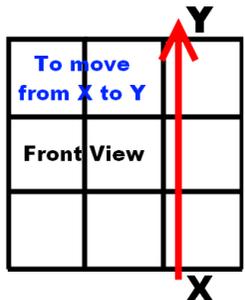


## 1 Top Corners

Getting the top corners is easy, but make sure they match the centre square. The hardest one is from 'X' to 'Y' so here is the solution :-



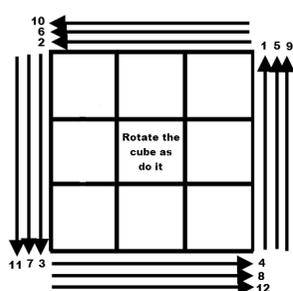
Right ↓  
Bottom →  
Right ↑  
Front ∪  
Bottom →→  
Front ∪

## 2 Bottom Corners



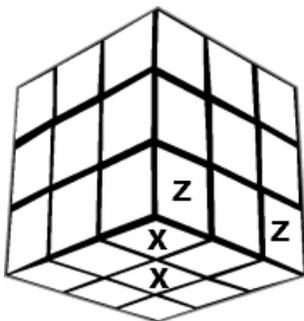
Right ↓  
Bottom →  
Right ↑  
Bottom →  
Front ∪  
Bottom ←  
Front ∪

## 3 Orientate Corners



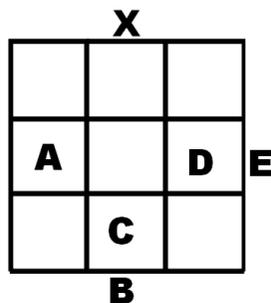
### Twelve turn trick

Turn the cube 12 times rotating one side as you do it. This is the top view, hold the cube as indicated in the diagram below with the marked corner nearest to you. If you don't have that then have 2 similar colours to the right. Failing that do anyway and it will come right.



Now turn the cube back over to where it was when you first began and move the top edges into position.

## 4 Top Edges



**A to X**  
Middle →→  
Front ∪  
Middle ←  
Front ∪

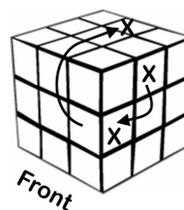
**B to X**  
Centre ↓  
Bottom →→  
Centre ↑

**C to X**  
Front ∪  
Middle →  
Front ∪

**D to X**  
Middle →  
Front ∪  
Middle →→  
Front ∪

**E to X**  
Middle →  
Front ∪  
Middle ←  
Front ∪

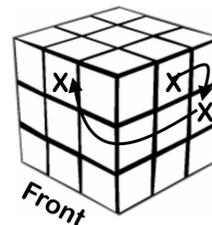
## 5 Middle Layer



(Turn the cube over so the completed side is at the bottom and hold the cubies to be moved to the right.)

### (algorithm 9)

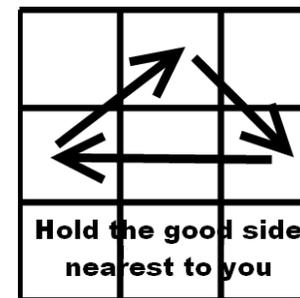
Right ↓  
Top →  
Right ↓  
Top →  
Right ↓  
Top ←  
Right ↑  
Top ←  
Right ↑



This moves the cubie away from you.

Right ↑  
Top ←  
Right ↑  
Top ←  
Right ↑  
Top →  
Right ↓  
Top →  
Right ↓

## 6 Top Edges



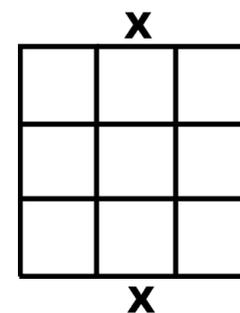
Do algorithm 9 and then turn the top twice.

Repeat the algorithm and the procedure is complete.

When the edges have rotated into their correct position the cube will be complete.

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16/02/2014

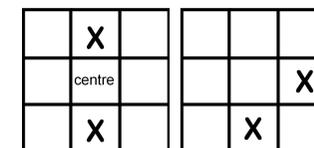
## Problem solvers



### Rotate Edges

Centre ↑  
Top →  
Centre ↑  
Top →  
Centre ↑  
Top →→  
Centre ↓  
Top →  
Centre ↓  
Top →  
Centre ↓  
Top →→

### Move Edges



**CENTRE** ↑  
Front ∪  
Top →  
Front ∪  
**CENTRE** ↓  
Front ∪  
Top ←  
Front ∪