

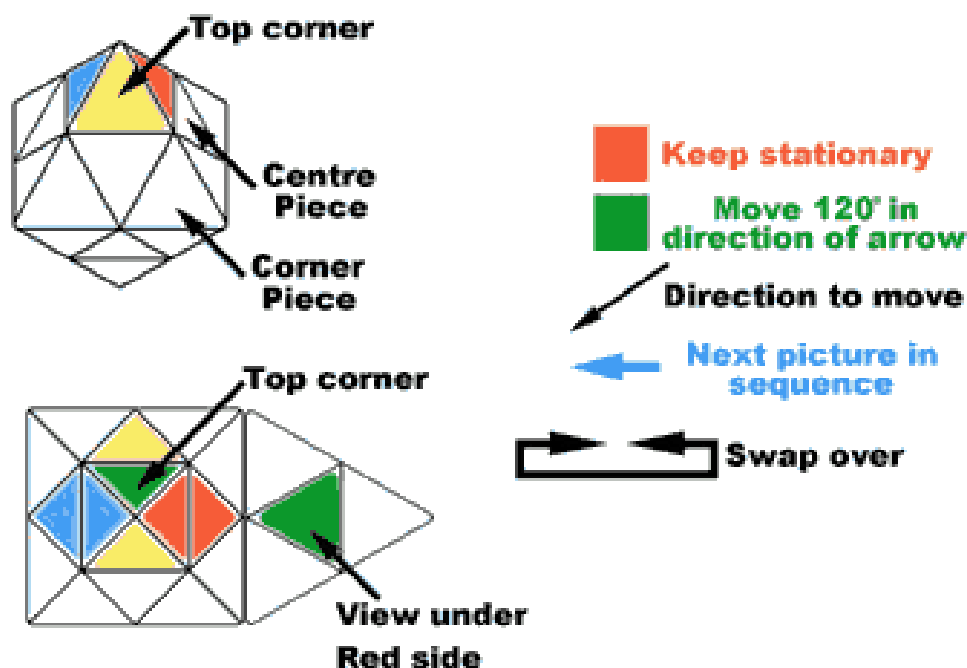
Skewb Diamond Solution

Solution by Jaap Scherphuis & Andrew Southern

Thank you for buying Meffert's Skewb Diamond. This is a hints booklet, written to help when you get stuck. If you wish to solve the Skewb Diamond on your own, please read no further, and good luck!

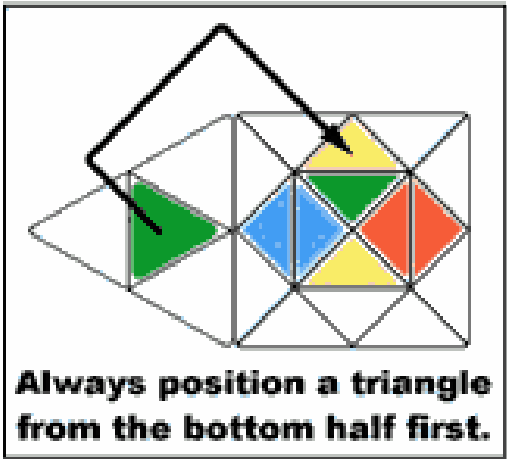
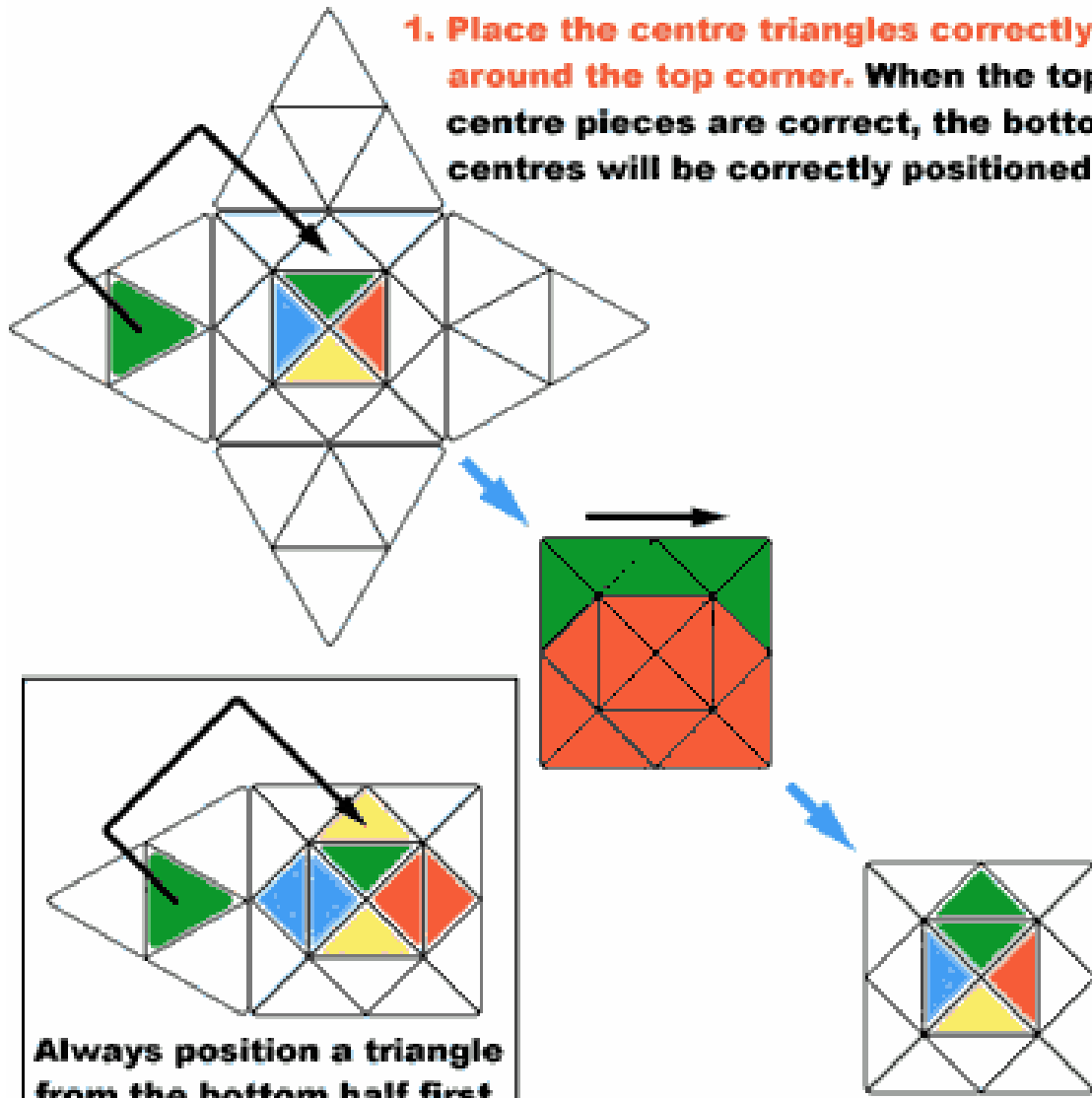
The Skewb Diamond is a **Octohedron** divided into two types of piece. The first type is a single triangle, this shall be referred to as a **Centre Piece**. The second type has four triangles on it, this shall be referred to as a **Corner Piece**.

To make moves simpler to follow, we will always keep the same corner piece at the top. Here it is in the two views you will find in this book:



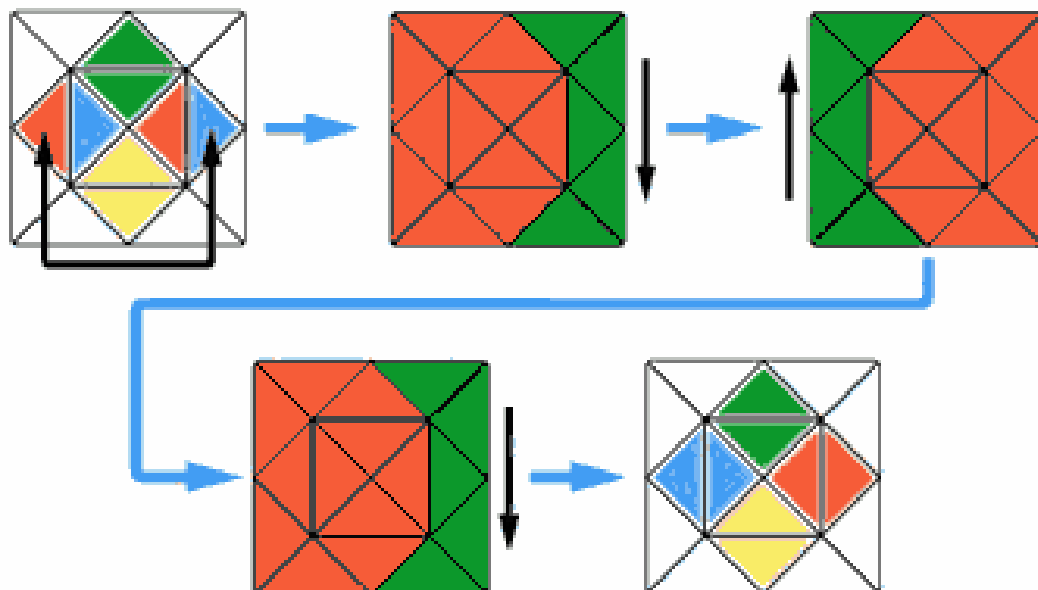
If you would like to see what the inside of a Skewb Diamond looks like, why not check it out on Meffert's Puzzles Website? The address is simple enough:
<http://www.mefferts.com> - so see you there!

1. Place the centre triangles correctly around the top corner. When the top centre pieces are correct, the bottom centres will be correctly positioned.



Always position a triangle from the bottom half first.

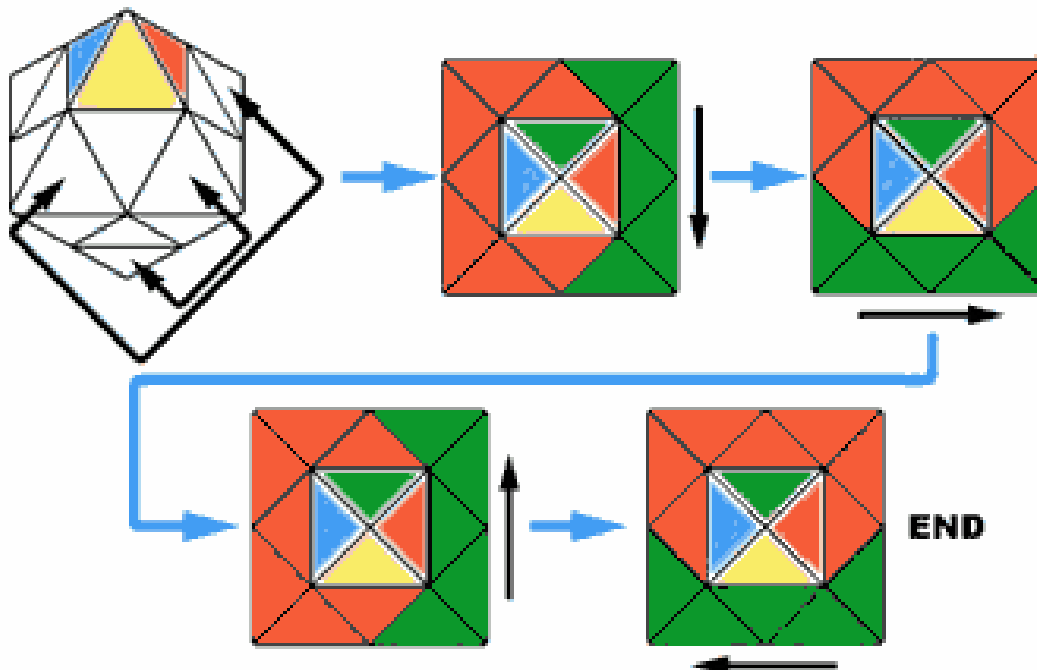
If two centre pieces in the top half need swapping over, use the following set of moves.



2. Next, place the corners correctly. The Skewb Diamond has no markings on the centres, so only the positioning matters, not the rotation. This makes solving the Skewb Diamond much simpler as we have already solved the centres.

We must now solve the bottom corners. This is done in two stages: position them, then orientate them.

There is one basic move that will swap corners around but leave the centres in position. All moves from this point on are derived from this.

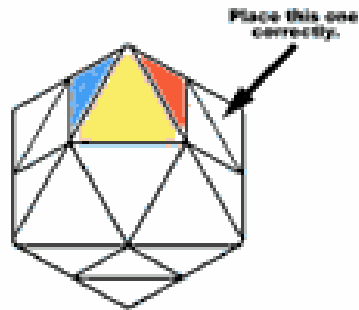


Please remember, the colours of the top corner are only there to give reference throughout the move set. These moves can be performed with any corner in any orientation at the top.

Performing this move **ONCE** will swap the two pairs of corners.

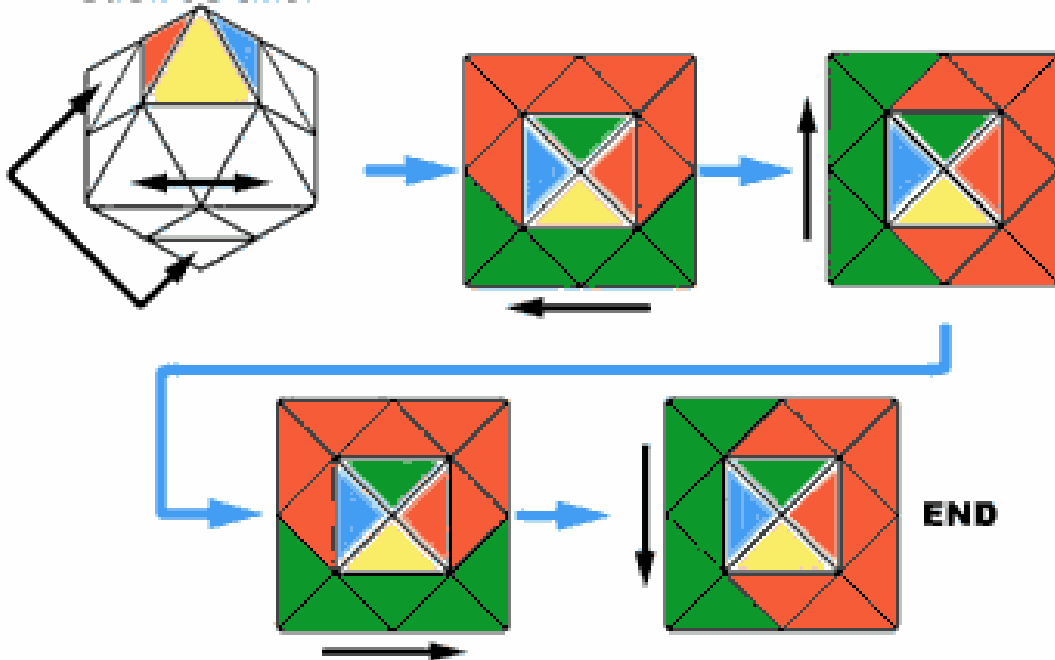
Performing this move **TWICE** will rotate the four corners 180° .

Should all five bottom corners be incorrectly placed, perform a move to place this one correctly.

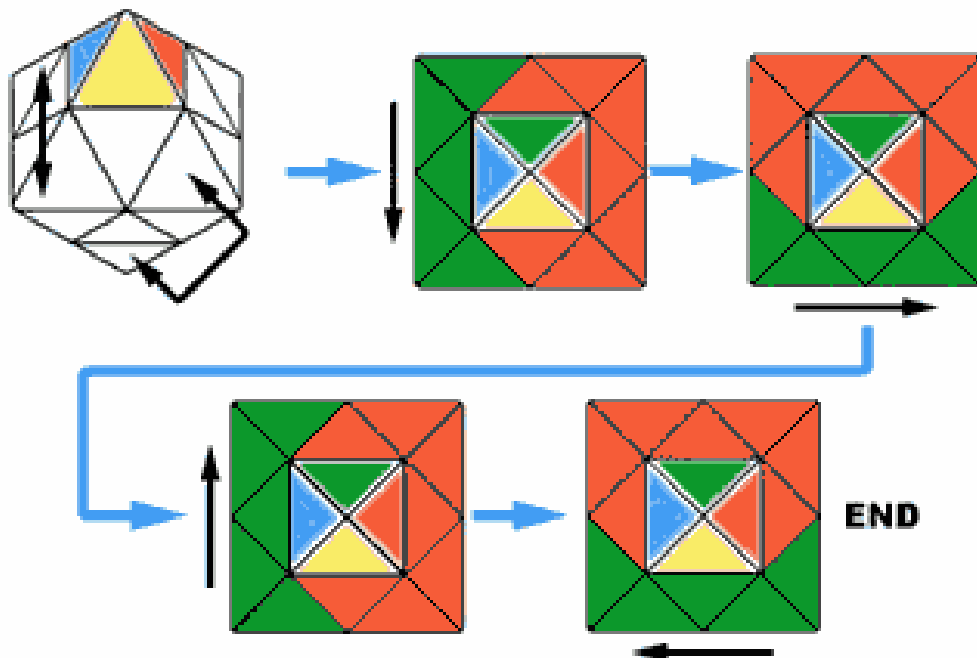


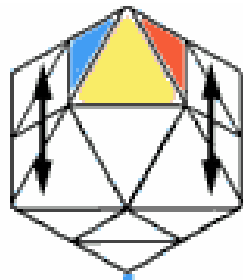
There are six possible position exchanges of those five corners. To save going through them all we will just do the move on the previous page and follow on with one of the 2-2-swaps that I will list.

Such as this:

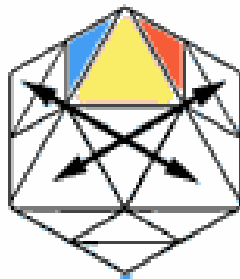
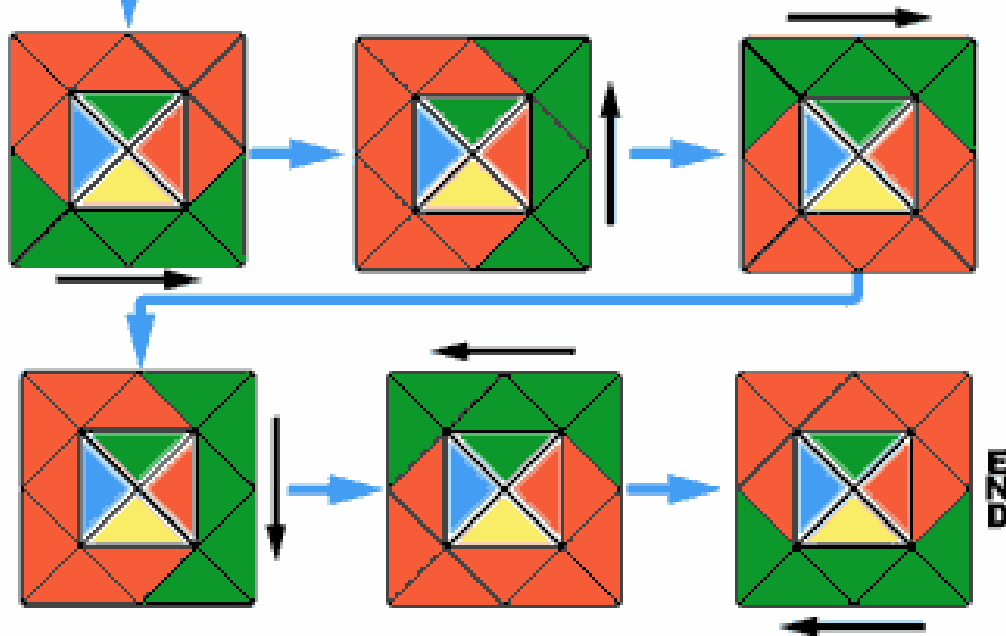


Or this:

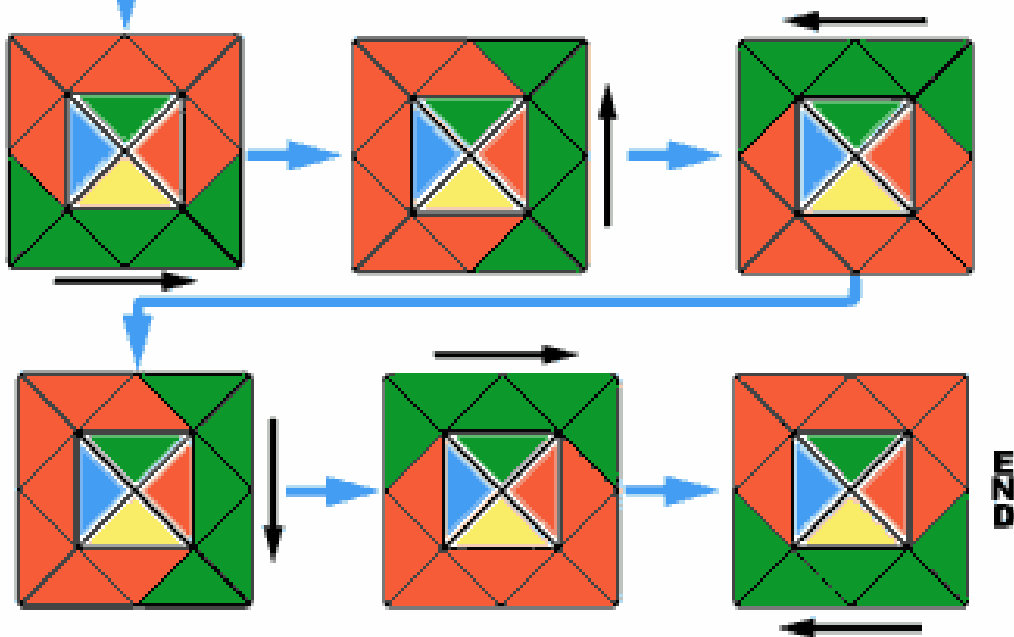




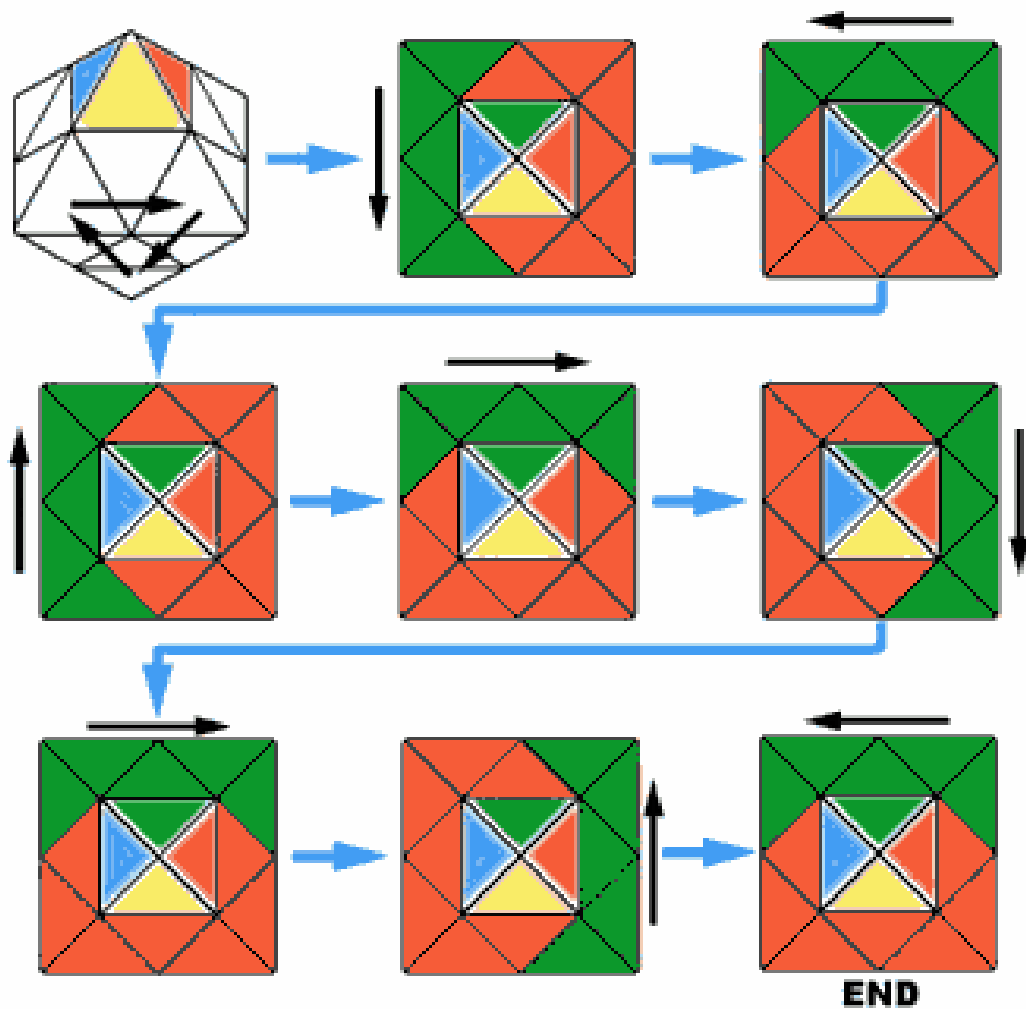
There are five position swaps involving four corners. We know three of them already. The last two don't involve the bottom corner. Here they are.



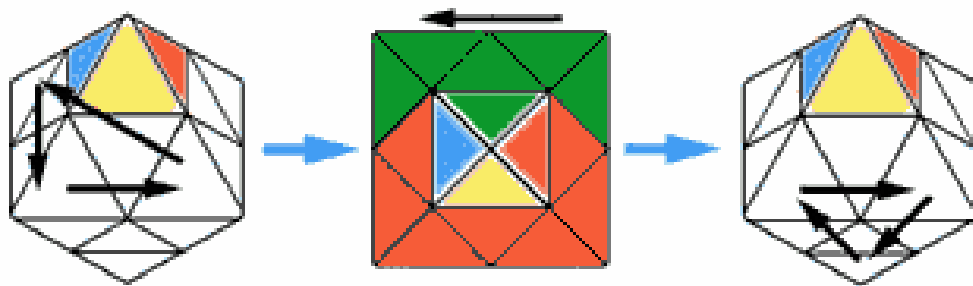
Remember: as with the rest of this hints booklet, the top corner is only coloured to make the moves easier to follow.



This is a **3-swap**. So called because it swaps three corners around in itself.

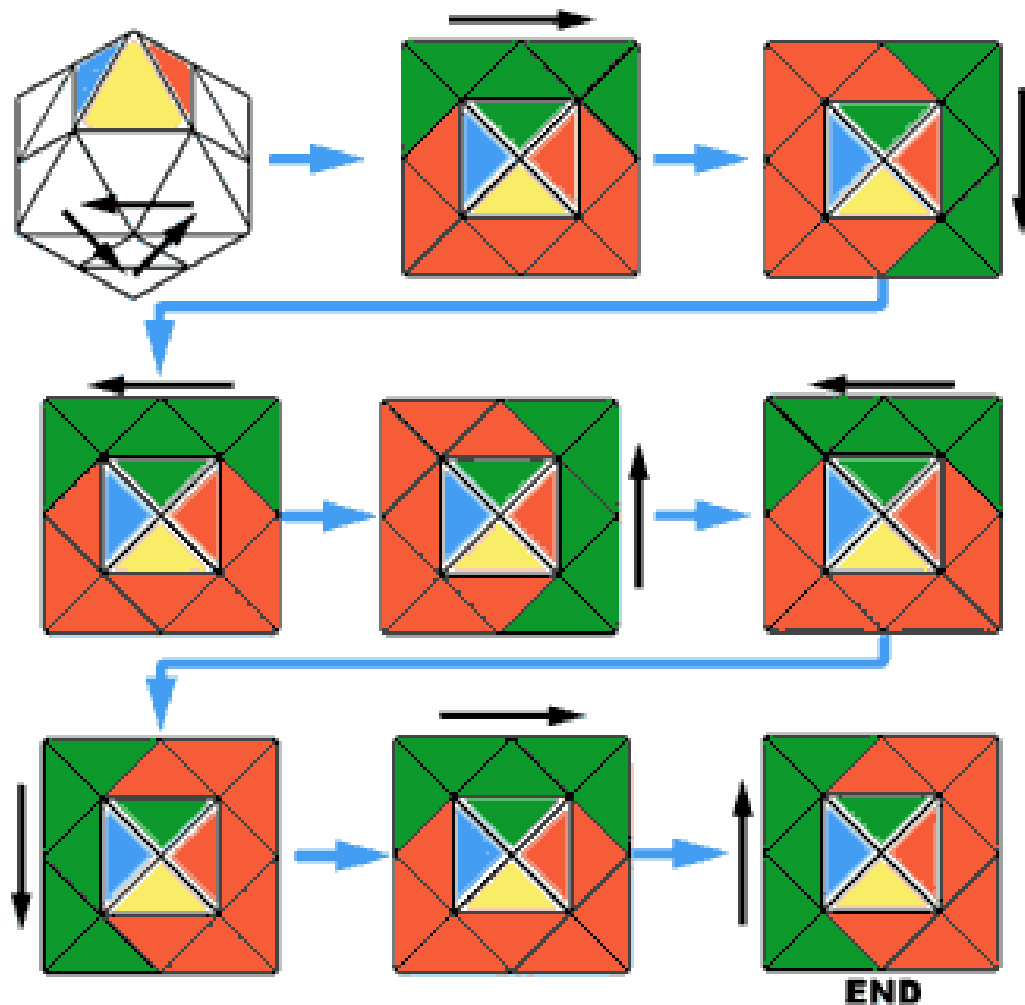


Because it leaves all centre pieces unaltered it can be used after repositioning three corners in these locations. This is a useful trait when dealing with three incorrect corners on the same plane. e.g.:

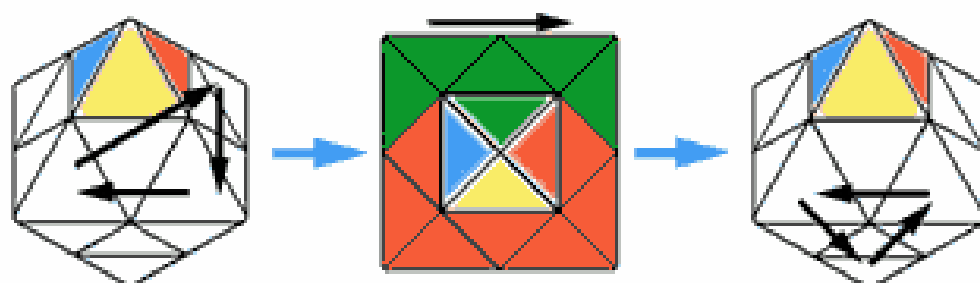


Just remember to put it back at the end of the sequence!

A **3-swap** in the anti-clockwise direction is also possible.
 This would be as follows:



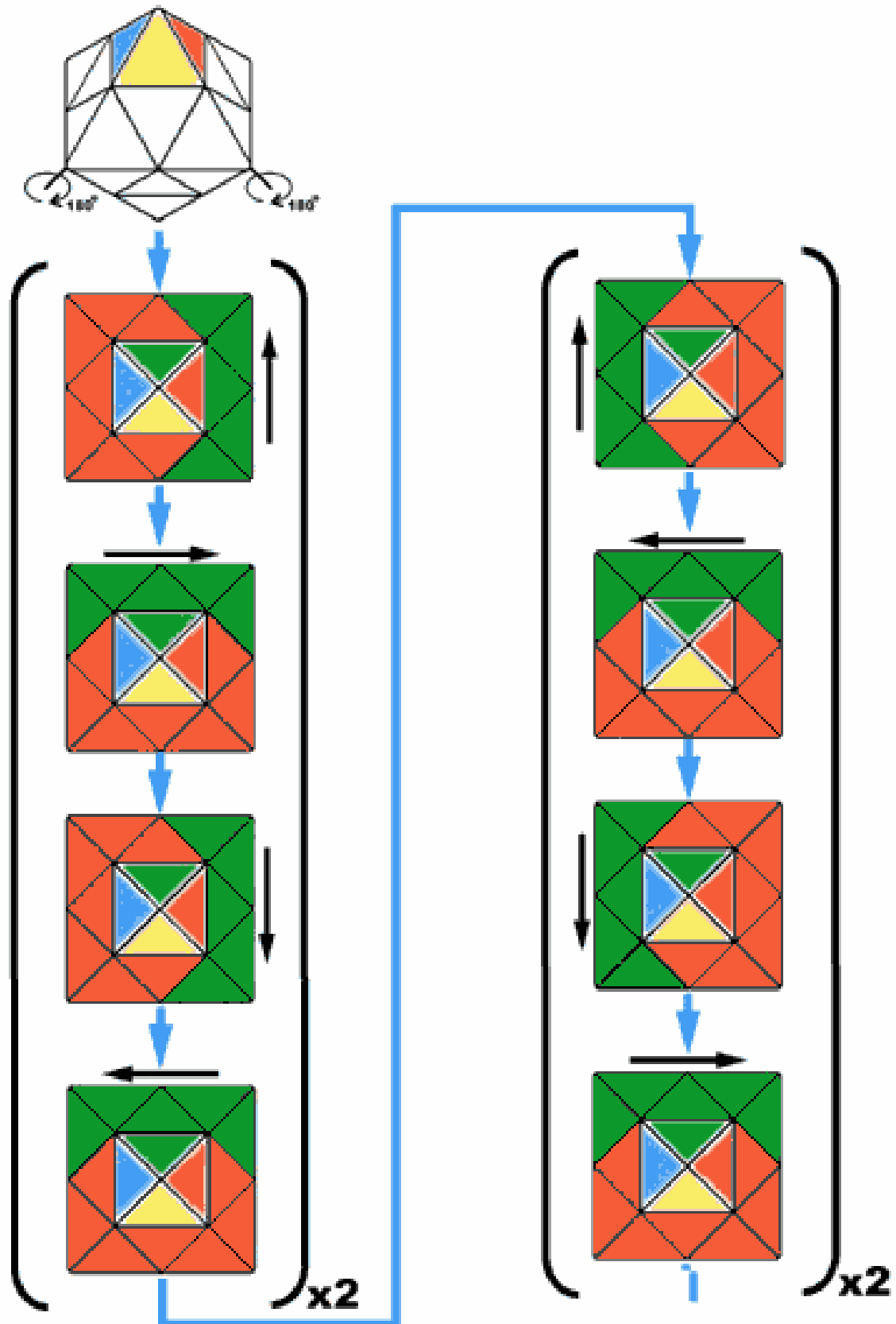
As before, this 3-swap can be used to swap three corners that are in the same plane by performing the following move, then the above 3-swap:



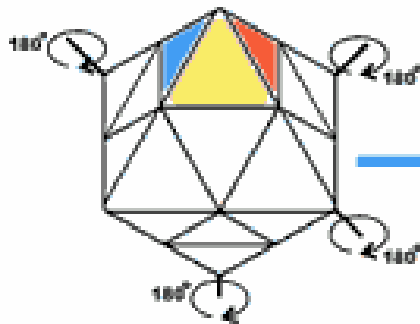
Just remember to put it back at the end of the sequence!

3. Finally, orientate the corners. This is done with a modified move from before. By repeating one of the 2-2 swaps twice, the pieces are rotated through 180° .

Either two or four corners will need rotating.

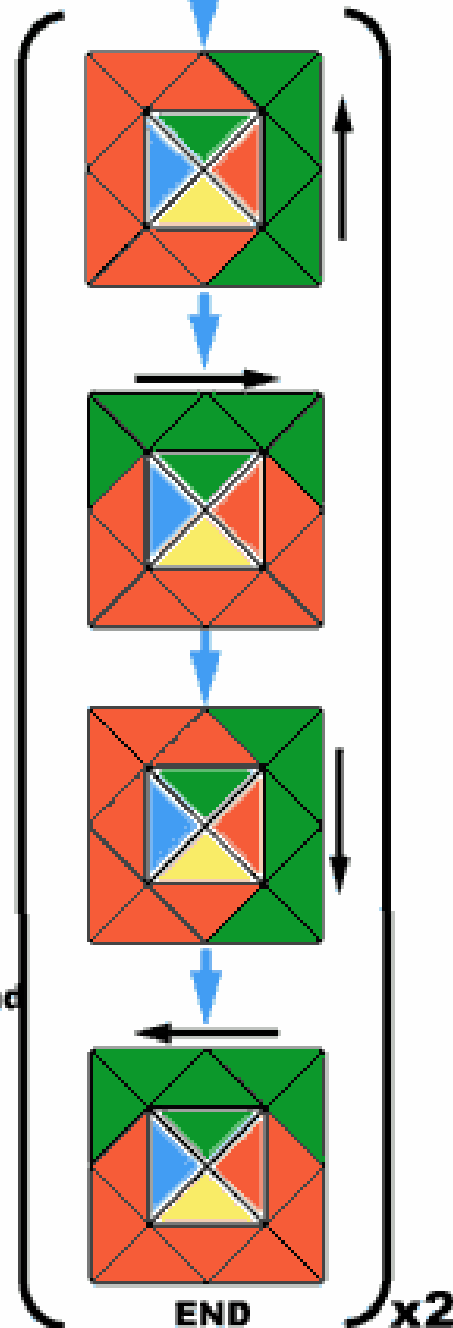


Similarly, if four corners need rotating, follow this set of moves:



Again, as with the 3-swap, this move does not alter the position of the centres, so it is possible to just turn the corners into this formation from the state they are in.

Congratulations! You have now solved the Skewb Diamond! Now all you need is a little practice and then you can show off to your friends, impress your boss and even enter competitions online! Meffert's Puzzles website has monthly **competitions for real prizes**, why not check them out at <http://www.mefferts.com>



Happy Puzzling, and good luck with the next challenge you face!