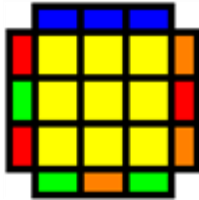
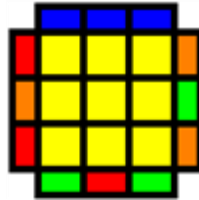


# 3x3x3: PLL



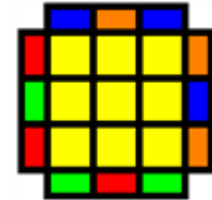
U(a)

R U' R U R U R U' R' U' R2  
 y2 R2 U' R' U' R U R U R U' R  
 y2 M2 U M' U2 M U M2



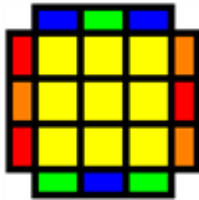
U(b)

R2 U R U R' U' R' U' R' U R'  
 y2 R' U R' U' R' U' R' U R U R2  
 y2 M2 U' M' U2 M U' M2



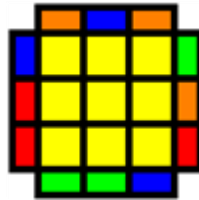
Z

R' U' R U' R U R U' R' U R U R2 U' R'  
 y M2 U M2 U M' U2 M2 U2 M'  
 y M' U M2 U M2 U M' U2 M2



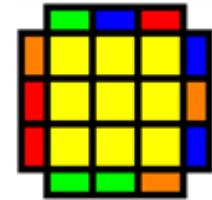
H

M2 U M2 U2 M2 U M2  
 M2 U' M2 U2 M2 U' M2



A(a)

I' U R' D2 R U' R' D2 R2 x'  
 y x' R2 D2 R' U' R D2 R' U R' x



A(b)

x' R2 U2 R D R' U2 R D' R x  
 y x' R U' R D2 R' U R D2 R2 x



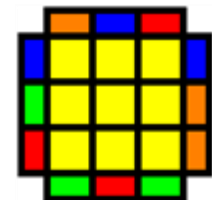
J(a) or L

F2 L' U' R U2 L' U R' U' L2  
 R' U2 R U R' U2 L U' R U L'  
 y R' U L' U2 R U' R' U2 R L



J(b)

R U2 R' U' R U2 L' U R' U' L  
 R U R' F' R U R' U' R' F R2 U' R'



R(a)

L U2 L' U2 L F' L' U' L U L F L2  
 y R U R' F' R U2 R' U2 R' F R U R U2 R'  
 y R U' R' U' R U R D R' U' R D' R' U2 R'



R(b)

R' U2 R U2 R' F R U R' U' R' F' R2  
y R2 F R U R U' R' F' R U2 R' U2 R



T

R U R' U' R' F R2 U' R' U' R U R' F'



F

R' U R U' R2 F' U' F U x R U R' U' R2  
y R' U' F' R U R' U' R' F R2 U' R' U' R U R' U R



G(a)

R2 u R' U R' U' R u' R2 y' R' U R  
y' R U R' U' R' U F R U R U' R' F' U R' U2 R  
y2 l U2 R' r U r' F' D R U' R' D' R U' l'



G(b)

R' U' R y R2 u R' U R U' R u' R2  
y2 R' U2 R U' F R U R' U' R' F' U' R U R U' R'  
y' l U R' D R U R' D' F r U' r' R U2 l'



G(c)

R2 u' R U' R U R' u R2 y R U' R'  
y2 R2 F2 R U2 R U2 R' F R U R' U' R' F R2  
y2 l' U2 L' U l F' U' L U F R' F R



G(d)

R U R' y' R2 u' R U' R' U R' u R2  
y R' F' R F' U' L' U F l' U' L U2 l



E

R2 U R' U' y (R U R' U')2 R U R' F U' F2  
y x' R U' R' D R U R' D' R U R' D R U' R' D' x



Y

F R U' R' U' R U R' F' R U R' U' R' F R F'  
F R' F' R U R' U' R2 U' R U L U' R'



V

R' U R' U' y R' F R2 U' R' U' R' F  
R' U2 R U2 L U' R' U L' U L U' R U L'



N(a)

F' R U R' U' R' F R2 F U' R' U' R U F' R'  
R' U R2 B2 U R' B2 R U' B2 R2 U' R  
R U' R' U l U F U' R' F' R U' R U l' U R'



N(b)

R' U R U' R' F' U' F R U R' U R U y R U R'  
R U' R2 F2 U' R F2 R' U F2 R2 U R'