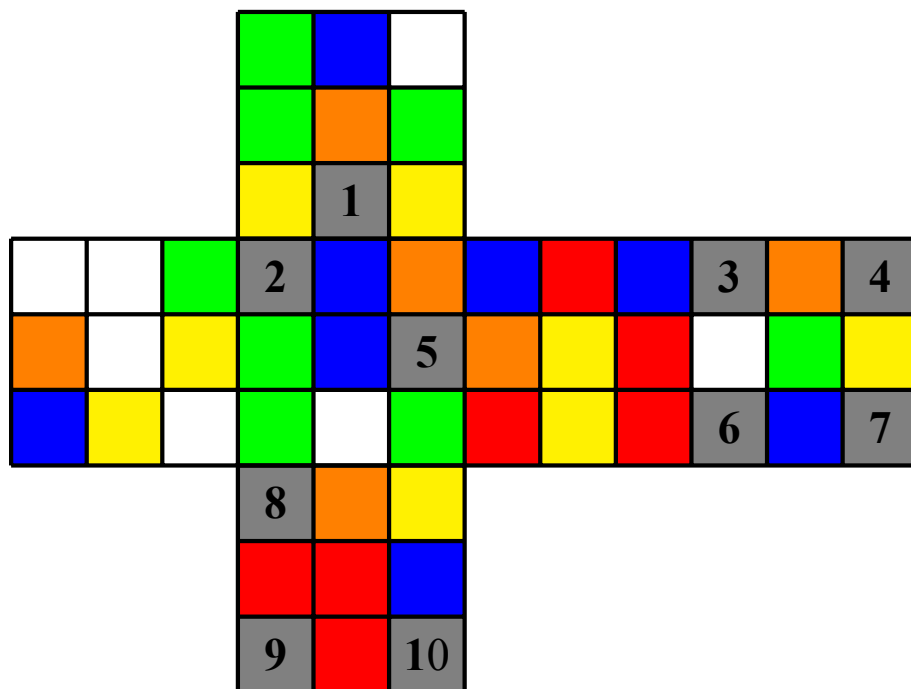
**Solution 30: R B L F D U2 R F' L' F' B2 L F2 D F B' D R' F U' Uw'**

**No. 31      Difficulty: ★★**



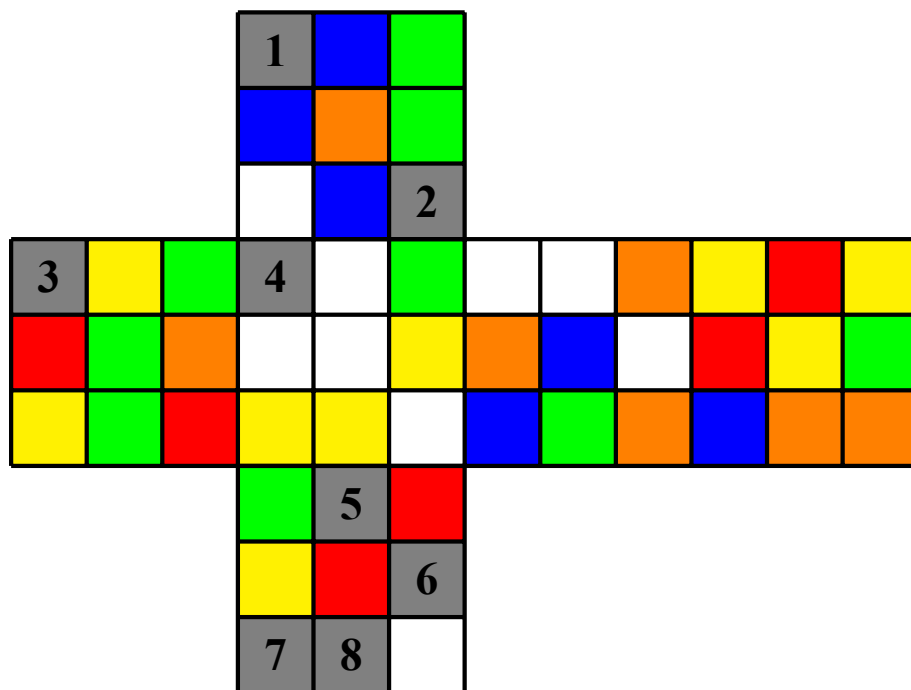
**Solution 31: U F' R2 F2 R L2 D U' R2 F2 R2 U' L D' F' B' U2 F2 U' L' Rw Uw**

**No. 32      Difficulty: ★★**



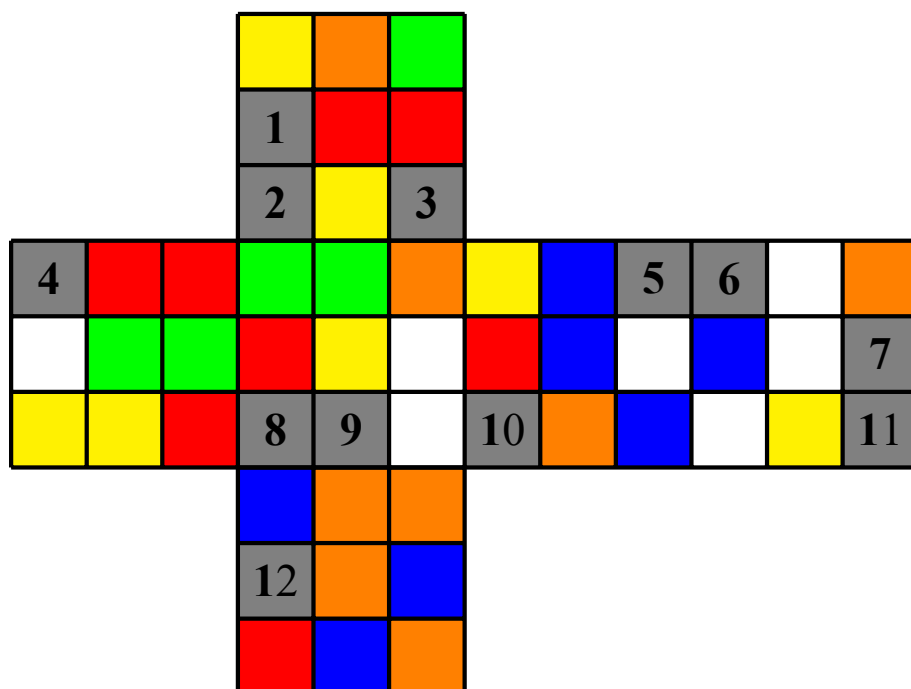
**Solution 32: R' F' B' U L2 B U2 B2 U' F' L D' B2 F R D L2 B' F2 D' Rw' Uw'**

**No. 33      Difficulty: ★★**



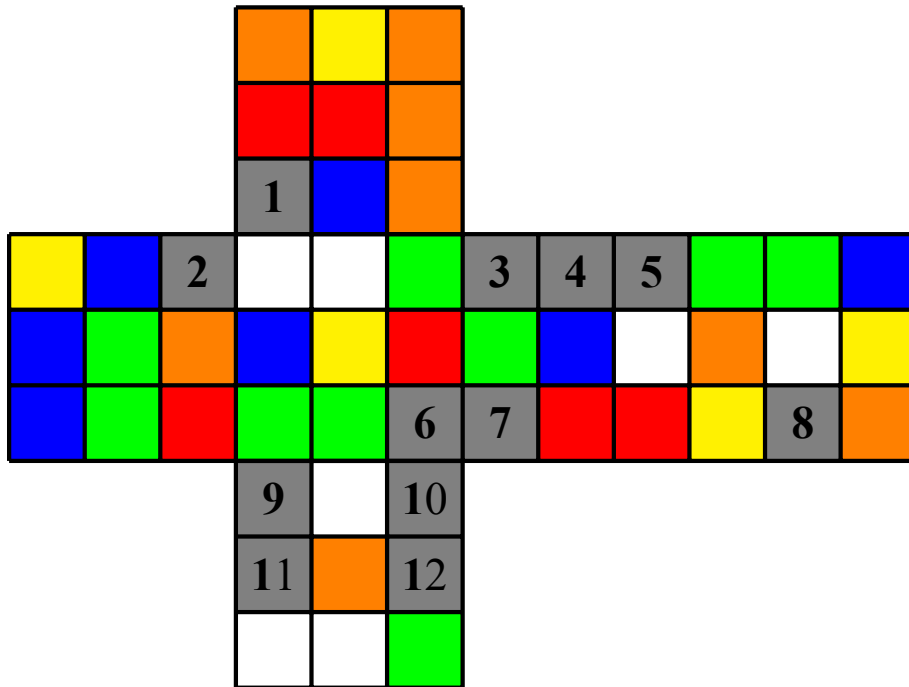
**Solution 33: B2 R2 F2 U F' L F R L' B2 U' R D F D F' L' R2 D2 F2 Rw' Uw2**

**No. 34      Difficulty: ★★**



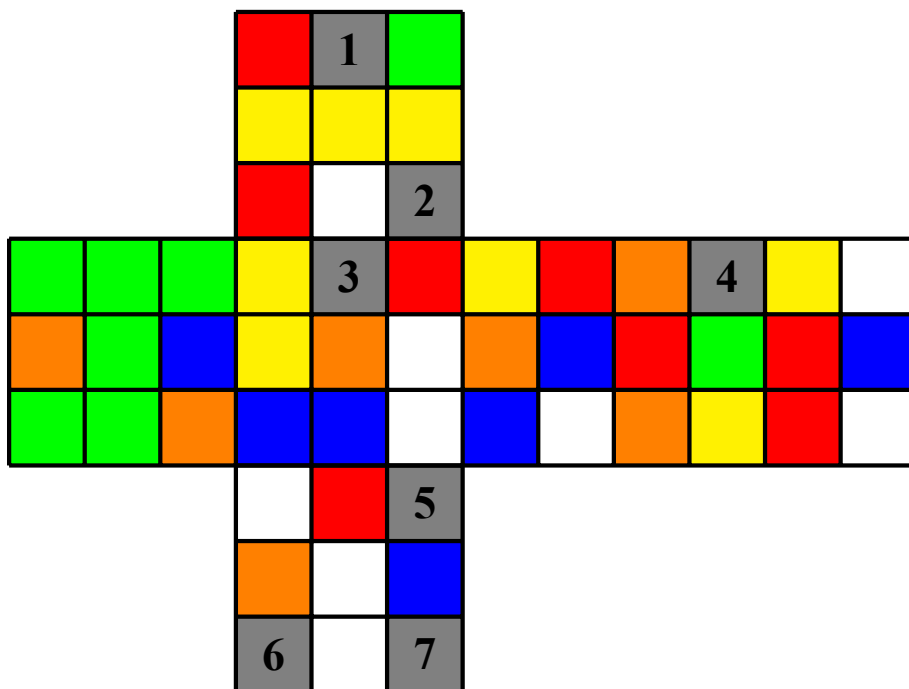
**Solution 34: B2 U' L2 R' F2 B' U F R2 D2 F L B D' L B' R2 L U2 R2 Rw Uw2**

**No. 35      Difficulty: ★★**



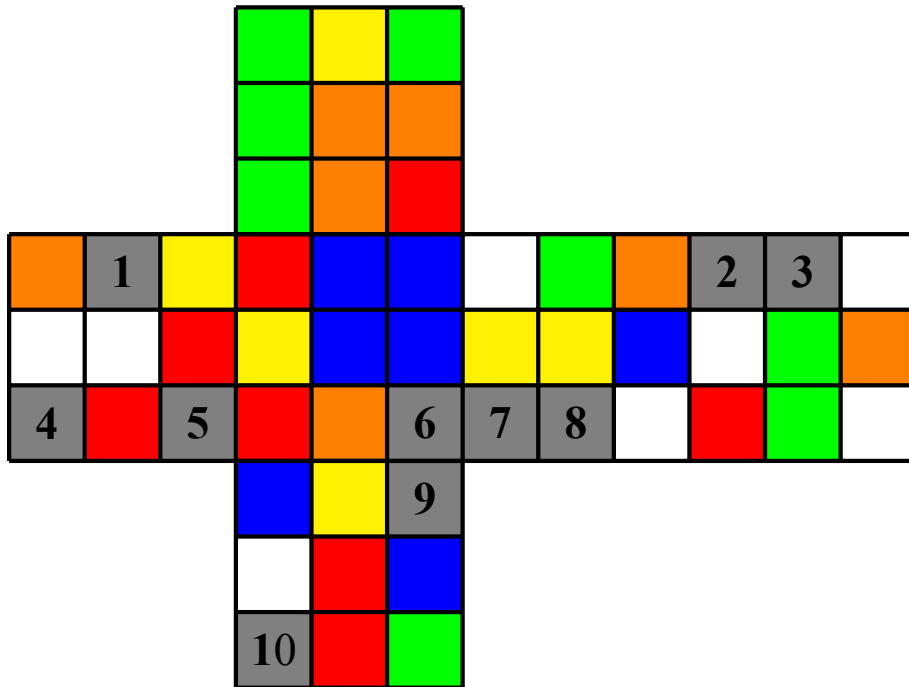
**Solution 35: F' R U2 B F' D' U B2 L' D2 U2 L' D2 R' B2 U2 L' R D' U2 Rw Uw2**

**No. 36      Difficulty: ★★**



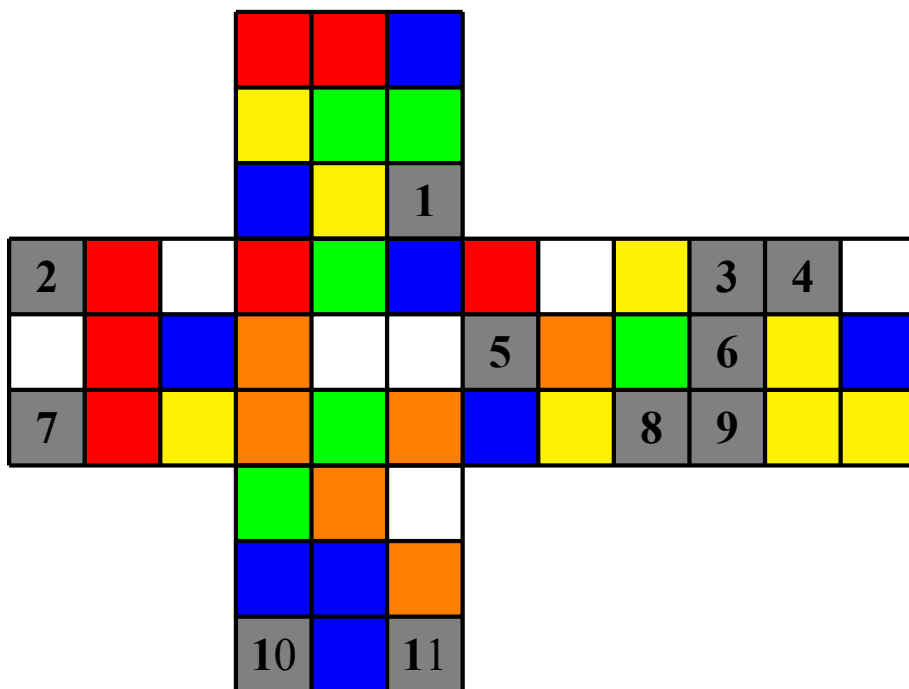
**Solution 36: B' U' F' L' R U' F' D' B2 R' U L2 U B' L F' B' L2 F' D' Uw2**

**No. 37      Difficulty: ★★**



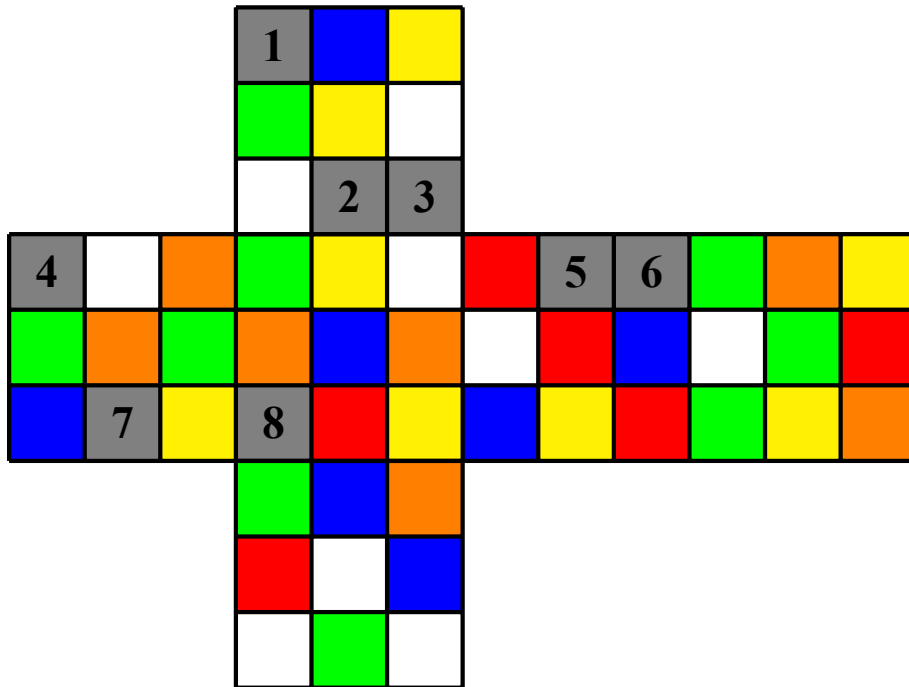
**Solution 37: D' L2 R' F R' F B' R2 U D' B2 D' U' L2 U R U R2 B2 L' Rw' Uw'**

**No. 38      Difficulty: ★★**



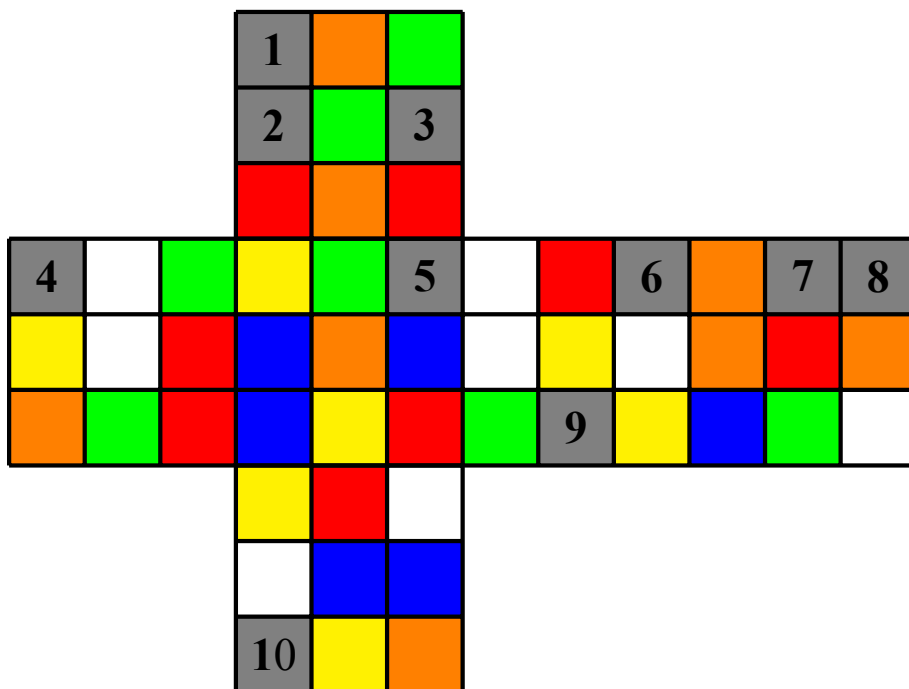
**Solution 38: R' L B2 F D' F U B R2 B2 F L2 D' R2 F' L2 D' R2 D' F2 Fw' Uw**

**No. 39      Difficulty: ★★**



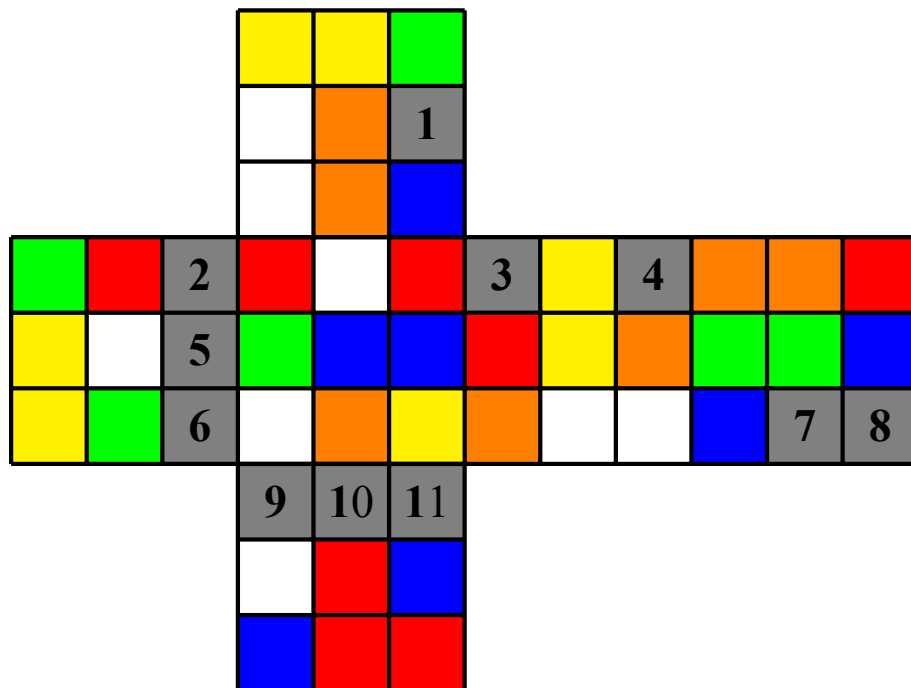
**Solution 39: L' U' D' R F U2 F D2 U L R2 F L' U' B U R D' B' U2 Uw'**

**No. 40      Difficulty: ★★**



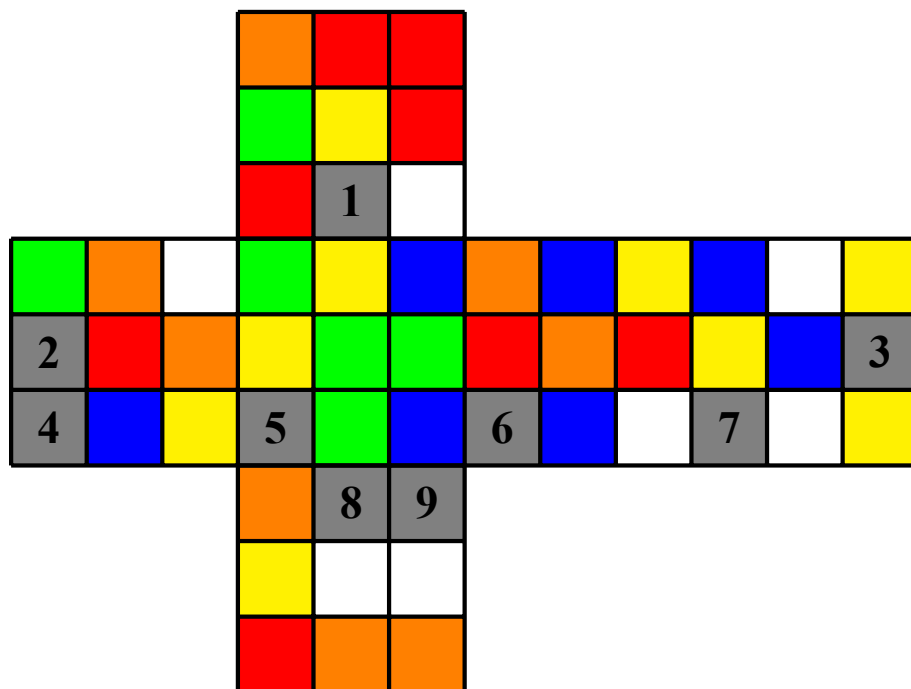
**Solution 40: B2 D L B' D' L R2 B L' D U2 R U' L R' F' L' U' L F Fw' Uw2**

**No. 41      Difficulty: ★★**



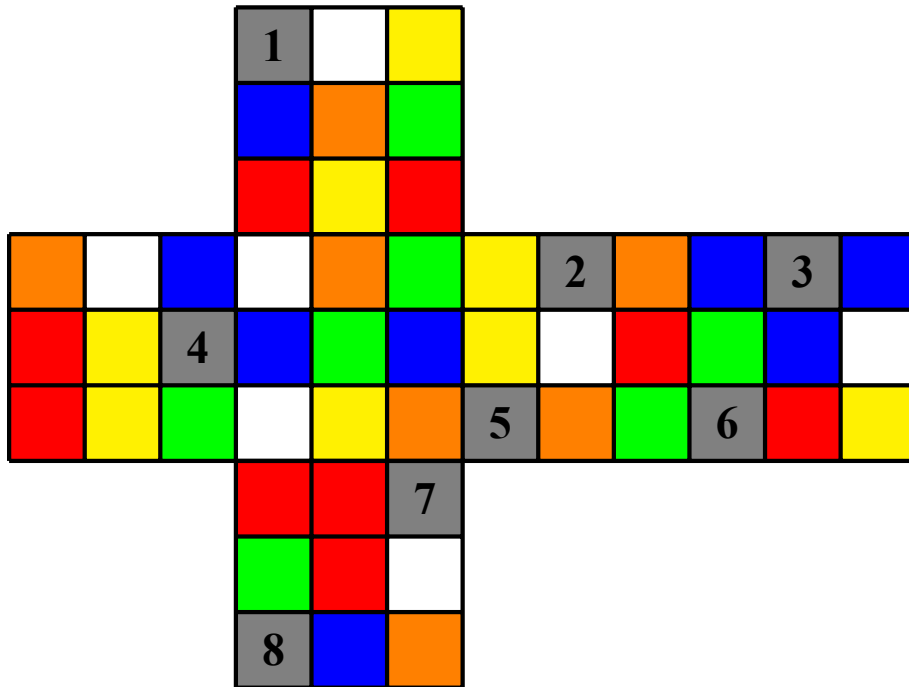
**Solution 41: U2 B F' R2 D' B' L2 B' U2 F2 L' U B2 R2 D B' R' L2 D2 F' Rw' Uw'**

**No. 42      Difficulty: ★★**



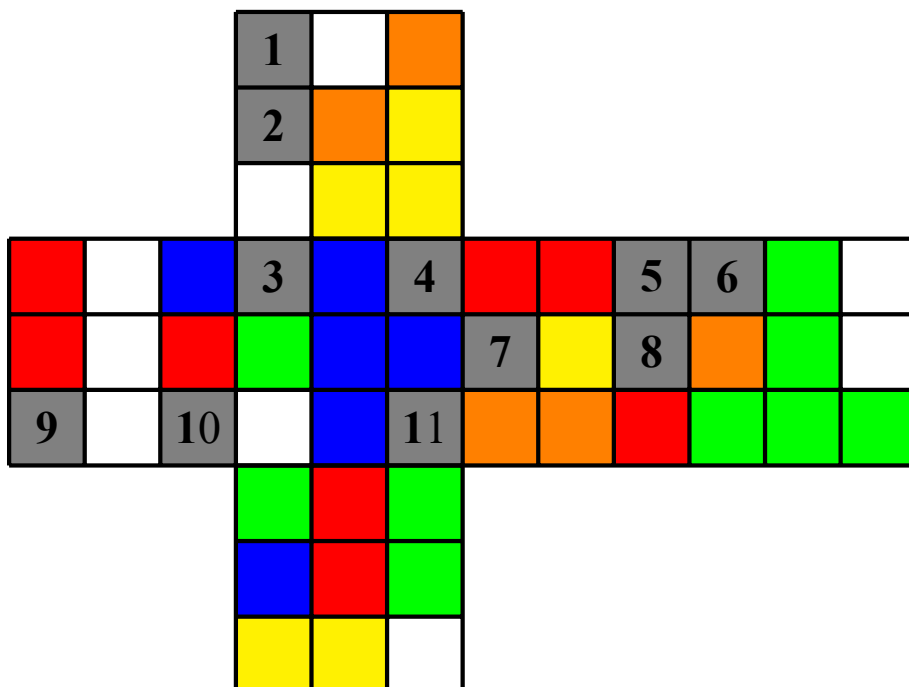
**Solution 42: D2 F R2 U2 D' B' D B' F' D' R2 L' U2 L' B2 L' D2 F2 B R' Uw**

**No. 43      Difficulty: ★★**



**Solution 43: D F' U2 F2 L' F2 L F R2 D2 R B' D B L D2 U2 F' L2 D' Rw' Uw**

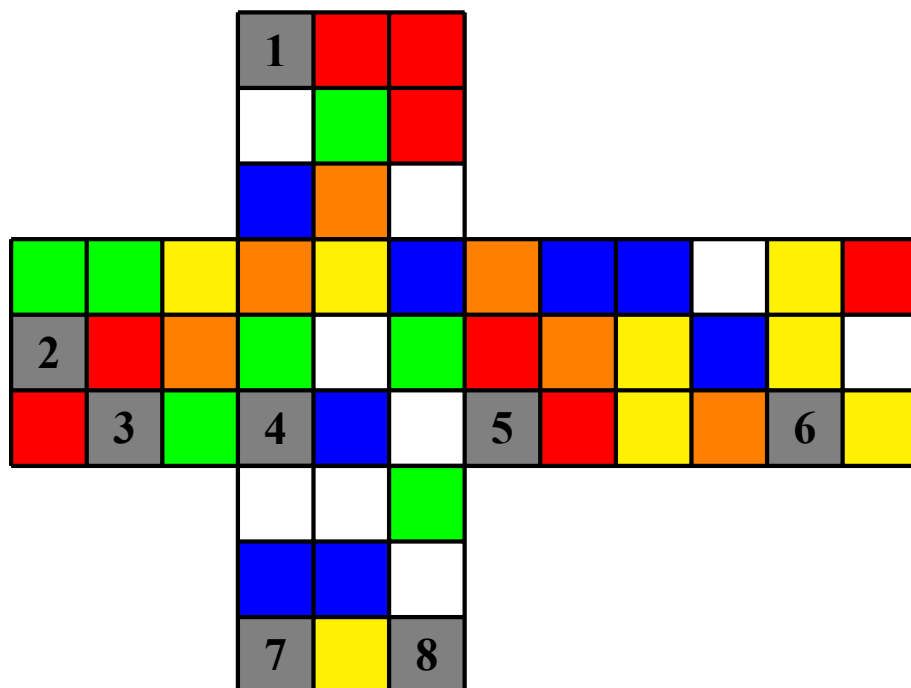
**No. 44      Difficulty: ★★**



**Solution 44: U L2 D2 R D2 R2 F2 R2 F' U' L F2 B2 L R2 F D B2 R L Rw' Uw'**

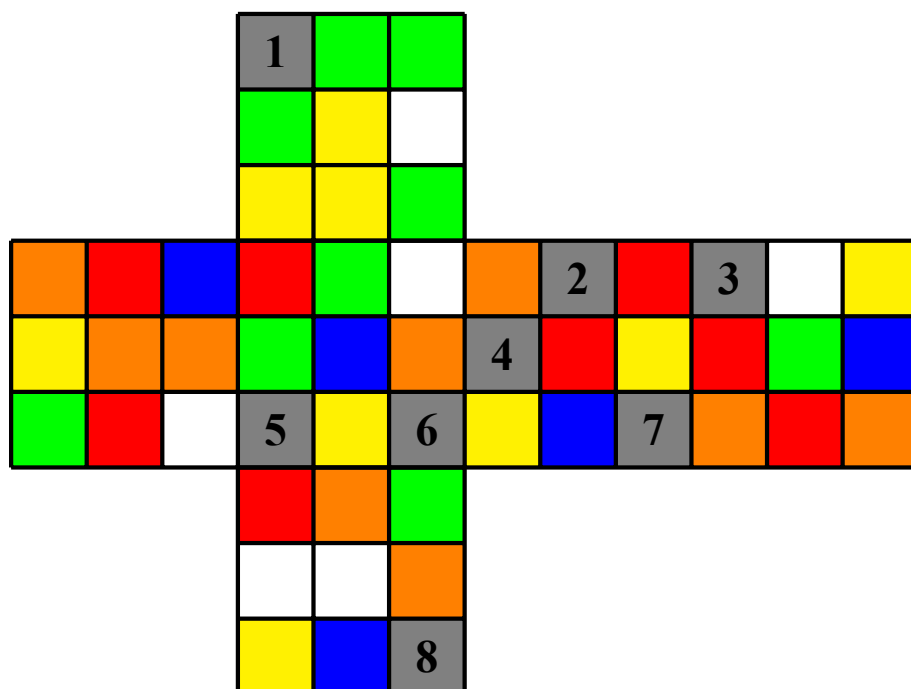


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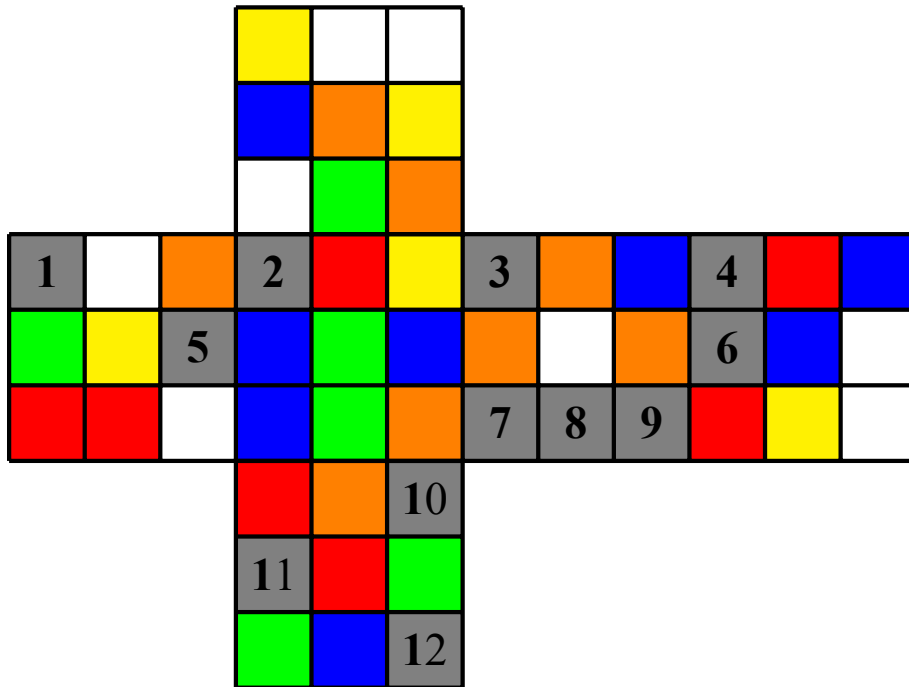
**Solution 45: D2 R2 F' D B2 U R F U' B2 D2 L F2 R2 U F' L B2 F R2 Fw' Uw**

**No. 46      Difficulty: ★★**



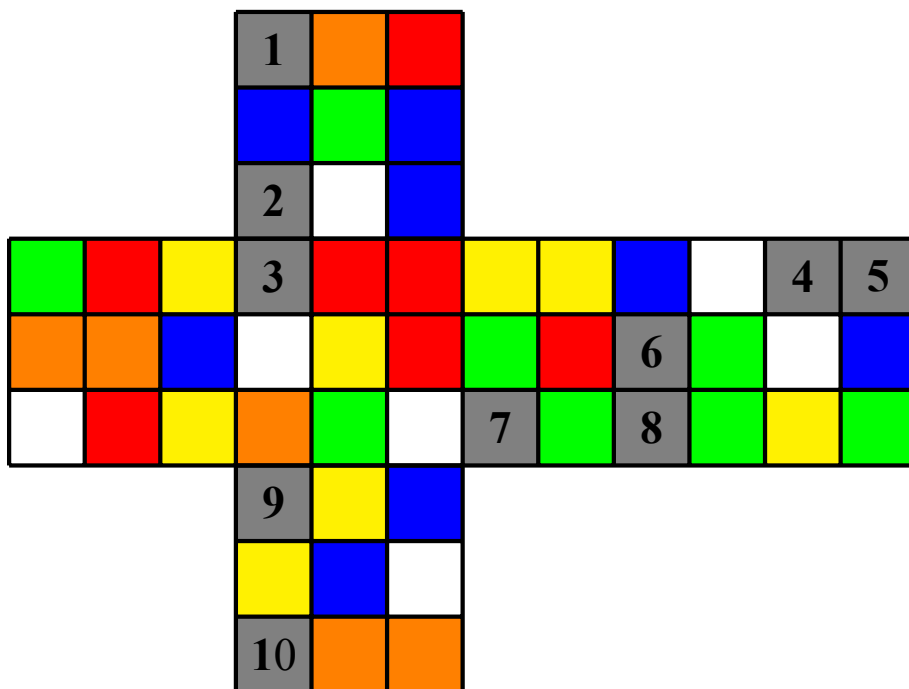
**Solution 46: F' L' D' B' U' L2 D2 L2 B' F D F' L B D2 U2 R2 B' U R2 Uw'**

**No. 47      Difficulty: ★★**



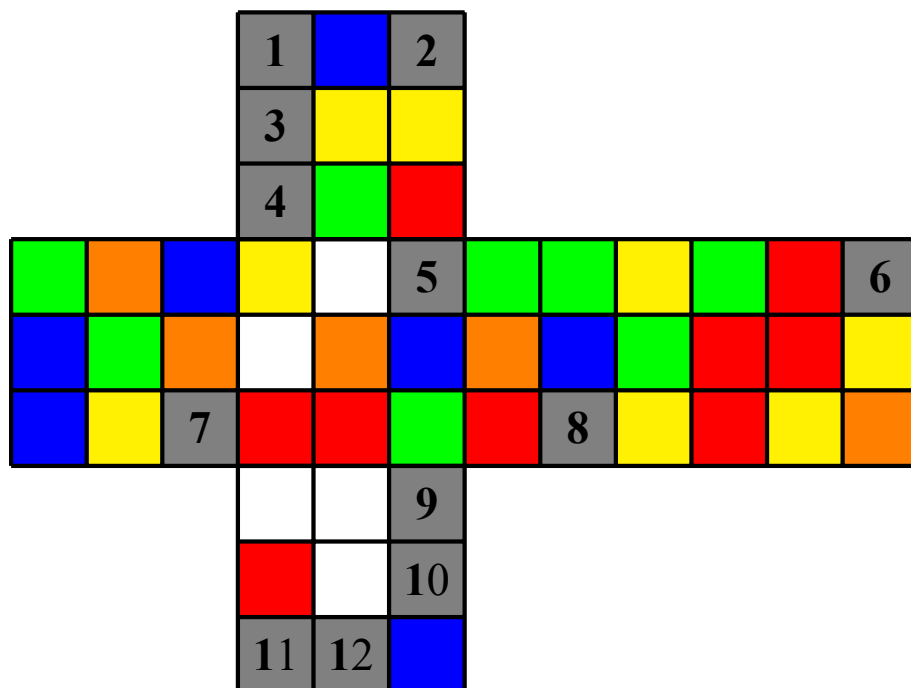
**Solution 47: F' R2 L' F U' L B2 R B' F' U L2 R' F R F U2 L' F2 B2 Rw' Uw**

**No. 48      Difficulty: ★★**



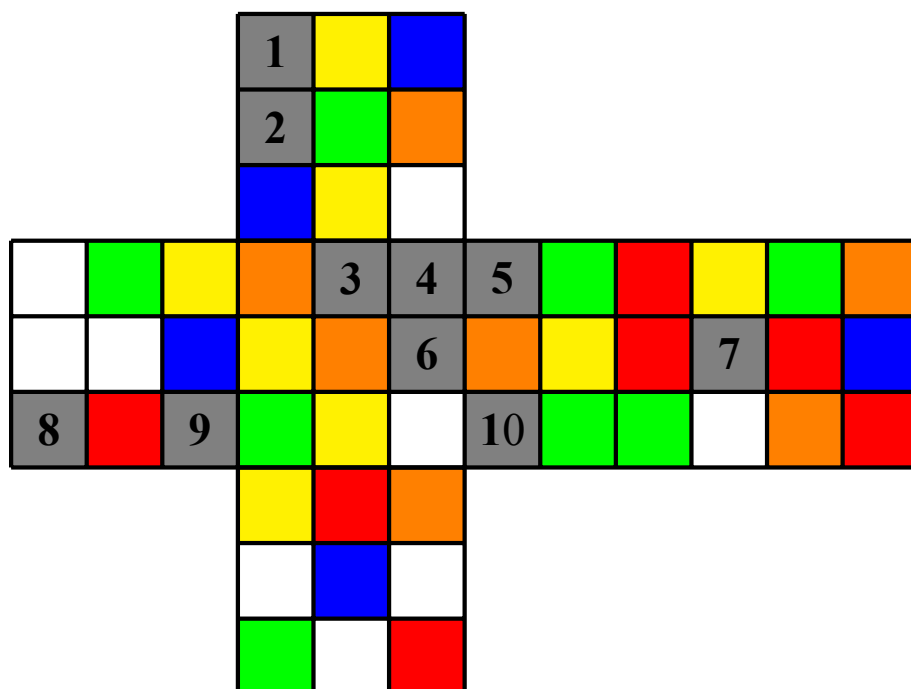
**Solution 48: F U' R' U' L F R2 L2 U B' U F U' B' L R' U D' R2 B2 Fw' Uw'**

**No. 49**      **Difficulty: ★★**



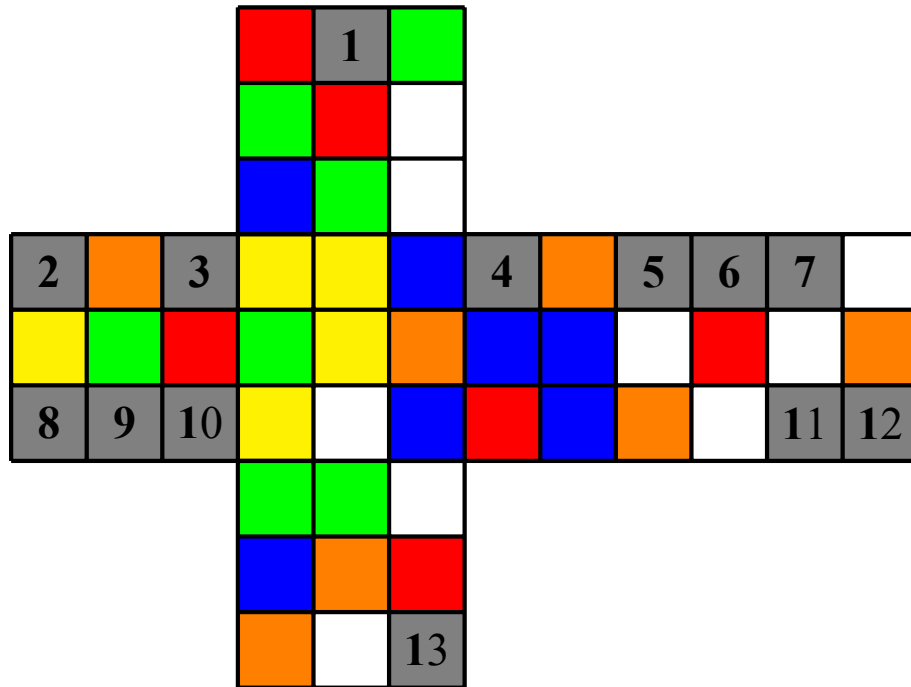
**Solution 49:** R' D L D U L F B2 R2 B2 L' D2 L B' L D F2 D' B2 R2 Uw2

**No. 50**      **Difficulty: ★★**



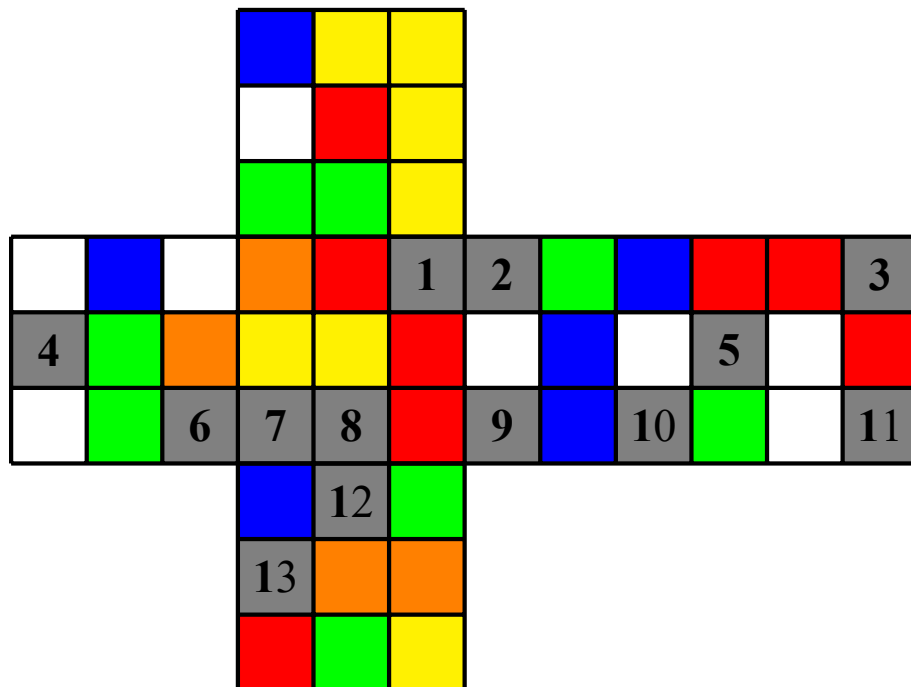
**Solution 50:** D U' B2 L2 F2 R' D2 F' D F2 L F' B L' F2 L U L' U2 B Fw' Uw2

**No. 51      Difficulty: ★★★**



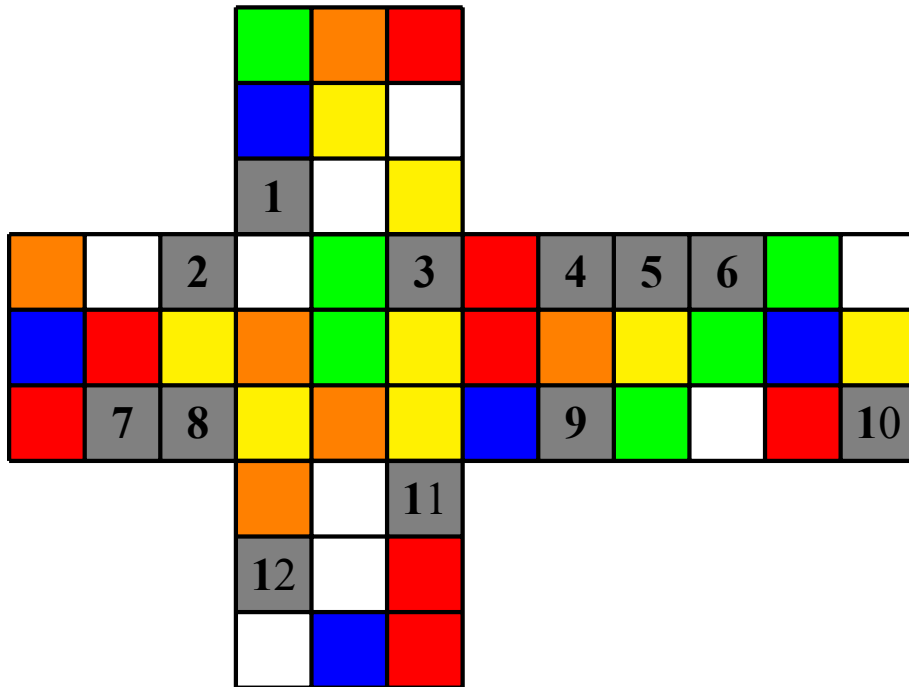
**Solution 51: D2 L D2 F2 D2 R' L' B2 L' U2 D' R' U' B' L R2 F U D' L Rw Uw2**

**No. 52      Difficulty: ★★★**



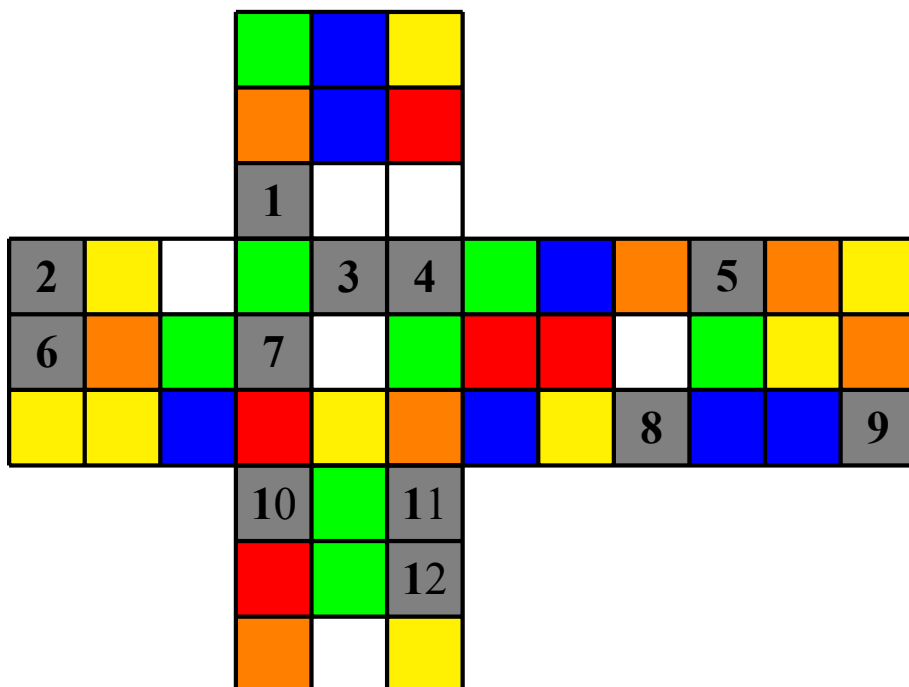
**Solution 52: R B R' U' F' L2 F L R2 U R' U' D2 B' U' B' D2 B F2 D2 Rw Uw2**

**No. 53      Difficulty: ★★★**



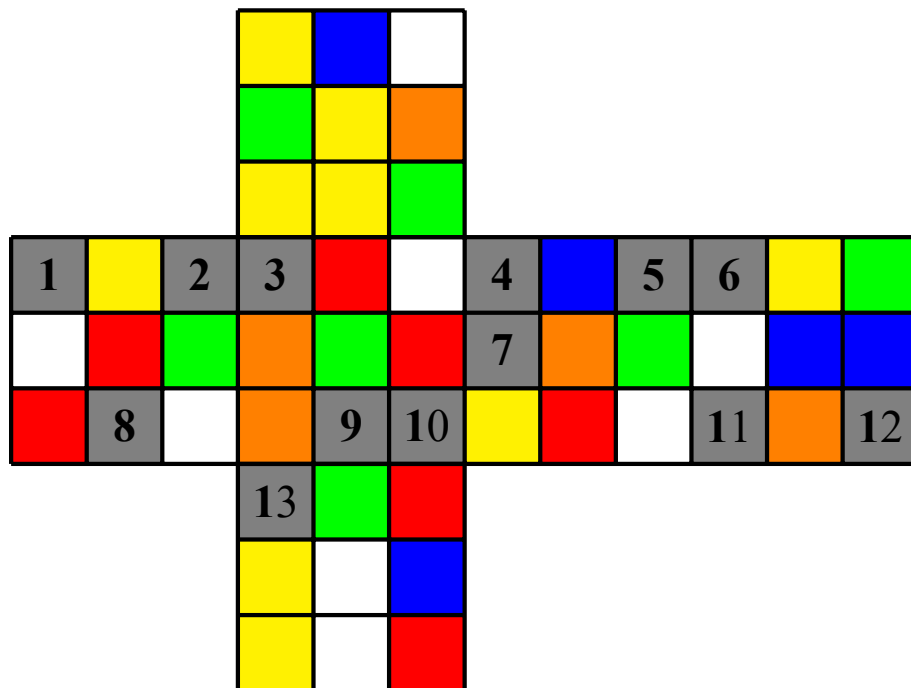
**Solution 53: B' U' F' U2 D' F' U2 F' B' R D2 U' R' L D U' R B' L D Uw**

**No. 54      Difficulty: ★★★**



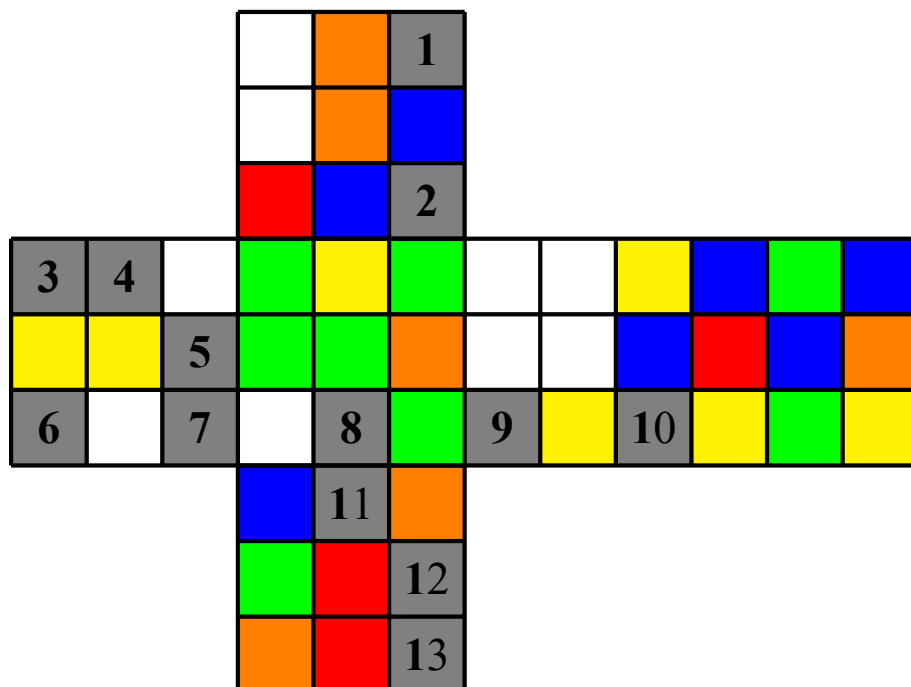
**Solution 54: U L2 R' D' B F R' F' D' B' U' L' R2 B2 F R2 B R B2 F2 Fw Uw'**

**No. 55**      **Difficulty: ★★★**



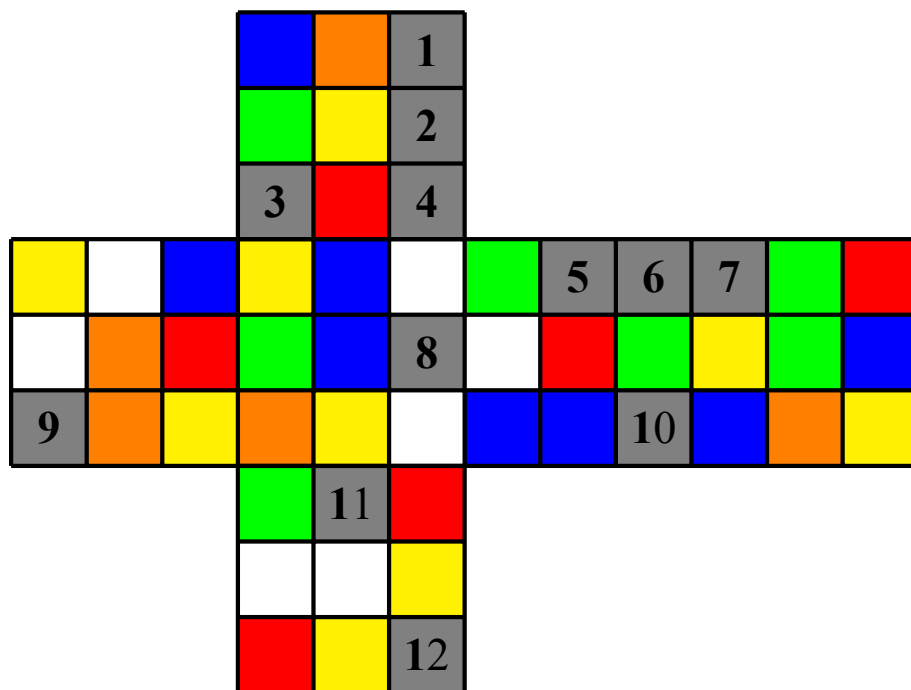
**Solution 55:** R2 B2 U' R2 U F R2 D2 U2 R B' U2 B' D' F B' R' U' R F Uw

**No. 56**      **Difficulty: ★★★**



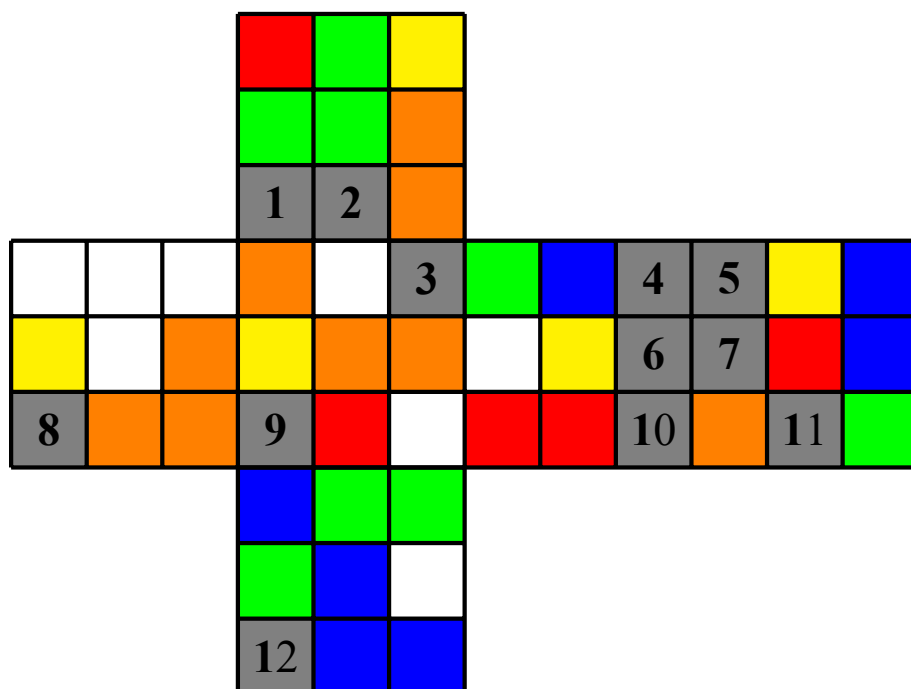
**Solution 56:** U D' F B' R D2 U' F L2 U2 B2 D2 L2 F B2 L' B' L2 R F' Rw' Uw

**No. 57**      **Difficulty: ★★★**



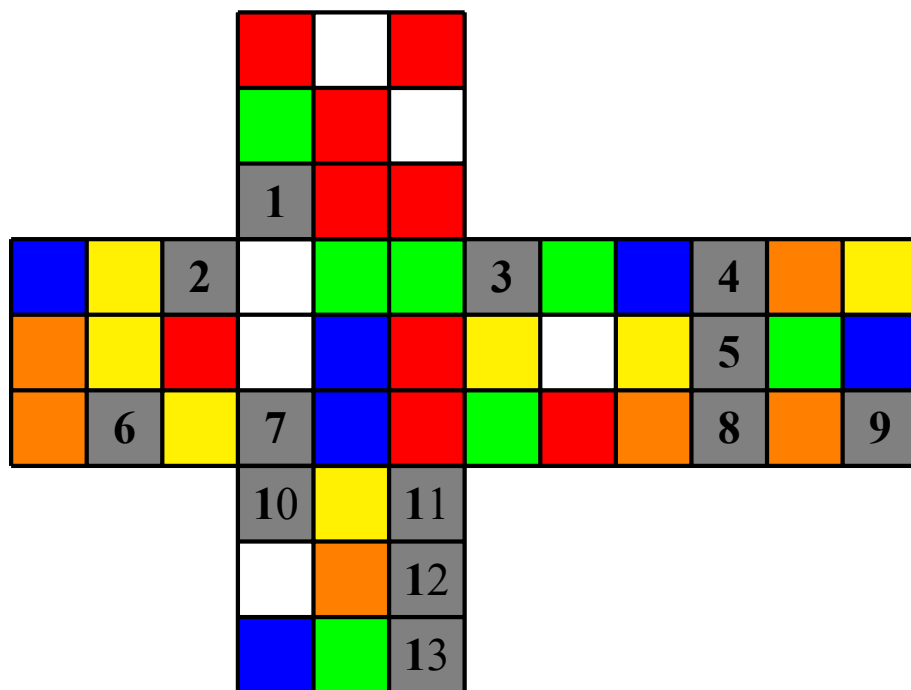
**Solution 57:** R' U L2 B2 R' D F2 B L D' U2 F' U' L U2 F' R2 U L U2 Uw'

**No. 58**      **Difficulty: ★★★**



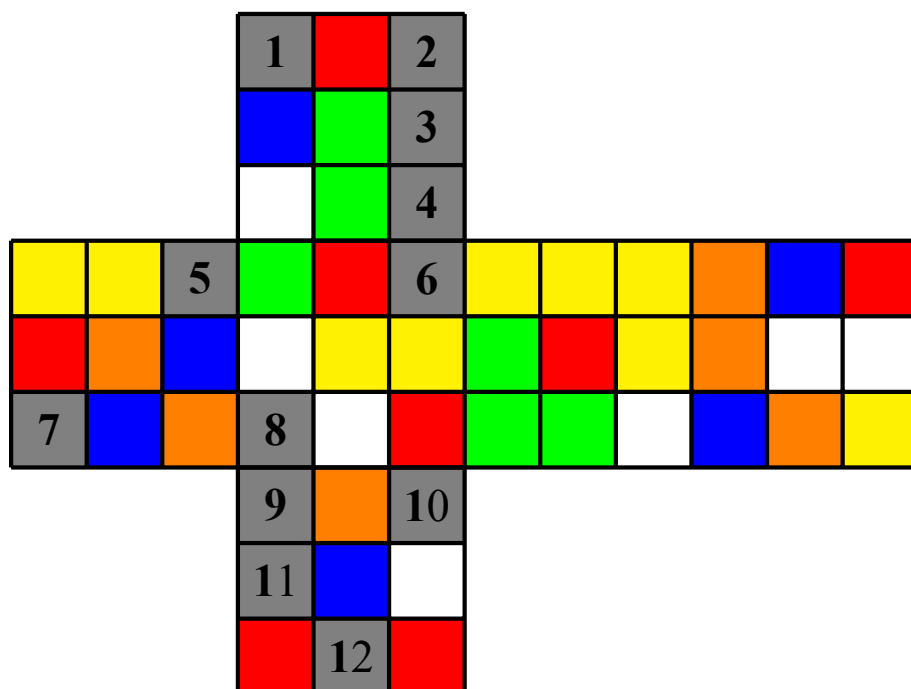
**Solution 58:** L' B' D2 R2 D B F' D2 R2 D' U' R2 L' F B U R' D L' U2 Fw' Uw2

**No. 59**      **Difficulty: ★★★**



**Solution 59:** B' F2 D2 L R D R' U2 B F' U2 F' U' F' B2 U2 D2 B2 R F2 Rw Uw'

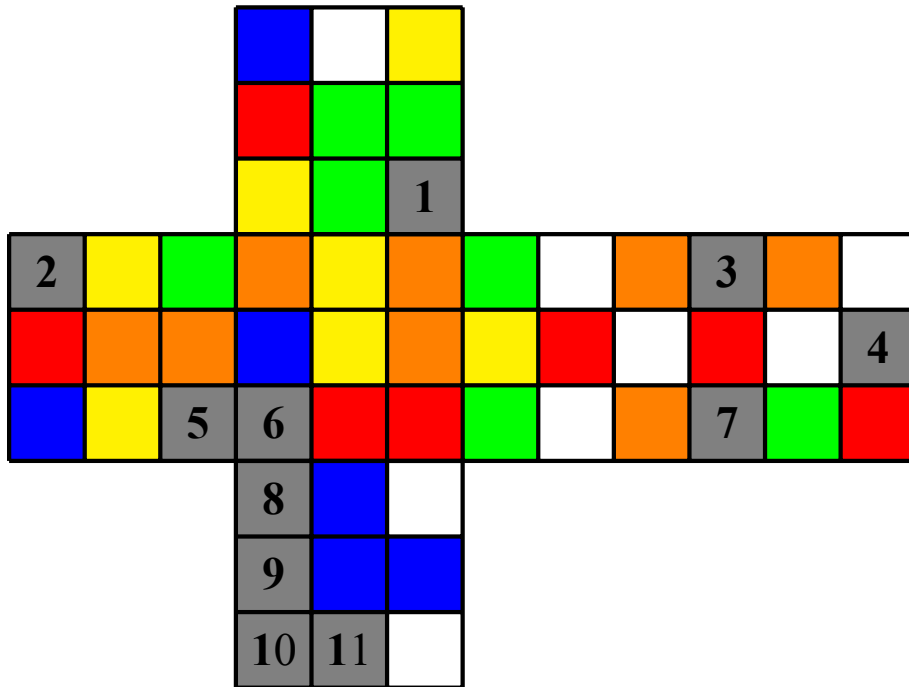
**No. 60**      **Difficulty: ★★★**



**Solution 60:** D B F L2 D F' R U' R U' F' L2 U' R2 B2 L' D B' L' U Fw' Uw'

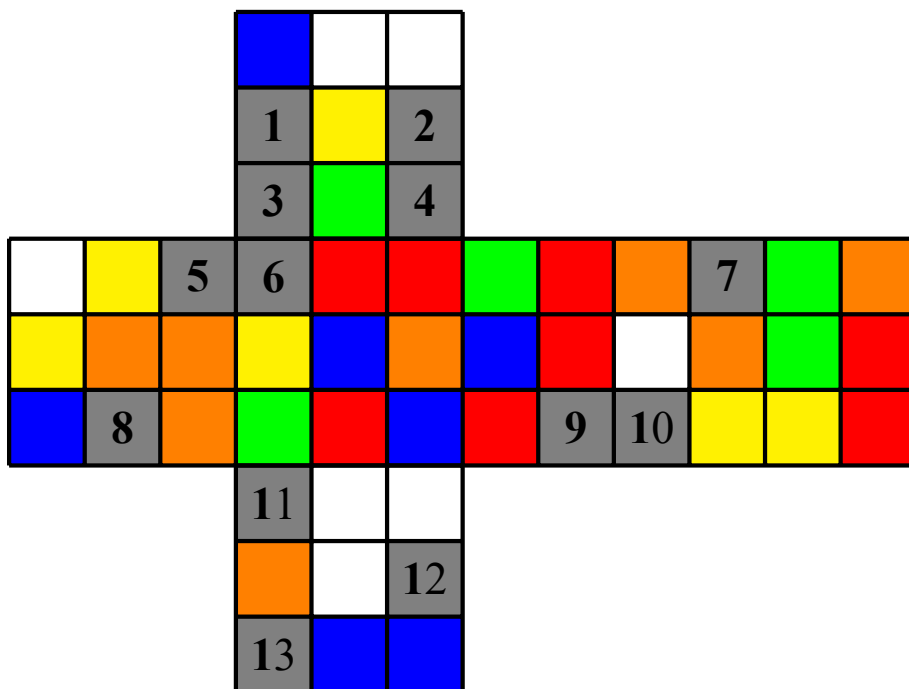


**No. 61      Difficulty: ★★★**



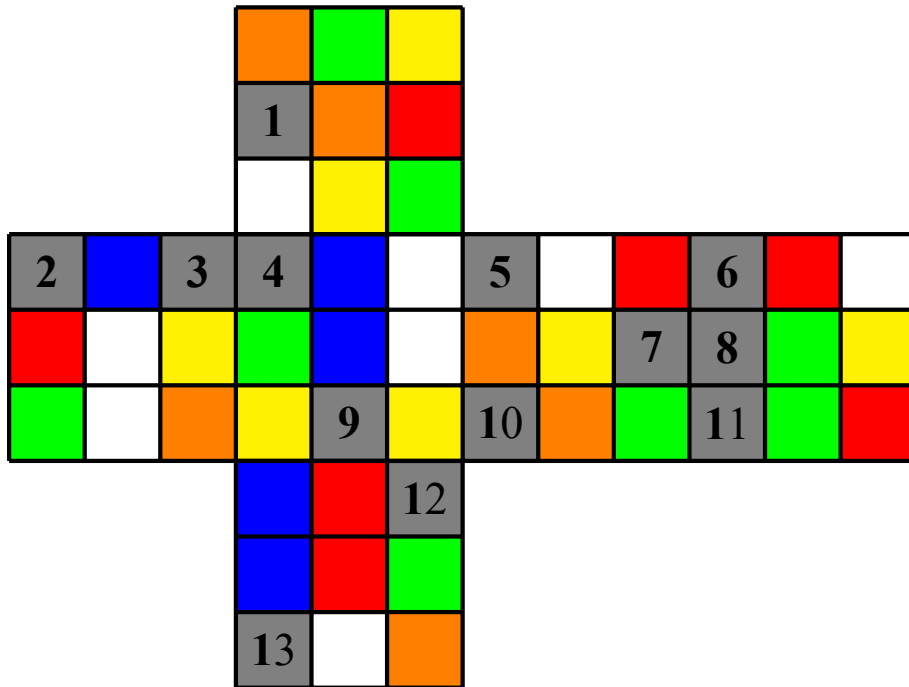
**Solution 61: F2 B' R2 B2 D' U' F' U L D F' U L F2 B2 D B2 R L' B' Fw' Uw'**

**No. 62      Difficulty: ★★★**



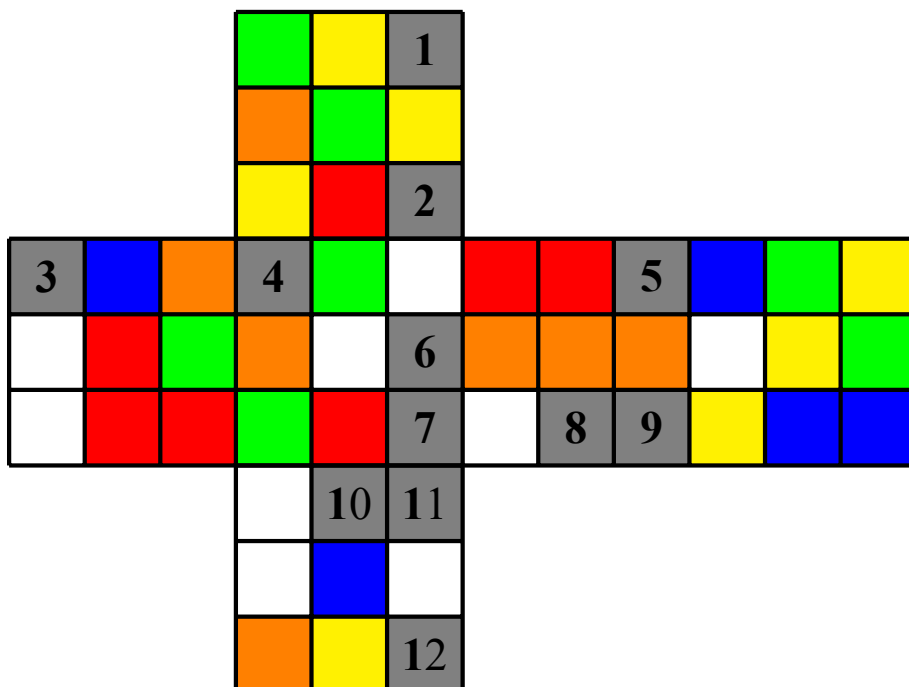
**Solution 62: F' B' U B F2 U2 F L U' F2 D' B2 F2 R2 B2 D R D2 R2 U' Uw'**

**No. 63      Difficulty: ★★★**



**Solution 63: R B R2 D' R F L2 B' R2 D2 U2 L R2 D F' L2 U2 B' R B' Rw' Uw'**

**No. 64      Difficulty: ★★★**



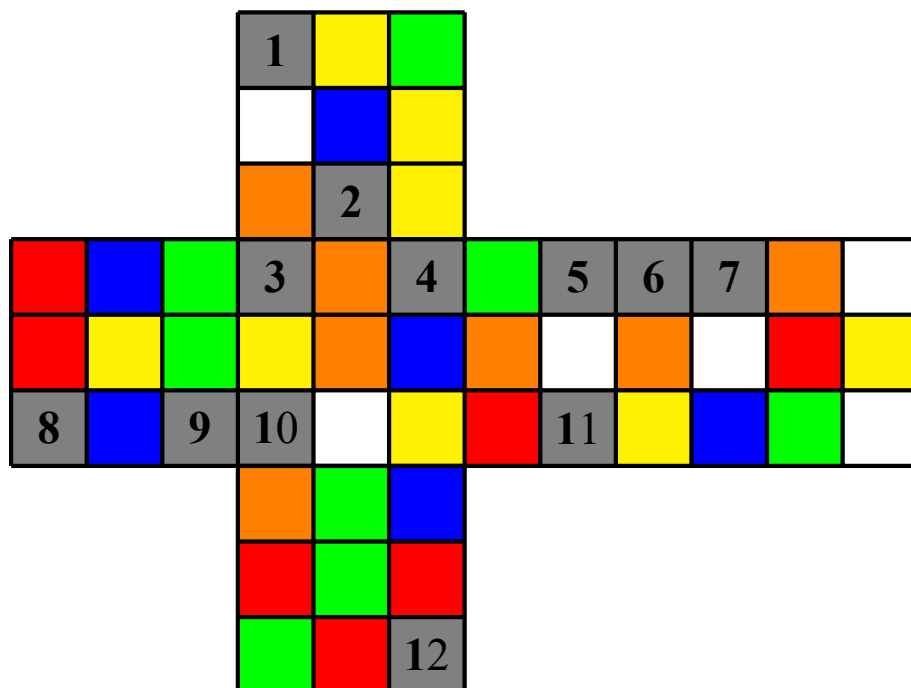
**Solution 64: L2 F' D R' B2 D U F2 D' B D F' D' B U2 D2 L F L R2 Fw' Uw**

The grid is a 14x14 array of squares. The colors of the squares are as follows:

- Row 1: Grey (1), White, Blue, White, White, White, White, White, White, White, White, White, White, White.
- Row 2: Yellow, Blue, Red, White, White, White, White, White, White, White, White, White, White, White.
- Row 3: Grey (2), White, Grey (3), White, White, White, White, White, White, White, White, White, White, White.
- Row 4: Yellow, Red, White, Orange, Blue, Red, Green, White, Orange, Grey (4), Orange, Blue, White, White.
- Row 5: Orange, Orange, Grey (5), Yellow, White, White, Green, Red, Yellow, Blue, Yellow, Yellow, White, White.
- Row 6: Red, Green, Red, Grey (6), Red, Blue, Red, Grey (7), Grey (8), Orange, Grey (9), Grey (10), Grey (11), Grey (12).
- Row 7: Grey (13), Blue, Grey (14), White, White, White, White, White, White, White, White, White, White, White.
- Row 8: Grey (15), Green, Blue, White, White, White, White, White, White, White, White, White, White, White.
- Row 9: Blue, Orange, Grey (16), White, White, White, White, White, White, White, White, White, White, White.

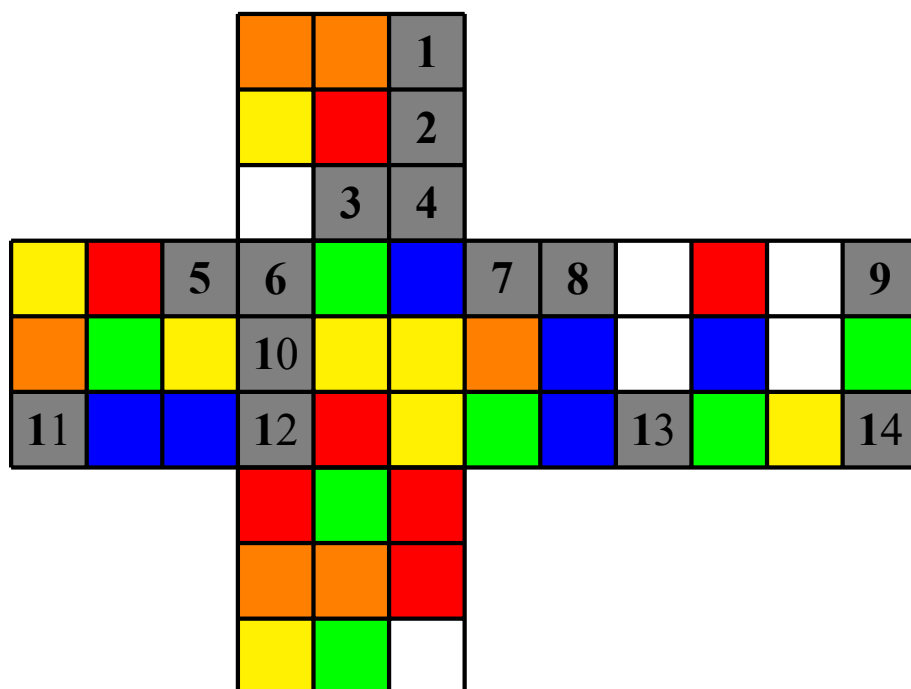
34

**No. 67**      **Difficulty: ★★★**



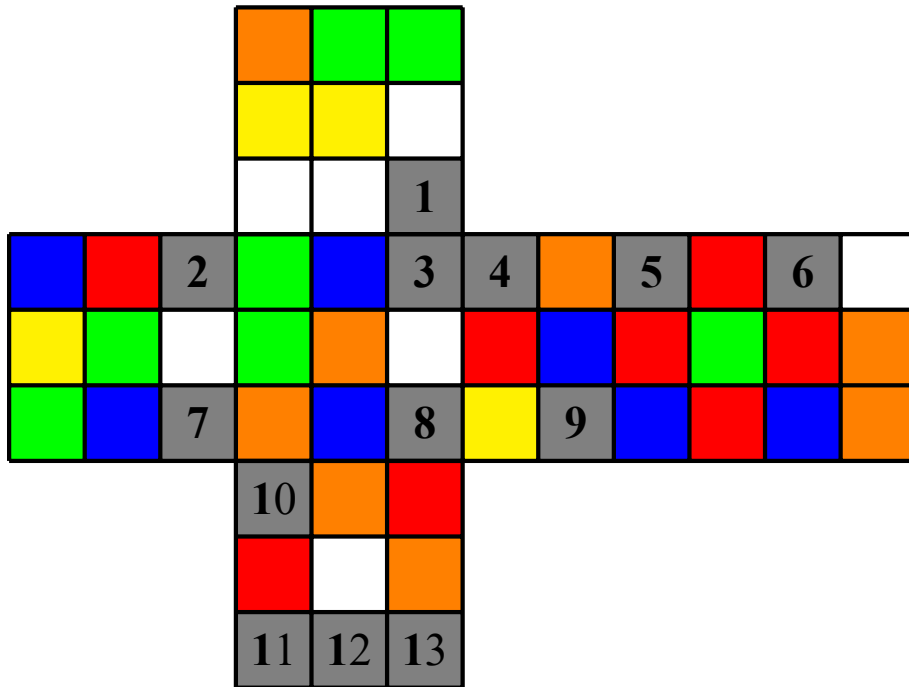
**Solution 67:** D' U2 F' L' B' F' L' R' B R2 F' L2 U' B' R2 L2 U D R' B2 Fw Uw2

**No. 68**      **Difficulty: ★★★**



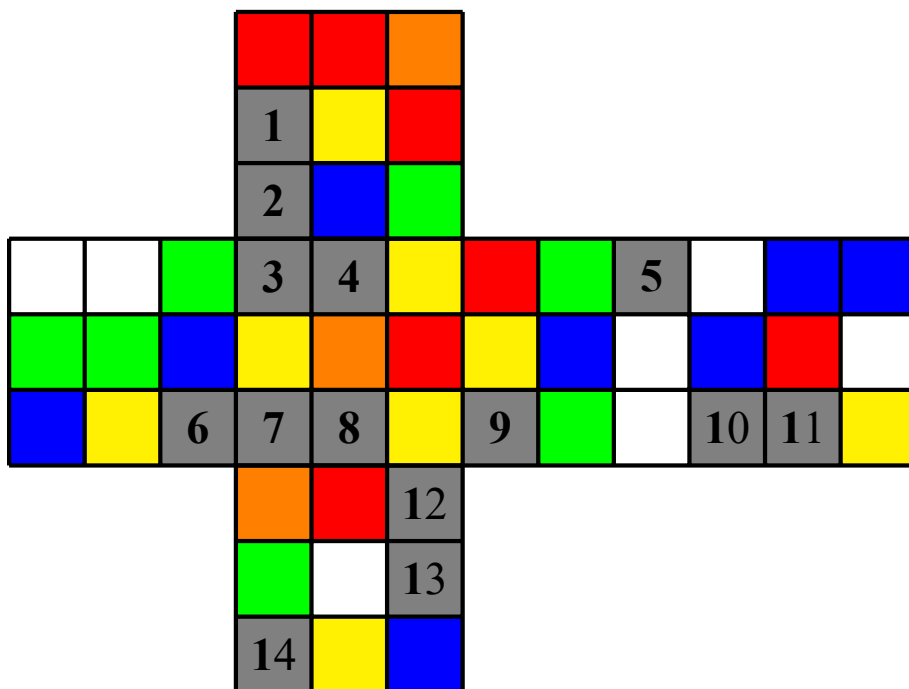
**Solution 68:** R' U2 L' F2 U' D' L B2 U R2 B' D L2 U' F2 L2 D U2 R F2 Rw Uw2

**No. 69**      **Difficulty: ★★★**



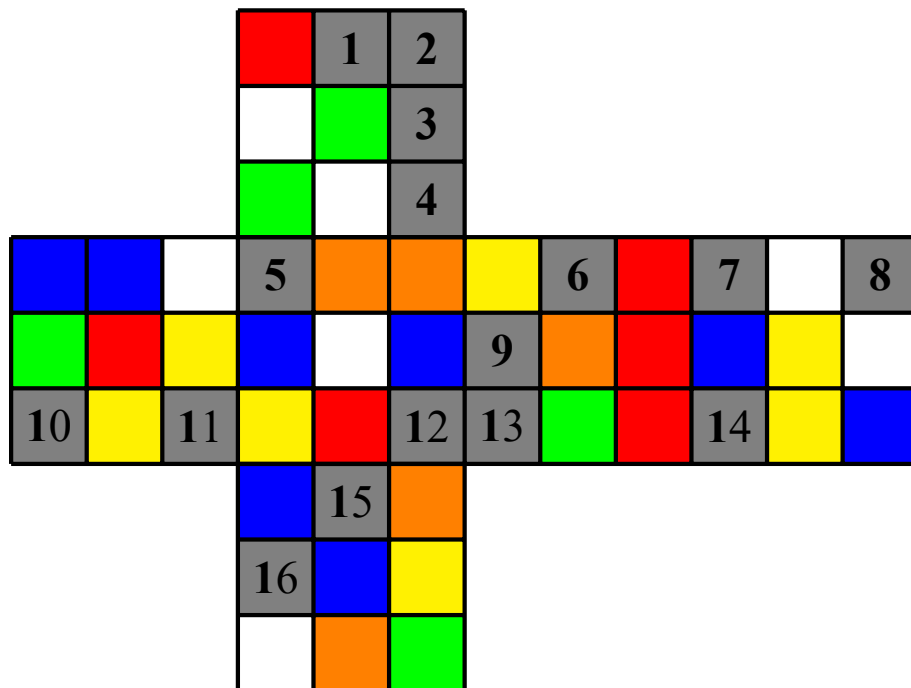
**Solution 69:** R F L2 D' F2 D2 U B F' L2 U' D' F' R' U2 D' F L2 B2 U Uw2

**No. 70**      **Difficulty: ★★★**



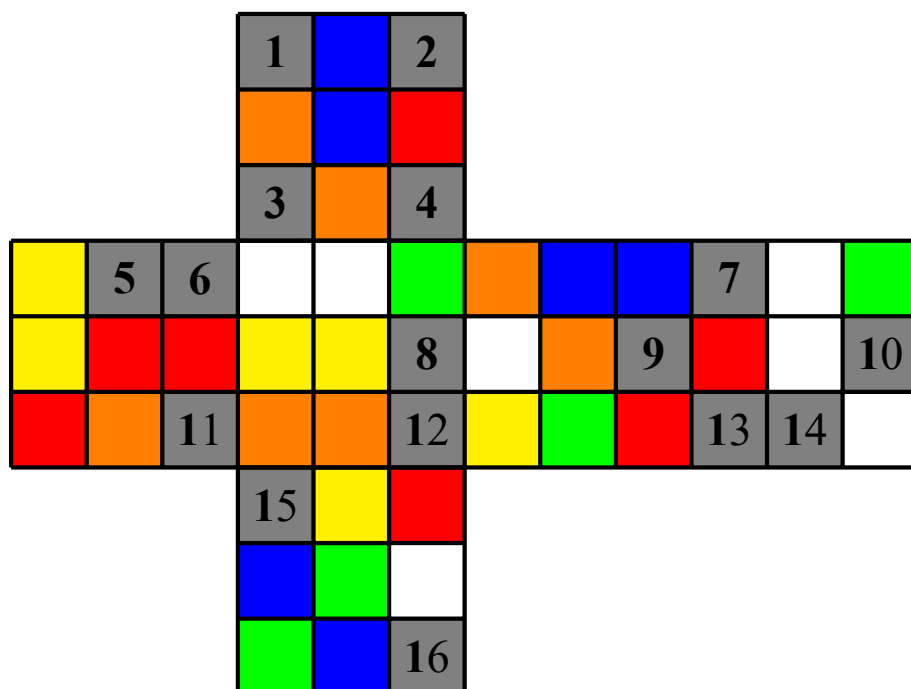
**Solution 70:** L2 R' B F U B2 D' B' F2 L' F2 L B' R2 D' U L2 R F' D2 Uw2

**No. 71**      **Difficulty: ★★★★★**



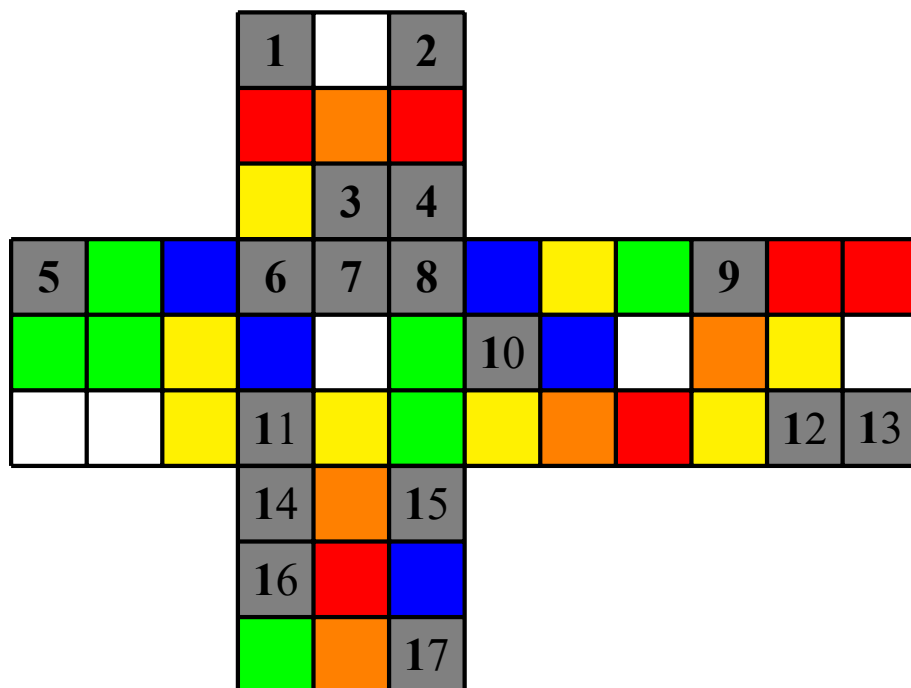
**Solution 71: R2 D' B2 D2 L F' B L2 D R U2 D R D U B' F2 U B' U2 Fw' Uw**

**No. 72**      **Difficulty: ★★★★★**



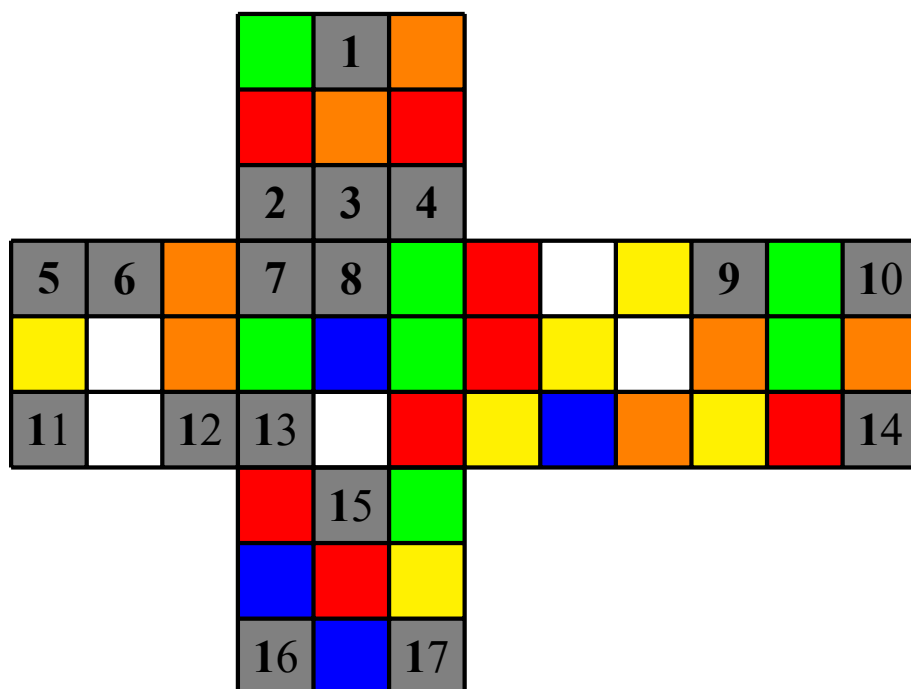
**Solution 72: R2 L2 B' F' R2 D2 B U2 D B' R' D F2 D' L U B F' R B Fw Uw**

**No. 73**      **Difficulty: ★★★★★**



**Solution 73: B L2 D F2 R F D2 L2 B2 D R U2 D2 B L D U2 L R D2 Rw' Uw2**

**No. 74**      **Difficulty: ★★★★★**



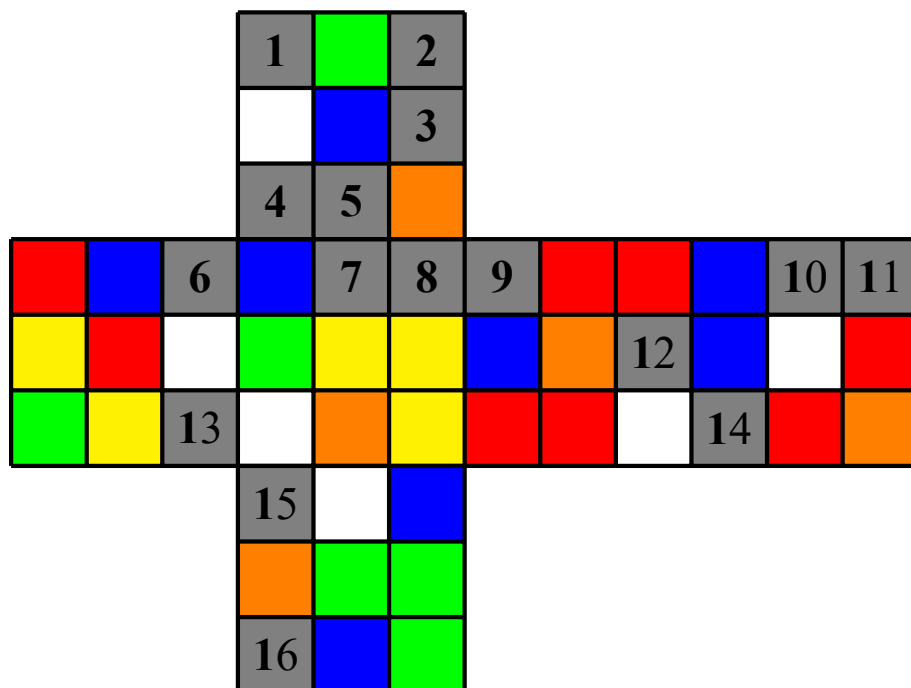
**Solution 74: R2 F' D' R2 U2 F2 B2 R' U' R D' L' F2 B L D2 R D' R2 B' Rw' Uw'**

[illegible][illegible]

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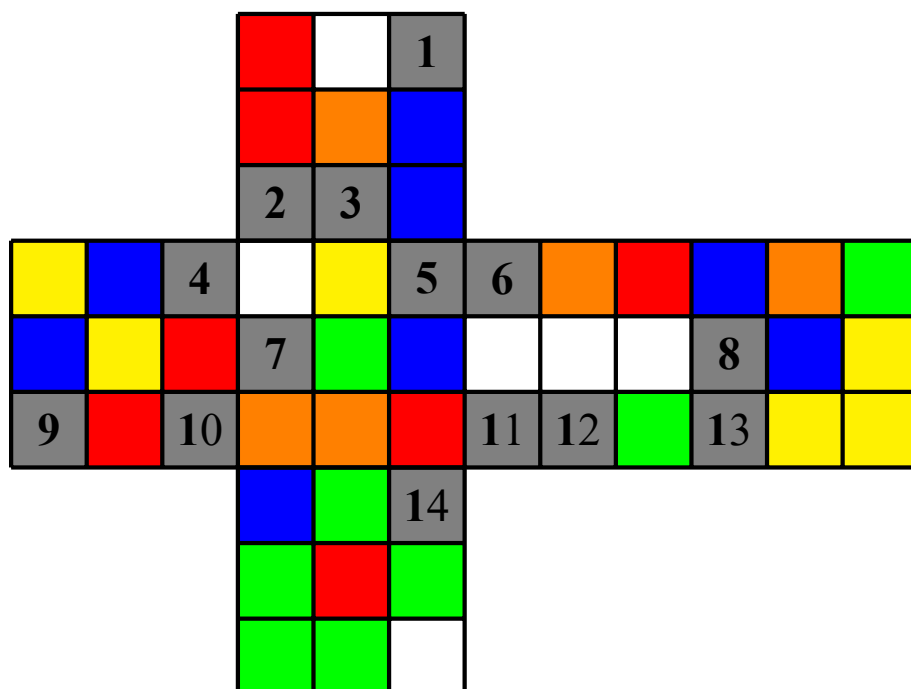


**No. 77**      **Difficulty: ★★★★★**



**Solution 77: D R2 U2 D L2 F2 U' D2 B2 D L2 U L F D2 B2 F' R2 F B Fw Uw**

**No. 78**      **Difficulty: ★★★★★**



**Solution 78: L2 F' B' D' R' F' L' B F' U2 D' R U2 D2 F U2 B L' B2 D Rw' Uw**

The image shows a crossword puzzle grid with 16 numbered squares. The grid is composed of white squares for letters and gray squares for numbers. The numbers are placed in the top-left corner of the starting square for each word. The colors of the cells are as follows:

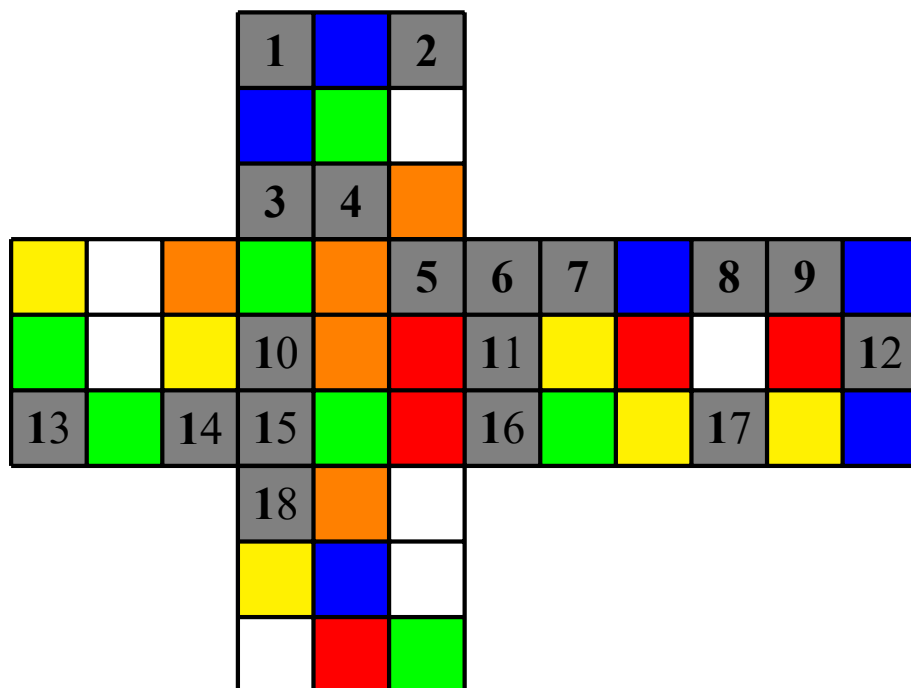
- Gray cells: 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 15, 16
- White cells: 7, 8, 10, 11, 12, 13, 14, 15, 16
- Blue cells: 1, 2, 3, 4, 5, 6, 9, 10, 12, 13, 14, 15, 16
- Red cells: 7, 8, 10, 11, 12, 13, 14, 15, 16
- Yellow cells: 1, 2, 3, 4, 5, 6, 9, 10, 12, 13, 14, 15, 16
- Green cells: 7, 8, 10, 11, 12, 13, 14, 15, 16

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[illegible][illegible]

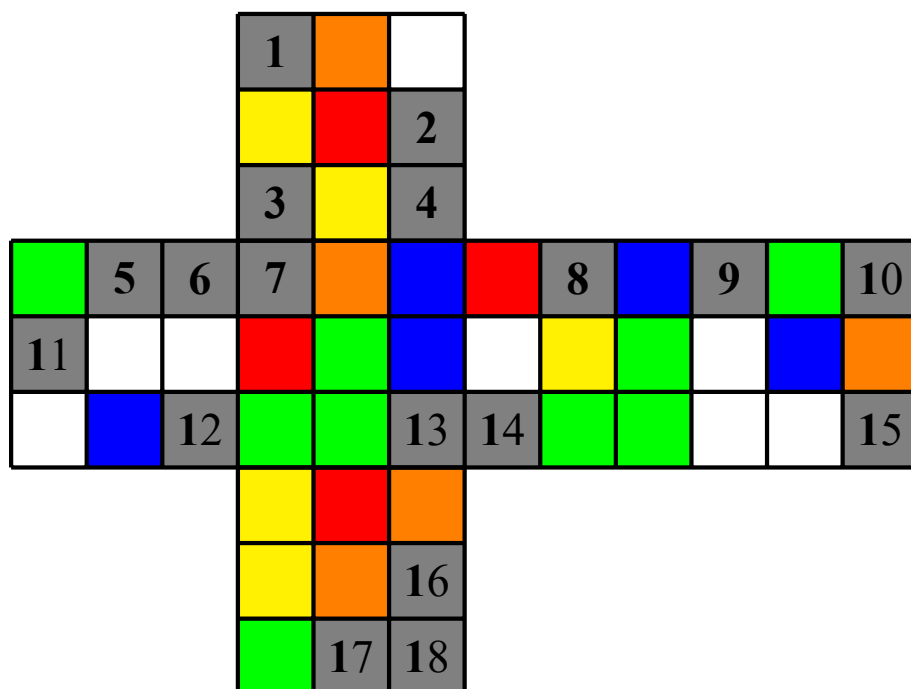
42

**No. 83      Difficulty: ★★★★★**



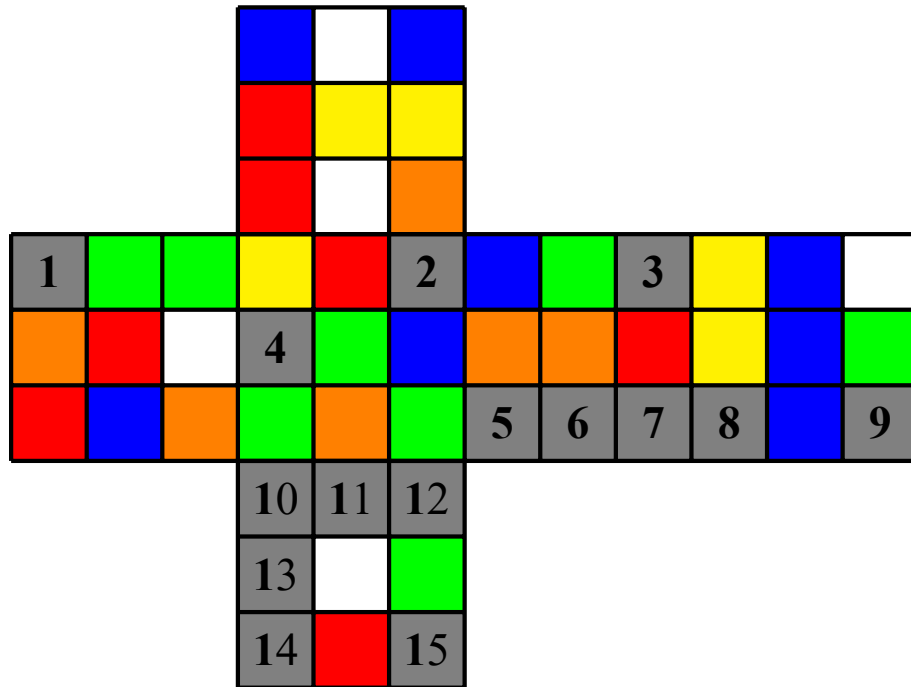
**Solution 83: F2 B L' U D2 R' B F' U2 R' L F2 R2 F B L2 D2 B' D' R' Fw' Uw2**

**No. 84      Difficulty: ★★★★★**



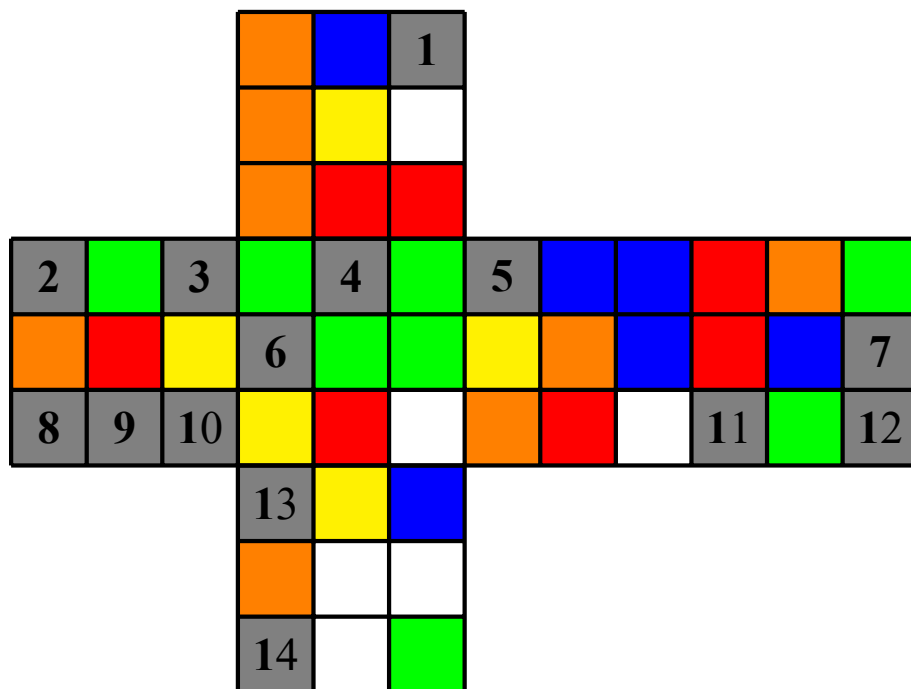
**Solution 84: B' L2 B F' L2 U2 L2 F U F2 L D' U' F' B R' B' R' B2 U2 Rw Uw**

**No. 85      Difficulty: ★★★★★**



**Solution 85: L B' U' F R' U' B L' R' F' D U2 R' L' U' L2 B2 R2 B U Uw**

**No. 86      Difficulty: ★★★★★**



**Solution 86: R B' D2 R' F2 R' F2 L U' D R' D' R' F2 L B U' B' D' L' Uw**

The crossword puzzle grid consists of 17 numbered starting points for words. The grid is composed of white cells for letters and black cells for empty space. The numbered cells are as follows:

- 1: Down (Top)
- 2: Down (Top)
- 3: Across (Left)
- 4: Across (Left)
- 5: Across (Middle)
- 6: Across (Middle)
- 7: Across (Middle)
- 8: Down (Middle)
- 9: Across (Middle)
- 10: Across (Bottom)
- 11: Across (Bottom)
- 12: Down (Bottom)
- 13: Down (Bottom)
- 14: Across (Bottom)
- 15: Down (Bottom)
- 16: Down (Bottom)
- 17: Down (Bottom)

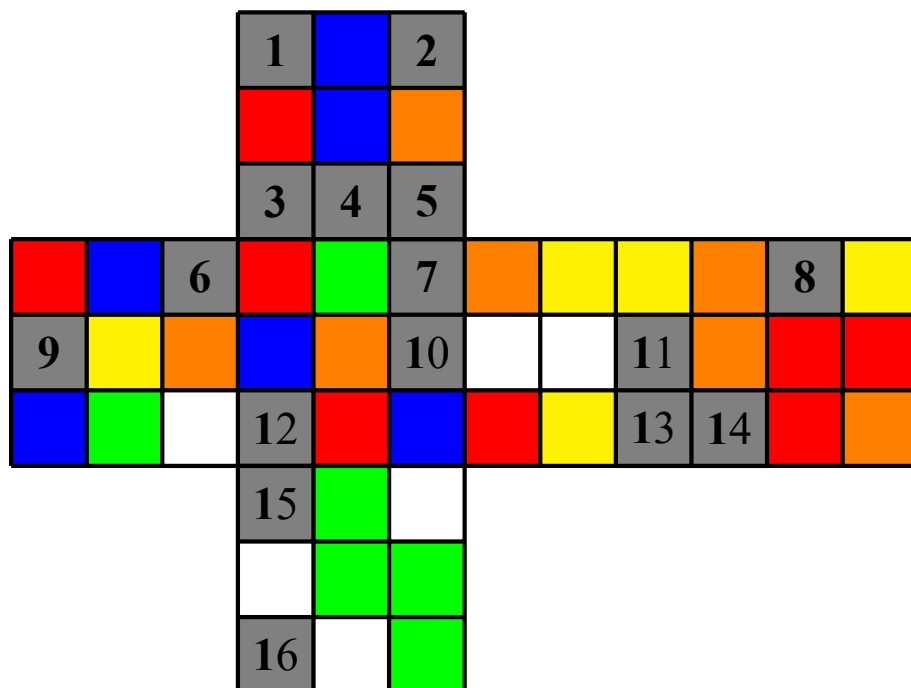
The pre-filled colored cells are:

- Orange: 1, 2, 5, 6, 7, 14
- Yellow: 1, 2, 8, 12, 13, 16, 17
- Green: 1, 2, 15
- Blue: 3, 4, 9, 10, 11, 12, 13, 16, 17
- Red: 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17

[illegible]

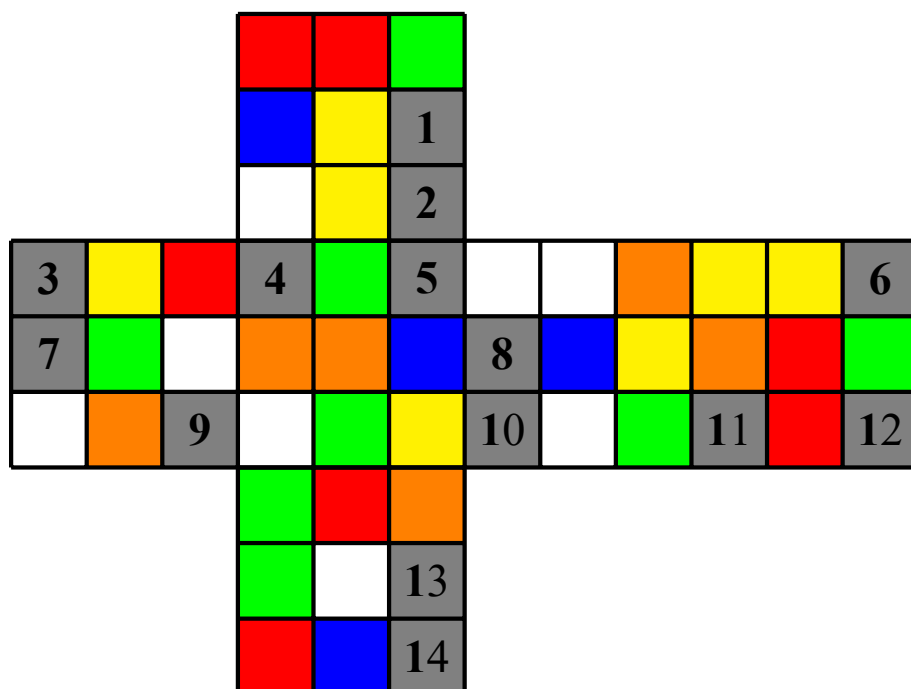
45

**No. 89**      **Difficulty: ★★★★★**



**Solution 89: D2 F2 D F2 D' U B2 D' U2 L2 D2 F2 U' B U B2 D2 R F2 U' Fw Uw2**

**No. 90**      **Difficulty: ★★★★★**



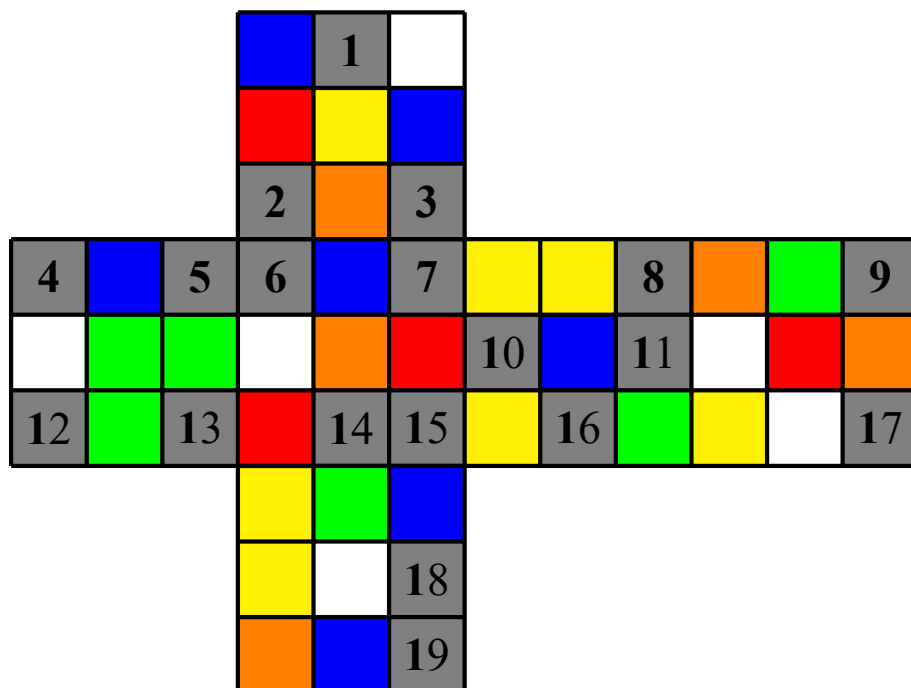
**Solution 90: L2 D' U B2 R D' F L B' F2 U' D' F2 B' R2 U2 B F L R' Uw2**

[illegible][illegible]

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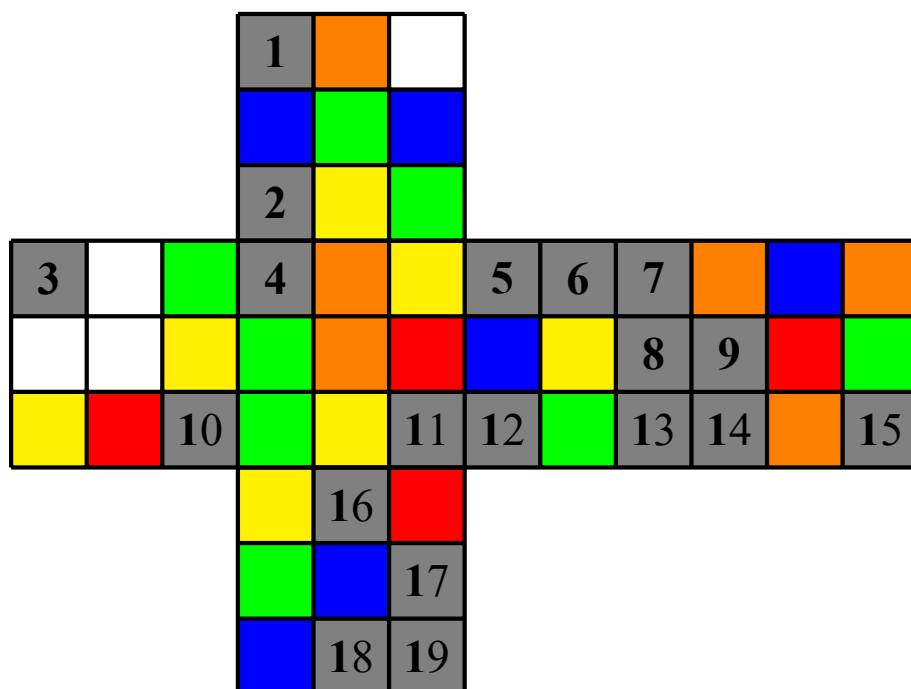


**No. 93**      **Difficulty: ★★★★★**



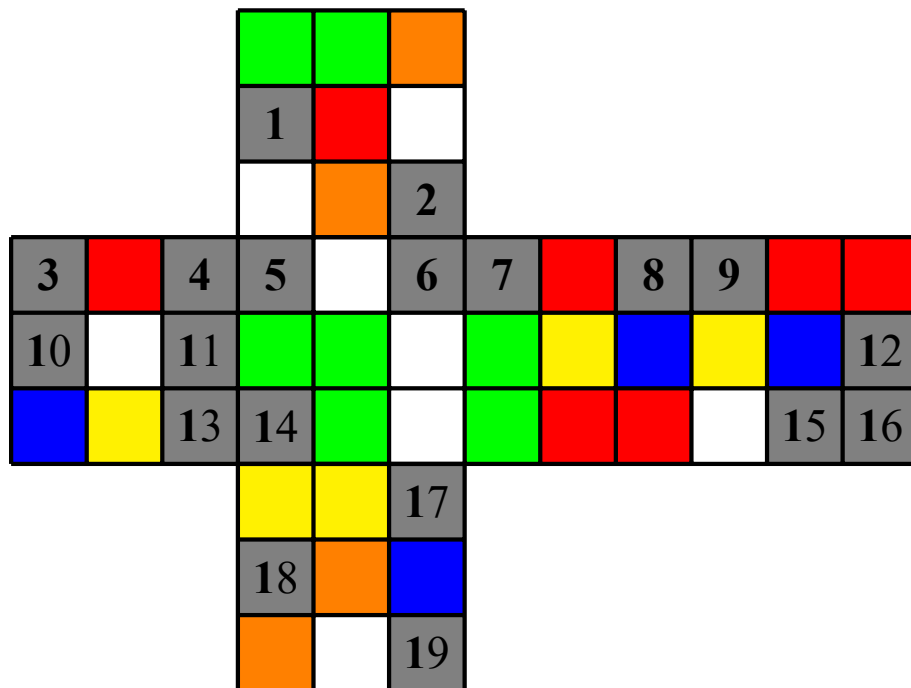
**Solution 93: B2 U' D' B2 U2 R F D2 U R' L D B F' U D R2 D' F D2 Uw2**

**No. 94**      **Difficulty: ★★★★★**



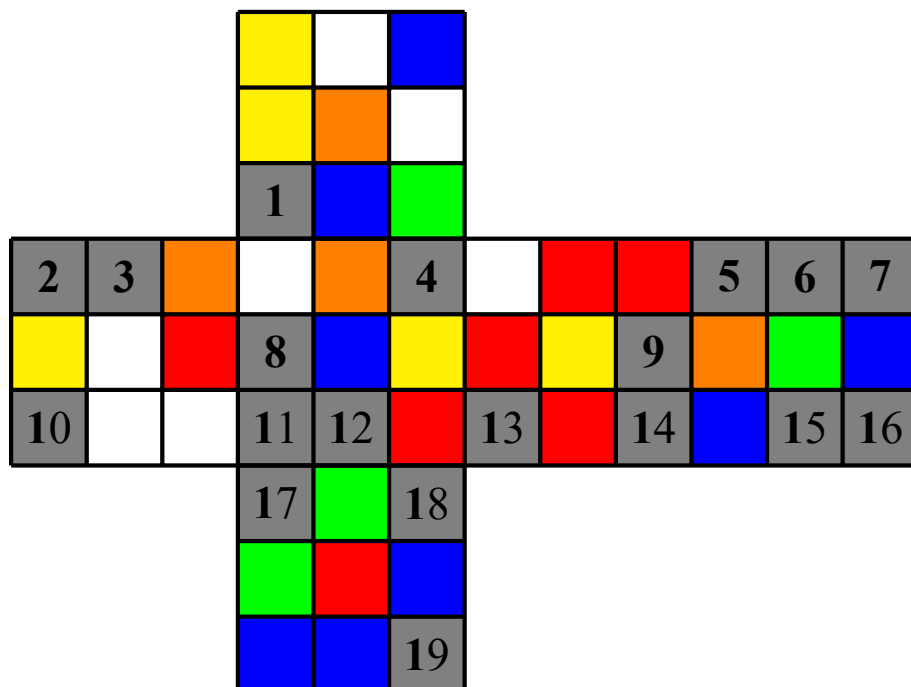
**Solution 94: B2 D' F2 D F' R' F B2 D B2 L D2 L D' F U B2 F L2 U Fw' Uw2**

**No. 95      Difficulty: ★★★★★**



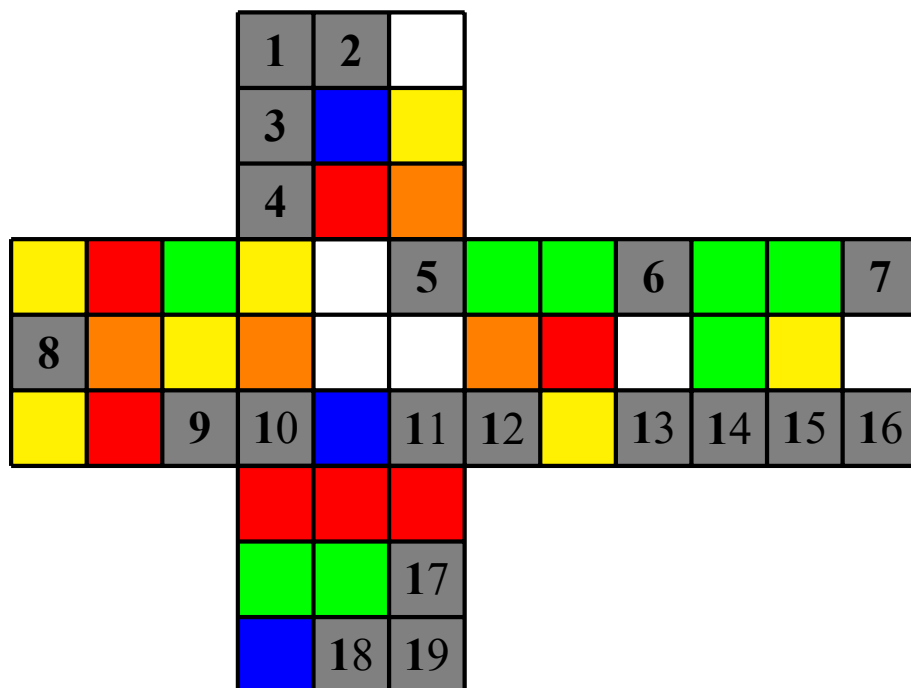
**Solution 95: U L' R D' R L' B' F' L F B' U' B' D' F' U' L' F2 R' L Rw Uw**

**No. 96      Difficulty: ★★★★★**



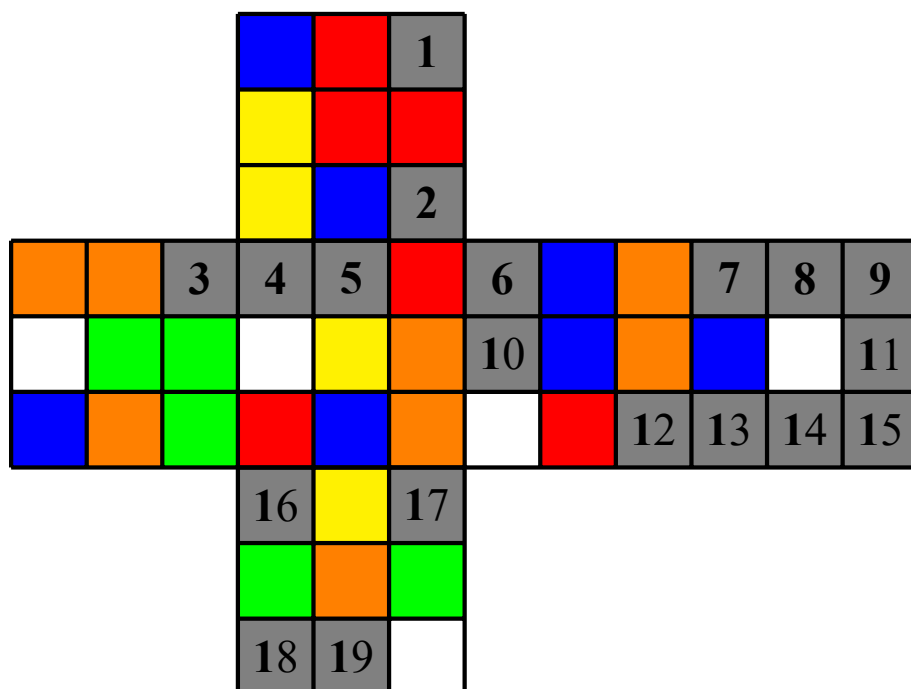
**Solution 96: B2 L B2 L U2 L R U F' D' R L2 D B' L2 U' D R2 L' D2 Rw' Uw'**

**No. 97**      **Difficulty: ★★★★★**



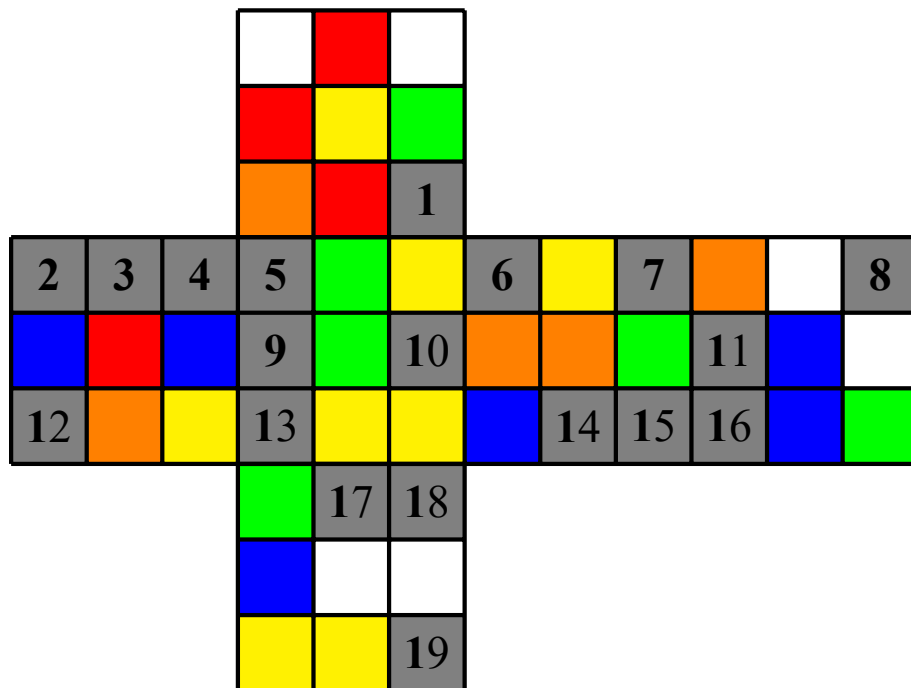
**Solution 97: L' R' B' D R2 F' B R' L2 B F2 U' D' B' U' L' D2 L2 U R Fw Uw'**

**No. 98**      **Difficulty: ★★★★★**



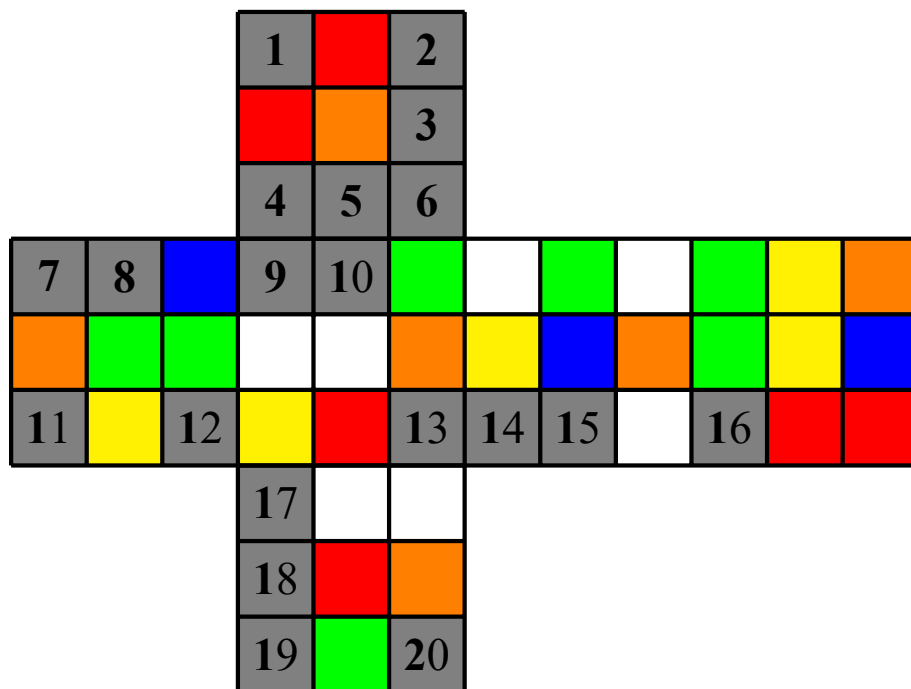
**Solution 98: L B2 R2 L2 B' L2 F L F' R' D R' L' F2 B' U B' U2 R2 L2 Rw Uw2**

**No. 99**      **Difficulty: ★★★★★**



**Solution 99: R2 F' U L F2 R' L' F' D U2 B D L D L B' F' L2 U2 B Uw**

**No. 100**      **Difficulty: ★★★★★**



**Solution 100: D2 U2 R F' B2 D' R2 F L2 D2 R D U L2 D' R B U2 D B2 Rw' Uw2**