```
Solution found in 434 moves:
(1, 2, 3)
(4, 0, 6)
(7, 5, 8)

(1, 2, 3)
(4, 6, 0)
(7, 5, 8)

(1, 2, 3)
(4, 6, 8)
(7, 5, 0)

(1, 2, 3)
(4, 6, 8)
(7, 0, 5)

(1, 2, 3)
(4, 6, 8)
(0, 7, 5)

(1, 2, 3)
(0, 6, 8)
(4, 7, 5)

(1, 2, 3)
(6, 0, 8)
(4, 7, 5)

(1, 2, 3)
(6, 8, 0)
(4, 7, 5)

(1, 2, 3)
(6, 8, 5)
(4, 7, 0)

(1, 2, 3)
(6, 8, 5)
(4, 0, 7)

(1, 2, 3)
(6, 8, 5)
(0, 4, 7)
```

```
start = (1, 2, 3, 4, 5, 6, 0, 7, 8)
path = ids(start)
if path:
    print(f"Solved in {len(path)-1} moves:")
    for p in path: print_state(p)
else:
    print("No solution found.")
```

```
Solved in 2 moves:
(1, 2, 3)
(4, 5, 6)
(0, 7, 8)

(1, 2, 3)
(4, 5, 6)
(7, 0, 8)

(1, 2, 3)
(4, 5, 6)
(7, 8, 0)
```