

Diagram illustrating a sequence of 100 moves in a 3D puzzle, starting from a root state and branching into various configurations. The moves are labeled with numbers 1-6 and their corresponding states.

Root State: ROOT -4 -6 3 1 -2 5

Level 1 Moves:

- 1,2: -4 -3 6 1 -2 5
- 3,-2: -4 -6 -1 -3 -2 5
- 1,-2: -4 -6 3 1 2 5
- 5,-4: 2 -1 -3 6 4 5
- 5,-6: -4 -6 -5 2 -1 -3

Level 2 Moves:

- 1,2: -4 -3 6 1 2 5
- 5,-4: 2 -1 -6 3 4 5
- 5,-4, 5,-6: 17DRAW 2 3 1 4 -6 -5 2 3 1
- 3,-4: 23DUP -4 -3 6 1 2 5
- 5,-4, 5,-6: -2 -5 4 6 3 5
- 2,-1, 2,-3: -4 1 6 3 4 5
- 4,-3: 41DUP 2 -1 -6 3 4 5
- 2,-1, 2,-3: 49DRAW -4 -6 -5 2 3 1

Level 3 Moves:

- 2,-3: -4 -3 -2 -1 -6 5
- 2,-1, 5,-6: -2 -1 -6 3 4 5
- 10DUP: 10DUP -2 -1 -6 3 4 5
- 2,-1 -6 -5 -4 -3: 2 -1 -6 -5 -4 -3
- 3,-4: -4 -3 -2 5 6 1
- 24DUP: 24DUP -4 -3 -2 -1 -6 5 2 7DUP -2 -1 -6 3 4 5
- 31DUP: 31DUP -2 -1 -6 3 4 5
- 37DUP: 37DUP -2 -1 -6 3 4 5
- 42DUP: 42DUP -2 -1 -6 3 4 5
- 54DUP: 54DUP 2 -1 -6 -5 -4 -3
- 35DUP: 35DUP -4 -3 -2 5 6 1

Level 4 Moves:

- 5,-4, 5,-6: -4 -3 -2 -1 -6 5
- 3,-2, 5,-6: -2 -1 -6 3 4 5
- 3,-2, 5,-6: 10DUP -2 -1 -6 3 4 5
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1
- 5,-4, 5,-6: 24DUP -4 -3 -2 -1 -6 5 2 7DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 31DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 37DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 42DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 54DUP 2 -1 -6 -5 -4 -3
- 35DUP: 35DUP -4 -3 -2 5 6 1
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1

Level 5 Moves:

- 5,-4, 5,-6: -4 -3 -2 -1 -6 5
- 3,-2, 5,-6: -2 -1 -6 3 4 5
- 3,-2, 5,-6: 10DUP -2 -1 -6 3 4 5
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1
- 5,-4, 5,-6: 24DUP -4 -3 -2 -1 -6 5 2 7DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 31DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 37DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 42DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 54DUP 2 -1 -6 -5 -4 -3
- 35DUP: 35DUP -4 -3 -2 5 6 1
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1

Level 6 Moves:

- 5,-4, 5,-6: -4 -3 -2 -1 -6 5
- 3,-2, 5,-6: -2 -1 -6 3 4 5
- 3,-2, 5,-6: 10DUP -2 -1 -6 3 4 5
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1
- 5,-4, 5,-6: 24DUP -4 -3 -2 -1 -6 5 2 7DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 31DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 37DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 42DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 54DUP 2 -1 -6 -5 -4 -3
- 35DUP: 35DUP -4 -3 -2 5 6 1
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1

Level 7 Moves:

- 5,-4, 5,-6: -4 -3 -2 -1 -6 5
- 3,-2, 5,-6: -2 -1 -6 3 4 5
- 3,-2, 5,-6: 10DUP -2 -1 -6 3 4 5
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1
- 5,-4, 5,-6: 24DUP -4 -3 -2 -1 -6 5 2 7DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 31DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 37DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 42DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 54DUP 2 -1 -6 -5 -4 -3
- 35DUP: 35DUP -4 -3 -2 5 6 1
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1

Level 8 Moves:

- 5,-4, 5,-6: -4 -3 -2 -1 -6 5
- 3,-2, 5,-6: -2 -1 -6 3 4 5
- 3,-2, 5,-6: 10DUP -2 -1 -6 3 4 5
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1
- 5,-4, 5,-6: 24DUP -4 -3 -2 -1 -6 5 2 7DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 31DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 37DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 42DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 54DUP 2 -1 -6 -5 -4 -3
- 35DUP: 35DUP -4 -3 -2 5 6 1
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1

Level 9 Moves:

- 5,-4, 5,-6: -4 -3 -2 -1 -6 5
- 3,-2, 5,-6: -2 -1 -6 3 4 5
- 3,-2, 5,-6: 10DUP -2 -1 -6 3 4 5
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1
- 5,-4, 5,-6: 24DUP -4 -3 -2 -1 -6 5 2 7DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 31DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 37DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 42DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 54DUP 2 -1 -6 -5 -4 -3
- 35DUP: 35DUP -4 -3 -2 5 6 1
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1

Level 10 Moves:

- 5,-4, 5,-6: -4 -3 -2 -1 -6 5
- 3,-2, 5,-6: -2 -1 -6 3 4 5
- 3,-2, 5,-6: 10DUP -2 -1 -6 3 4 5
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1
- 5,-4, 5,-6: 24DUP -4 -3 -2 -1 -6 5 2 7DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 31DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 37DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 42DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 54DUP 2 -1 -6 -5 -4 -3
- 35DUP: 35DUP -4 -3 -2 5 6 1
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1

Level 11 Moves:

- 5,-4, 5,-6: -4 -3 -2 -1 -6 5
- 3,-2, 5,-6: -2 -1 -6 3 4 5
- 3,-2, 5,-6: 10DUP -2 -1 -6 3 4 5
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1
- 5,-4, 5,-6: 24DUP -4 -3 -2 -1 -6 5 2 7DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 31DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 37DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 42DUP -2 -1 -6 3 4 5
- 3,-2, 5,-6: 54DUP 2 -1 -6 -5 -4 -3
- 35DUP: 35DUP -4 -3 -2 5 6 1
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1

Level 12 Moves:

- 5,-4, 5,-6: -4 -3 -2 -1 -6 5
- 3,-2, 5,-6: -2 -1 -6 3 4 5
- 3,-2, 5,-6: 10DUP -2 -1 -6 3 4 5
- 2,-1, 2,-3: 2 -1 -6 -5 -4 -3
- 5,-4, 1,-2: -4 -3 -2 5 6 1
- 5,-4, 5,-6: 24DUP -4 -