



The image displays a 3x3 grid of 9 different 15-puzzle states. Each state is represented by a 3x3 grid of numbers 1 through 9. Some numbers are replaced by black dots, indicating tiles that are out of place. The states are labeled 1 through 9 in the top right corner of each grid.

- State 1:** Top row: 1, 4, 2; Middle row: 3, 6, 5; Bottom row: 9, 7, 4. Dots are at (1,2), (2,1), (2,3), (3,2), (3,3).
- State 2:** Top row: 8, 3, 9; Middle row: 1, 7, 8; Bottom row: 6, 5, 4. Dots are at (1,1), (1,3), (2,2), (2,3), (3,1), (3,2), (3,3).
- State 3:** Top row: 3, 8, 2; Middle row: 6, 5, 4; Bottom row: 9, 7, 1. Dots are at (1,1), (1,2), (1,3), (2,1), (2,2), (2,3), (3,1), (3,2), (3,3).
- State 4:** Top row: 3, 8, 9; Middle row: 1, 7, 4; Bottom row: 6, 5, 2. Dots are at (1,1), (1,2), (1,3), (2,1), (2,2), (2,3), (3,1), (3,2), (3,3).
- State 5:** Top row: 3, 8, 9; Middle row: 1, 7, 4; Bottom row: 6, 5, 2. Dots are at (1,1), (1,2), (1,3), (2,1), (2,2), (2,3), (3,1), (3,2), (3,3).
- State 6:** Top row: 3, 8, 9; Middle row: 1, 7, 4; Bottom row: 6, 5, 2. Dots are at (1,1), (1,2), (1,3), (2,1), (2,2), (2,3), (3,1), (3,2), (3,3).
- State 7:** Top row: 3, 8, 9; Middle row: 1, 7, 4; Bottom row: 6, 5, 2. Dots are at (1,1), (1,2), (1,3), (2,1), (2,2), (2,3), (3,1), (3,2), (3,3).
- State 8:** Top row: 3, 8, 9; Middle row: 1, 7, 4; Bottom row: 6, 5, 2. Dots are at (1,1), (1,2), (1,3), (2,1), (2,2), (2,3), (3,1), (3,2), (3,3).
- State 9:** Top row: 3, 8, 9; Middle row: 1, 7, 4; Bottom row: 6, 5, 2. Dots are at (1,1), (1,2), (1,3), (2,1), (2,2), (2,3), (3,1), (3,2), (3,3).