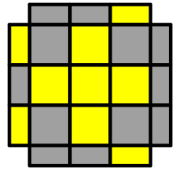
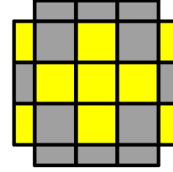


# 3x3 Rubik's Cube OLL algorithms

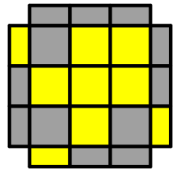
## Orient corners



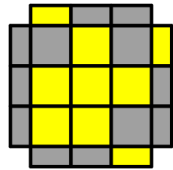
$R U2' R2' U' R2 U' R2' U2' R$



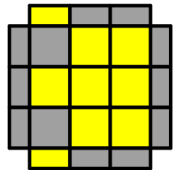
$R U R' U R U' R' U R U2' R'$



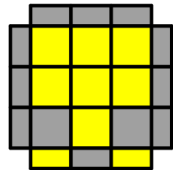
$R U2' R' U' R U' R'$



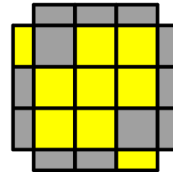
$R U R' U R U2' R'$



$r U R' U' r' F R F'$

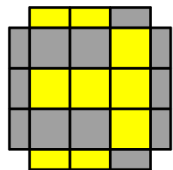


$R2 D R' U2 R D' R' U2 R'$

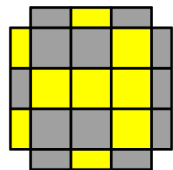


$F' r U R' U' r' F R$

## T shapes

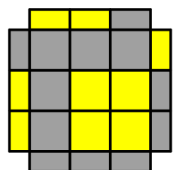


$R U R' U' R' F R F'$

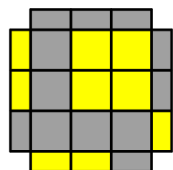


$F R U R' U' F'$

## Square shapes

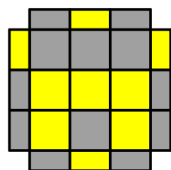


$r' U2' R U R' U r$

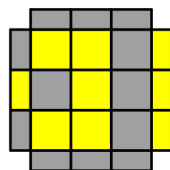


$r U2 R' U' R U' r'$

## C shapes

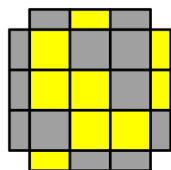


$RUR2'U'R'FRURU'F'$

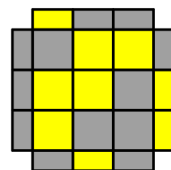


$R'U'R'FRF'UR$

## W shapes

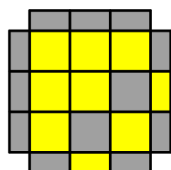


$R'U'RUR'R'URU'U'R'Ux$   
 $y2RUR'FRUR'U'R'FRU'R'FRF'$

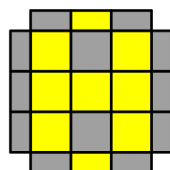


$RUR'URU'R'U'R'FRF'$

## Ship and H shapes

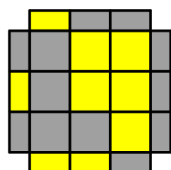


$rUR'U'MURU'R'$

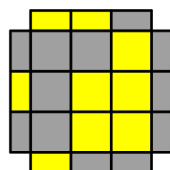


$RUR'U'M'URU'r'$

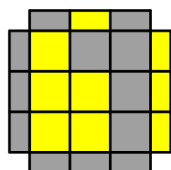
## P shapes



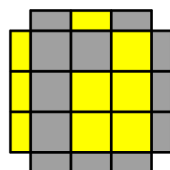
$R'U'FURU'R'F'R$



$RUB'U'R'URBR'$   
 $SRUR'U'R'FRf'$

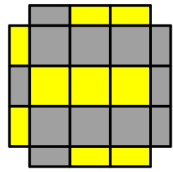


$yR'U'F'UFR$   
 $f'L'U'LUf$

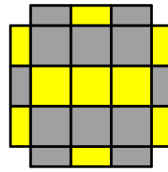


$fRUR'U'f'$   
 $y2FURU'R'F'$

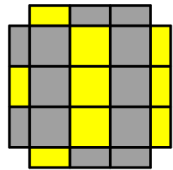
## I shapes



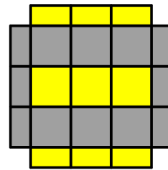
$f R U R' U' R U R' U' f'$   
 $y^2 F U R U' R' U R U' R' F'$



$r' U' r U' R' U R U' R' U R r' U r$

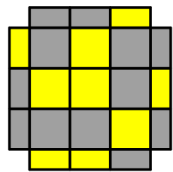


$R' U' R U' R' U y' R' U R B$   
 $R U R' U R U' y R U' R' F'$

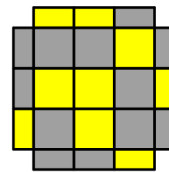


$R' F R U R U' R^2 F' R^2 U' R' U R U R'$

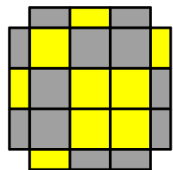
## Fish shapes



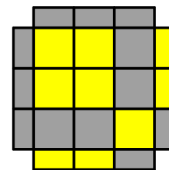
$R U R' U' R' F R^2 U R' U' F'$   
 $R' U' R y r U' r' U r U r'$



$R U R' U R' F R F' R U^2 R'$   
 $R U R' y R' F R U' R' F' R$

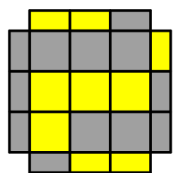


$R U^2 R^2 F R F' R U^2 R'$

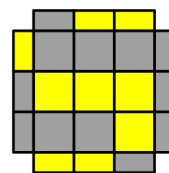


$F R U' R' U' R U R' F'$

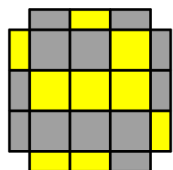
## Large L shapes



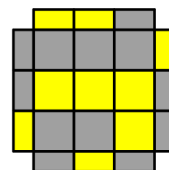
$r U' r' U' r U r' y' R' U R$   
 $F U R U' R^2 F' R U R U' R'$



$R' F R U R' F' R F U' F'$

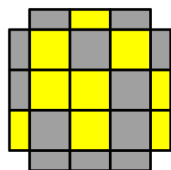


$r U r' R U R' U' r U' r'$

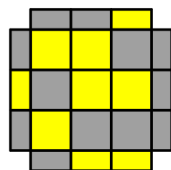


$r' U' r R' U' R U r' U r$

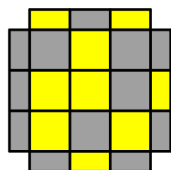
## Chair shapes



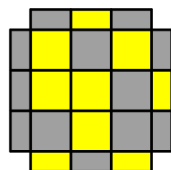
$y R U R' U' R U' R' F' U' F R U R'$   
 $M U R U R' U' R' F R F' M'$



$y' F U R U^2 R' U' R U^2 R' U' F'$   
 $y' F R' F R^2 U' R' U' R U R' F^2$

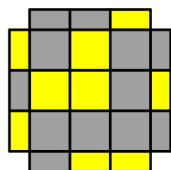


$R U R' U R U^2 R' F R U R' U' F'$

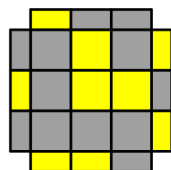


$R' U' R U' R' U^2 R F R U R' U' F'$   
 $y R' F R F' R' F R F' R U R' U' R U R'$

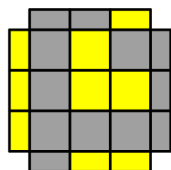
## Small L shapes



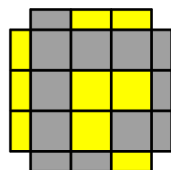
$F R U R' U' R U R' U' F'$



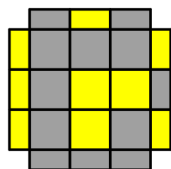
$F' L' U' L U L' U' L U F$   
 $R' U' R' F R F' R' F R F' U R$



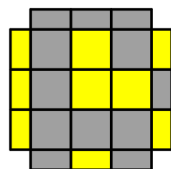
$r U' r^2 U' r^2 U r^2 U' r$



$r' U r^2 U' r^2 U' r^2 U r'$   
 $y' R U^2 R' U' R U' R' F R U R' U' F'$

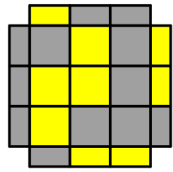


$r' U' R U' R' U R U' R' U^2 r$   
 $y r' U^2 R U R' U' R U R' U r$

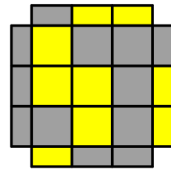


$r U R' U R U' R' U R U^2 r'$   
 $y' r U^2 R' U' R U R' U' R U' r'$

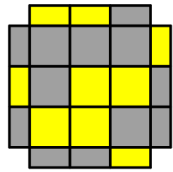
## Z shapes



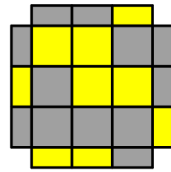
$r' U R' U R U2' r'$



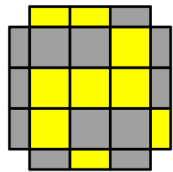
$r' U' R U' R' U2 r$   
 $y2 l' U' L U' L' U2 l$



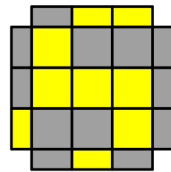
$r' R2 U R' U R U2 R' U M'$



$M' R' U' R U' R' U2 R U' M$   
 $y F R U R' U' F' U F R U R' U' F'$

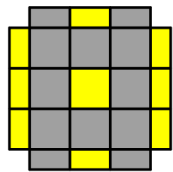


$L F' L' U' L U F U' L'$   
 $F R U R' U' F' R' U' R U' R' U2 R$

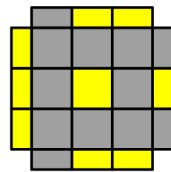


$R' F R U R' U' F' U R$

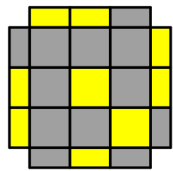
## Point shapes



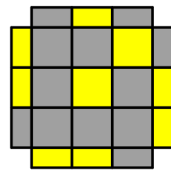
$R U2' R2' F R F' U2' R' F R F'$



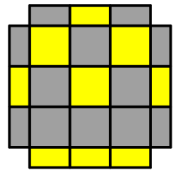
$F R U R' U' F' f R U R' U' f'$   
 $y r U r' U2 R U2' R' U2 r U' r'$



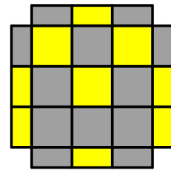
$f R U R' U' f' U' F R U R' U' F'$



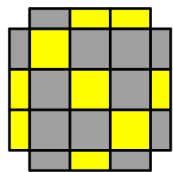
$f R U R' U' f' U F R U R' U' F'$



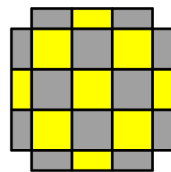
$y R U2' R2' F R F' U2' M' U R U' r'$   
 $r U R' U R U2 r2' U' R U' R' U2 r$



$M U R U R' U' M' R' F R F'$



$R U R' U R' F R F' U2' R' F R F'$



$M U R U R' U' M2' U R U' r'$   
 $r U R' U' M2' U R U' R' U' M'$