Step 1: Solve the edges

Goal

In this step, you need to solve all the five edges on the white face. There are no fixed steps. You can solve it by yourself intuitively.
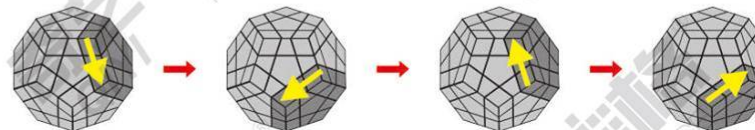

Step 2: Solve the corners

Goal

We only need to remember one algorithm in this step. The goal is to solve five corner pieces. Let us take the white-purple-green corners for example:

Find out the white-purple-green corner and rotate it to the grey position.

Repeat algorithm 1 until we get it as illustrated on the right.

Algorithm 1

Algorithm 1: R′ RD′ R RD

After solving all the white-purple-green corner pieces, you can use the same method for other white-green-red, white-red-blue, white-blue-yellow and white-yellow-purple corner pieces.
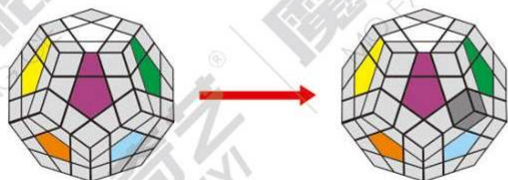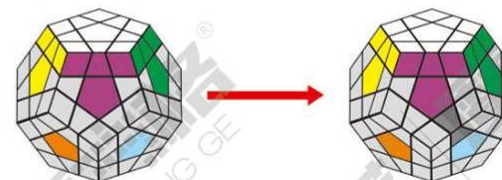
Step 3: Solve the edges

Goal

We only need to remember two algorithms in this step. The goal is to solve five edge pieces. Let us take the purple-green edge for example:

Find out the purple-green edge and rotate it to the grey position.
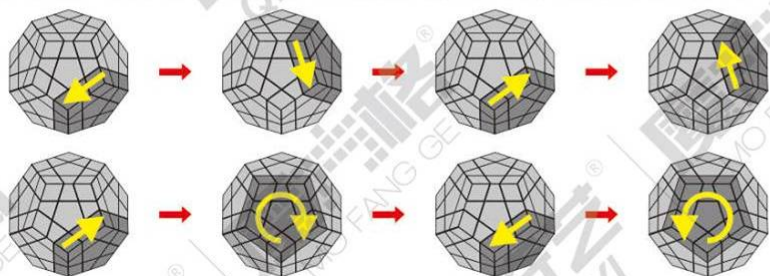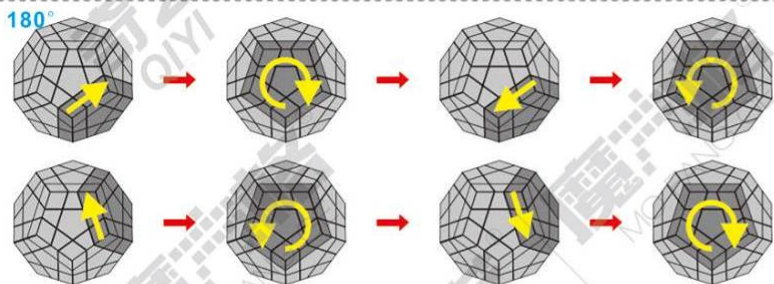
There will be two cases:

The first case:

Algorithm 2

The second case:

Algorithm 3

Algorithm 2:RD' R' RD R RD F RD' F'

Algorithm 3:RD2 F RD' F' R F' R' F
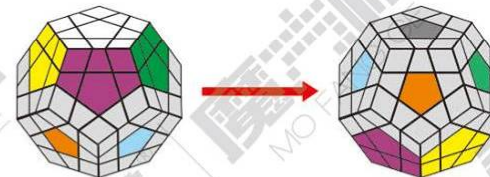
180°

After solving all the purple-green edge pieces, you can use the same method for other green-red, red-blue, blue-yellow, and yellow-purple edge pieces.
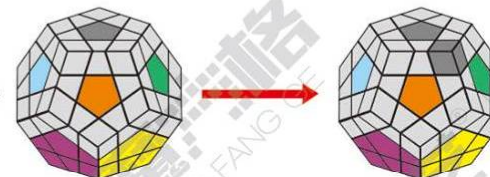

Goal

Spin the cube around in your hands
Place the white face on the bottom.
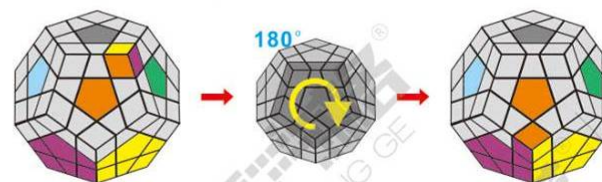Place the orange center in front of you.

The goal is to solve five corner pieces in this step. Let us take the orange-yellow-purple corner piece for example:

Find the purple-orange-yellow corner and rotate it to the grey position.
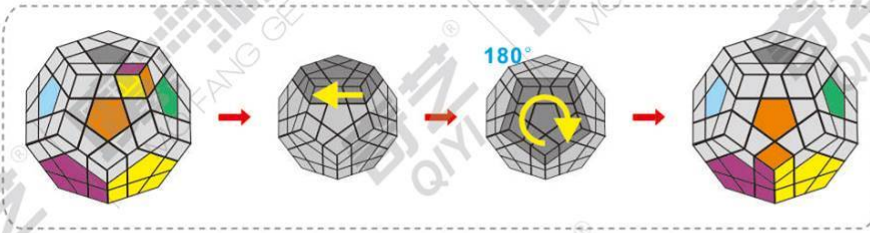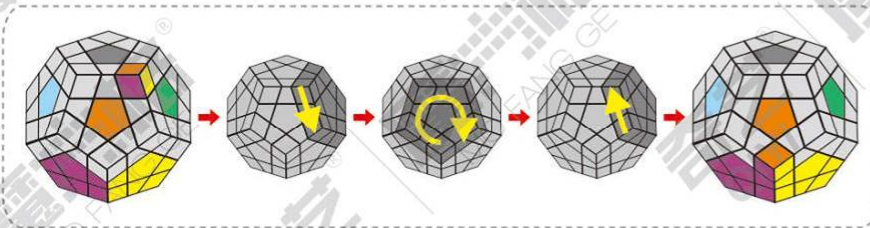

There will be three cases:

The first case:

180°

The second case:

The third case:

After solving the orange-yellow-purple corner piece, you can use the same method for all other corner pieces in this position.

Step 5: Solve the edges

Goal

In this step, you need to solve two edge pieces on one face. There are ten edge pieces in total. Let us take the orange-yellow and the orange-purple edges for example. Steps proceed as follows:
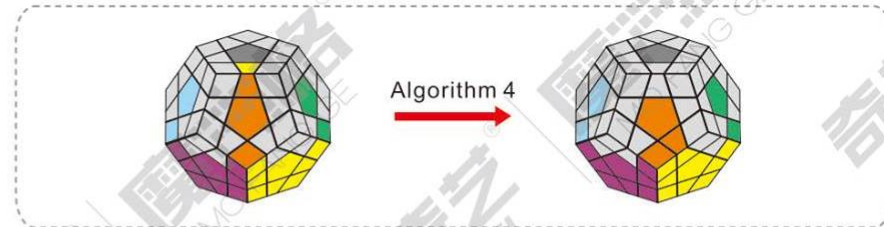

Unsolved | Solve the orange-yellow edge | solve the orange-purple edge
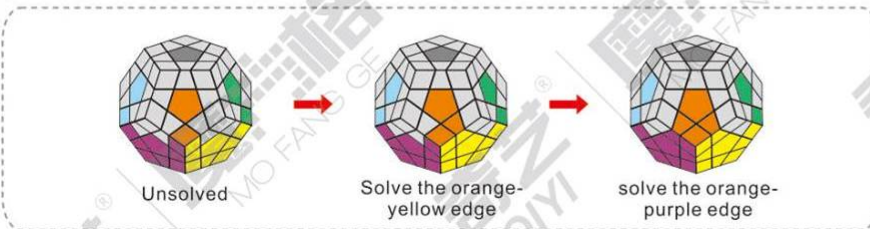
1.Solve the orange-yellow edge:

Find out the orange-yellow edge and rotate it to the grey position.

There will be two cases
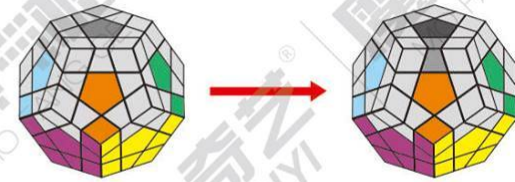
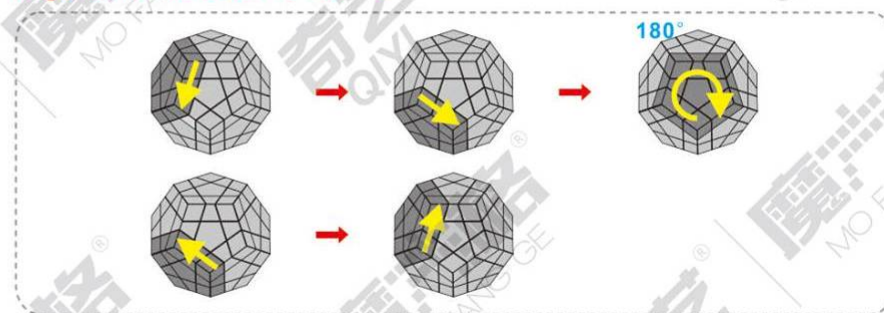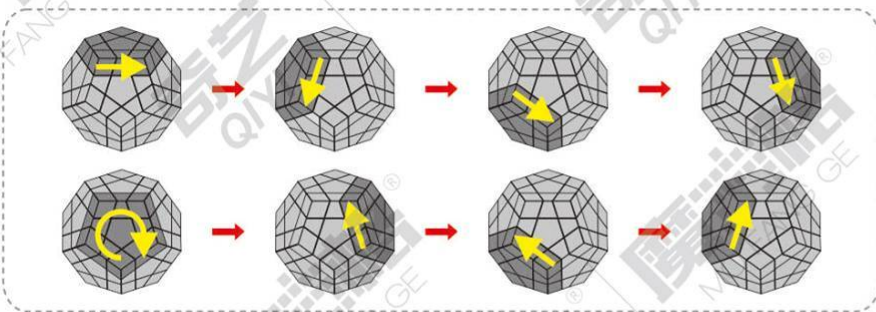The first case:
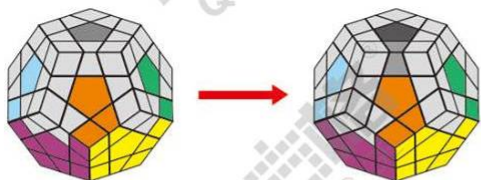

Algorithm 4

The second case:
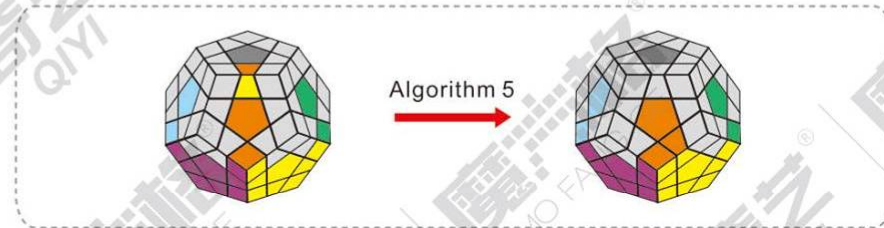
Algorithm 5

Algorithm 4:L LD F2 LD' L'

2.Solve the orange-purple edge:

Find out the orange-purple edge and rotate it to the grey position.
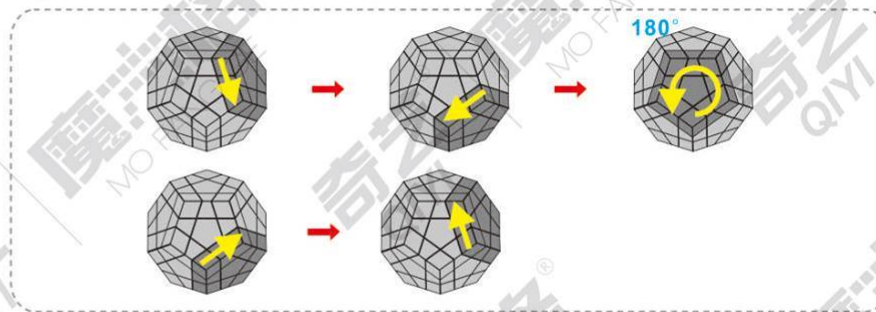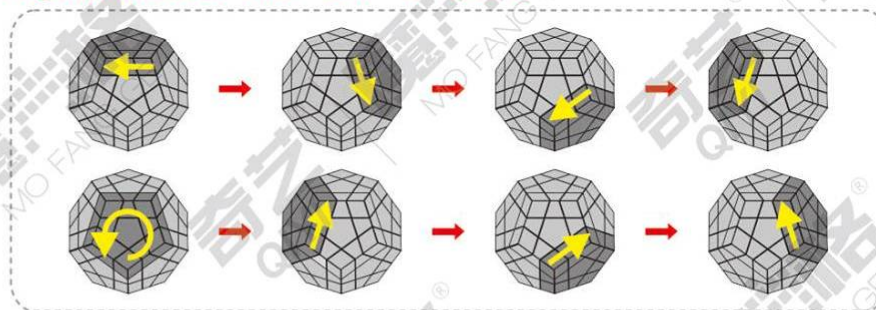

There will be two cases

The first case:

Algorithm 6

The second case:

Algorithm 7

180°

After solving the two orange edges, you can use the same method for the 8 edges on the other four faces.
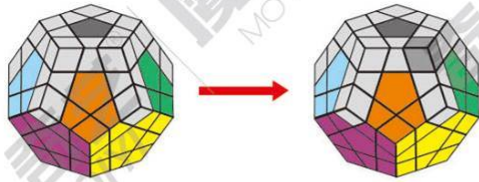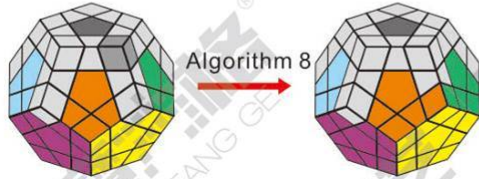
Step 6: Solve the corners

Goal

In this step, use one algorithm to solve all five corners. Let us take the orange-green-yellow corners for example, steps proceed as follows:
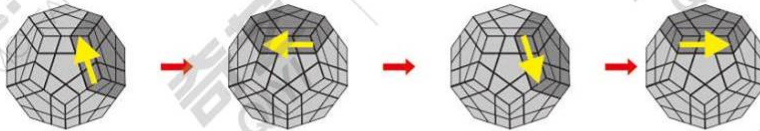
Find the orange-green-yellow corner and rotate it to the grey position.

Repeat algorithm 8 until it is the same as the illustration on the right.

Algorithm 8

Algorithm 8: R U R' U'

After solving the orange-green-yellow corner, you can use the same method for the other corners.
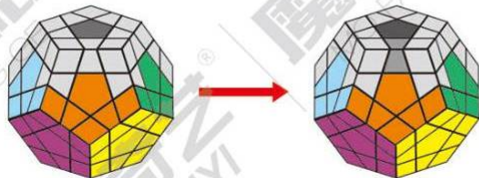
Step 7: Solve the edges

Goal

In this step, use two algorithms to solve all five edges. Let us take the orange and green edges for example. There will be two cases. Step proceed as follows:

Find out the orange-green edge and rotate it to the grey position.

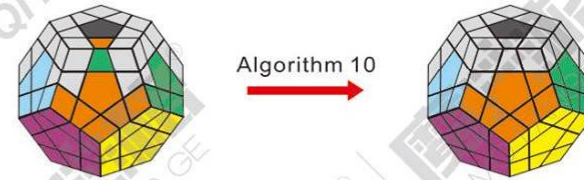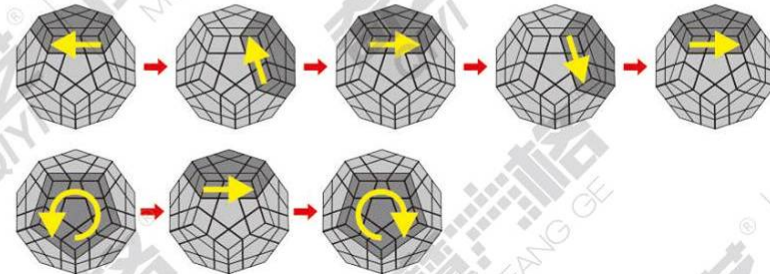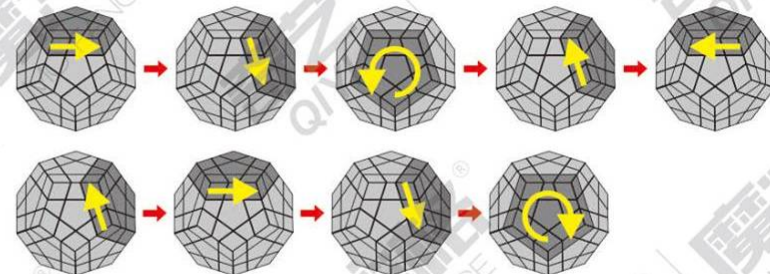**Now there will be two cases:**

The first case:

Algorithm 9

The second case:

Algorithm 10

Algorithm 9: U R U' R' U' F' U F

Algorithm 10: U' R' F' R U R U' R' F

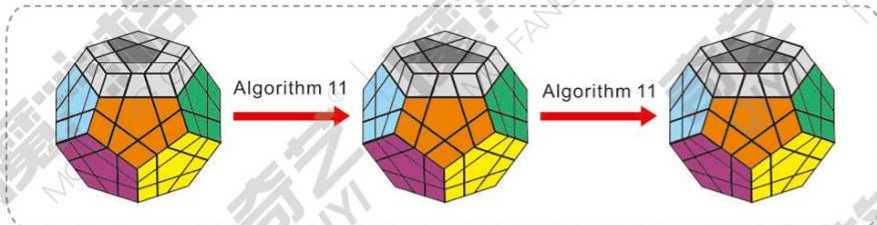After solving the orange-green edge, you can use the same method for the other edges.

Goal

There will be three cases and use two algorithms to solve the star on the top layer.

The first case:

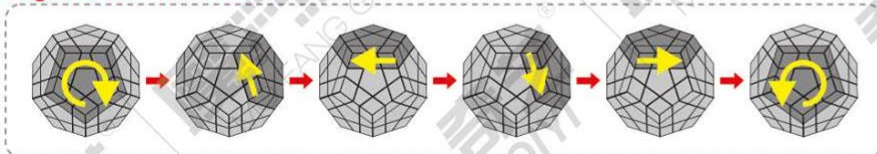Algorithm 11 → Algorithm 11

The second case:

Algorithm 11

The third case:

Do algorithm 11 twice
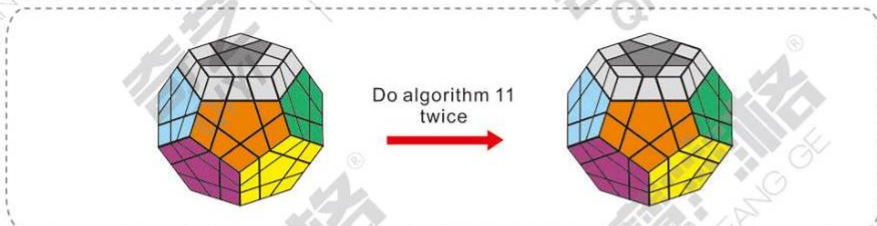
Algorithm 11: F R U R' U' F'
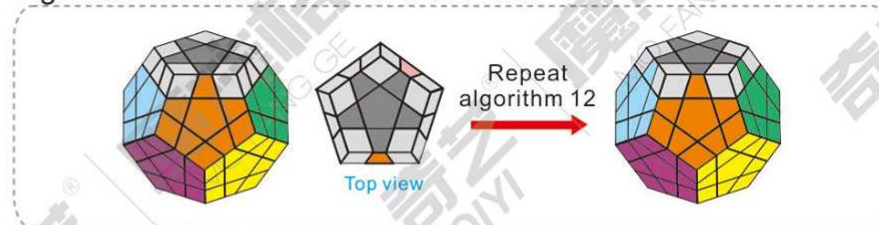
Goal

There will be two basic cases, which can be solved by algorithm 12 and 13. If there is a special case, do the algorithm once to arrive at the basic cases.

Basic case 1: two edges and the center of the side are the same color and two edges are opposite one another. Repeat the algorithm until it is solved as illustrated:

Repeat algorithm 12

Top view

Basic case 2: two edges and the center of the side are the same color and two edges are on the adjacent to one another. Repeat the algorithm until it is solved as illustrated:

Repeat algorithm 13

Top view
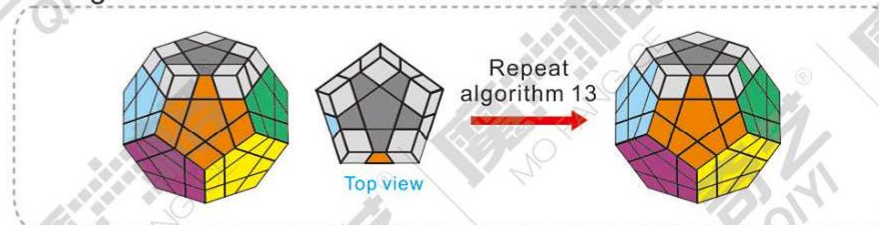
Algorithm 12: R U R' U' R' F R2 U' R' U' R U R' F'

Algorithm 13: R U R' F' R U R' U' R' F R2 U' R'
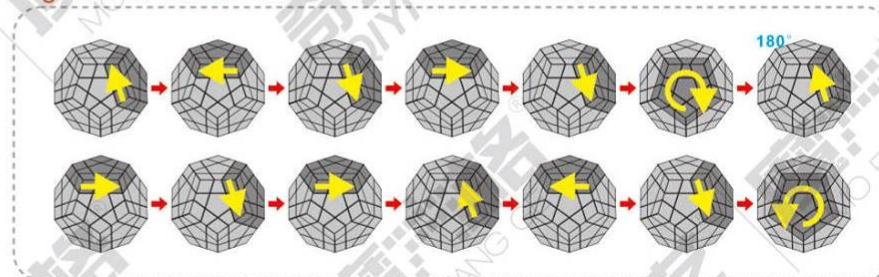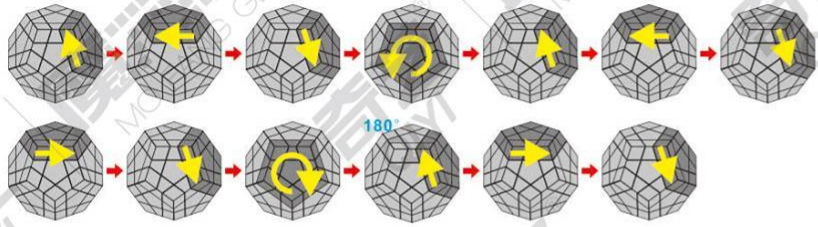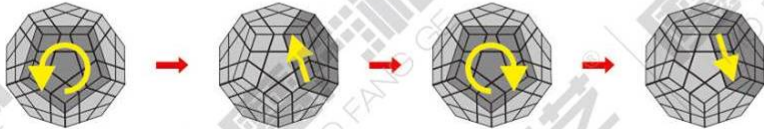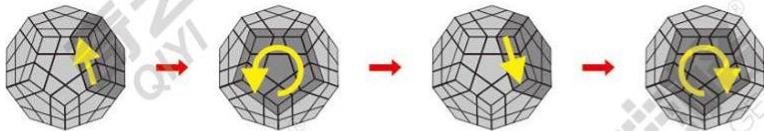

Step 10: Solve the grey top

Goal

Algorithm 14: F' R F R'

Algorithm 15: R F' R' F

Rotate the unsolved grey corner to the black position as illustrated. Now there will be two cases:

Case 1

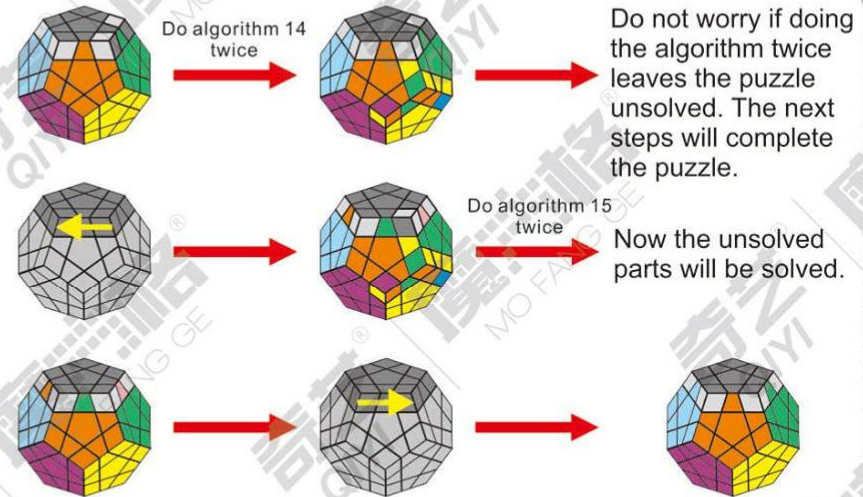The grey portion of the corner is facing to the right.
Do algorithm 14 twice.

Case 2

The grey portion of the corner is facing to the front side.
Do algorithm 15 twice.

In this step, we use a cube state as an example:

Do algorithm 14 twice

Do not worry if doing the algorithm twice leaves the puzzle unsolved. The next steps will complete the puzzle.

Do algorithm 15 twice

Now the unsolved parts will be solved.

In other cube states, rotate the unsolved corner to the grey position step by step. Then, use different algorithms for different cases. Some pieces may become unsolved while you are executing this step. Proceed carefully through the steps and they will be solved again.

Step 11: Solve the cube

Goal

In this step, we do it in three small steps:

The first step: Solve any a corner piece. Let's take the grey-pink-green corner for example. There are four cases:

Totally rotate the cube

Algorithm 16
Algorithm 17
Algorithm 18
Algorithm 19
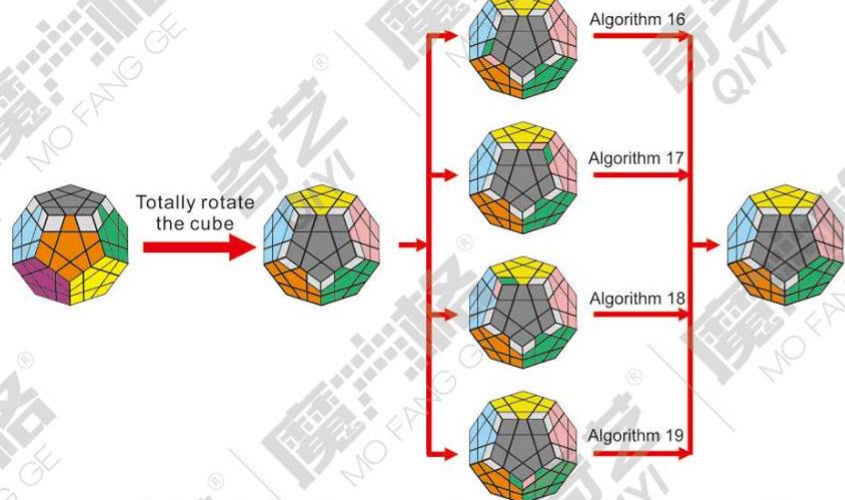
The second step: Solve the opposite corners in step one, the grey-blue-yellow corners. There are three cases:

Totally rotate the cube

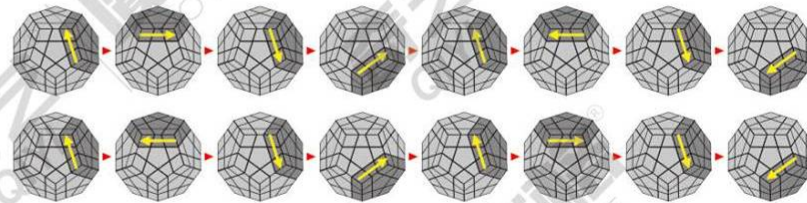Algorithm 17
Algorithm 18
Algorithm 19
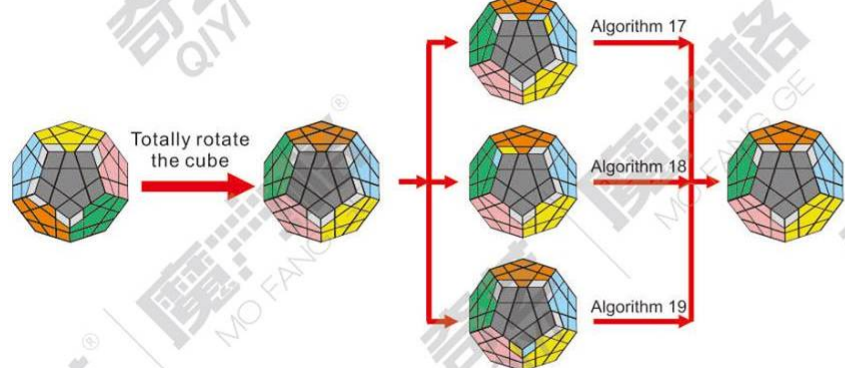
The third step: To solve the last three corners, only repeat algorithm 16

Totally rotate the cube

Repeat algorithm 16

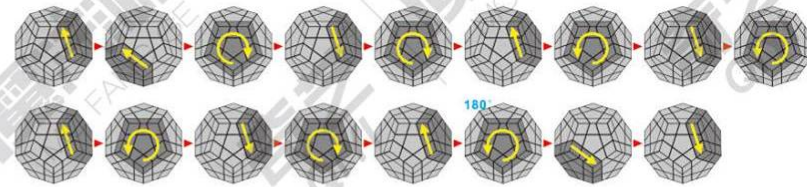**Algorithm 16:** L' U'2 F RD F' U F RD' F' U L
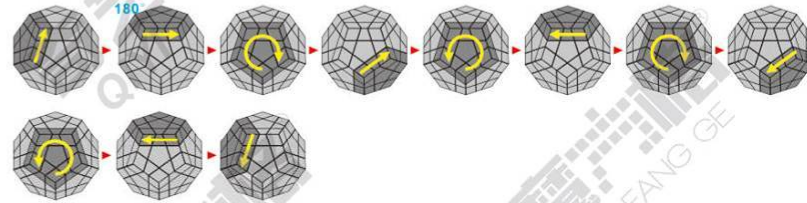
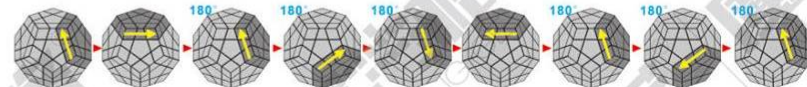**Algorithm 17:** R U' R' RD R U R' RD' R U R' RD R U' R' RD'

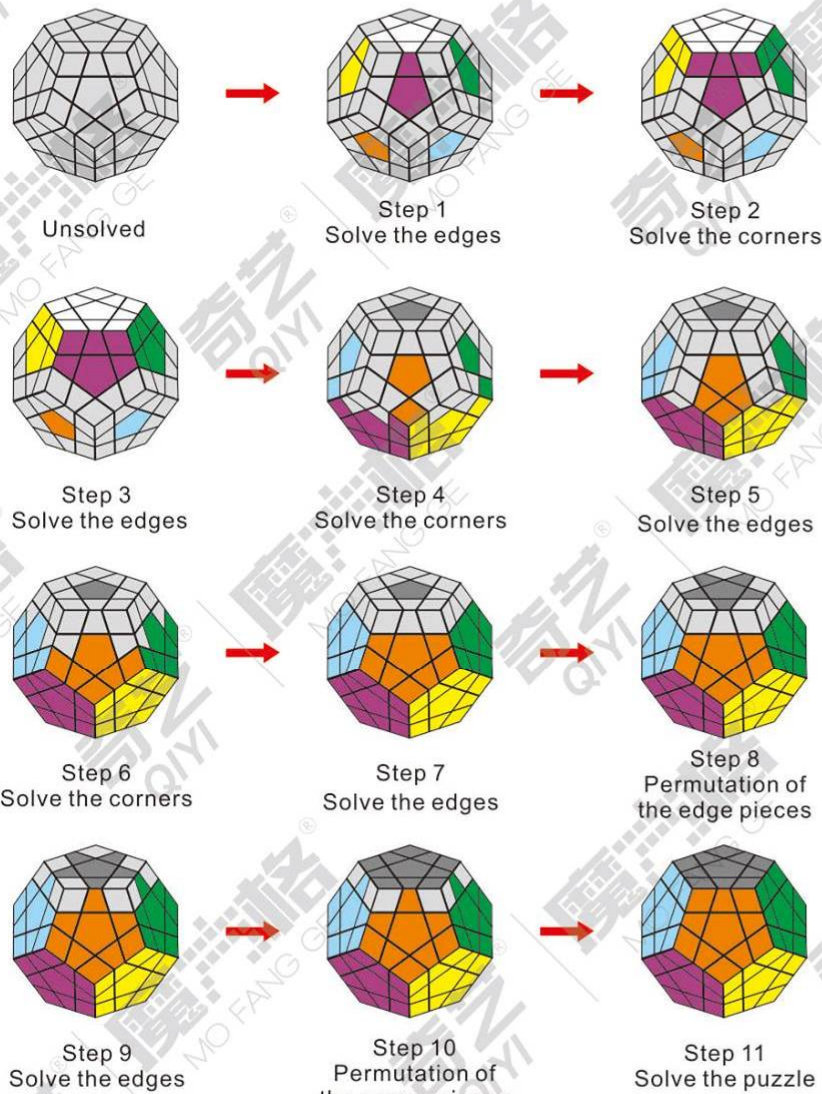**Algorithm 18:** R LD' F R' F R F' R' F' R F' R' F R F'2 LD R'

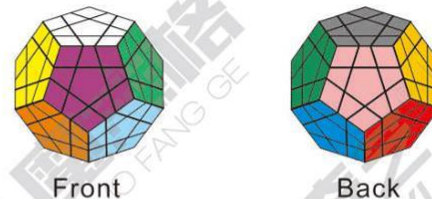
Algorithm 19: R U' R2 RD2 R'2 U R2 RD'2 R2

Megaminx Entry Tutorial

It will be easier to solve the megaminx if you know how to solve the 3×3×3.

Solution steps for the Megaminx as follows:

Unsolved

Step 1
Solve the edges

Step 2
Solve the corners

Step 3
Solve the edges

Step 4
Solve the corners

Step 5
Solve the edges

Step 6
Solve the corners

Step 7
Solve the edges

Step 8
Permutation of
the edge pieces

Step 9
Solve the edges

Step 10
Permutation of
the corner pieces

Step 11
Solve the puzzle

There are twelve faces on the Megaminx. The colors are as follows:

Front

Back

Rotation & Illustration & Notation

U

R

L

U'

R'

L'

F

R D

L D

F'

R D'

L D'

F 2 = F + F

Y

Y'