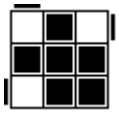
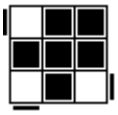
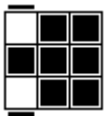
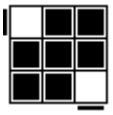
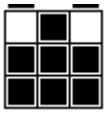
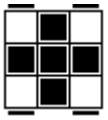
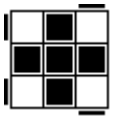
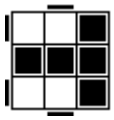
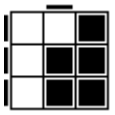
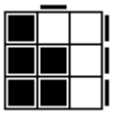
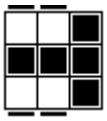
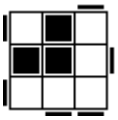
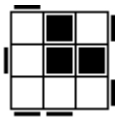
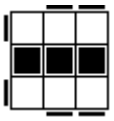
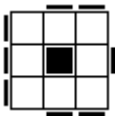
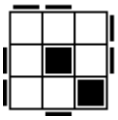
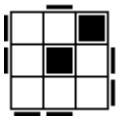
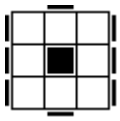
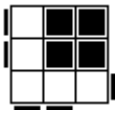
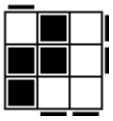
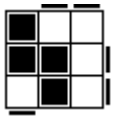
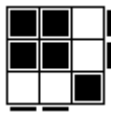
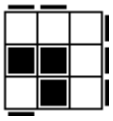
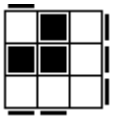
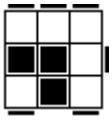
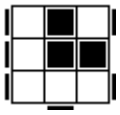
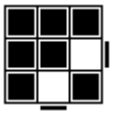
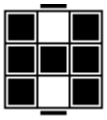
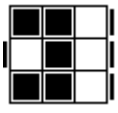
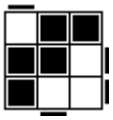
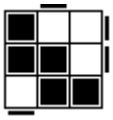
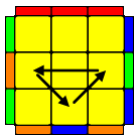
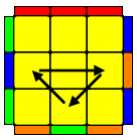
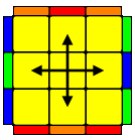
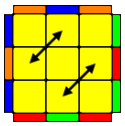
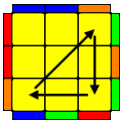
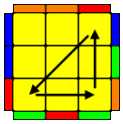
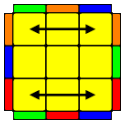
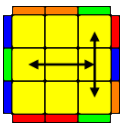
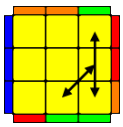
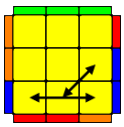
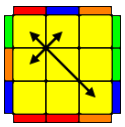
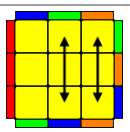
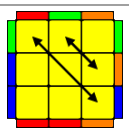
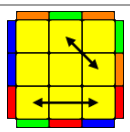
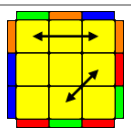
魔方小站 CFOP 公式表 OLL 按小站顺序分组 (2014/8/26 更新)	1-1	1-2	1-3	1-4	1-5	1-6	1-7	2-1	2-2
									
	R' U2 R U R' U R	R U' U' R' U' R U' R'	(r U R' U') (r' F R F')	F' (r U R' U') (r' F R)	(R2 D') (R U' U') (R' D) (R U' U' R)	(R U U R' U') (R U R' U') (R U' R')	R U' U' (R2' U') (R2 U') R2' U2 R	F (R U R' U') F'	f (R U R' U') f'
2-3	2-4	2-5	2-6	2-7	3-1	3-2	3-3	3-4	3-5
									
B' U' (R' U R B)	(R U R' U') (R' F R F')	F (RU R' U')2 F'	F' (L' U' L U)2 F	f (RU R' U')2 f'	(F R U R' U' F') (f R U R' U' f')	(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')	(R U' U') (R2' F R F') U2 (R' F R F')	(r' U2) (R U R' U) r
3-6	3-7	3-8	4-1	4-2	4-3	4-4	4-5	4-6	4-7
									
(r U' U') (R' U' R U' r')	r U R' U R U U r'	r' U' R U' R' U2 r	F (R U' R' U') (R U R' F')	R U' U' (R2' F R F')(R U' U' R')	(R B') (R2 F) (R2 B) (R2 F') R	(R' F) (R2 B') (R2 F') (R2 B) R'	r' U2 (R U R' U') (R U R' U) r	r U (R' UR U')2 U' r'	(R U R' U) (R' F R F') U2 (R' F R F')
4-8	4-9	5-1	5-2	5-3	5-4	5-5	5-6	5-7	5-8
									
F (R U R' U) y' (R' U2) (R' F R F')	(M 下 U) (R U R' U') M 上 (R' F R F')	(R U R' U') (R' F) (R2U R' U') F'	(R U R' U) (R' F R F') (R U' U' R')	(r U R' U') (r' R) (U R U' R')	(R U R' U') r R' (U R U' r')	(R' U') (R' F R F') (U R)	(R U R' U') x D' (R' U R) E'	(R U R' U) (R U' R' U') (R' F R F')	(R' U' R U') (R' U R U) (l U' R' U)
5-9	5-10	6-1	6-2	6-3	6-4	6-5	6-6	6-7	6-8
									
(F R U R' U' F') U (F R U R' U' F')	(r U R' U) (R' F R F') R U2 r'	(R U) (B' U') (R'URB R')	(R' U' F) (U R U') (R' F' R)	R' F (R U R' U') F' (U R)	L F' (L' U' L U) F (U' L')	(R U R' U R U2 R') (F R U R' U' F')	(R' U' R U' R' U2 R) (F R U R' U' F')	(r' U2 R U R' U r) (R U2 R' U' R U' R')	(r U2 R' U' R U' r') (R' U2 R U R' U R)
7-1	7-2	7-3	7-4	7-5	7-6	7-7	7-8		
(r U r') (R U R' U') (r U' r')	(l' U' l) (L' U' L U) (l' U l)	R' F (R U R' F' R) y' (R U' R')	F (U R U') (R2' F') (R U R U' R')	(R' U' R U') (R' U) y' (R' U R B)	(r U r') (UR U' R')2 (r U' r')	R' F (U R U') (R2' F') (R2 U R' U' R)	(r' R U) (R U R' U') (r2 R2') (U R U' r')		

魔方小站 CFOP 公式表 PLL

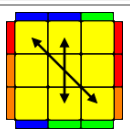
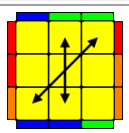
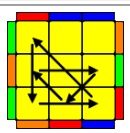
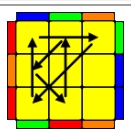
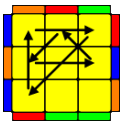
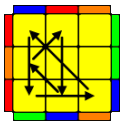
第 1 组 简版 CFOP 里面的 7 个 PLL 公式

			
1-1 (R U’ R) U (R U R U’) (R’ U’ R2)	**1-2** (R2’ U) (R U R’ U’) (R’ U’) (R’ U R’)	**1-3** M2 U M2 U2 M2 U M2	**1-4** (M2 U M2 U) (M 上 U2) (M2 U2) (M 上 U2)
			
1-5 x’ R2 D2 (R’ U’ R) D2 (R’ U R’) x	**1-6** x’ (R U’ R) D2 (R’ U R) D2 R2 x	**1-7** (R2 U R’ U’) y (R U R’ U’)2 (R U R’) y’ (R U’ R2)	

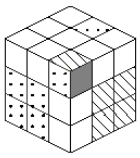
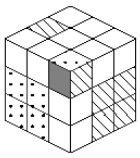
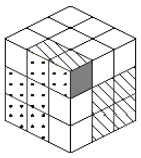
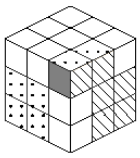
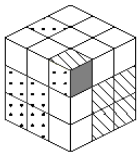
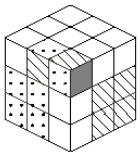
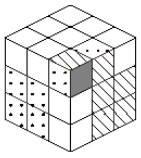
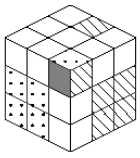
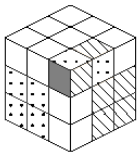
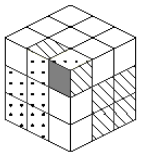
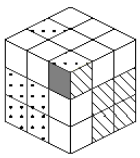
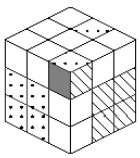
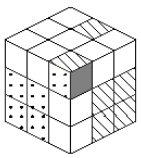
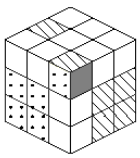
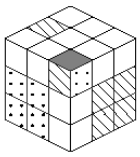
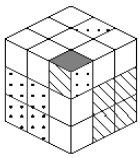
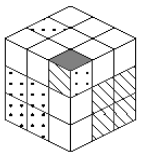
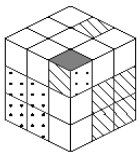
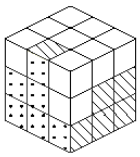
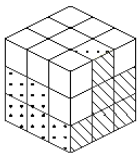
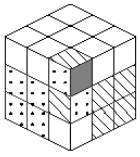
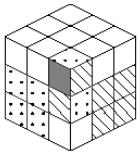
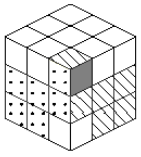
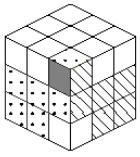
第 2 组 8 个关键的 PLL 公式

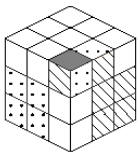
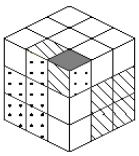
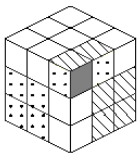
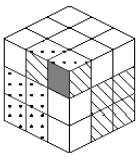
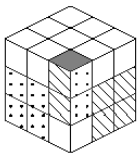
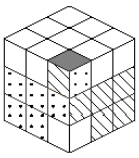
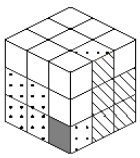
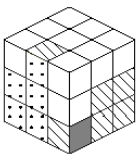
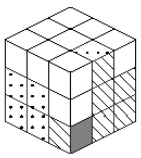
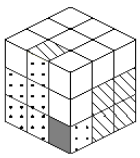
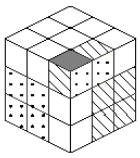
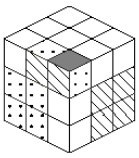
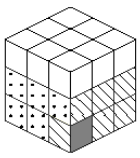
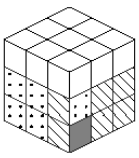
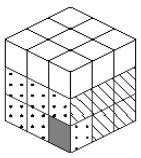
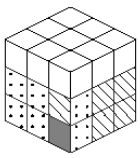
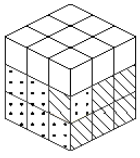
			
2-1 (R U R’ U’) (R’ F R2 U’ R’ U’) (R U R’ F’)	**2-2** (R U R’ F’) (R U R’ U’) (R’ F R2 U’ R’ U’)	**2-3** z (U’ R D’) (R2 U R’ U’) (R2 U) D R’	**2-4** F (R U’ R’ U’) (R U R’ F’) (R U R’ U’) (R’ F R F’)
			
2-5 U’ (R’ U R U’) R2’ b’ x (R’ U R) y’ (R U R’ U’ R2)	**2-6** (R’ U R’ d’) (R’ F’) (R2 U’ R’ U) (R’ F R F)	**2-7** (R U’ U’) (R’ U2) (R B’ R’ U’) (R U R B) R2’ U	**2-8** (R’ U2) (R U’ U’) (R’ F R U R’ U’) (R’ F’ R2 U’)

第 3 组 最后 6 个较难的 PLL 公式

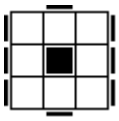
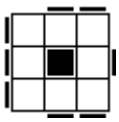
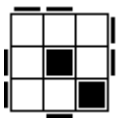
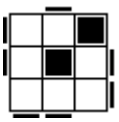
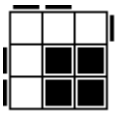
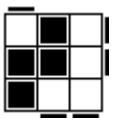
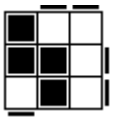
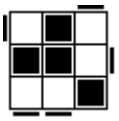
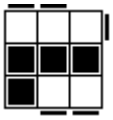
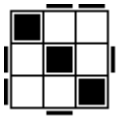
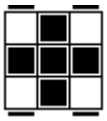
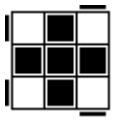
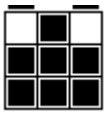
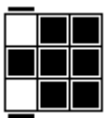
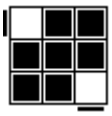
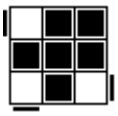
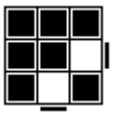
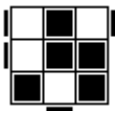
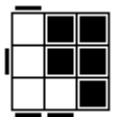
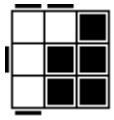
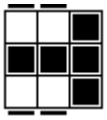
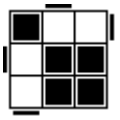
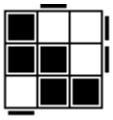
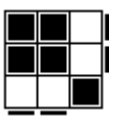
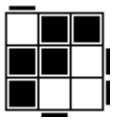
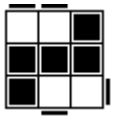
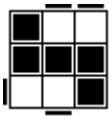
			
3-1 z (R’ U R’) z’ (R U2 L’ U R’) z (U R’) z’ (R U2 L’ U R’)	**3-2** z (U’ R D’) (R2 U R’ U’) z’ (R U R’) z (R2 U R’) D R’	**3-3** (R2’ u’) (R U’ R) U (R’ u R2’) y (R U’ R’)	**3-4** (R U R’) y’ (R2’ u’) (R U’ R’ U) (R’ u R2)
			
3-5 (R2’ u R’) (U R’ U’) (R u’ R2’) y’ (R’ U R)	**3-6** (R’ d’ F) (R2’ u R’) U (R U’ R) u’ R2		

魔方小站 CFOP 公式表 F2L

第 1 组：四种基本情况			
 (R U R')	 y' (R' U' R) 或 F' U' F	 y' U' (R' U R) 或 F R' F' R	 U R U' R' 或 R' F R F'
第 2 组六种情况：可转化为第 1 和第 2 种基本情况			
 U' (R U R' U) (R U R')	 d (R' U2 R) d' (R U R')	 U' (R U' R' U) (R U R')	
 U y' (R' U' R U') (R' U' R)	 U' (R U2' R') d (R' U' R)	 d (R' U R U') (R' U' R)	
第 3 组四种情况：可转化为第 3 和第 4 种基本情况			
 U' (R U2' R') U2 (R U' R')	 (U' R U R') U2 (R U' R')	 d (R' U2 R) U2' (R' U R)	 d (R' U' R) U2' (R' U R)
第 4 组四种情况：角棱都在顶层并分开，并且角块白色朝上			
 y' U' (R' U2 R) U' (R' U R)	 U R U2 R2' (F R F') 或 U (R U2 R') U (R U' R')	 U2 (R U R' U) (R U' R') 或 (R U' R') U2 (R U R')	 y' U2 (R' U' R U') (R' U R) 或 y' (R' U R) U2 (R' U' R)
第 5 组两种情况：远切回回接孩子放学			
 U (R U' R') U' (F' U F)	 U' (F' U F) U (R U' R')		
第 6 组四种情况：棱块在第二层，角块在顶层并且白色朝侧面			
 d (R' U' R) d' (R U R')	 U' (R U R') d (R'U' R)	 U' (R U2' R') U (R U R') 或 d (R' U R) U2 (R' U R)	 (U' R U' R') U2 (R U' R')
第 7 组两种情况：藏棱、角块越过棱块头顶转 180°			

 (R U2’ R’) U’ (R U R’)	 y’ (R’ U2 R) U (R’ U’ R)		
第 8 组两种情况：藏棱、角块越过棱块头顶转 90°			
 (R U’ R’ U) d (R’ U’ R)	 y’ (R’ U R U’) d’ (R U R’) 或 M U L F’ L’ U’ M’		
第 9 组两种情况：角棱一上一下，并且角块白色朝上			
 (R U’ R’) d (R’ U R)	 (R U R’ U’)2 (R U R’) 或 (U R U’ R’)3		
第 10 组四种情况：棱块在顶层，角块在底层且白色在侧面			
 (R U’ R’ U) (R U’ R’)	 y’ (R’ U R) U’ (R’ U R) 或 (R U R’ U’) (F R’ F’ R)	 (R U R’U’) (R U R’)	 y L’ U’ L U L’ U’ L 或 y’ (R’ U’ R U) (R’ U’ R)
第 11 组两种情况：角棱在顶层挨着，并且侧面同色；角块白色朝上			
 (R U R’) d (R’ U R U’) (R’ U R)	 U2 R2 U2 (R’ U’ R U’) R2 或 (R U R’ U’) U’ (R U R’ U’) (R U R’)		
第 12 组五种情况：角棱对都在下面两层，并且在它们自己的槽位里			
 (R U’ R’ U) (R U2’ R’) U (R U’ R’)	 (R U’ R’ U) d (R’ U’ R U’) (R’ U R)	 (R U’ R’) U’ (R U R’) U2 (R U’ R’)	 (R U’ R’ U’) (R U’ R’) U (F’ U’ F)
 (R U’ U’ R’ U)2 y’ (R’ U’ R)			

按传统 OLL 公式顺序的 OLL 公式表

1	2	3	4	5	6	7	8	9	10
									
(R U’ U’) (R2’ F R F’) U2 (R’ F R F’)	(F R U R’ U’ F’) (f R U R’ U’ f’)	(f RU R’ U’ f’) U’ (F R U R’ U’ F’)	(f R U R’U’ f’) U (F R U R’ U’F’)	(r’ U2) (R U R’ U) r	(r U’ U’) (R’ U’ R U’ r’)	r U R’ U R U U r’	r’ U’ R U’ R’ U2 r	(R U R’ U’) (R’ F) (R2U R’ U’) F’	(R U R’ U) (R’ F R F’) (R U’ U’ R’)
11	12	13	14	15	16	17	18	19	20
									
(r U R’ U) (R’ F R F’) R U2 r’	(F R U R’ U’ F’) U (F R U R’ U’ F’)	F (U R U’) (R2’ F’) (R U R U’ R’)	R’ F(R U R’ F’ R) y’ (R U’ R’)	(l’ U’ l) (L’ U’ L U) (l’ U l)	(r U r’) (R U R’ U’) (r U’ r’)	(R U R’ U) (R’ F R F’) U2 (R’ F R F’)	F (R U R’ U) y’ (R’ U2) (R’ F R F’)	(M下 U) (R U R’ U’) M上 (R’ F R F’)	(r’ R U) (R U R’ U’) (r2 R2’) (U R U’ r’)
21	22	23	24	25	26	27	28	29	30
									
(R U U R’U’) (R U R’ U’) (R U’ R’)	R U’ U’ (R2’ U’) (R2 U’) R2’ U2 R	(R2 D’) (R U’ U’) (R’ D) (R U’ U’ R)	(r U R’ U’) (r’ F R F’)	F’ (r U R’ U’) (r’ F R)	R U’ U’ R’ U’ R U’ R’	R’ U2 R U R’ U R	(r U R’ U’) (r’ R) (U R U’ R’)	(r U2 R’ U’ R U’ r’) (R’ U2 R U R’ U R)	(r’ U2 R U R’ U r) (R U2 R’ U’ R U’ R’)
31	32	33	34	35	36	37	38	39	40
									
(R’ U’ F) (U R U’) (R’ F’ R)	(R U) (B’ U’) (R’ U R B R’)	(R U R’ U’) (R’ F R F’)	(R U R’ U’) x D’ (R’ U R) E’	R U’ U’ (R2’ F R F’) (R U’ U’ R’)	(R’ U’ R U’) (R’ U R U) (l U’ R’ U)	F (R U’ R’ U’) (R U R’ F’)	(R U R’ U) (R U’ R’ U’) (R’ F R F’)	L F’ (L’ U’ L U) F (U’ L’)	R’ F (R U R’ U’) F’ (U R)
41	42	43	44	45	46	47	48	49	50
(R U R’ U R U2 R’) (F R U R’ U’ F’)	(R’ U’ R U’ R’ U2 R) (F R U R’ U’ F’)	B’ U’ (R’ U R B)	f (R U R’ U’) f'	F (R U R’ U’) F’	(R’ U’) (R’ F R F’) (U R)	F’ (L’ U’ L U)2 F	F (R U R’ U’)2 F’	(R B’) (R2 F) (R2 B) (R2 F’) R	(R’ F) (R2 B’) (R2 F’) (R2 B) R’
51	52	53	54	55	56	57	公式 34 里的 E’ 的意思是：从上往下看时，顺时针转水平的中间层。国际规定 E 和 D 顺逆方向一致。	对标记有问题请到最后页去看标记说明。	
f (RU R’U’)2 f’	(R’ U’ R U’) (R’ U) y’ (R’ U R B)	r’ U2 (R U R’ U’) (R U R’ U) r	r U (R’URU’)2 U’ r’	R’ F (U R U’) (R2’ F’) (R2 U R’ U’ R)	(r U r’) (UR U’R’)2 (r U’ r’)	(R U R’ U’) r R’ (U R U’ r’)			

以下公式标记解释图为魔方吧小白同学原创，经过魔方小站部分修改。

魔方的某个面

U 上层作顺时针90 度转(即转一下)

U' 上层作逆时针90度转(即转一下)

U2 上层作顺时针180度转而逆时针180度实际结果与顺时针是一样的!

R 右面作顺时针90度转(即转一下)

R' 右面作逆时针90度转(即转一下)

R2 右面作顺时针180度转而逆时针180度实际结果与顺时针是一样的!

F 前面作顺时针90度转(即转一下)

F' 前面作逆时针90度转(即转一下)

F2 前面作顺时针180度转而逆时针180度实际结果与顺时针是一样的!

D 底层作顺时针90 度转(即转一下)

D' 底层作逆时针90度转(即转一下)

D2 底层作顺时针180度转而逆时针180度实际结果与顺时针是一样的!

L 左面作顺时针90度转(即转一下)

L' 左面作逆时针90度转(即转一下)

L2 左面作顺时针180度转而逆时针180度实际结果与顺时针是一样的!

B 后面作顺时针90度转(即转一下)

B' 后面作逆时针90度转(即转一下)

B2 后面作顺时针180度转而逆时针180度实际结果与顺时针是一样的!

整个魔方

x 整个魔方作一个R方向90度转

x' 整个魔方作一个R'方向90度转

x2 整个魔方作一个R方向180度转

y 整个魔方作一个U方向90度转

y' 整个魔方作一个U'方向90度转

y2 整个魔方作一个U'方向180度转

z 整个魔方作一个F方向90度转

z' 整个魔方作一个F'方向90度转

z2 整个魔方作一个F方向180度转

魔方双层转

u 上面两层作顺时针90 度转(即转一下)

u' 上面两层作逆时针90度转(即转一下)

u2 上面两层作顺时针180度转而逆时针 180度实际结果与顺时针是一样的!

r 右面两层作顺时针90 度转(即转一下)

r' 右面两层作逆时针90 度转(即转一下)

r2 右面两层作顺时针180度转而逆时针 180度实际结果与顺时针是一样的!

f 前面两层作顺时针90 度转(即转一下)

f' 前面两层作逆时针90 度转(即转一下)

f2 前面两层作顺时针180度转而逆时针 180度实际结果与顺时针是一样的!

d 底面两层作顺时针90度转(即转一下)

d' 底面两层作逆时针90度转(即转一下)

d2 底面两层作顺时针180度转而逆时针 180度实际结果与顺时针是一样的!

l 左面两层作顺时针90 度转(即转一下)

l' 左面两层作逆时针90 度转(即转一下)

l 2 左面两层作顺时针180度转而逆时针 180度实际结果与顺时针是一样的!

b 后面两层作顺时针90 度转(即转一下)

b' 后面两层作逆时针90 度转(即转一下)

b2 后面两层作顺时针180度转而逆时针 180度实际结果与顺时针是一样的!

中间层

E' 中间层做从上往下看的顺时针90° 旋转。

E 中间层做从上往下看的逆时针90° 转。

E2 中间层做180° 旋转。知所以E' 是顺时针是因为规定E和D的顺逆方向是一致的。

M' 中层做向上一下的90° 旋转

M 中层做向下一下的90° 旋转. 规定M和L的顺逆方向一致。

M2 中层作顺时针180度转而逆时针180度实际结果与顺时针是一样的!

S 中层向F作顺时针 90度转(即转一下)

S' 中层作逆时针90度转(即转一下)

S2 中层作顺时针180度转而逆时针180度实际结果与顺时针是一样的!