

# Advanced Solution to the Rubik's Cube

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## Introduction

Once you know the Intermediate method., getting faster boils down to learning more algorithms, optimizing the solution to your solving style, and lots of practice. For the advanced method you will be learning more algorithms to cut your last layer times in half and be encouraged to look deeper into Cross and F2L to reduce your solve time even more.

## The Cross

The Cross step is the same, but remember to look for the easiest cross, plan out the exact moves that will solve the cross, then make changes (if necessary) to make it speed-optimal. When you are solving a cube and you are not getting good times, or you do not want to speedsolve, solve the cube slowly, looking ahead and planning out the best moves. Try to make the best out of every case or F2L pair. These are called slow solves. Once you can effectively do the best solutions during slow solves, then work on speed, doing the slow solves faster and faster until you can do full-out speedsolves efficiently.

## F2L

What I said above applies even more here. Do a lot of slow solves to improve your F2L, and remember to look ahead to the next pair or step, while your fingers are solving the previous pair.

F2L tricks are also very helpful. One way you can pick up F2L tricks is looking at an algorithmic F2L page and look at different cases, see how the algs work, and maybe you will find one that you can implement into your solves.

Here is one of many algorithmic F2L pages: <http://www.speedsolving.com/wiki/index.php/F2L>

## Last Layer

For the Advanced method Last Layer, you are going to be learning the Full Fridrich method. Full Fridrich is Full OLL and Full PLL. You will be learning all 57 OLL cases and all 21 PLL cases, so you will be doing a 2-Look Last Layer. That means that after you finish F2L, you do two algs and then you are done. I would recommend learning all the PLLs first, and then the OLLs. If you get a case you don't know yet, just do 2-Look for that step, and try to look ahead to see what the second case will be.

I have put a links below to where you can download OLL/PLL algorithm sheets. Putting all the cases here would make this page way too long.

OLL printout: <http://www.kungfoomanchu.com/guides/andy-klise-3x3x3-oll-v3.pdf>

F2L, 2-Look OLL, Full PLL printout: <http://www.kungfoomanchu.com/guides/andy-klise-3x3x3-speedcubing-guide-v4.pdf>

If you don't like the algorithm given for a specific case, you can find more OLLs and PLLs here:

<http://www.speedsolving.com/wiki/index.php/OLL>

<http://www.speedsolving.com/wiki/index.php/PLL>

With practice, you should be able to get sub-15 second solves! If you want more info about what to learn to be sub-15, check out this page: [http://www.speedsolving.com/wiki/index.php/Road\\_to\\_Sub-15\\_Second\\_Averages](http://www.speedsolving.com/wiki/index.php/Road_to_Sub-15_Second_Averages)

Remember to check out WCA competitions if you haven't already:

[http://www.speedsolving.com/wiki/index.php/Competitions\\_General](http://www.speedsolving.com/wiki/index.php/Competitions_General)

<http://www.worldcubeassociation.org/index.php>

Even after this advanced method, there are many more things you can learn to get faster. Good luck!