

Pyramorphix Solution

Solution by [David Singmaster](#) and [Andrew Southern](#).

Thank you for buying the Pyramorphix from Meffert's.

Before completely scrambling the puzzle you should always try a few experimental moves out first. You will find that the Pyramorphix can be placed in 7 different shapes. The rest of the combinations are due to colors on the sides.

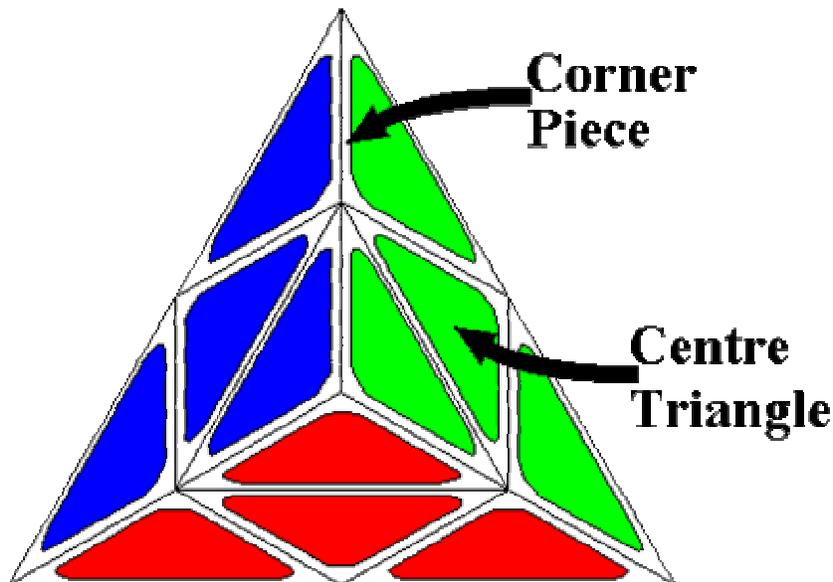
The idea of the Pyramorphix is to either return it to one color per side from a random position in the fastest time or least number of moves, or to create the best pattern of a shape in the least number of moves.

The unscrambling challenge can be broken into 4 parts:

- 1) Get the Tetrahedron (pyramid) shape.
- 2) Solve two corners.
- 3) Solve the last two corners.
- 4) Solve the center triangles.

Using these four steps it is possible to solve this puzzle on your own with a bit of time and effort.

Terminology



It is worth noting that the colors used in the pictures are only to help recognition and the moves will work equally as well on the Pyramorphix when it has different colors substituted for the ones in the pictures.



Means

"Move one click this way"



Means

"Move two clicks this way"



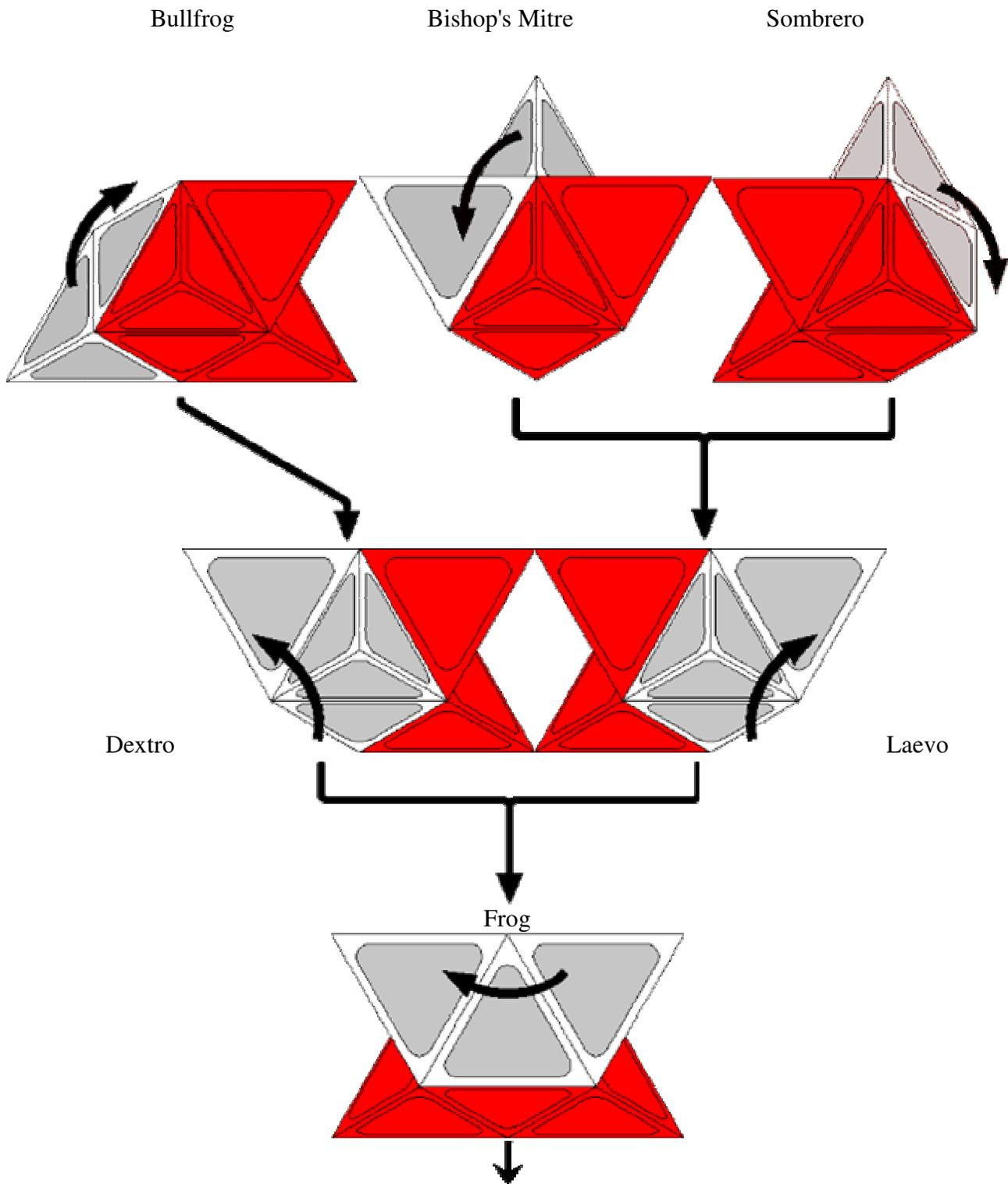
Means

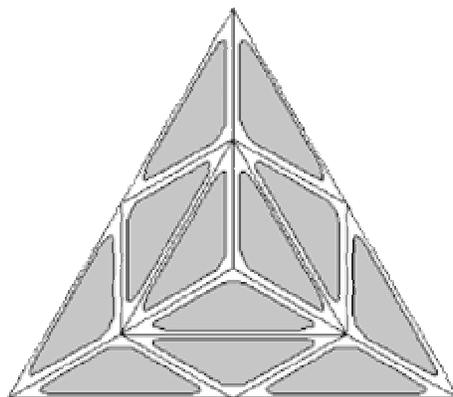
"Keep this stationary"

Step 1: Getting the Tetrahedron

Learn and follow the shape diagram below to get the Pyramorphix into a Tetrahedron.

Once you have learned how to view the puzzle from the correct side, you'll soon be able to get it into a Tetrahedron from any position.





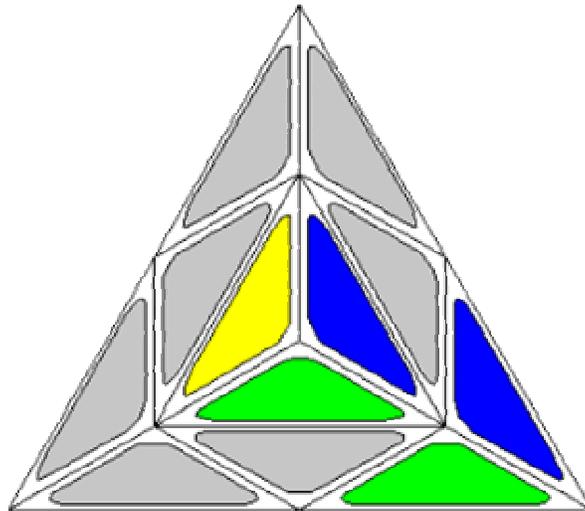
The Tetrahedron.

You may think that Dextro and Laevo look the same. This is because they are mirror images of each other, hence they are named after optical isomers in chemistry.

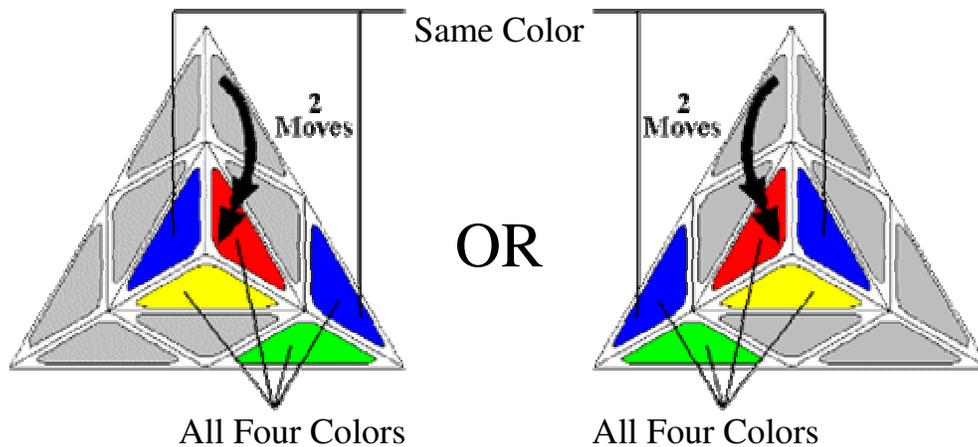
Follow the diagram to the Tetrahedron, then proceed to step 2.

Step 2: Solving two corners.

If two corners are already in position, as shown below proceed to step 3.



If this isn't the case find the edge which contains all four colors and twist appropriately. As with all diagrams in this solution, the colors on the Pyramorphix may not necessarily be the same as the diagram, e.g. what is blue may be red on your pyramorphix.

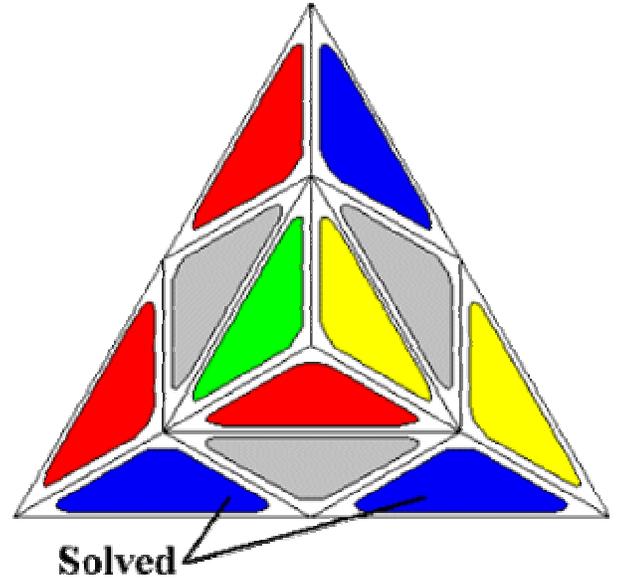


Step 3: Solving the last two corners.

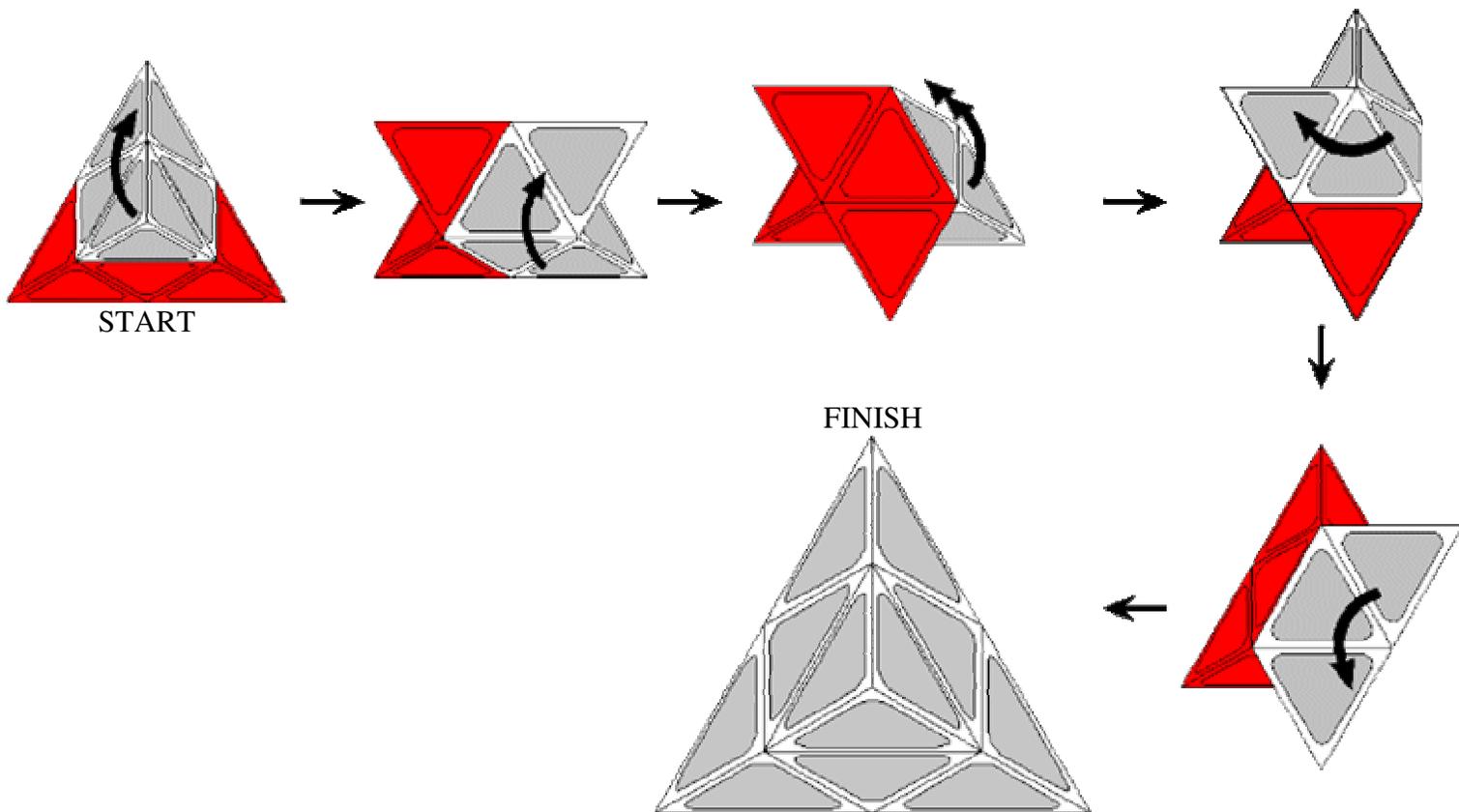
If all corners are now solved then proceed to step 4.

If the two unsolved corners both have the same color on the same side of the Pyramorphix, then proceed to step 3b.

Otherwise follow this set of moves until the Pyramorphix is ready to proceed to step 3b or step 4:

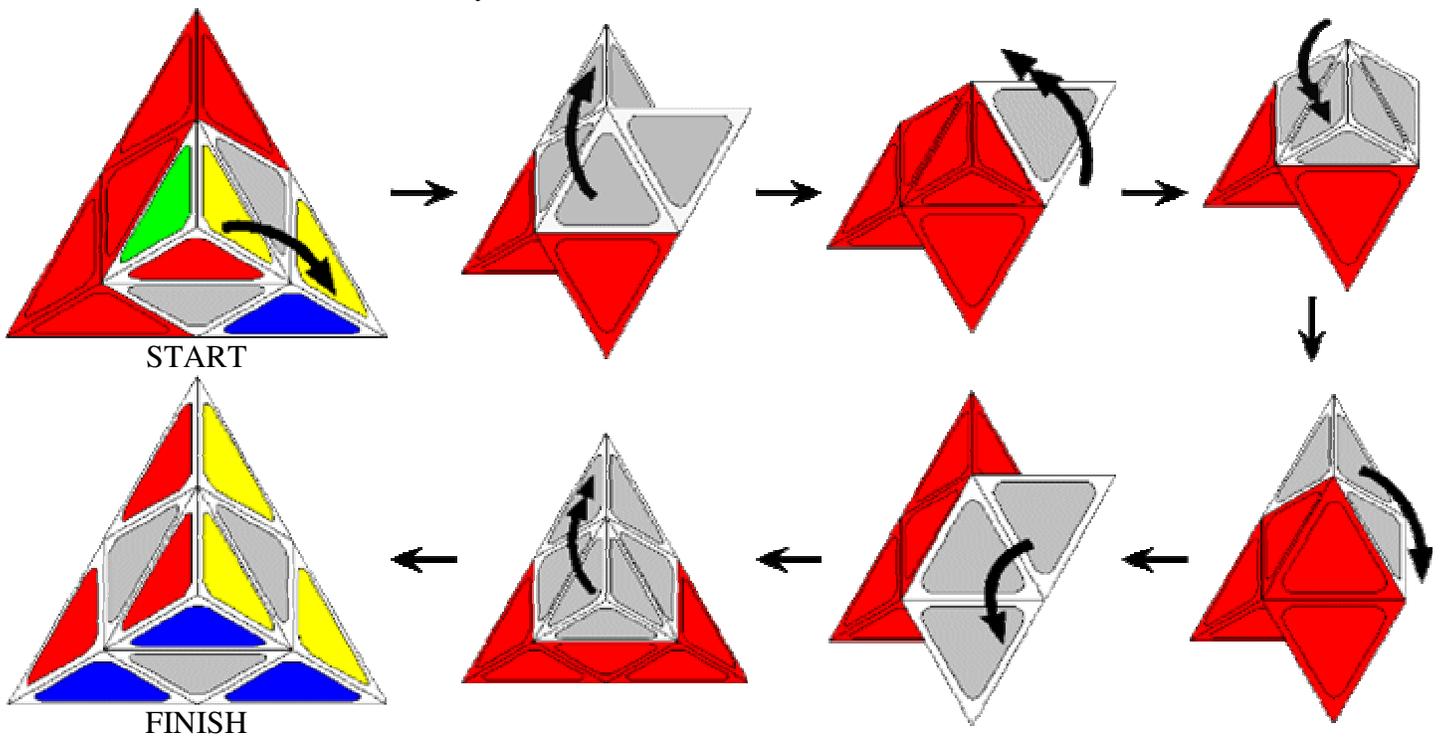
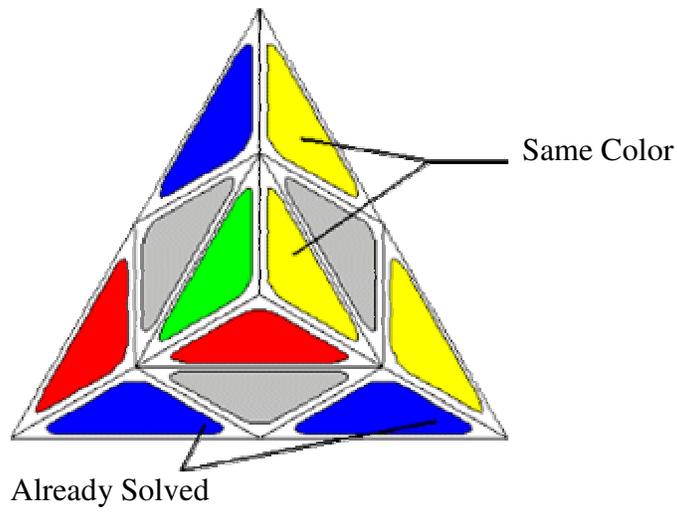


Step 3a:



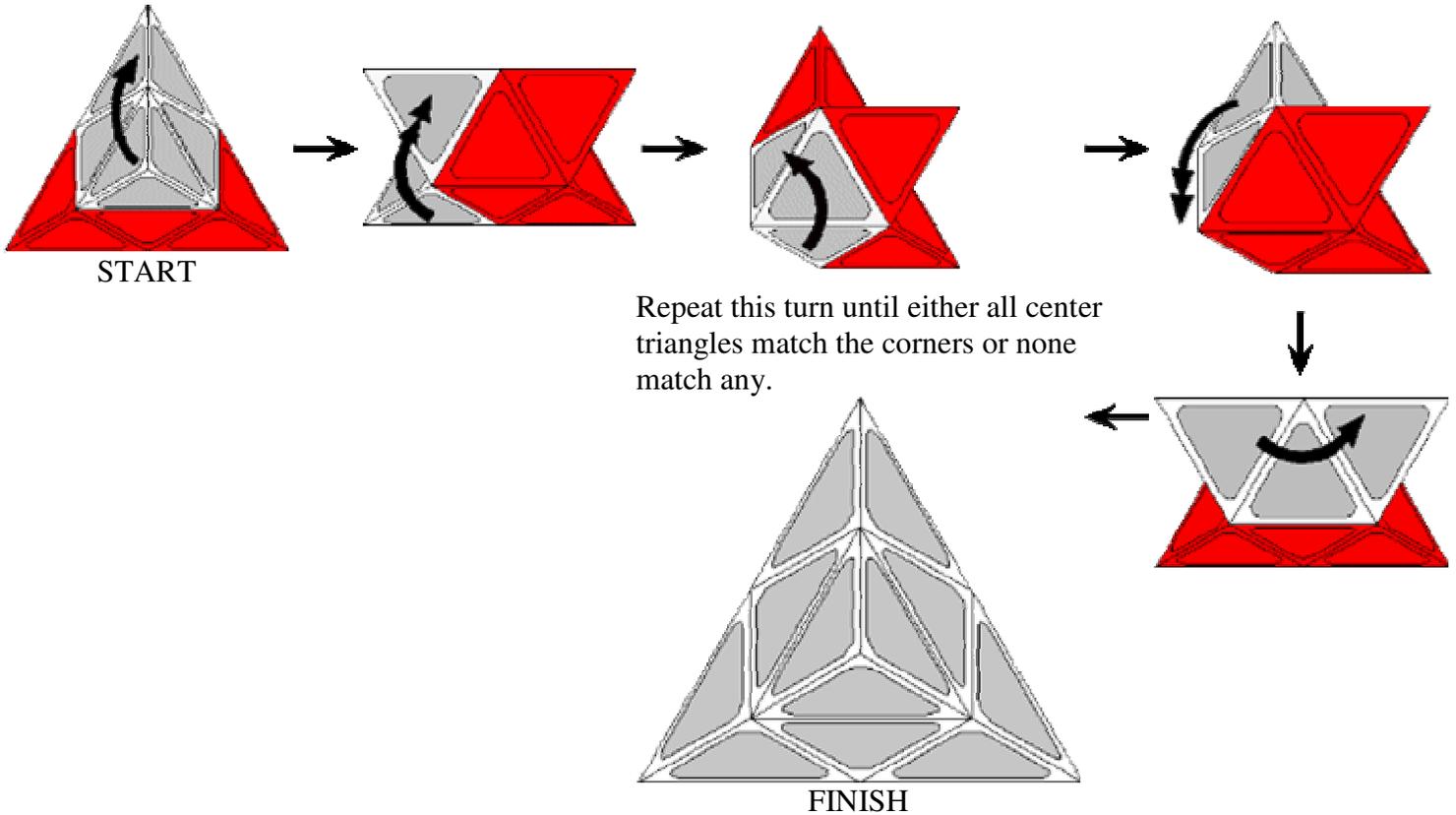
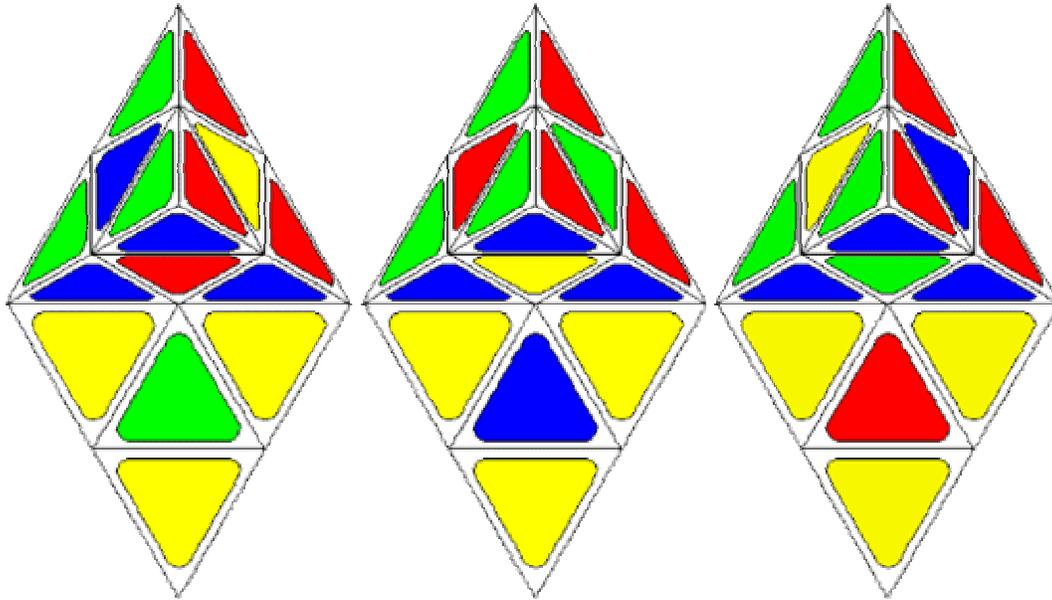
n.b.: Some positions need this series of moves repeating before the final two corners are complete or the puzzle is ready for Step 3b.

Step 3b:



Step 4: Solving the center triangles

Orientate the Pyramorphix as indicated and perform the move.
If you have just one center solved, it does not matter which starting orientation you use, just that during the third move the centers are positioned so that none match their corners.



CONGRATULATIONS!

You have now solved the Pyramorphix!