

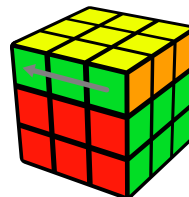
NOTATION

HOLDING THE CUBE IN A FIXED POSITION, THERE ARE 6 SIDES THAT CAN BE TURNED.

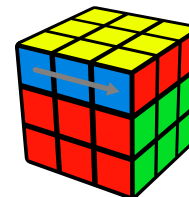
A SINGLE LETTER DENOTES TURNING THE SPECIFIED FACE 90 DEGREES CLOCKWISE. A LETTER FOLLOWED BY A PRIME (') SYMBOL DENOTES A 90 DEGREE TURN ANTI-CLOCKWISE.

A LETTER FOLLOWED BY A 2 DENOTES A DOUBLE TURN OF THAT FACE.

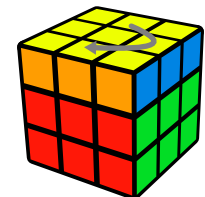
TOP [U] LEFT [L] FRONT [F] BOTTOM [D] RIGHT [R] BACK [B]



U
(CLOCKWISE)



U'
(ANTI-CLOCKWISE)

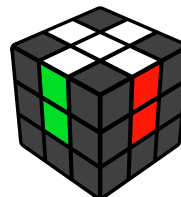


U2
(DOUBLE TURN)

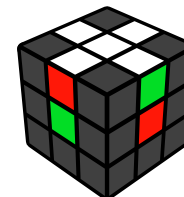
FIRST LAYER CROSS

THE 1st STEP IS TO CORRECTLY POSITION THE 4 WHITE EDGE PIECES AROUND THE WHITE CENTER PIECE TO CREATE A CROSS.

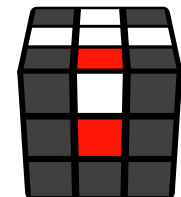
WHEN YOU DO THIS, MAKE SURE THAT THE NON-WHITE STICKERS OF THE EDGE PIECES ALSO LINE UP WITH THEIR CORRESPONDING CENTER PIECES.



CORRECT



INCORRECT

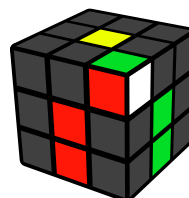


F U' R U
FIXES A
FLIPPED CROSS EDGE

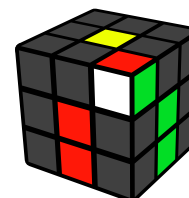
FIRST LAYER CORNERS

THE 2nd STEP IS TO SOLVE THE CORNERS OF THE FIRST LAYER. THERE ARE 3 BASIC CASES.

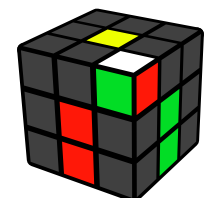
NOTE: IF A CORNER IS MISORIENTED, OR IN THE WRONG POSITION, YOU CAN TAKE IT OUT USING R U R'.



R U R'



U R U' R'



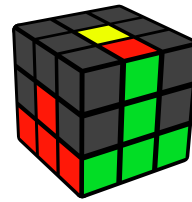
(R U2 R') U' (R U R')

MIDDLE LAYER EDGES

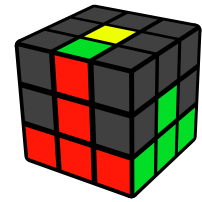
THE 3rd STEP IS TO SOLVE THE EDGES OF THE MIDDLE LAYER.

EDGE PIECES FROM THE TOP LAYER WILL EITHER NEED TO GO TO THE RIGHT OR LEFT POSITION, IF YOU HOLD THEM AT THE FRONT.

IF AN EDGE PIECE IS MISORIENTED OR STUCK IN THE WRONG POSITION, TAKE IT OUT BY INSERTING ANOTHER EDGE INTO ITS POSITION.



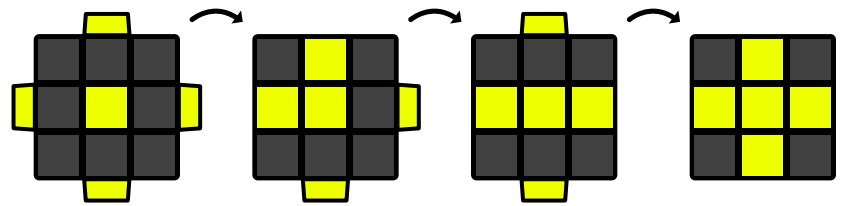
$(U' L' U L) (U F U' F')$



$(U R U' R') (U' F' U F)$

LAST LAYER EDGE ORIENTATION

USE THE ALGORITHM BELOW TO ORIENT YOUR EDGES. REMEMBER TO HOLD THE LAST LAYER ON TOP.



$FRUR'U'F'$

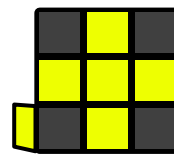
$FRUR'U'F'$

$FRUR'U'F'$

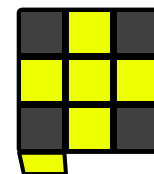
SOLVED

LAST LAYER CORNER ORIENTATION

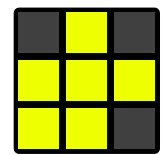
CHECK HOW MANY OF YOUR CORNERS ARE ORIENTED, AND HOLD THE CUBE IN THE POSITIONS SPECIFIED BELOW, BEFORE PERFORMING THE CORNER ORIENTATION ALGORITHM.



$(R U R') U (R U^2 R')$
0 CORNERS ORIENTED



$(R U R') U (R U^2 R')$
2 CORNERS ORIENTED

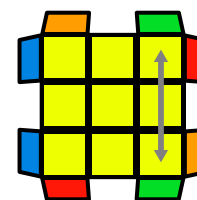


$(R U R') U (R U^2 R')$
1 CORNER ORIENTED

LAST LAYER CORNER PERMUTATION

CORRECTLY ALIGN TWO CORNERS ON THE LEFT SIDE OF YOUR CUBE AS SHOWN, AND THEN EXECUTE THE ALGORITHM SHOWN.

IF THERE ARE INITIALLY NO MATCHING CORNERS, PERFORM THE ALGORITHM FROM ANY ANGLE.

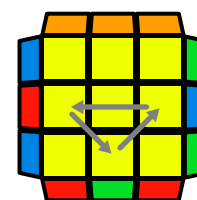


$(R U R' U') (R' F R^2 U') R' U' (R U R' F')$

LAST LAYER EDGE PERMUTATION

FIND A SOLID BLOCK WHERE AN EDGE IS SOLVED, MOVE IT TO THE BACK SIDE OF YOUR CUBE, AND THEN EXECUTE THE ALGORITHM SHOWN.

IF THERE IS INITIALLY NO BLOCK, PERFORM THE ALGORITHM FROM ANY ANGLE.



$(R U') (R U) (R U) (R U') R' U' R^2$