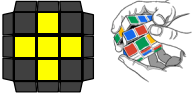
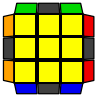



# COLL 公式和指法




推荐公式

可选公式

 左单公式


高阶公式

右拇指, 右食指, 右无名指, 右小指, 左食指  
从顶, 底层起手

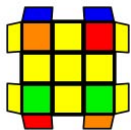
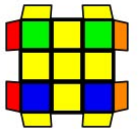
COLL 在顶层有十字棱时复原顶层角块。若  或紫色文本不存在, 左单或高阶公式将是第一条。

## COLL-H




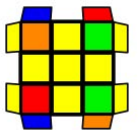
$(R U R' U) (R U' R' U) (R U2' R')$   
  $y (R U2' R' U') (R U R' U') (R U' R')$

$F (R U R' U')3 F'$

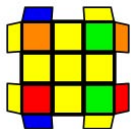


$F (R U' R' U) (R U2 R' U') (R U R' U') F'$


$(R U R' U) (R U L' U) R' U' L$   
  $(R' U' R U' R' U') (L U' R U L')$   
 $(R' F' R U2') (R U2' R' F) (U' R U' R')$

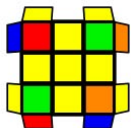
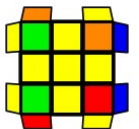



## COLL-Pi




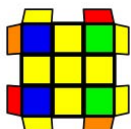
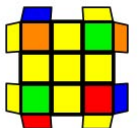
$R U2' R2' U' R2 U' R2' U2' R$


$(R U D') (R U R' D) (R2 U' R' U') R2' U2' R$   
 $(R U2' R') x (R' U R U')3 x' (R U2' R')$   
  $(R U' R' U2') (L' U R U') (L R') U2' (R U R')$   
 $y (R U2 R' U') F' (R U2' R' U') (R U' R') (F R U' R')$



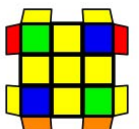
$F U (R U' R' U) (R U' R2' F') (R U R U' R')$   
  $(R U2' R' U' R U' R') (R' U L U' R U L')$

$(R U R' U') R' F (R2 U R' U') (R U R' U') F'$   
  $y' (R' U2' R U R' U R) (R U' L' U R' U' L)$

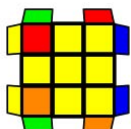



$y (R U R' U) F' (R U2' R' U2') (R' F R)$   
  $(L' U R U' L U') (R' U' R U' R')$

$F U (R U' R' U) (R U2' R' U') (R U R' F')$

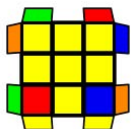
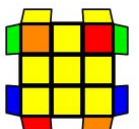


## COLL-U



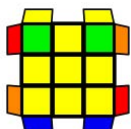
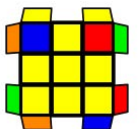
$y' (R U R' U R U2' R2') (U' R U' R' U2 R)$   
 $(L' U2 L U L' U L) (R U2' R' U' R U' R')$   
  $(R U R' U') (R U' R' U2')2 (R U R')$


$F (R U' R' U) (R U R' U) (R U' R' F')$   
 $x' R2 D2 (R' U2 R D2) (R' U2 R') x$



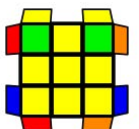
$R2 D (R' U2 R D') (R' U2 R')$

$R2' D' (R U2 R' D) (R U2 R)$

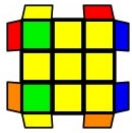


$R' F (R U' R' U') (R U R' F') (R U R' U') (R' F R F' R)$   
 $y F' (R U R' U) (R U R' F') (R U R' U')$   
 $(R' F R2 U') R' U2 (R U' R' F)$   
  $y2 (R' U R U') x' z (R U' R U R2')$   
 $z' (R U' R' U) x$

$(R' U2 R F) U' (R' U' R U) F'$

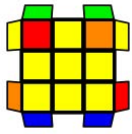
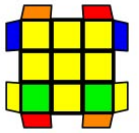


### COLL-T



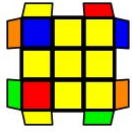
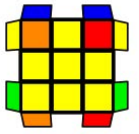
y (R U2' R' U' R U' R2') (U2' R U R' U R)  
 (R U R' U R U2' R') (L' U' L U' L' U2 L)  
 🖐️ (R U R' U R U2' R') U' (R U2' R' U' R U' R')

F (R U R' U') (R U' R' U') (R U R' F')  
 x' (R U2 R D2) (R' U2 R D2) R2' x



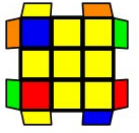
(R' U R U2') L' (R' U R U') L  
 y2 (R U' R' U2) L (R U' R' U) L'  
 y2 R' F (R U R' U') (R' F' R2 U') (R' U2 R)

(R' U R2 D) (r' U2 r) (D' R2' U' R)  
 🖐️ y2 (R U' R2' D') (r U2 r') (D R2 U R')  
 🖐️ (R U2' R' U) (L U' R U L2' U) R' U' L  
 y2 R' U' (R U' R' U) (R U R' F') (R U R' U')  
 R' F R2

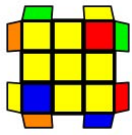


y2 (l' U' L U) (R U' r' F)  
 🖐️ (r' U' R U) (L U' R' U) x  
 🖐️ y' x' (R U R' D) (R U' R' D') x

(r U R' U') (r' F R F')  
 🖐️ (r U R' U') (L' U R U') x'  
 🖐️ y' x' (D R U' R') (D' R U R') x

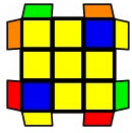
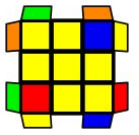


### COLL-L



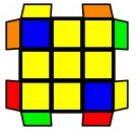
(R U R' U) (R U' R' U)2 (R U2' R')  
 🖐️ (R U2' R' U') (R U R' U')2 (R U' R')

r U2' (R2' F R F') R U2' r'  
 🖐️ y' R U2' (L' U L) U2' R' (L' U L)  
 🖐️ y2 L' U2' (R U' R' U2') L (R U' R')  
 y2 R' U' (R U R' F') (R U R' U') R' F R2



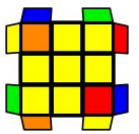
(R U2 R D) (R' U2 R D') R2'

(R' U2 R' D') (R U2 R' D) R2

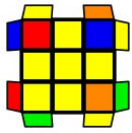


(F R' F' r) (U R U' r')  
 🖐️ L' (R U R' U') L (U R U' R')  
 y' (R U R' U') (R' F R U) (R U' R' F')  
 🖐️ y' x' (R U' R' D) (R U R' D') x

F' (r U R' U') (r' F R)  
 🖐️ y2 x' (U' R U L') (U' R' U r)  
 y F (R U' R' U') (R U2 R' U') F'  
 🖐️ y x' (D R U R') (D' R U' R') x

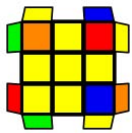
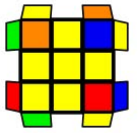


### COLL-S



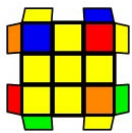
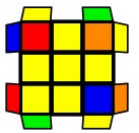
R U R' U R U2' R'

F' (R U2' R' U2) R' F2 (R U R U') R' F'  
 🖐️ R' U2' (L U' R U) L' (U R' U R)  
 y2 (R U R' F') (R U R' U R U2' R') (F R U' R')



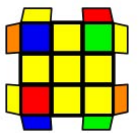
R U' L' U R' U' L  
 y2 L U' R' U L' U' R

L' (R U R' U') L (U2 R U2' R')

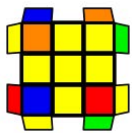


(L' U2 L U2) R (U' L' U L) R'  
 (R U R2' F') (R U2 R U2') (R' F R U' R')

(R U R' U) (R U' R D) (R' U' R D') R2'  
 y2 (R' U' R U') (R2' F' R U) (R U' R' F) U2 R

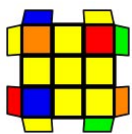


### COLL-AS



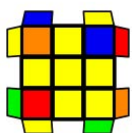
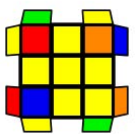
R U2' R' U' R U' R'

(R U' R' U2)2 R' D' (R U R' D) R  
 🖐️ y2 (R' U' R U') L (U' R' U L') U2' R  
 y2 (R U R' F') (R U2 R' U' R U' R') (F R U' R')



L' U R U' L U R'  
 y2 R' U L U' R U L' U'

R (L' U' L U) R' (U2 L' U2 L)  
 (R U R' F') (R U2 R' U2') (R' F R2 U' R')



(R U2' R' U2) L' (U R U' R') L

(R' U' R U') (R' U R' D') (R U R' D) R2

