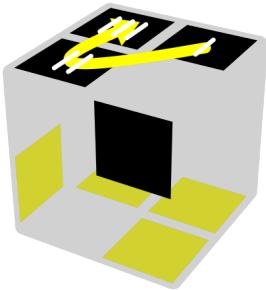


# 2x2 First Face Algorithms w/ Onelook

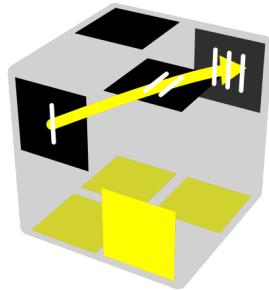
## TCLL+

R' F' R F



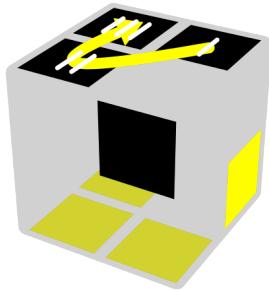
F' R' F R

R U' R' U' R



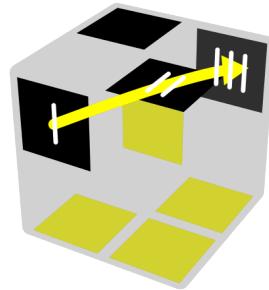
R' U R U R'

F U R' U' z'



z U R U' F'

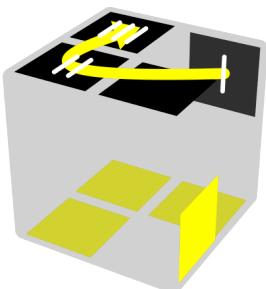
L U' L' U' L



L' U L U L'

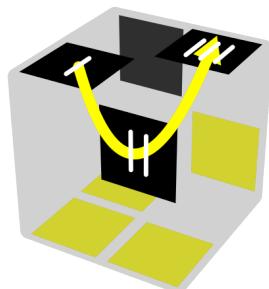
## TCLL-

F' R' F R



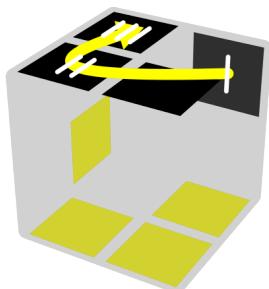
R' F' R F

R' U R U R'



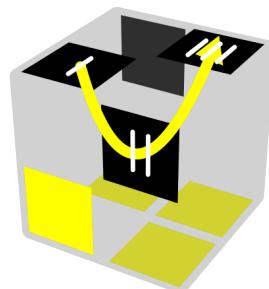
R U' R' U' R

L U L' F' z



z' F L U' L'

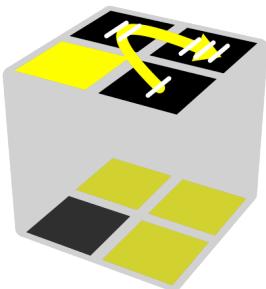
L' U L U L'



L U' L' U' L

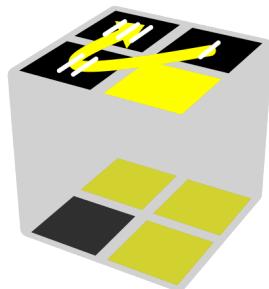
## LS-123

L2 U' L2 U



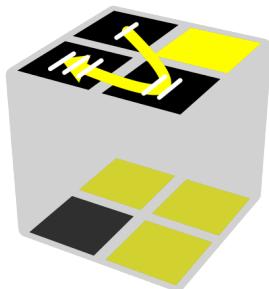
U' L2 U L2'

L2 U' L2



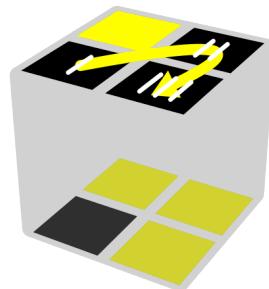
L2 U L2'

L2 U' L2 U'

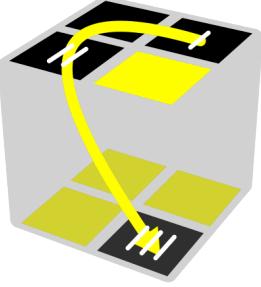
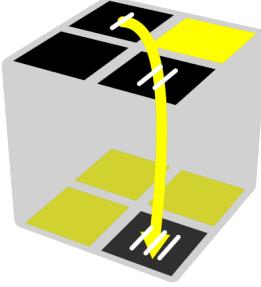
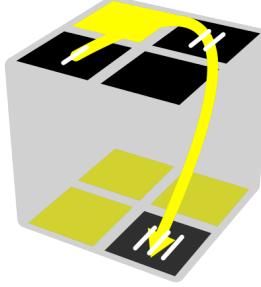
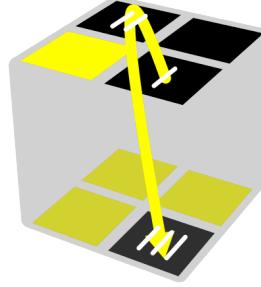
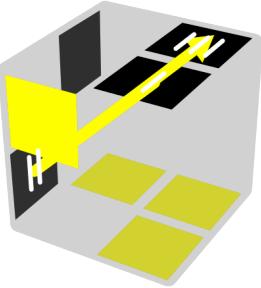
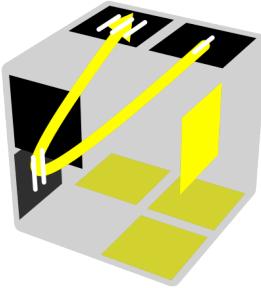
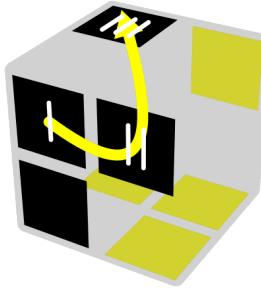
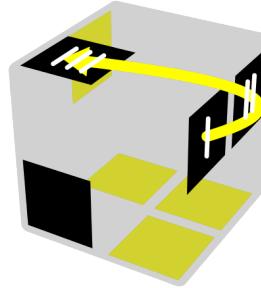
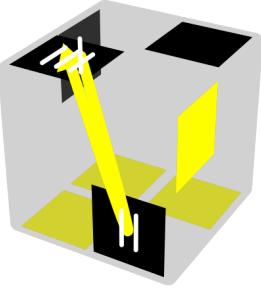
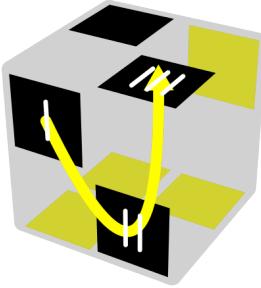
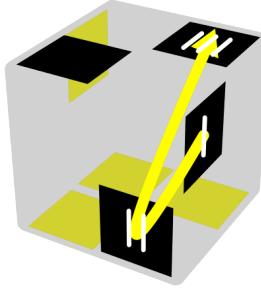
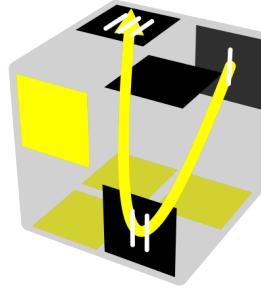


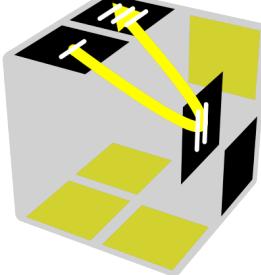
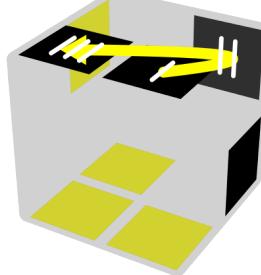
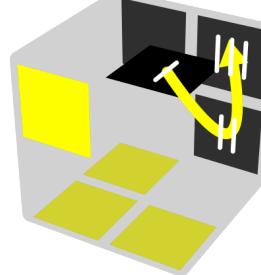
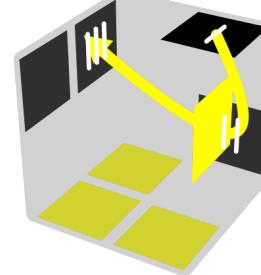
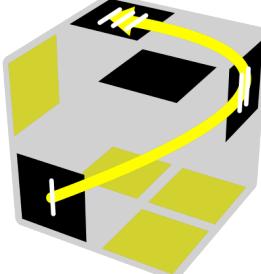
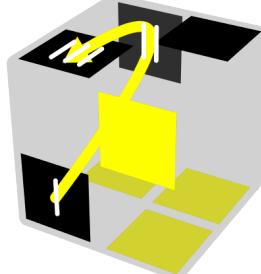
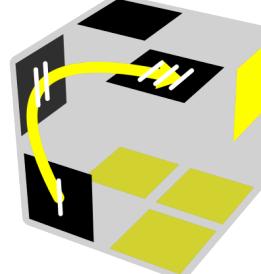
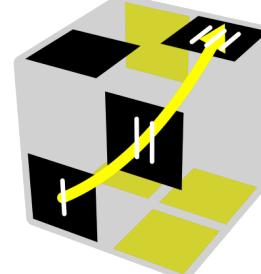
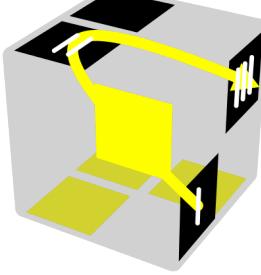
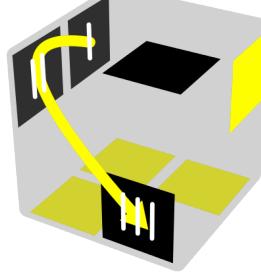
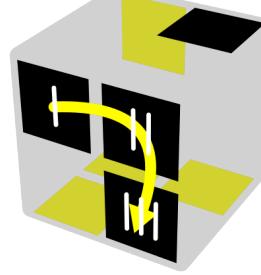
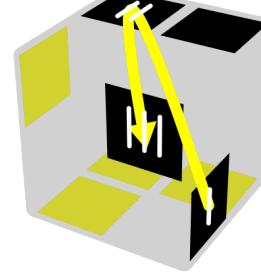
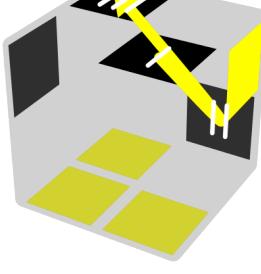
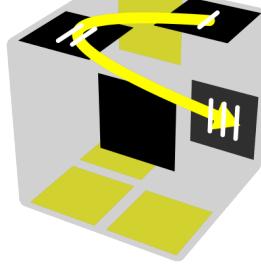
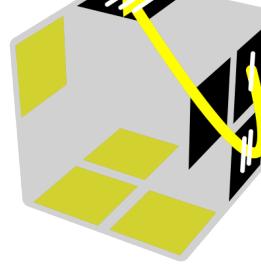
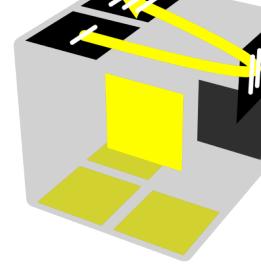
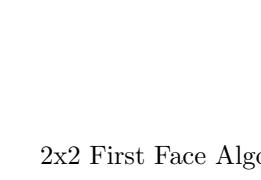
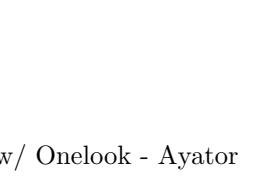
U L2 U L2'

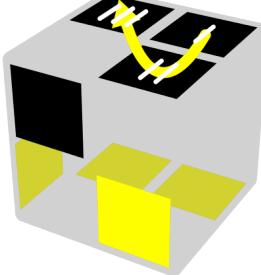
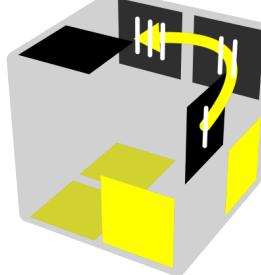
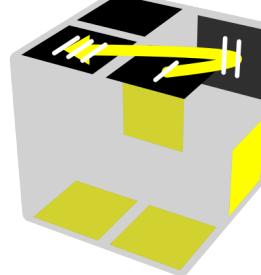
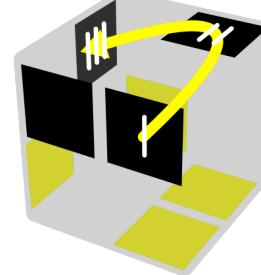
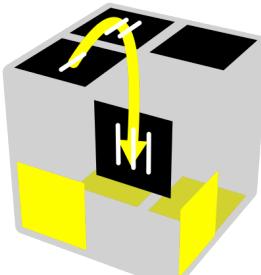
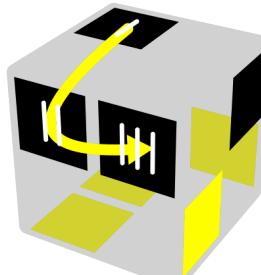
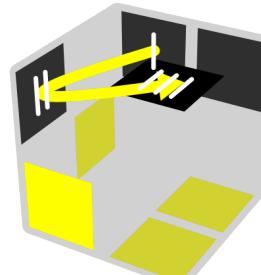
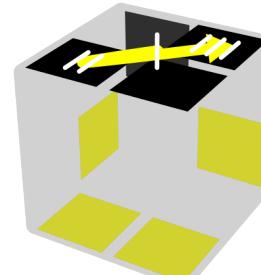
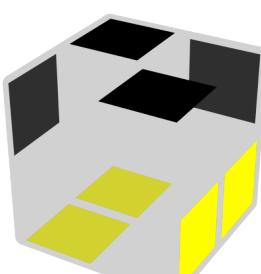
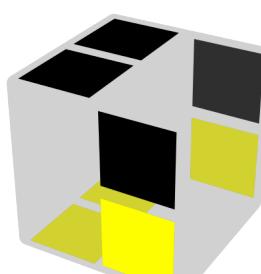
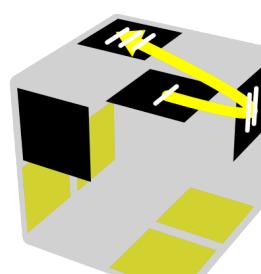
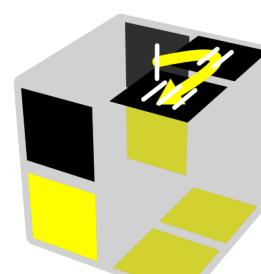
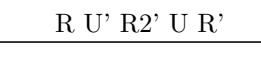
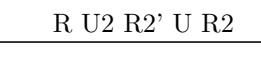
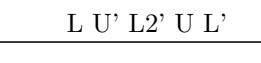
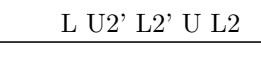
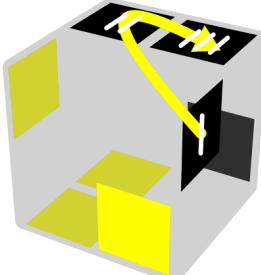
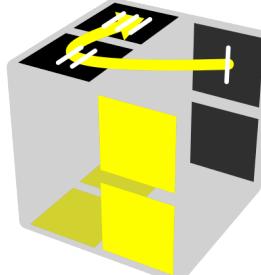
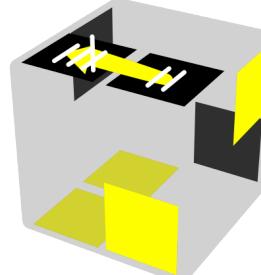
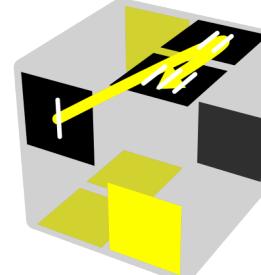
L2 U' L2 U2

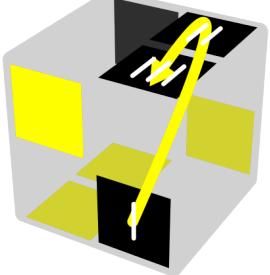
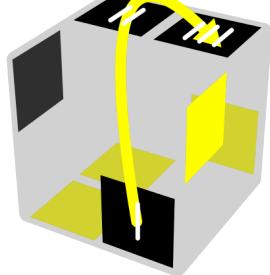
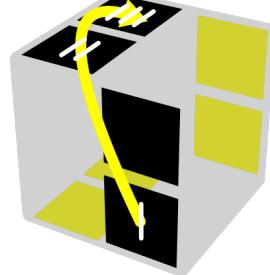
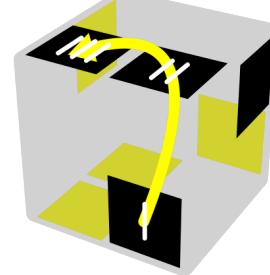
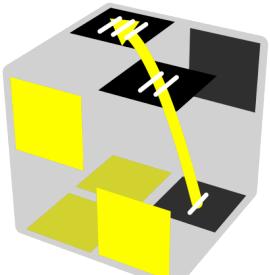
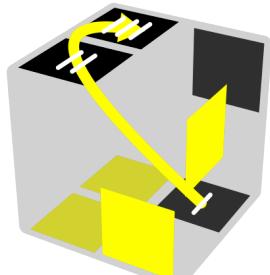
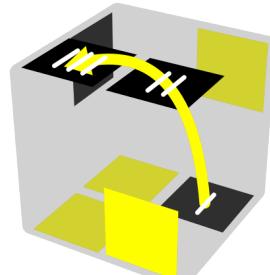
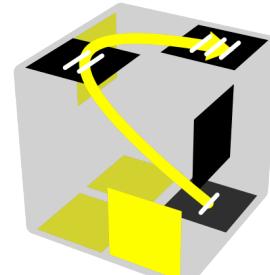
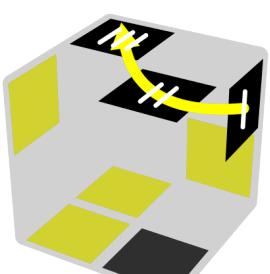
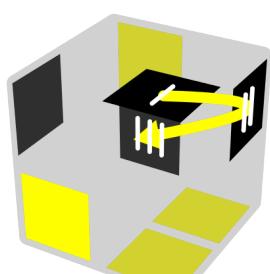
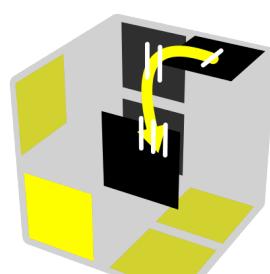
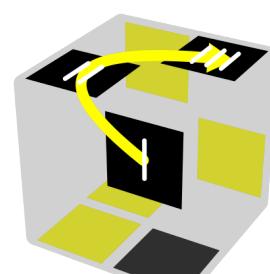
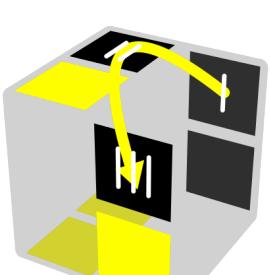
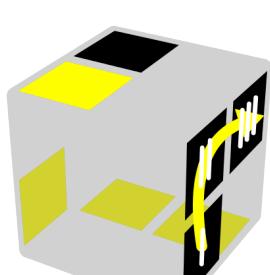
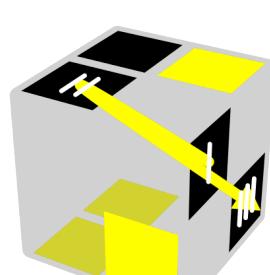
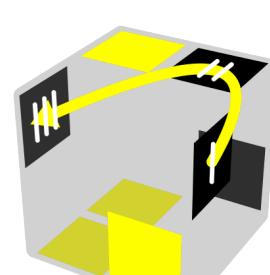
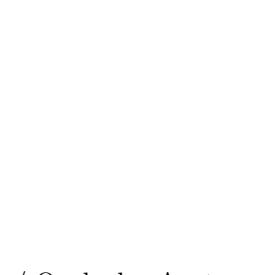


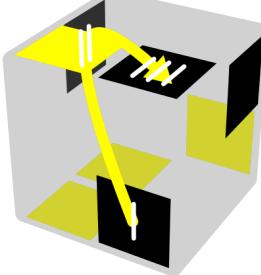
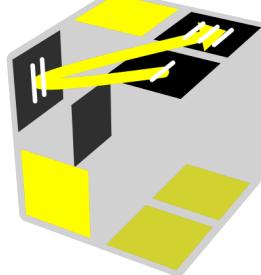
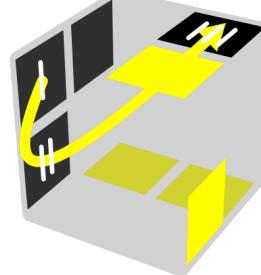
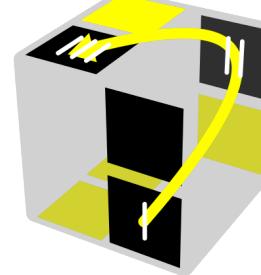
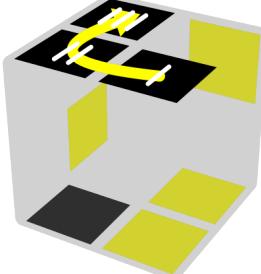
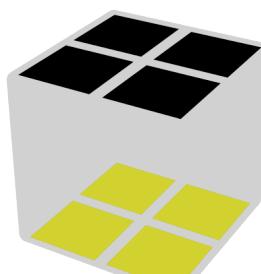
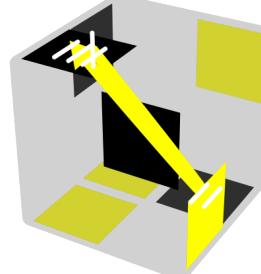
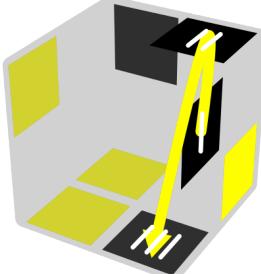
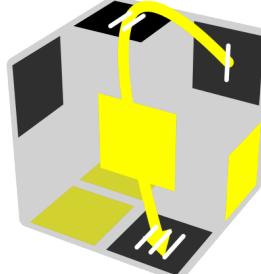
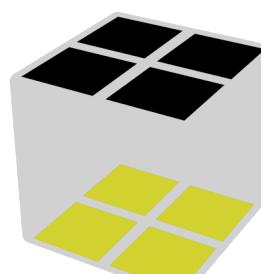
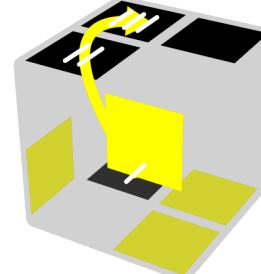
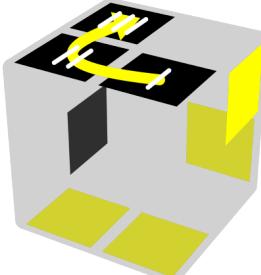
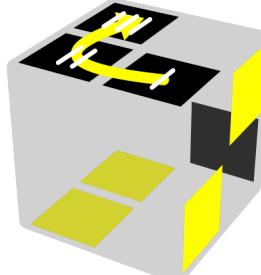
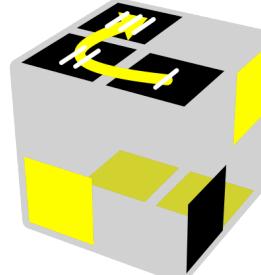
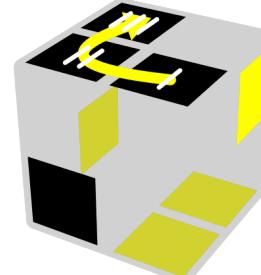
U2 L2 U L2'

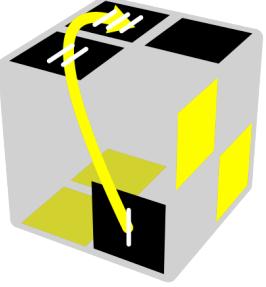
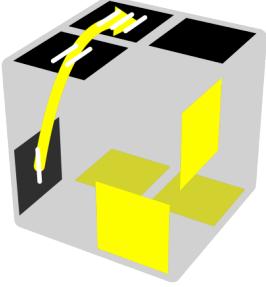
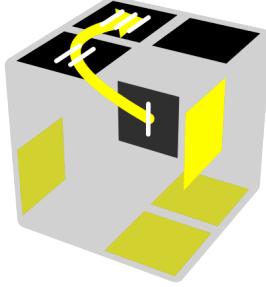
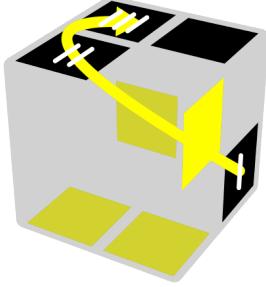
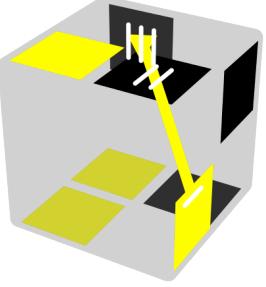
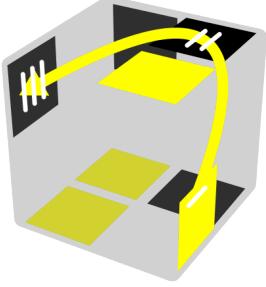
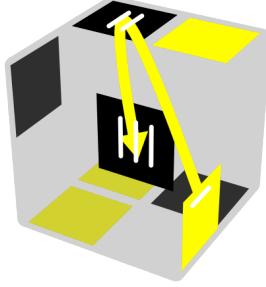
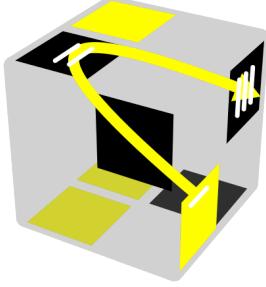
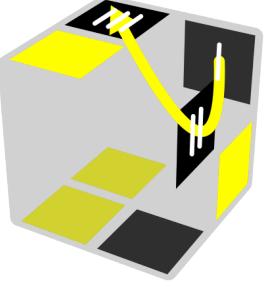
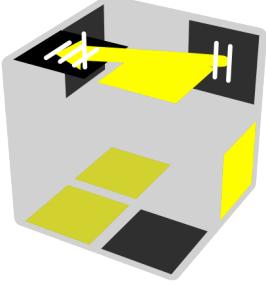
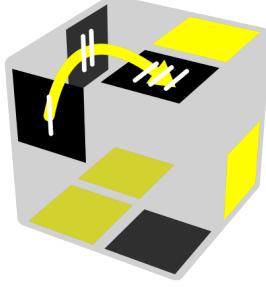
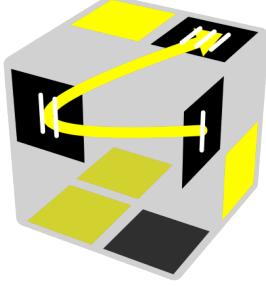
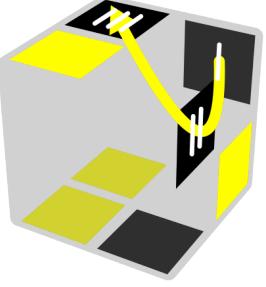
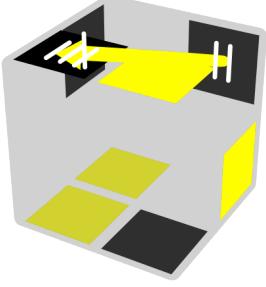
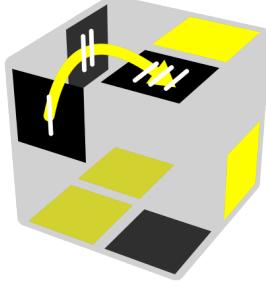
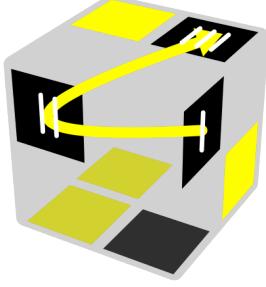
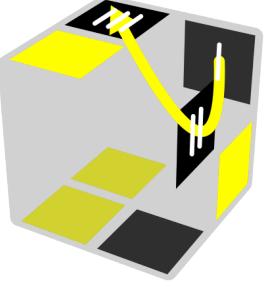
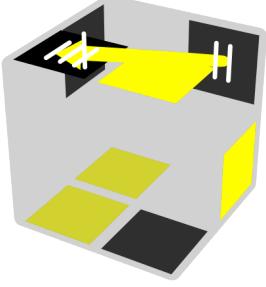
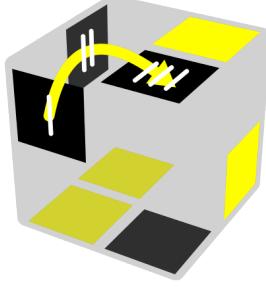
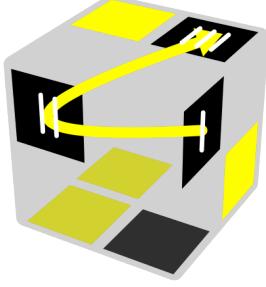
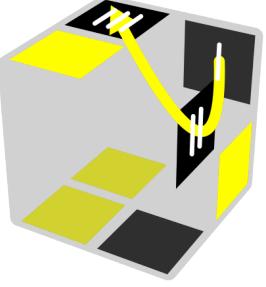
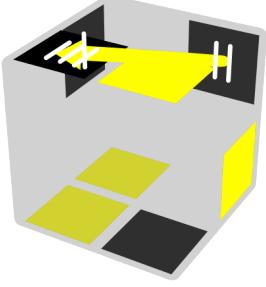
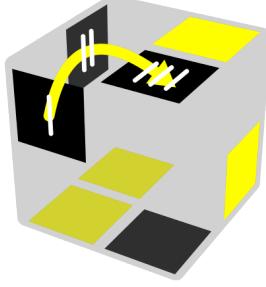
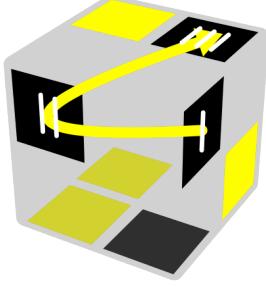
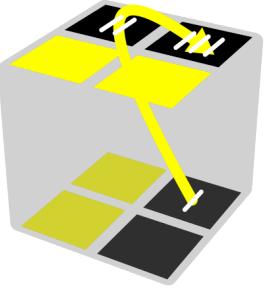
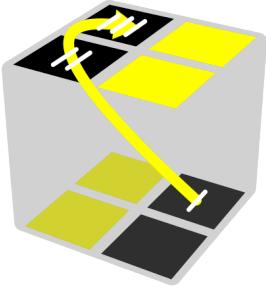
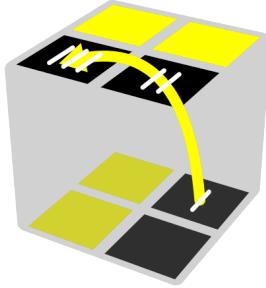
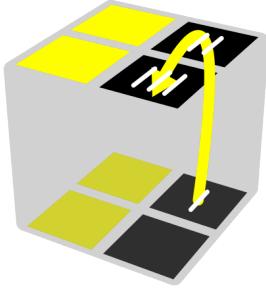
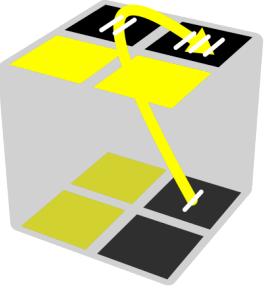
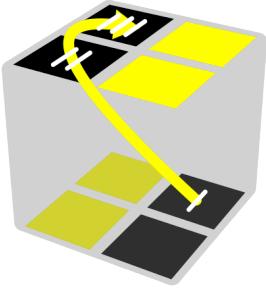
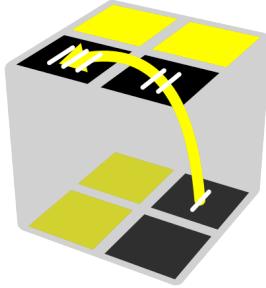
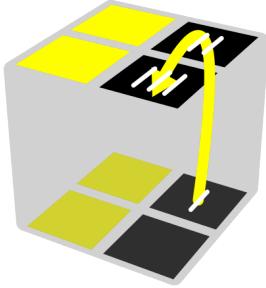
R2 U R2 U'	R2 U R2 U2	R2 U R2 U	R2 U R2
			
<b>LS-456</b>			
L' U' L U	L' U' L	L' U2 L	L' U2 L U'
			
U' L' U L	L' U L	L' U2 L	U L' U2 L
R U' R'	R U' R' U'	R U' R' U2	R U' R' U
			
R U R'	U R U R'	U2 R U R'	U' R U R'

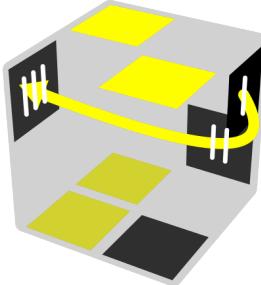
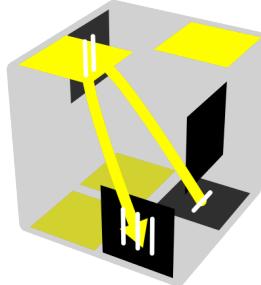
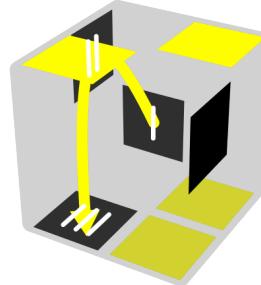
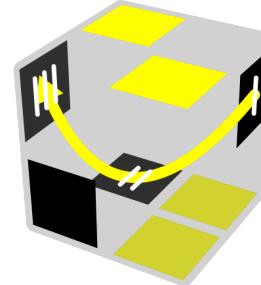
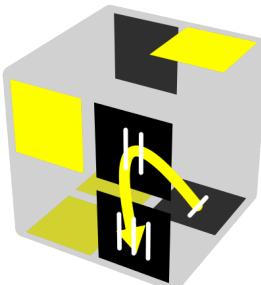
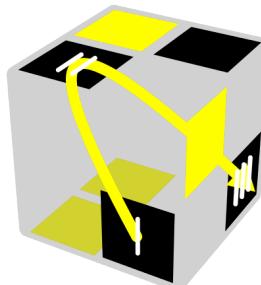
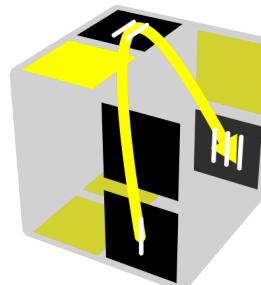
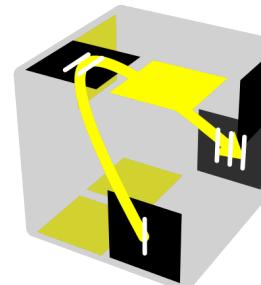
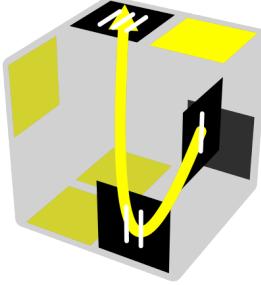
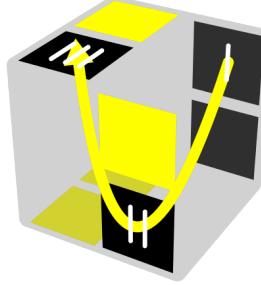
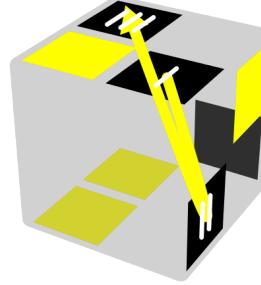
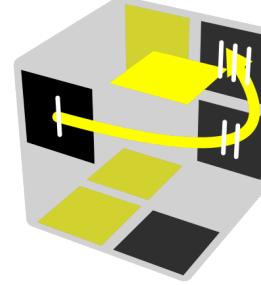
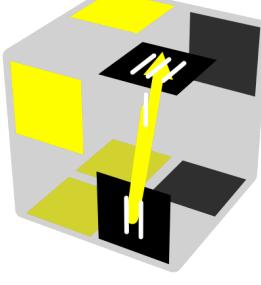
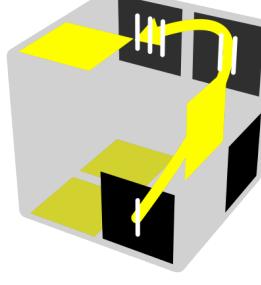
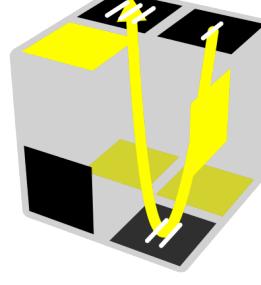
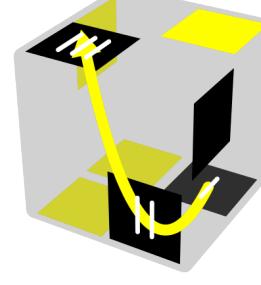
$R' U' R U$ 	$R' U' R$ 	$R' U2 R$ 	$R' U2 R U'$ 
<b>LS-789</b>			
$L' U L$ 	$L' U L U'$ 	$L' U L U2$ 	$L' U L U$ 
$L' U' L$ 	$U L' U' L$ 	$U2 L' U' L$ 	$U' L' U' L$ 
$R U R' U'$ 	$R U2 R' U$ 	$R U2 R'$ 	$R U R'$ 
$R' U R$ 	$R' U R U'$ 	$F R2 F'$ 	$F R F'$ 
<b>DD-Bar</b>			

$L' U2 L F R$ 	$R U R' U2 R$ 	$R' U2 R B L$ 	$L U L' U2 L$ 
$R' F' L' U2 L$ $R U2 R' F' L'$ 	$R' U2 R U' R'$ $R' U' R U2 R'$ 	$L' B' R' U2' R$ $L' U' L U2 L'$ 	$L' U2 L U' L'$ $L U2 L' B' R'$ 
$L F R U2' R'$ $R U' R2 U R'$ 	$R U2' R' U R$ $R2 U' R2 U2 R'$ 	$L U2 L' U L$ $L U' L2 U L'$ 	$R B L U2 L'$ $L2 U' L2 U2 L'$ 
$R U' R2' U R'$ 	$R U2 R2' U R2$ 	$L U' L2' U L'$ 	$L U2' L2' U L2$ 
<b>UD-1MoveD</b>			
$R U$ 	$R$ 	$R U'$ 	$R U2$ 
$U' R'$	$R'$	$U R'$	$U2' R'$

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

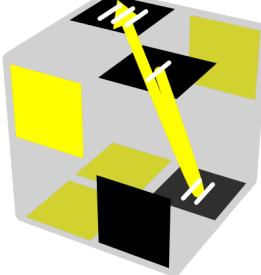
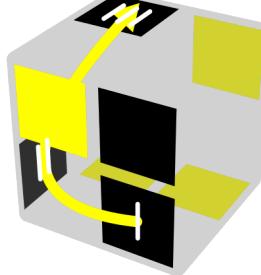
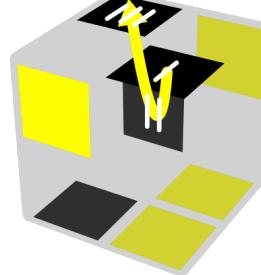
R2 U' R U'	L' U' L U L'	F' U R U' R'	R2 U' R
			
U R' U R2	L U' L' U L	R U R' U' F	R' U R2
<b>UD-3MoveD</b>			
L2 U' L' U L' B'	R U' R2	R U' R2 U'	
			
B L U' L U L2'	R2 U R'	U R2 U R'	
R' U R2 U			
			
U' R2' U' R	R2' U' R		
R D R'	R D R' D'	R D R' D2	R D R' D
			
R D' R'	D R D' R'	D2 R D' R'	D' R D' R'

$R' D' R D$ 	$R' D' R$ 	$R' D' R D'$ 	$R' D' R D2$ 
$D' R' D R$ 	$R' D R$ 	$D R' D R$ 	$D2 R' D R$ 
$R' U R' U2$ 	$R' U R' U$ 	$R' U R'$ 	$R' U R' U'$ 
$U2 R U' R$ 	$U' R U' R$ 	$R U' R$ 	$R U' R U2$ 
$R U' R U$ 	$R U' R$ 	$R U' R U'$ 	$R U' R U2$ 
$U' R' U R'$ 	$R' U R'$ 	$U R' U R'$ 	$U2 R' U R'$ 
<b>UU-2Up</b>			
$R2 U$ 	$R2$ 	$R2 U'$ 	$R2 U2$ 
$U' R2'$ 	$R2'$ 	$U R2'$ 	$U2' R2'$ 

R2 U R' U R	R2 U' R U' R'	L2 U' L U' L'	L2 U L' U L
			
R' U' R U' R2'	R U R' U R2	L U L' U L2	L' U' L U' L2
<b>UU-1Up</b>			
R' U2 R'	R' U R' U' R	R2 U R	R2 U R U'
			
R U2' R	R' U R U' R	R' U' R2	U R' U' R2
R2 U' R' U	R2 U' R'	R U' R U R'	R U2 R
			
U' R U R2'	R U R2'	R U' R' U R'	R' U2' R'
R' U' R' U'	R' U R' U2 R	R' F' R F'	R' U' R'
			
U R U R	R' U2 R U' R	F R' F R	R U R

$R U R$ 	$R U R' F$ 	$R U' R U2 R'$ 	$R U' R U2 R' U'$ 
$R' U' R'$ $R U' R' U R2$ 	$F' R U' R'$ $L' U' L F L2$ 	$R U2 R' U R'$ $L' U' L F L2 U'$ 	$U R U2 R' U R'$ $L' U' L F L2 U2$ 
$R2' U' R U R'$ $F' R' F R' U2$ 	$L2 F' L' U L$ $F' R' F R'$ 	$U L2 F' L' U L$ $F' R' F R'$ 	$U2 L2 F' L' U L$ $R' U R' R2$ 
$U2' R F' R F$ 	$U' R F' R F$ 	$R F' R F$ 	$R2 U R' U' R$ 
<b>UU-0Up</b>			
$R' U2 R2$ 	$R U2 R2 U$ 	$R U2 R2$ 	$R' U2 R2 U$ 
$R2' U2' R$ 	$U' R2 U2' R'$ 	$R2 U2' R'$ 	$U' R2' U2' R$ 

$R' U R U' R U R'$ 	$L2 U' L2 U2 L$ 	$L U' L' U L' U' L$ 	$R' U R U' R U R' U$ 
$R U' R' U R' U' R$ $L2 U' L' U L' B' L$ 	$L' U2 L2 U L2$ $R U2 R' U R'$ 	$L' U L U' L U L'$ $R2 U R U' R$ 	$U' R U' R' U R' U' R$ $R U2 R' U R' U2$ 
$L' B L U' L U L2$ $L2 U' L' U L'$ 	$R U' R U2' R'$ $L' U2 L U' L$ 	$R' U R' U' R2$ $L2 U L U' L F L'$ 	$U2 R U' R U2' R'$ $L' U2 L U' L U2$ 
$L U' L U L2$ 	$L' U L' U2 L$ 	$L F' L' U L' U' L2$ 	$U2' L' U L' U2 L$ 
$R U2 R' U' R' U2$ 	$R U2 R' U' R' U$ 	$R U2 R' U' R'$ 	$R' U' R2$ 
$U2 R U R U2' R'$ 	$U' R U R U2' R'$ 	$R U R U2' R'$ 	$R2' U R$ 

R U' R' U R' 	F' U' R U R' 	L U' L' U L' 	
R U' R U R' R' U R U' R	R U' R' U F F U L' U' L	L U' L U L'	
<b>DD-NoBar</b>			