

# Anthony Brooks' Permute Last Layer

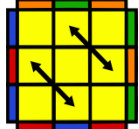
Arranged by Andy Klise

## Permutations of Edges or Corners Only



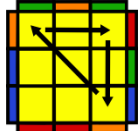
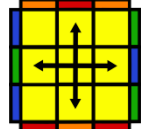
$R^2 U R U R' U' R' U' R' U R'$   
Ub - Probability = 1/18

$R U' R U R U R U' R' U' R^2$   
Ua - Probability = 1/18



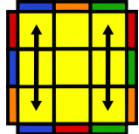
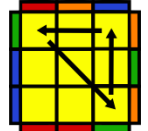
$M' U M^2 U M^2 U M' U^2 M^2$   
Z - Probability = 1/36

$M^2 U M^2 U^2 M^2 U M^2$   
H - Probability = 1/72



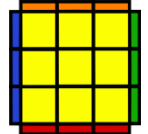
$x R' U R' D^2 R U' R' D^2 R^2$   
Aa - Probability = 1/18

$x R^2 D^2 R U R' D^2 R U' R$   
Ab - Probability = 1/18

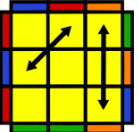


$R' U' R' D' R U' R' D R U R' D' R U R' D R^2$   
E - Probability = 1/36

Solved  
Probability = 1/72

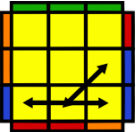
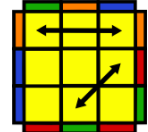


## Swap One Set of Adjacent Corners



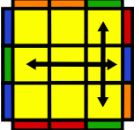
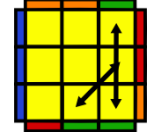
$R U' R' U' R U R D R' U' R D' R' U^2 R'$   
Ra - Probability = 1/18

$R' U^2 R' D' R U' R' D R U R U' R' U' R$   
Rb - Probability = 1/18



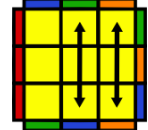
$L' U R' z R^2 U R' U' R^2 U D$   
Ja - Probability = 1/18

$R U R' F' R U R' U' R' F R^2 U' R' U'$   
Jb - Probability = 1/18

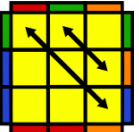


$R U R' U' R' F R^2 U' R' U' R U R' F'$   
T - Probability = 1/18

$R' U' F' R U R' U' R' F R^2 U' R' U' R U R' U R$   
F - Probability = 1/18

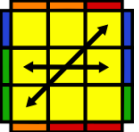
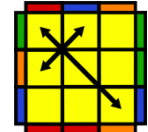


## Swap One Set of Corners Diagonally



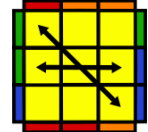
$R' U R' U' y R' F' R^2 U' R' U R' F R F$   
V - Probability = 1/18

$F R U' R' U' R U R' F' R U R' U' R' F R F'$   
Y - Probability = 1/18



$R U R' U R U R' F' R U R' U' R' F R^2 U' R' U^2 R U R'$   
Na - Probability = 1/72

$R' U L' U^2 R U' R' L U L' U^2 R U' L$   
Nb - Probability = 1/72

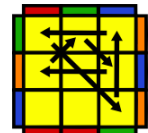


## Double Spins



$R^2 u R' U R' U' R u' R^2 y' R' U R$   
Ga - Probability = 1/18

$R^2 F^2 R U^2 R U^2 R' F R U R' U' R' F R^2$   
Gc - Probability = 1/18



$R U R' D U' R^2 U' R U' R' U R' U R^2 D'$   
Gd - Probability = 1/18

$R' U' R D' U R^2 U R' U R U' R U' R^2 D$   
Gb - Probability = 1/18

