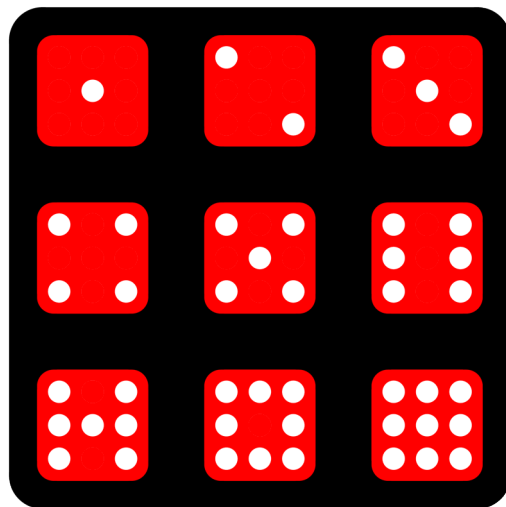


Tile Swap Puzzle Challenges



Instructions

This booklet contains 36 challenges for the Tile Swap puzzle. The challenges are grouped by common themes and roughly ordered in increasing difficulty.

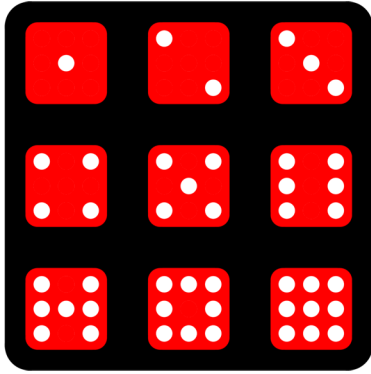
The goal of each challenge is to get from the given start state to the given end state by swapping tiles. You are not allowed to rotate the puzzle when solving a challenge.

The start position of each challenge is either the basic state shown at the front of this booklet or the end state of the previous challenge, both possibly rotated. You can rotate the puzzle to get to the start state of a challenge.

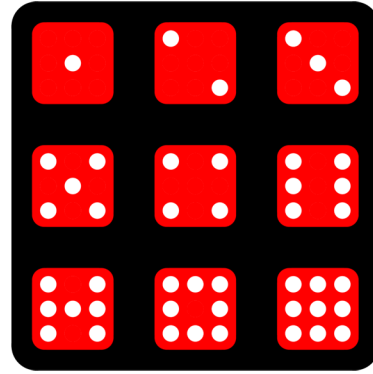
Each challenge includes the minimal number of swaps needed to solve it. First just try to solve each challenge. After that you can count the number of swaps that you need and try to get close to the optimal solution.

Basic swaps

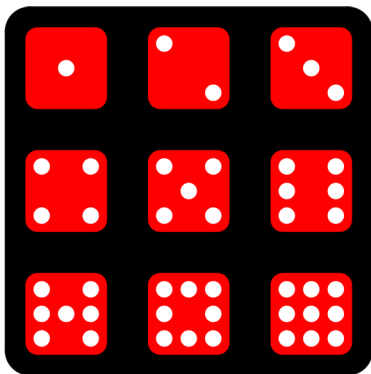
Swap 4-5



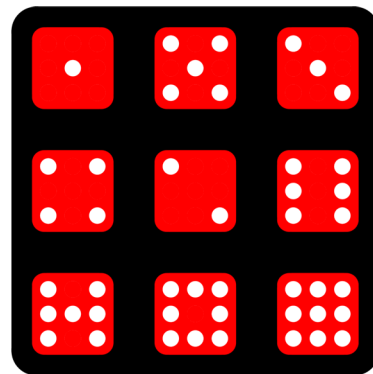
(1 swap)



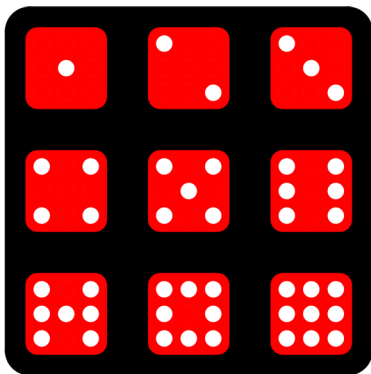
Swap 2-5



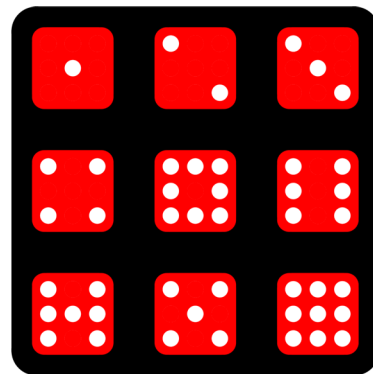
(5 swaps)



Swap 5-8



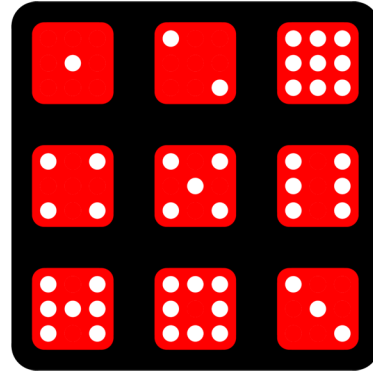
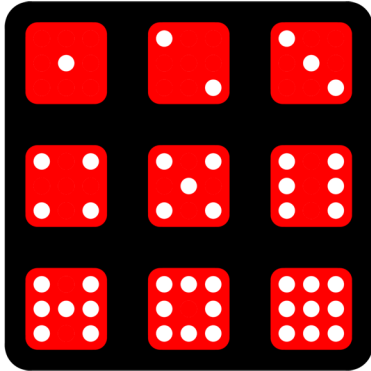
(9 swaps)



Column flips

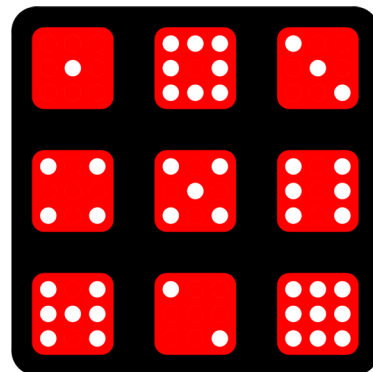
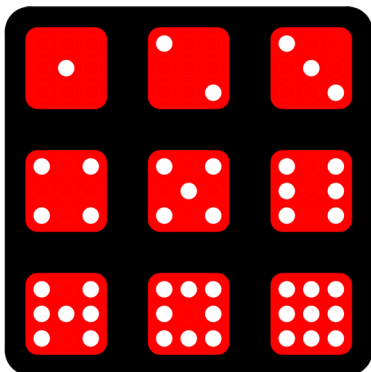
Flip right column

(3 swaps)



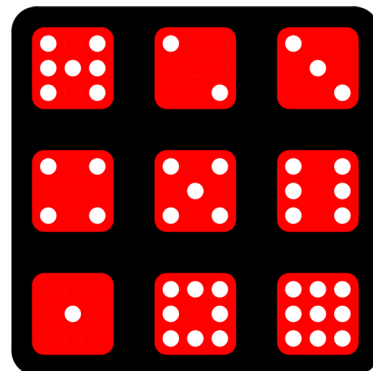
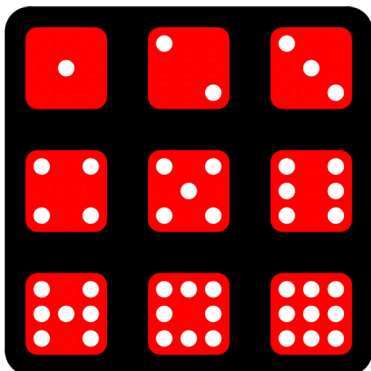
Flip center column

(5 swaps)



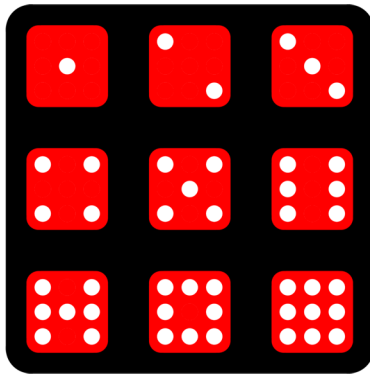
Flip left column

(9 swaps)

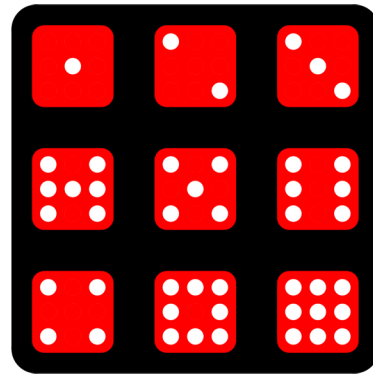


Basic swaps (2)

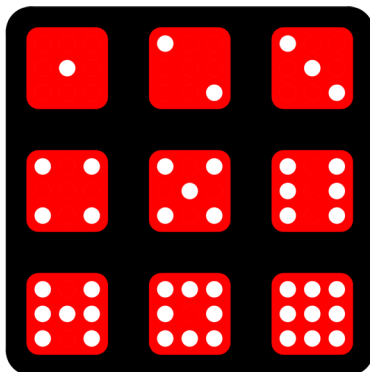
Swap 4-7



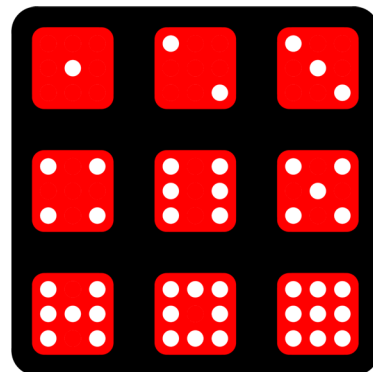
(9 swaps)



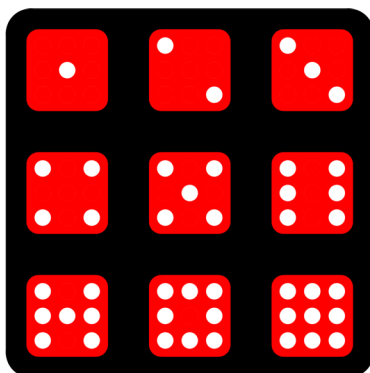
Swap 5-6



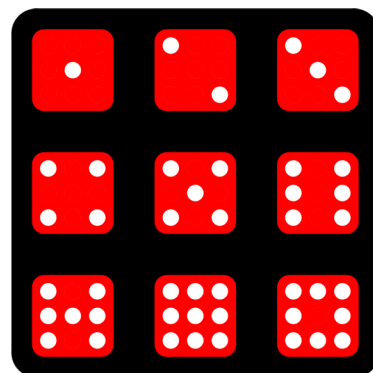
(13 swaps)



Swap 8-9



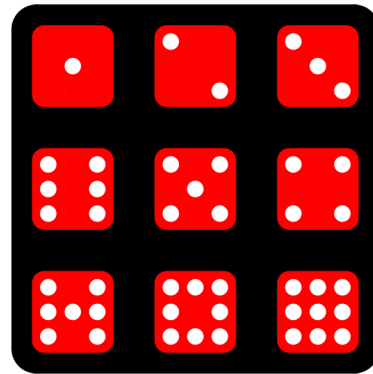
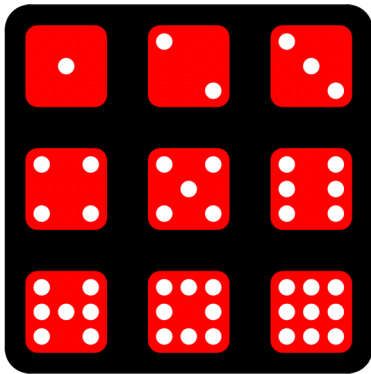
(19 swaps)



Row flips

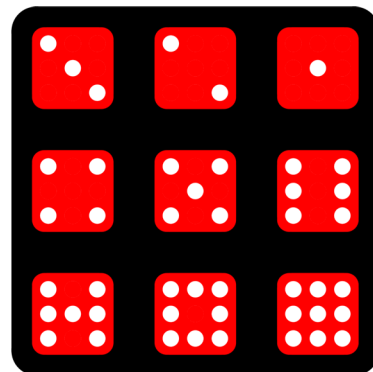
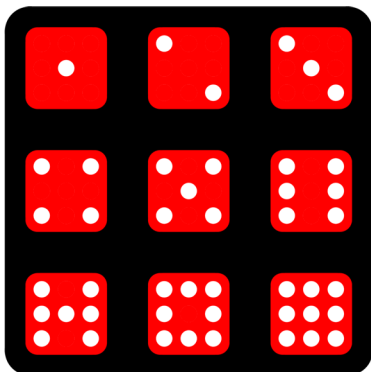
Flip center row

(11 swaps)



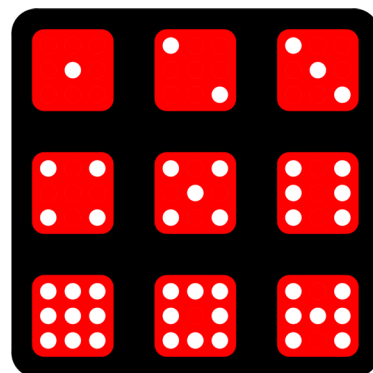
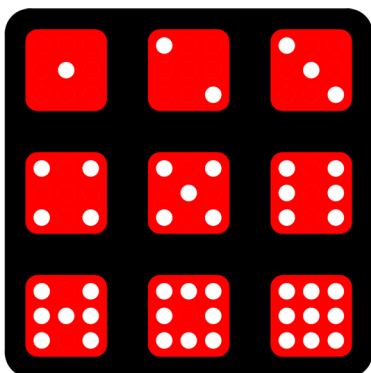
Flip top row

(17 swaps)



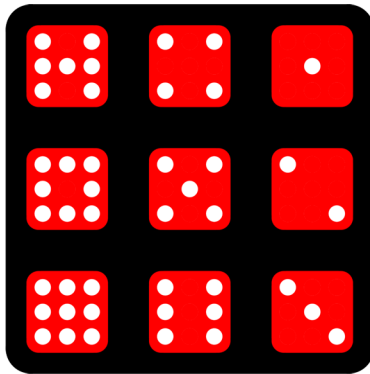
Flip bottom row

(17 swaps)

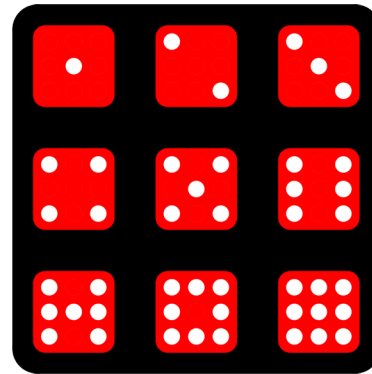


Basic

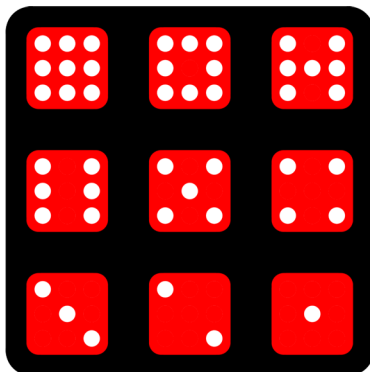
Quarter turn



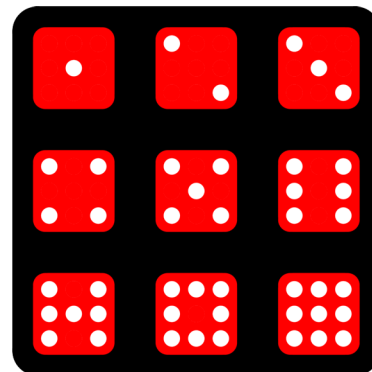
(22 swaps)



Half turn

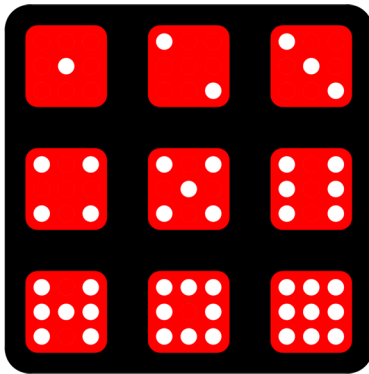


(30 swaps)

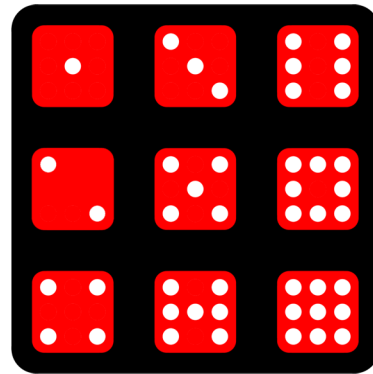


Diamond

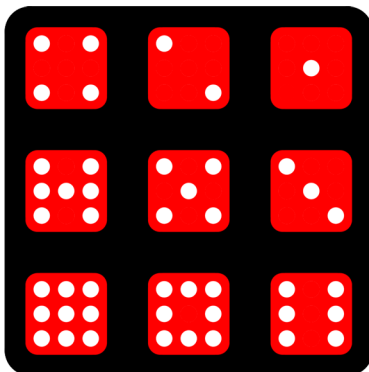
From basic



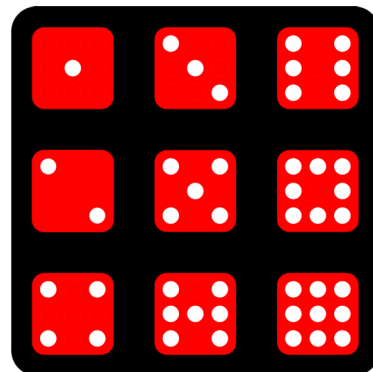
(9 swaps)



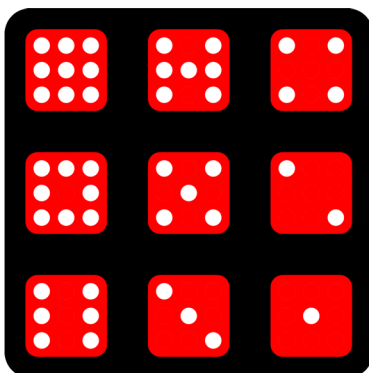
Quarter turn



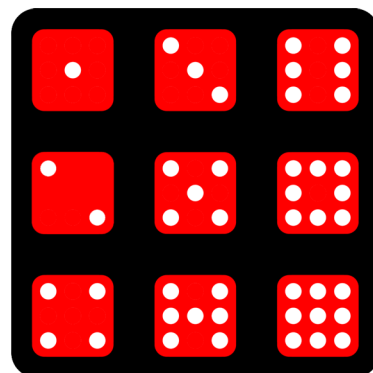
(18 swaps)



Half turn

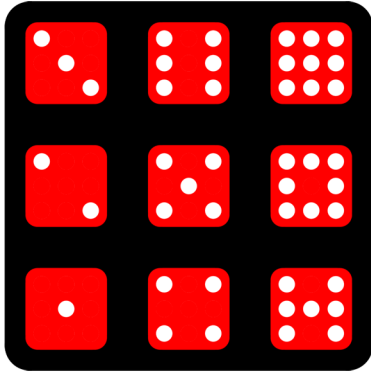


(26 swaps)

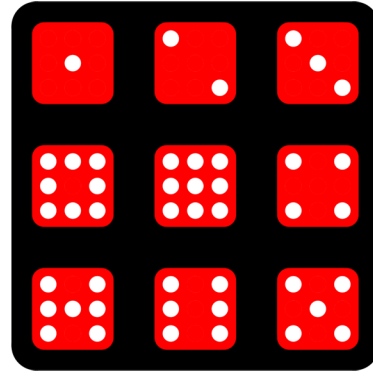


Inward spiral

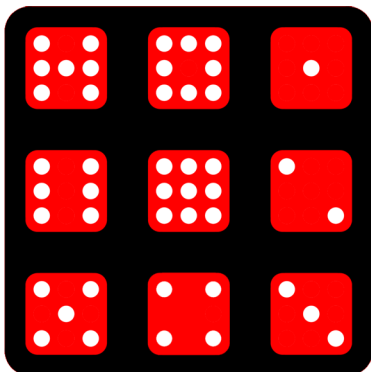
From basic



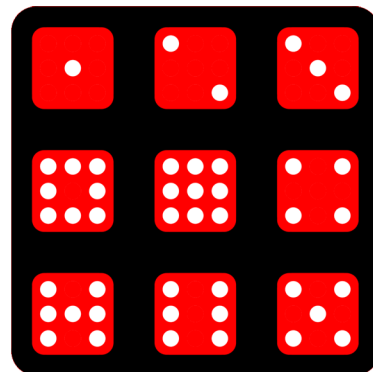
(15 swaps)



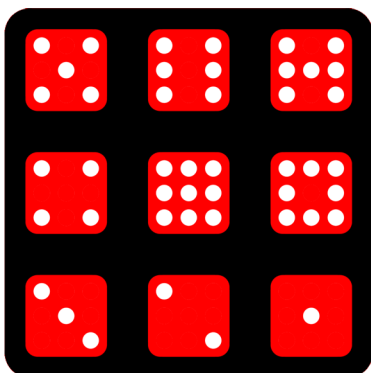
Quarter turn



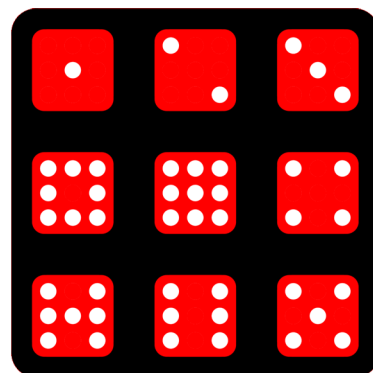
(18 swaps)



Half turn

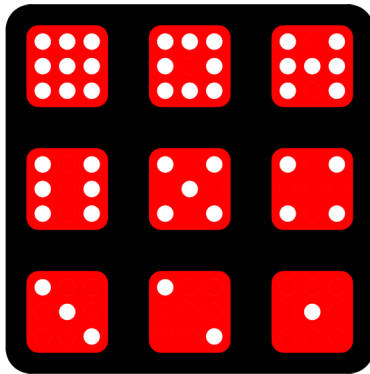


(24 swaps)

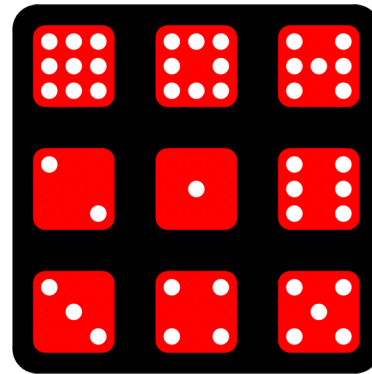


Outward spiral

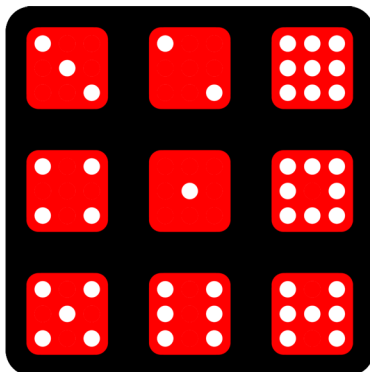
From basic



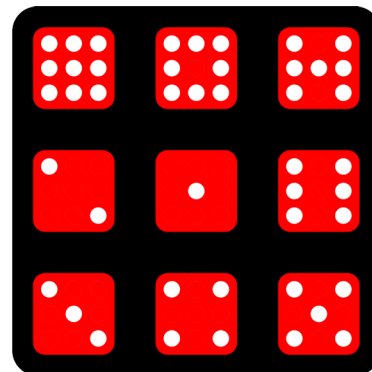
(15 swaps)



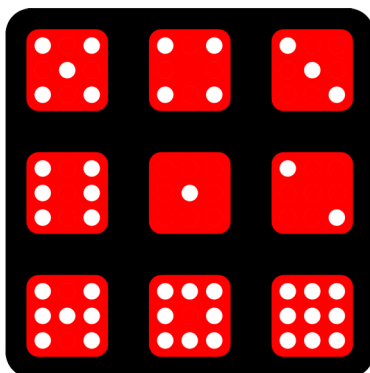
Quarter turn



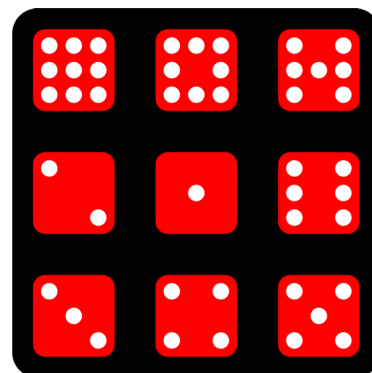
(20 swaps)



Half turn

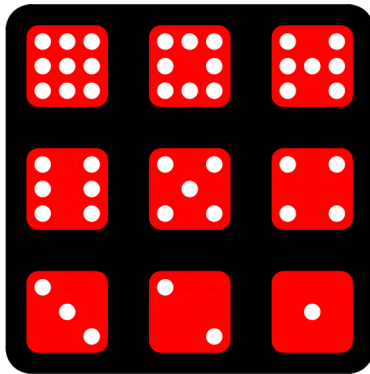


(24 swaps)

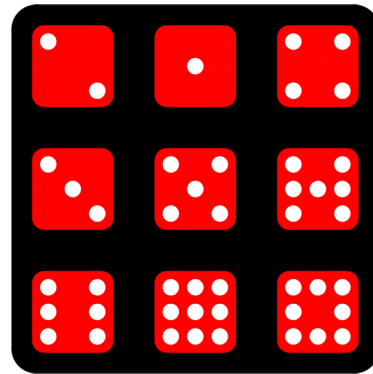


Odd cross

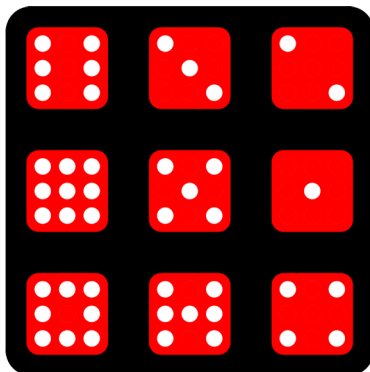
From basic



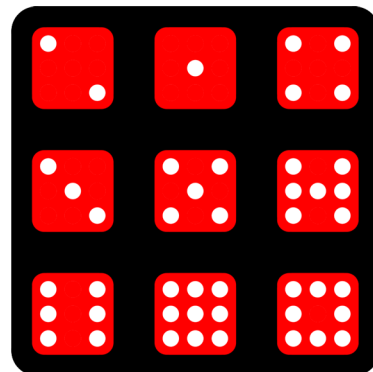
(16 swaps)



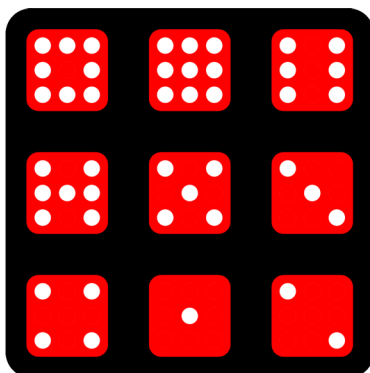
Quarter turn



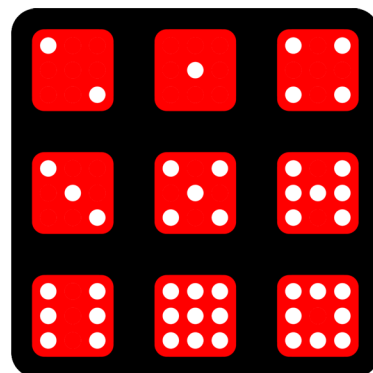
(18 swaps)



Half turn

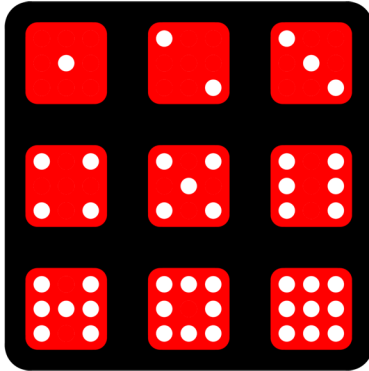


(24 swaps)

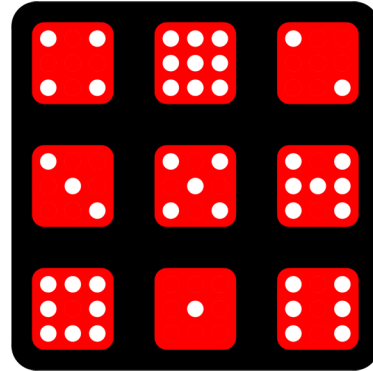


Magic square

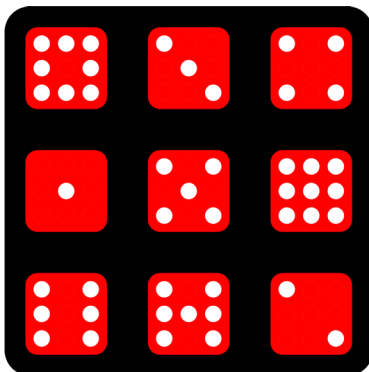
From basic



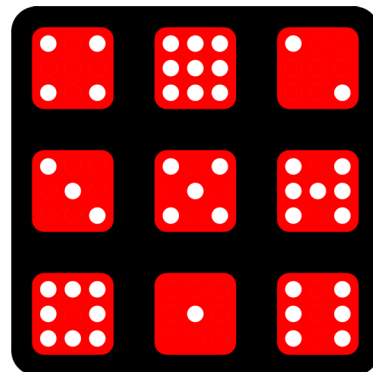
(13 swaps)



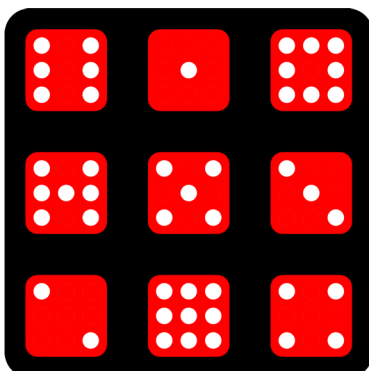
Quarter turn



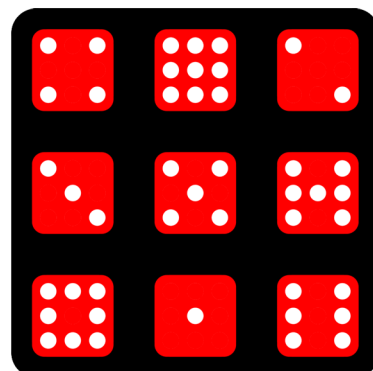
(26 swaps)



Half turn

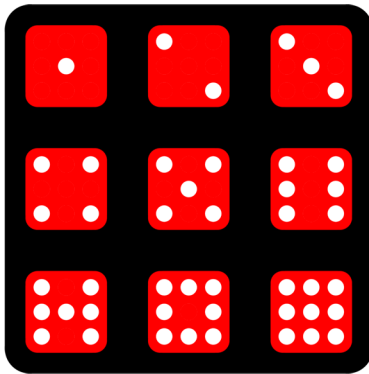


(28 swaps)

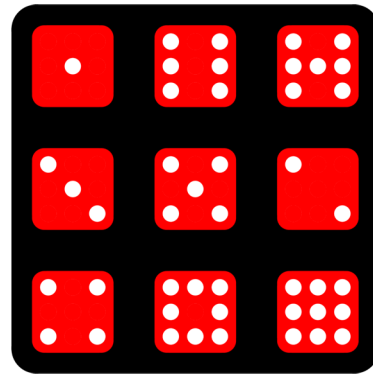


Swap 31

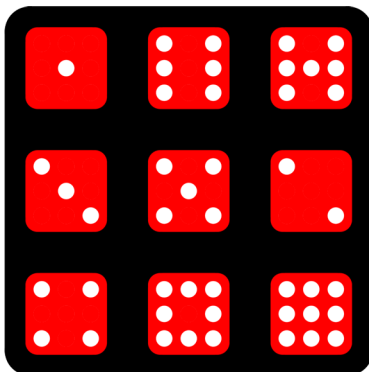
From basic



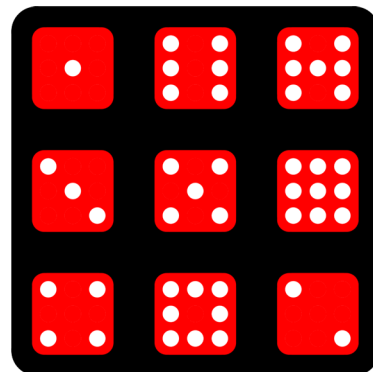
(11 swaps)



Swap 2-9

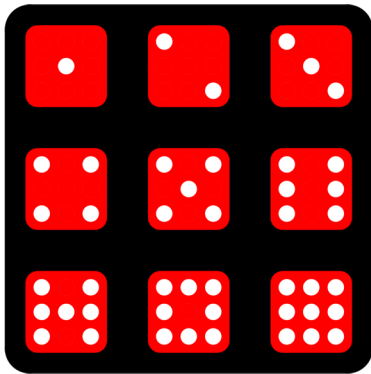


(31 swaps)

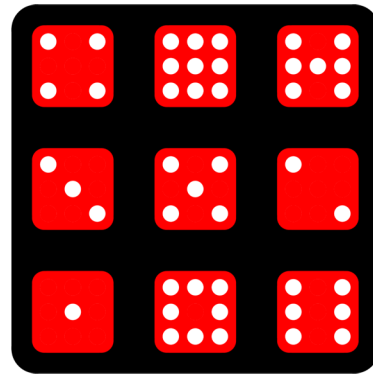


Swap 31 (2)

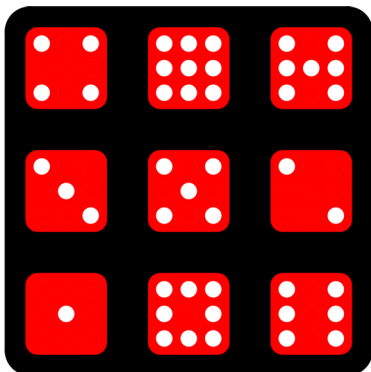
From basic



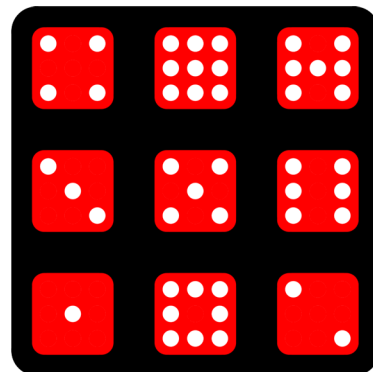
(13 swaps)



Swap 2-6

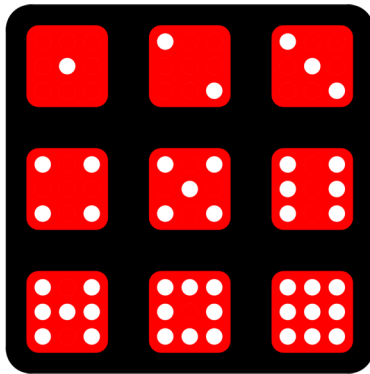


(31 swaps)

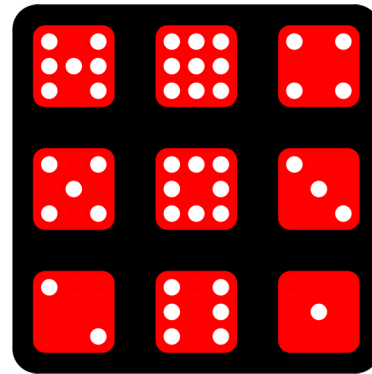


Half turn 38

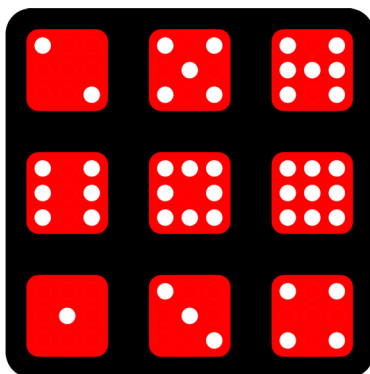
From basic



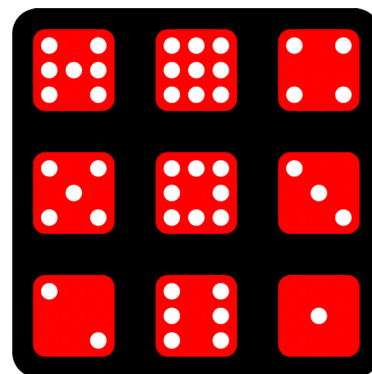
(15 swaps)



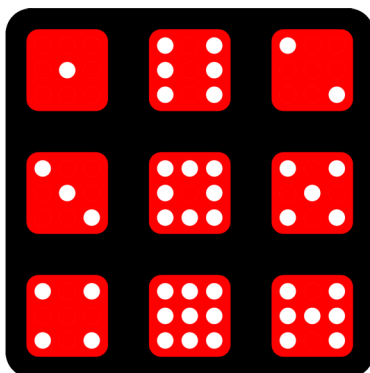
Quarter turn



(24 swaps)



Half turn



(38 swaps)

