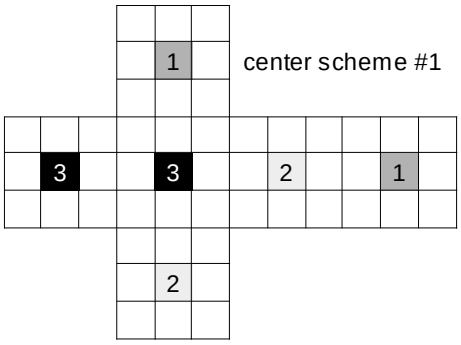
How to solve a (or any?) QUBAMI puzzle

This document was generated after following up a conversation with Kelvin Stott I had in the “speedsolving.com” thread “QUBAMI Reviews”. Kelvin says, that my assumptions for a simple QUBAMI solving approach cannot be true. But, ... I am sure, that the solving procedure described in this guide will work for all QUBAMI puzzles. Of course, I cannot prove it. But, if you cannot solve your QUBAMI, give it a try, or just queck out, if it works (eg. on your solved QUBAMI puzzle). It is not too difficult.

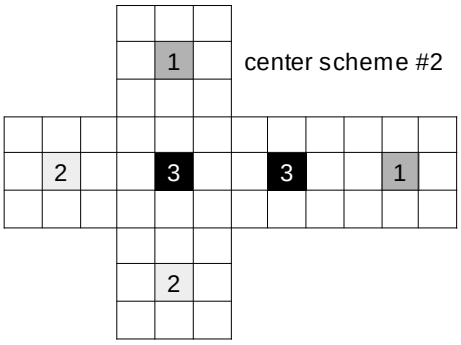
NOTE: As I know, all QUBAMI puzzle are delivered in solved *“Challenge #1”* status and anyone, trying to solve a QUBAMI puzzle, should already know, how to solve a 3x3x3 RUBIK´s cube. Therefore this solution guide will skip a guide for *“Challenge #1 and #2”*.

Solution, 1st step

- Identify the color and symbol scheme on your QUBAMI (each seperately).
- bothe, the color and the symbol center scheme should match with one of the following ones.



center scheme #1



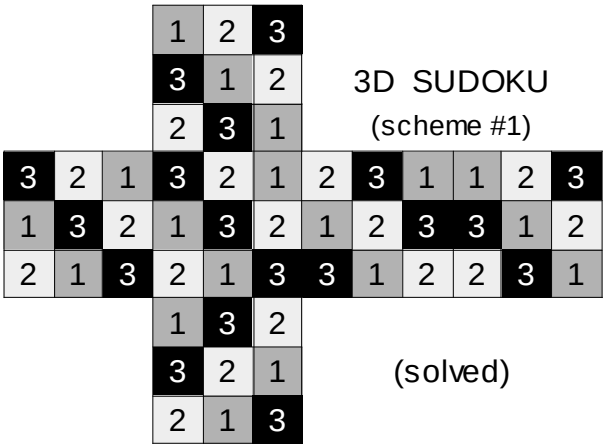
center scheme #2

- turn your puzzle around until the center symbols or colors show one of these positons.

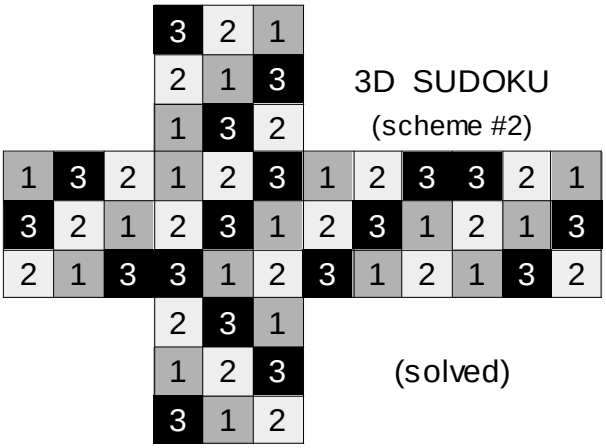
Important notice:

- it might be that both schemes (symbols and colors) match with only one of the 2 schemes, and one of them is only turned clockwise or counter-clockwise by 90°, 180° or 270°.
- it also might be, that both schemes (symbols and colors) match with each of them.

This will allow you to solve challenge #3 (3D color SUDOKU) and #4 (3D symbol SUDOKU) according to the following schemes, transferring your color or symbols scheme to the number scheme (eg. 1 = dot, 2 = cross, 3 = circle and 1 = blue, 2 = pink and 3 = yellow).



3D SUDOKU
(scheme #1)
(solved)



3D SUDOKU
(scheme #2)
(solved)

Now, following these schemes, you can solve easily the two 3D SUDOKUs (“*Challenge #3 and #4*”).

IMPORTANT NOTE: *While transferring the solves to the QUBAMI puzzle* ***may appear parity cases****.*

Solution, 2nd step

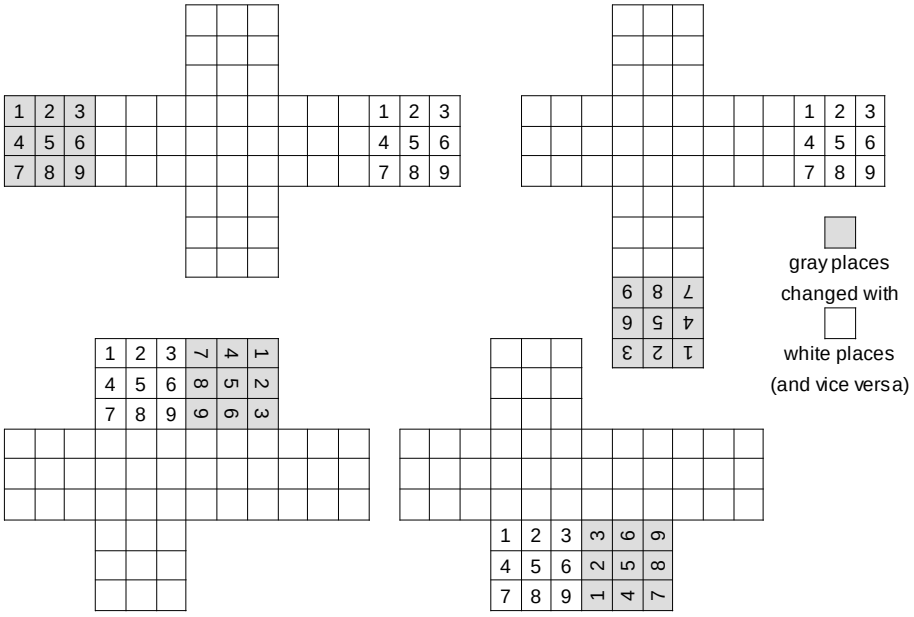
To solve "*Challenge #5*", you need to combine the two SUDOKUs due to the center scheme of your QUBAMI puzzle. This (usually) will require to move around one scheme over the other one, until at least "one" symbol and color center coincide exactly with one center of your original QUBAMI puzzle.

IMPORTANT NOTE: Please assure, that this center is unique center piece (with a combination of color and symbol, that only exists once). Identical center pieces (eg. 2 reds with 2 dots) may just be superimposed 3D SUDOKU solutions and may cause a mirrored error.

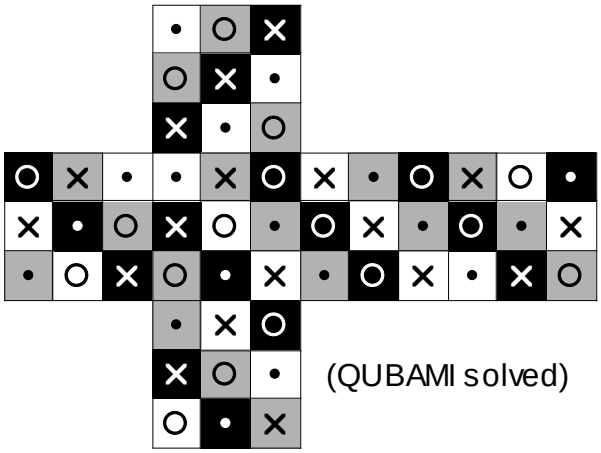
Finally, having found the correct center piece (e.g. "blue" color and "dot" symbol), you just need to turn around one of the schemes by 90°, 180° or 270° to match with the center scheme of your QUBAMI puzzle. And...

This should be the solution for *"Challenge #5"* of your QUBAMI puzzle.

Hint: Al least both schemes (colors and symbols) have to be joined together in "one" common 6-face puzzle scheme. This might be a little tricky (depending on your QUBAMI puzzle). You need to be very carefull while superimposing the color and symbol schemes. The following pictures will give you some hints how certain pieces change their position while moving the faces around.



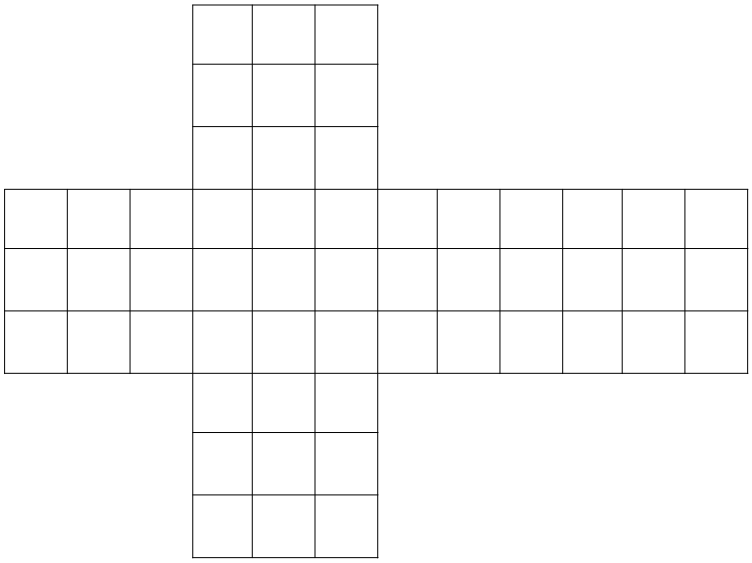
Having done everything correctly, you should get to a combined color and symbol scheme, looking like that one on the picture below (this sample solve has been made from the QUBAMI puzzle center scheme from an unboxing video on "Youtube").


(QUBAMI solved)

IMPORTANT NOTE: To solve the QUBAMI in the final stage *"Challenge #5"* it is recommendable to use a blank 6 face sticker scheme for a 3x3x3 cube. To join the color and symbol schemes in one common scheme it will be helpfull to use shortcodes, like:

PD = *pink* dot	PX = *pink* cross	PC = *pink* circle	- valid for all *pink* stickers
BD = *blue* dot	BX = *blue* cross	BC = *blue* circle	- valid for all *blue* stickers
YD = *yellow* dot	YX = *yellow* cross	YC = *yellow* circle	- valid for all *yellow* stickers

This allows in a very simple manner to note first the colors and to add then the second letter for the symbol in the final solution sticker scheme, based on WCA standard notation.



Final remarks: As already mentioned, I am sure, that this solution guide will work for any QUBAMI puzzle. But of course, I cannot promise that it will work for any QUBAMI puzzle. Anyhow, this procedure reduces the solution of a QUBAMI puzzle to a very simple procedure. And the final solution picture, shown above, shows that it works. So, if every QUBAMI puzzle has only one unique solution, this shall be a guide to find it. The only information needed is the specification of the center pieces due to the official WCA notation to solve *"Challenge 3 to 5"* a (or any) QUBAMI (eg. R = Right: yellow, dot; L= Left: blue, cross etc.

By the way, I do not own an original QUBAMI puzzle. Starting with two stickerless "Cyclone Boys" 3x3x3 cubes, I made the two different 3D SUDOKU cubes and solved them making some assumptions about the probable solution to minimize trial and error turns and edge swaps.

After having solved the two 3D SUDOKU cubes, to get my own unique QUBAMI puzzle, I superimposed the two 3D SUDOKU solve schemes on a black "Shengshou Wind" 3x3x3 cube with self-printed stickers on adhesive vinyl sheets. For the colors I used black, gray and white color, for the symbols I used symmetric symbols from the "Webdings" and "Wingdings" fonts. Of course not the best way, but I am happy with the result and it was a very nice small project.

I really hope, that this solution guide is correct and will help Kelvin Stott to sell his QUBAMI puzzles. It is a beautifull 3D puzzle, combining the logical aspect of a 3D SUDOKU with the geometry of a 3x3x3 RUBIK´s cube.

Thus, if this solution guide works or not, any QUBAMI puzzle will never loose its challenges to be solved just by turning its faces, doing trial and error swaps. And thinking about, that every QUBAMI is a unique puzzle, any solution generated with this guide won´t work on another QUBAMI puzzle. But it is an alternative solution for the puzzle, based on a more logical approach. It also may help to prove, that any QUBAMI is solvable (has a solution).

Good luck for solving your QUBAMI puzzle, **OLAF**