THE ULTIMATE
LAST LAYER
ALGORITHMS COLLECTION

~OLL~

The Ultimate Last Layer Algorithms Collection

Preliminary version

Please do not redistribute!

These collections are preliminary versions intended for review purposes only.

The final version will be freely available to everyone soon.

I would like to gather some opinions on the following:

- Is the presentation of the algorithms clear and understandable?
- Is the selection of algorithms appropriate?
- Would it be of interest to generate collections with many more algorithms?
- What could be added to improve this collection of algorithms?

You can write to me at grvigo@hotmail.com

OLL #1 – OCLL1
R' U2 R U R' U' R U R' U R

Setup

Front
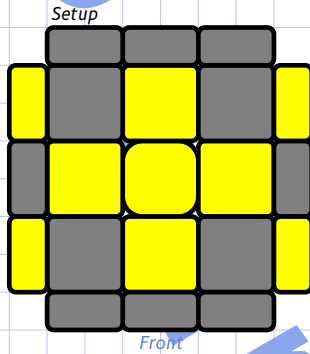
⭐ [R U R' U] R [U' R' U R] U2 R'
R' U' R U' [R' U R U'] R' U2 R
[R U R' U] R U r' F R' F' r
F R [U' R' U R] U2 R' U' [R U R' U'] F'
F [U R U' R'] F' U2 [R U R' U'] [R' F R F']
[R U R' U'] B' [U R U' R'] y U [R U R' U] R
F' R F U' R' U [R U R' U'] R U F' R' F
F' U' F [R U R'] U2 [R U R' U] F' U F
R' U' R2 U' R' U [R' U R] U [R U R' U] [R U R']
R' U' R U' R' U' L U' R U L'
R U F' U2 R' U [R U R' U'] R U2 F U' R'
R U [R U' R] U' R' U' R U [R U R' U] R' U' R'
[R U R' U] [R U R' U] B' U' [R U R'] B
B' [R' U R U'] R' U2 [R U R' U'] R U B

Setup + y

Front
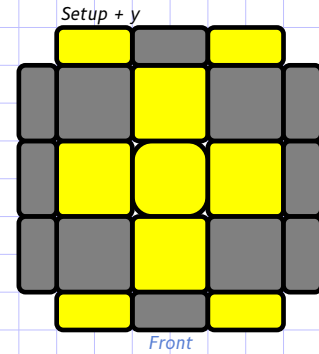
⭐⭐⭐ R' U2 [R U R' U'] [R U R' U'] R
⭐ R U2 R' U' [R U R' U'] R U' R'
R' F [R U R' U'] R' F' R U' [R U R' U] R
R' U2 R U2 [R U R' U'] [R' U R] [U R U' R']
F U R U' [R' U R U'] [R' U R U'] R' F'
F [R U R' U'] [R U R' U'] [R U R' U'] F'
R' U' F' U F R U [R U R' U'] [R' F R F']
R' U' R U [R U R' U'] [R' U R] U2 R U2 R'
[R' U R] U2 R' U2 R U' R' U' [R U R' U'] R
R U' R' U2 R U2 R' U [R U R' U'] [R U R']
[R U R' U'] R' U' R [U R U' R'] U2 R' U2 R
[R U R' U] R U2 R' F [U R' U' R] F' [R' U R]
R F' U [R U R'] U2 F U2 R' U [R U R']
[R' U R U'] R2 U [R U R' U] R U R2 U' [R U R']
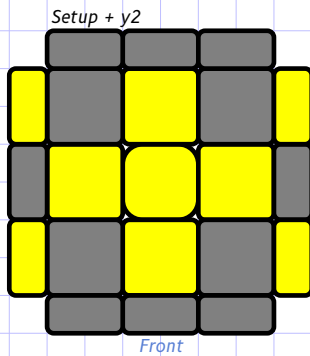
Setup + y2
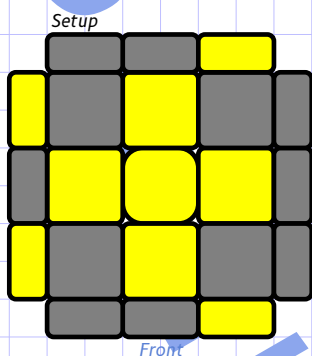

Front

[No specific algorithms for this orientation]

Setup + y'

Front
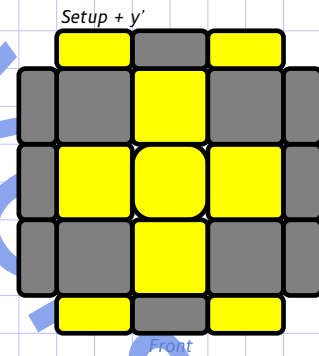
[No specific algorithms for this orientation]

OLL #2 – OCLL2
R U2 R2 U' R2 U' R2 U2 R

Setup

Front

⭐⭐ [R U R' U'] R' U2 [R U R' U] R2 U2 R'
⭐⭐ R U2 R2 U' R2 U' R2 U2 R
⭐⭐ R' U2 R2 U R2 U R2 U2 R'
⭐ [R' U R] U F [R' U R U'] F' U'R'U' R
⭐ R' U2 [R U R' U'] R U F [R' U R U'] F'
⭐ R' U2 R2 U [R' U R] U2 R' [U' R' U R]
[R' F R] U [R' F R F'] U' R' F' R2 U' R'
R U2 R2 U' R U' R' U2 R [U R U' R']
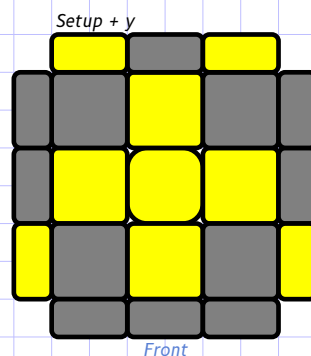F [R U R' U'] R U R2 U' R' [U' R' U R] U R F'
R F [R' U R U'] F' U' R' U' [R U R' U] [R U R']
R F' U' R2 F U' F' U R2 U F R'
[R U R' U'] R' U2 R U2 R U2 R' [U' R' U R]
[R U R' U'] R' F R2 U R' U' [R U R' U'] F'
R' F' U' F U' R2 r' U [R' U R U'] M'

Setup + y

Front

⭐⭐⭐ F [R' U R U'] F' U R' U [R U R' U'] R
[R U R' U'] R U2 R2 U2 [R U R' U'] R
R' [U R' U' R] U' R U R2 U' [R U R' U] R2
F [U R U' R'] U R U2 R' U' [R U R'] F'
R' U' [R U' R' U] [R' F R] [U R U' R'] F' R
[R U R' U'] R U2 R' U [R U R' U] R U2 R'
R F U R' U' [R U R' U'] R [U' R' U R] U F' R'
F U R U' [R U R U'] R2 F' R [U R U' R']
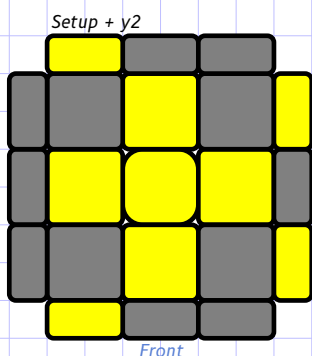F U [R' F R F'] R' U' F' U R [U R U' R']
R F R' F' [R U R' U'] R U2 [R' F R F'] R'
F' U2 F U' [R U R' U] y F [R U R'] F'
R' U' R U2 R2 U [R U' R] U' R U' [R U R']
B' R' U [R U R' U'] R S [U' R' U R] F
R U F' U2 R' U' [R U R' U'] R U' F U' R'

Setup + y2

Front

⭐ [R U R' U'] R2 U [R' U R] U2 R2 U' [R U R']
⭐ F [U R U' R'] F' U2 F [R U R' U'] F'
⭐ [R U R' U'] R2 U R' [U R' U' R] U R U2 R2
⭐ [R' U R] U F [U R' U' R] F' U' R' U' R
⭐ [R' U R U'] R2 U2 [R U R' U] R2 [U' R' U R]
R2 U' [R U' R' U] R2 U' R' U [R U R U'] R
F [U R' U' R] F' U' [R' U R U'] R' U2 R
R' U2 [R U R' U] F' [R U R U'] [R' F R] U R
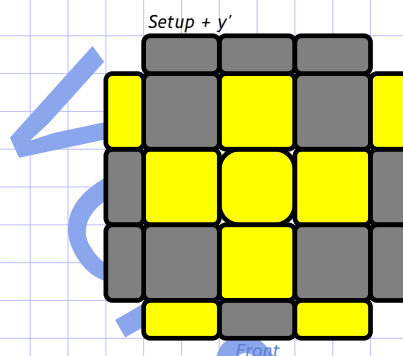R2 U2 R [U R U' R'] U' R' U R2 [U' R' U R]
F [U R U' R'] F' U' R' F' U' F U R
R' F [R U R' U'] R' F' R2 F [R' U R U'] F'
R F U' R2 U2 [R U R' U] R2 U F' R'
L' U R U' L U' R' U' R U' R'
R' F R2 U R2 U' F' U R U2 [R U R']

Setup + y'

Front

⭐ [R U R' U] F' R U2 R' U2 [R' F R]
⭐ R' U2 [R U R' U] R2 U [R' U R] U2 R'
⭐ R' U' F' U F R U F [R U R' U'] F'
[R' F R F'] U' F' U F U F [R U R' U'] F'
R U F' U [R' U R U'] [R' U R] U2 F U' R'
B' U' [R' U R U'] R' U2 [R U R U'] R B
[R U R' U] F2 R U2 R' U2 R' F2 R
R2 U' R F' [R' U R] F R2 y [R U R'U'] F'
[R U R'] U2 R2 U' R' U R' U' [U' R' U' R]
[R' U R] U R2 U2 R U F' [R' U R U'] F R
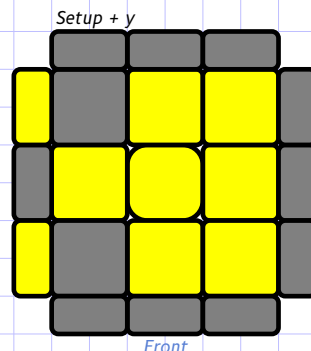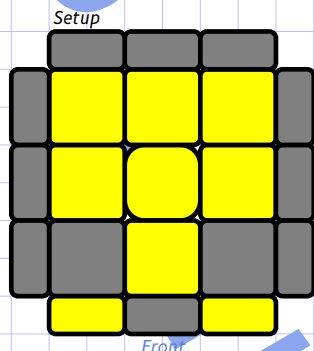[R U R' U] [R U' R] B' R' [U' R' U R] B R'
F' U2 F U [R U R'] F R' F' R2 U' R'
R' U' F U' R2 U R2 U F' R2 U2 R'
F' R F U2 [R' U R U'] [R' U R] U F' R' F

OLL #3 – OCLL3
R U2 R D R' U2 R D' R2

Setup

Front

⭐⭐ R U2 R' B' U (R U R' U') B
⭐ (R U R' U') (R' F R F') R' U' F' U F R
　 R' U (R U R' U') R' U' R F' (R' U R U') F R
　 R' U' R U' F U' R' U (R U R' U') R U' F'
　 R2 D R' U2 R D' R' U2 R'
　 B' (R' U R U') R' U' R (U' R' U R) B
　 (R U R' U) R U2 R2 U' R U' R' U2 R
　 (R U R' U) R' U2 R2 U R2 U R2 U' R'
　 R U' R' F' R' U' R U (R U R' U') R' U F R
　 (R U R') B' U (R U R' U') B U' R U' R'
　 B' R U (R U R' U') R' B U' R' (U' R' U R)
　 (R' U R) L U' R' U L' U' (R U R' U') R
　 R' D R2 U2 (R' U R) U R2 D' R
　 R' U' R U2 F (R' U R U') F' U2 (R' U R)

Setup + y

Front

⭐⭐⭐ F (U' R' U R) U F' R' U2 R
⭐⭐ (R U R' U') R' U' F R' (U' R' U R) U R F'
⭐ F U2 F' U R F (R' U R) F' R'
⭐ F R' U' R' (U' R' U R) U R U (R U R' U') F'
　 F R (U R U' R') F' R' U' R U (R U R' U') R'
　 F U2 F' U' F R' U' R F' (R' U R)
　 R' U2 R F U' R' U (R U R' U) R U' F'
　 F U2 F' R F R' U2 R F' R'
　 F' (R U R' U') L2 (U R U' R') L2 F
　 (R U R' U') R2 F2 R2 U (R U' R) F2 R2
　 (R U R' U') R U' R' U2 R U' R' U2 (R U R')
　 F (U R' U' R) U' R' U' R U F' U (R' U R)
　 R' U2 R U' F (R' U R U') F' U2 (R' U R)
　 F (R U R') F' r U' R' F' R U r

Setup + y2

Front
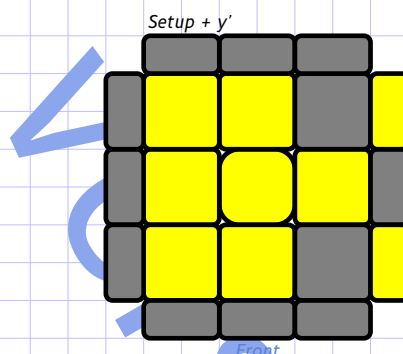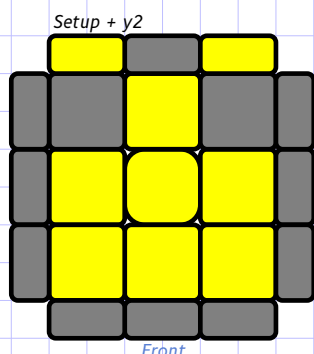
⭐⭐ F (R U' R' U) (R U R' U) R U' R' F'
⭐⭐ R' U2 R F U' R' U' R U F'
⭐ R' U F U' F' U' R F U2 F'
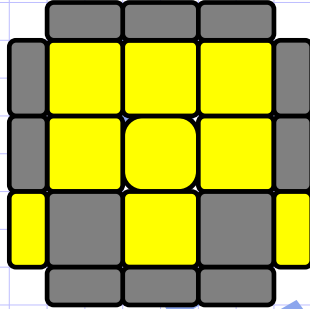⭐ R' U2 R U2 F (U' R' U R) U F'
　 R' U2 R F' R' F U2 F' R F
　 (R U R' U') R' U (R U R' U) (R U' R) U' R2 U' R
　 R' U2 R2 U F' (R U R' U') R' F U' R'
　 (R' U R U') F' U (R' U R) U2 F (U' R' U R)
　 R2 (U R' U' R) D (R' U R U') D' R2
　 R2 D' (R U R') D R (U R U' R') U' R
　 R' U2 (R U R') F U F' R F U' F'
　 R' U L' U R U' L U2 (R' U R)
　 R2 D' R U2 R' D R U2 R
　 R' U2 R U F U' R' U2 R U F'

Setup + y'

Front

R U R2 U' (R' F R) U R2 U' R' F'
R (U R U' R') (U' R' U R) F (R U R' U') R' F'
(R U R' U) (R U' R) U' r' F R' F' M'
R' U2 (R U R' U) (R U R' U') R U' R' U2 R
(R' U R) U2 F (U R U' R') (U' R' U R) U F'
F R' U' R F' (R' U R) U2 F U2 F'
R2 D (R' U R) D' R2 U R U2 R'
F (U R U' R') U R' U' R' (U' R' U R) U R F'
(R' U R) U R U' R' U' (R' F R) (U R U' R') F'
R' U (R' F R) (U R U' R') F' (R U R') U2 R
R U (R U R' U') (R' F R F') U' R' F' U2 F
R U R2 D' (R U R') D R2 U2 R'
F' (R U R') F' (R U R' U') R' F R2 U' R' F
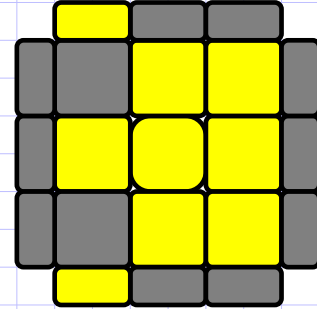(R U R') F' (U R' U' R) F R' U R2 U2 R'

OLL #4 – OCLL4
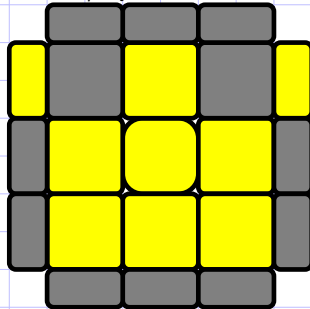## R B' R' F R B R' F'

Setup

Front

F (R U R' U') R U' R' U' (R U R') F'
F R B' R' F' R B R'
R' U' F' (U R' U' R) F R' U R2
R' U' F' U2 F U' F' U' F R
R F (R' U R) U2 (R' U R) U F' R'
R' U' (R U R' U') R F (R' U R U') F' (R' U R)
F U R' U' (R U R' U') R F' (R' U R U') (R' U R)
R U2 F (U R' U' R) F' R' U (R U R')
(R U R') F' U' F (R' F R) F2 U F
F (R' F R) F2 U F U (R U R') F'
F (R U R' U') F' (R' F R F') U' F' U F
R F R' U2 R F' R' F U2 F'
R' F (R U R' U') R' F' R2 U' R' U2 R
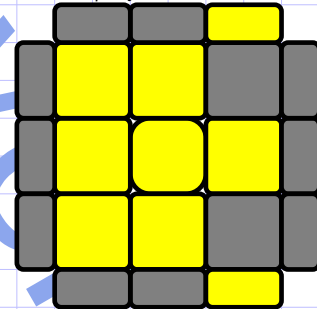F' U R (U R U' R') U' F U (R U R' U') R'
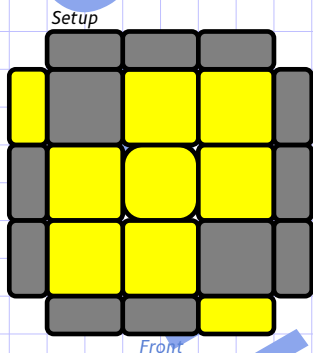
Setup + y2

Front

★★ R' F' (R U R' U') (R' F R) U R
(R' U R) U F' U (R' U R) U2 F
(R' U R) U2 R' r' F R F' r
B' R' U' (R U R' U) (R U R' U') R B
R' U F U2 F' U' R F U' F'
R' U2 R F (U' R' U R) U F' (R' U R)
F' (R U R' U') R' (U R' U' R) F R2 U R2
R' U' R' U' (R U R') F' (R U R' U') R' F R'
R U R u F' U' F D' F2
B' U F' (R U R' U') B (U R U' R') F
(R U R' U') R' U R' U' D (R' U R) D' R
F U (R' U R U') F (U R' U' R) F' U' F'
(R U R' U) R U' B' U' y R F' (R' U R)
R U2 R' U' R U' R2 U2 (R U R' U) R

Setup + y

Front

★★★ R' U R F (R' U R U') F'
★ (R U R' U') L' (U R U' R') L
★ F U' R' U2 R U F' (R' U R)
F (U R' U' R) F' R' U' (R U R' U') R
R' B' U' (R U R' U) (R U R' U') B R
F R F' L F R' F' L'
L F R' F' L' F R F'
B' U' (R U R') B (R U R' U') R U' R'
R U2 R' U2 (R' F R) (U R U' R') F'
F U' R' (U' R' U R) U R U F' (R U R' U') R'
(R U R' U') R' F U' R' (U' R' U R) U R U F'
(R U R' U') R U2 F (U R' U' R) F' U R'
R' U' F (R' U R U') F' (U R' U' R) U R
M' B' R' B r' U' R U R

Setup + y'

Front

★ F' R' F U' F' R F (R' U R)
F U R U2 R' U (R U R') F'
B U2 (R U R' U) B' U (R U R')
(R U R' U') R' F' R U2 R U2 R' F
F (U' R' U R) U F' U R' U' (R U R' U) R
F' U2 R' U' R U' F U' R' U' R
R' U' R U' F (U' R' U R) U F' (R' U R)
R' U F U F' U' R U F U' F'
B' (U' R' U R) B (R U R' U') (R' F R F')
(R' U R) F' R2 F U' F' U (R U' R') F
F' U' F (R U R') F R' F' R2 U' R'
R' F U' F R B U' B' (R' U R)
F' R' F U2 F' R F R' U2 R
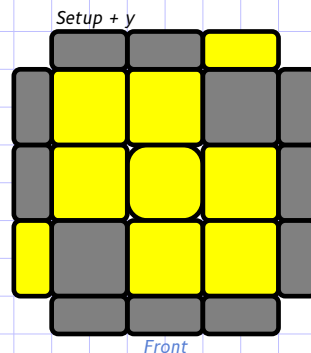B' U' F u' (R' U R) D M'

OLL #5 – OCLL5
R' F' L F R F' L' F

Setup
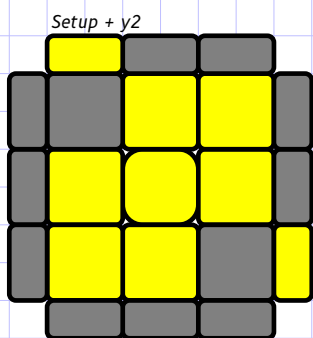
Front

(R U R' U) B' U (R U R' U') B
B' U' (R U R') B R U' R'
F' (R U R' U') R' F U' R' (U' R' U R) U R
F' (R U R' U') r' F R F' M' F
R2 U' R U (R U R' U) (R U R' U') R' U R2
(R U R') B' U R U2 R' U' B
B' R' U (R U R') U2 R U B
F' L F R' F' L' F R
R' U2 (R U R' U') (R U R' U') (R U R' U) R
F' R U2 R' U2 (R' F R) (U R U' R')
R2 D (R' U R) u' B' U' B'
R U R B R' (U' R' U R) B' R'
R' F' U' F (R' F R) F2 U F R
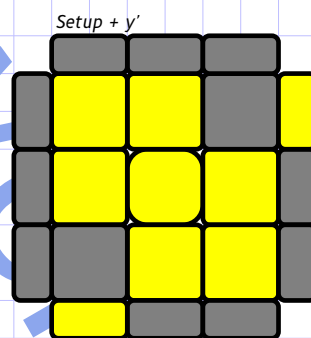R F R' U' R F' R' U2 F U' F'

Setup + y

Front

⭐⭐⭐ F (U R' U' R) F' (R' U R)
R2 U' R F' (R' U R U') F U R
R' U' (R U R') F' (R U R' U') R' F R2
F R U' R' U' R U2 R' U' F'
R' U' R F' R' F U F' R F
R' U' R F U' R' U2 R U F'
R' F' (R U R' U') (R' F R) U' (R U R' U) R
F U F' U2 R F (R' U R) F' R'
R' U' R U' F U' R' U' R U F'
(R U R' U) R U' (R' U R U') (R' U R) U2 R'
(R' U R U') F U R' U' (R U R' U') R F' (R' U R)
F U F' U' R' U F U' F' U' R
B' U (R U R' U') B U2 R U2 R'
F U F' R' F U' F' U' (R U R' U) R

Setup + y2

Front

(R U R' U') (R' F R) (U R U' R') F'
R F U' R' U (R U R' U) R U' F' R'
F (R U R') F R' F' R2 U' R' F'
F' R' F U F' R F U2 (R' U R)
R2 U R' U' R' U (R U R' U) (R U' R) U' R2
R2 F' R (U R U' R') F R (U' R' U R)
F U' (R' F R) (U R U' R') F' (R U R') F'
M' F' U2 F M U2 (R U R')
R' F' (R U R' U') R' F R2 U' R' U2 R
R (U R U' R') U' F' U (R U R' U') R' U' F
(R U R') B' U (R U R' U') B R U2 R'
F' U (R' U R) U2 F (U R' U' R) (U' R' U R)
R' U2 R' D' R U2 R' D R2
R F' (R U R' U') R' (U R' U' R) F R2 U R

Setup + y'
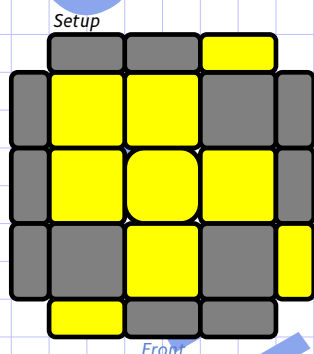
Front

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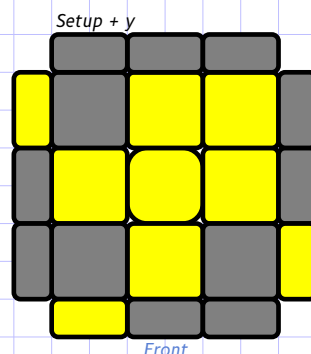F (R U R' U') F' r U (R' U R) U2 r'
R' U' R' U L U' R U R L'

# OLL #6 – OCLL6
R' U2 R U R' U R

Setup
Front

Setup + y
Front

⭐⭐⭐ R' U' R U' R' U2 R
⭐ [R' U R U'] F [U R' U' R] F'
[R' F R F'] U' [R U R' U'] F U2 F
R' U' [R U R'] F [R U R' U'] R' F' R2
R' U' F' U F U' [R' F R F'] U R
R' U' F' [R U R' U'] R' F R2 [U' R' U R]
R' U' R2 U [R U R' U'] R' U' R2 U2 R
R U' R' U' R' U2 [R U R' U] R2 U' R'
R' U' R2 U [R' U R] U2 R' U' R' U' R
R' U' R U' [R U R' U'] R' U2 R [U R U' R']
[R' U R] B' U R U [R U R' U'] R' U' B R'
[R' F R] U F' U' F' U r U r'
R' U' R U' R2 U' R' [U' R' U R] U [R U' R]
R' U2 B U2 [R U R' U] B' U' R

R U2 R' U' R U' R'
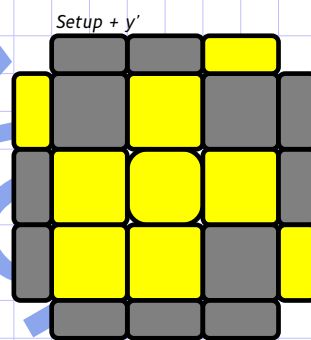F' U f [R' F R] f'
R' U [R U R' U] [R U R' U] [R U R' U'] R
R U2 R2 U' R2 U' R' U [R' U R]
[R U R' U'] R' U' R [U R U' R'] [U' R' U R]
R F R' F' r [U R U' R'] r'
F [R U R' U'] F' R' U' F' U F R
[R U' R' U] [R U' R' U] [R U' R' U] [R U R']
[R U' R] U [R U R' U'] R' U' R2 U' R U' R'
R r' U' R' U L U' [R U R']
R2 U R2 U R' U2 R' U [R U R' U'] R2
R U' F' U' F U' F' U2 F U' R'
R U2 R2 U' [R' U R U'] R' U' R2 U R
R2 U R2 U R U2 [R' U R] U R U' R2
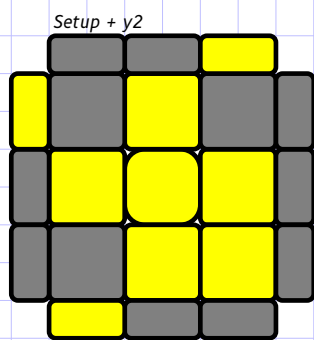
Setup + y2
Front

F U [R' F R F'] U' [R U R' U'] F'
R2 U' R F [R' U R U'] F' U R
[R U R' U] R' U' R2 U' R2 U2 R
R U' F' U [R' U R] U2 F U2 R'
F' U' F U [R' F R F'] [R U R' U'] [R U R']
R2 r' U2 R' U2 [R' F R F'] M'
R' F U' R' [U' R' U R] U R U F' [R U R']
R U R2 U' R' U [R U R' U'] R2 U2 R
R' U2 F' [R U R' U'] R' F R2 U [R' U R]
F [R' F R F'] [R U R'] F R' F' R F'
R' F U2 F' R F R' U2 R F'
R U2 R' U2 L' [U R U' R'] L
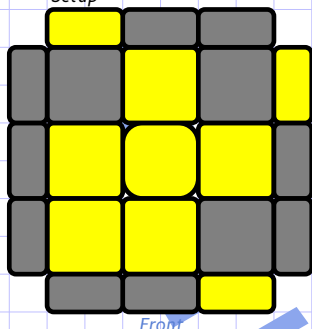F R2 D [R' U R] D' R' U' R' F'
R' F U' R' U2 R U F' [R' U R] U R

F [U R' U' R] F' U' R' U2 R
F [R U R' U] F' U' F U' [R U R' U'] F'
F U2 F' U' R' F U' F' U R
F [R U R' U'] [R U R'] F R' F' R U' F'
B' U' R' U2 F' U' F R B
[R U R' U'] R' U' F2 R' [U' R' U R] U R F2
F' B' [R' F R] B R' F' R F
F [U' R' U R] U F' [R U R' U'] R' U2 R
R' U2 [R U R' U'] R2 U R2 U R2 U2 R'
[R' F R F'] [R U R' U] R F [R U R' U'] F' U' R'
M' U' r' F R F U' [R' F R] F2
R2 F2 R' U2 R' U' [R U' R] F2 R2
[R' U R] U2 F [U' R' U R] U2 R' U' R F'
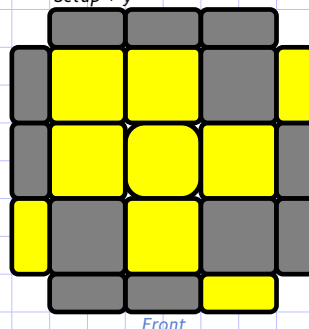F [R U R' U'] R2 B' R2 F' R B R'

# OLL #7 – OCLL7
R U2 R' U' R U' R'

Setup

Front

⭐⭐⭐ [R U R' U] R U2 R'
R U' r' F R' F' r
(R U R' U') (R U R') F' U' F U (R' F R F')
R2 F R (U R U' R') F' R (U' R' U R)
(R U R' U') (R' F R) U (R' F R F') R U' R' F'
(R U R' U) R F (U' R' U R) U F' U R'
(R' F R F') U (R U R' U) (R U R') F' U F
R' F' U' F U R F (U R U' R') F'
(R U R' U) R2 U R (U R U' R') U' R' U R'
(R U R' U) R2 U R U R2 U' R' U' R2
(R' U R) U R U2 R' U' R U' R2 U R
(R U R' U) R U R U R (U R U' R') U' R2
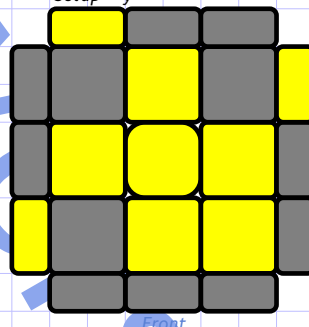R U R2 U' R U' R' U2 R U (R U R')
R' U B' U (R U R' U') B (R U R' U) R

Setup + y

Front

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

Setup + y2
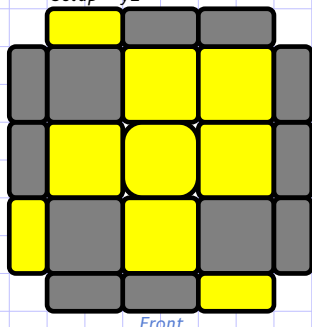
Front

R' U2 R U F (R' U R U') F'
R' U' (R U R') U R2 U R2 U2 R'
R' U' R2 U (R U R' U') R U R2 U2 R'
R' U' R U' (R U R' U) R U2 R' (U' R' U R)
(R U R') F' (R U R' U') (R' F R) U R U2 R'
R B' R' B r' U' R U M'
B' R' F' U F U2 R U B
(R U R' U') M' U2 (R' F R F') R U2 r'
(R U R' U) L' U R U' L U2 R'
R U R2 U (R U' R) U' R2 U (R U R' U') R
R2 F2 R' U (R' U R) U2 R F2 R2
R' U (R U R' U') R U R2 U' R U' R' U2 R2
(R U R') F' (R U R' U) R U2 (R' F R) U' R'
R U F' U2 F U F' U F U R'

Setup + y'

Front

⭐⭐⭐ R' U2 (R U R' U) R
R' U' R U (R U R' U') (R' U R) (U R U' R')
R' U' F (U R' U' R) F' R' U R2
R' U2 F' (R U R' U') (R' F R) U2 R
(R U R' U') R' U2 (R U R' U) (R U' R) U' R'
R' U2 R2 U R2 U (R U' R) U' R'
(R U R' U') R' U2 R (U R U' R') U (R' U R)
F (R' U R) U F' R' U F U F' R
F R' F' R B' (R' F R F') B
R' U' F U R U' (R U R' U') F' U' (R U R')
F R' U2 R F' R' F U2 F' R
M' U R U' r' U' (R U R') F' U F
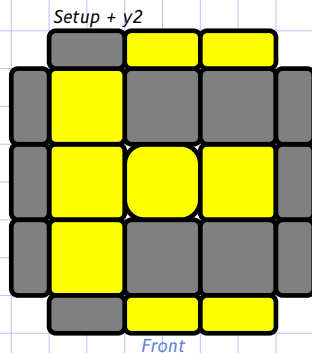R' U' F U F' U F U2 F' U' R
R' U2 R U R U (R U R' U') R' U' R' U (R U R)

OLL #8 – T1
F R' F' R U R U' R'

Setup

Front
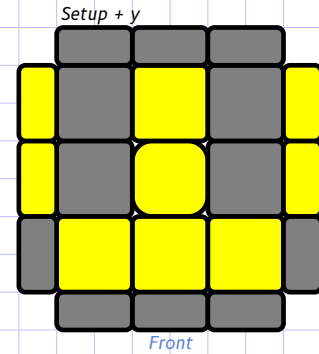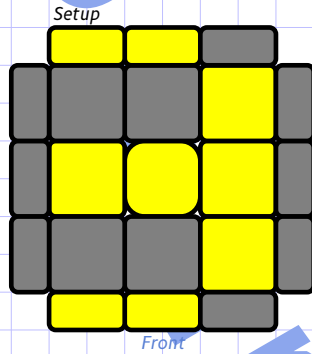
⭐⭐⭐ [R U R' U'] [R' F R F']
F R [U' R' U R] U R' F'
R' U' R B U B' [R' U R]
R' F [R U R' U'] F' U' [R U R' U] R
[R' U R] U2 R' U' F' U2 F R
R' U F R' F' R F U' F R
R U' R' U' F' U2 F [R' F R F']
[R' F R] U R2 U' R F' R' U R2
[R U R'] F' U' [R U R' U'] R' F R2 U' R'
R' U' [R U R' U'] [R U R'] F' U2 F U' R
R' F U F R' F' R U' F' U' R
B' [R' U R] U B L U' L'
[R U R' U] F' U2 F R U' [R' U R U'] R'
R U' [R U R' U] F R' F' U' R2 U' R2

Setup + y

Front

R U r' F U F' U' F' M'
F U F' U2 F [R U' R' U] F'
R' U' [R' F R] U F' R F U' F'
F R' F' R F' U' [R U R' U'] [R' F R]
F' M' U' r' U' F U R U F
R' F' [R U' R] F [R' U R] F' R2 F R
F U' D [R' F R F'] [R U R'] u' R'
F' U F U R U2 R' F R' F' R
F R' F2 U' F U R U F' U' F
R B U B' U' R' U' [R U R' U'] R U' R'
F U' [R' F R F'] U F R' F' R U F'
F' U' F B' R' U [R U R' U'] R B [R U R']
B' U [R U R' U'] B M' U R U' r'
R2 U' R2 F R' F' U' R' U R' U R2

Setup + y2

Front

F [U R' U' R] F' [R' U R] U F [R U R' U'] F'
F2 U R2 F' R F R U' F2 [R' U R]
F U' F' U' [R U R' U'] R' F R2 U R' F'
F2 U' F' U' [R U' R' U] F U2 F2
R' F U R U' F' R2 U' R' U [R' U R U'] R
F [R U R' U'] F' [R U R' U] R [U' R' U R] U2 R'
[R' F R] F2 [U R' U' R] F2 R' F' U R
F U2 F' U' R' F U' F2 U F R
F U' [R U R'] F [R U R' U'] F' [U R U' R'] U F'
R' U' R U F [R U R' U'] R' F' U F R F'
F [R' F R F'] R U' R' F' U F [R U R'] F'
F [R U R' U] F' U' F U F' U' F U' F'
[R U R' U'] F U F' [R' F R F'] R F U' F' R'
[R U R'] F' U [R U R' U'] R' F2 R F2 U F

Setup + y'

Front
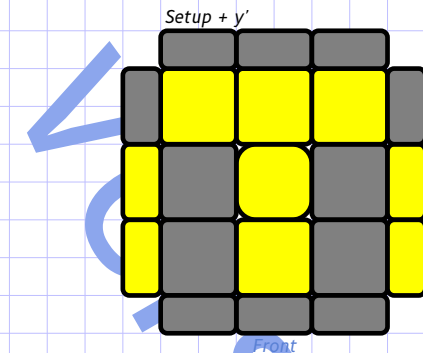
R' F' U' F U' [R U R' U'] [R U R' U] R
R2 U' F R F' U [R U R' U'] R' U R2
F U [R U R' U'] F [U R U' R'] F' U' F'
R' U2 R U F R' U R2 U' R' F'
R' U' R U F [U' R' U R] U [R U R' U'] F'
B' R U [R U R' U'] R' y R U' R' F' R
R2 U R U F' U F U' R' U2 R2
R F [R' U R] F' r F U' F' U M'
R' U' L U' F' U F U R L'
R' U' R F R' F R' [U' R' U R] U R F2
R' B R U [R U R' U'] [R' F R F'] R' B' R
B' U [R U R'] F' U' F B R U' R'
F' U' F2 [R U R' U'] R' F' R F' U2 F
B' [U' R' U R] F U [R U R' U'] B U' F'

OLL #9 – T2
F U R U' R' F'

Setup

Front


Setup + y

Front
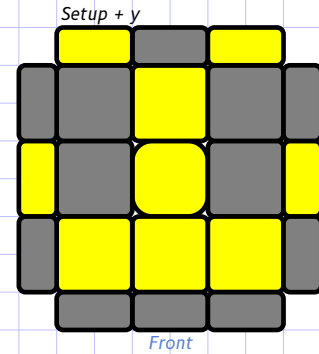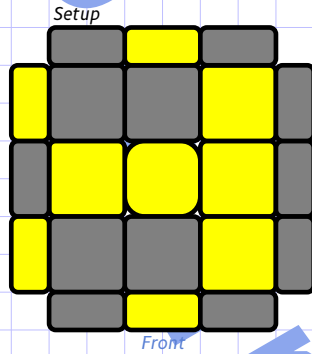
⭐⭐⭐ F [R U R' U'] F'
R2 U R' U' R' F [R U R' U'] R F' R'
F2 R [U' R' U R] U R2 F' R F'
F R2 D [R' U R] D' R2 U' F'
R F U F R' F' U' R F' U' R'
F' R' F2 [R U R' U'] F' U F' R F
F B' [R U' R' U] B [R U R'] F'
F B' R B U R' U' F' [R' U R]
F2 M2 F' [R U R' U'] F M2 F2
B' R B R' F [R U R' U'] F' [R' U R]
F B' [R' U R U'] F' R' U' R B
R' U2 R U2 F [R U R' U'] [R' U R U'] F'
B' R' F [U R U' R'] F' U' R B
F R B' [U' R' U R] B U R' F'

R' F' U' F U R
R' U' R F [R' U R U'] [R U R' U'] F'
F' R' U' [R' F R] U F' R U F
M' U' r' U' F U R F U' F'
R' U' F U F' R F U' [R U R' U'] F'
[R' U R] U F [U R U' R'] F' U [R' U R]
F U' [R' F R F'] U' R U2 R' U' F'
R' F' R U' F U [R U R'] F' [R' F R]
R' U' [R U R' U'] [R' F R F'] [R' F R F'] R
R F R2 F' U' F U [R U' R] F' R'
F U F' r' U' F' U' [R U R' U] r
[R' F R F'] U' F [R U R' U'] y' R' U [R' U R]
R2 F' R' U' R F [R' U R] F R F' R
M' U' R' U' F R' F' R U R2 r'

Setup + y2

Front

Setup + y'

Front
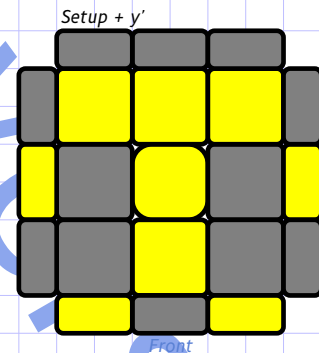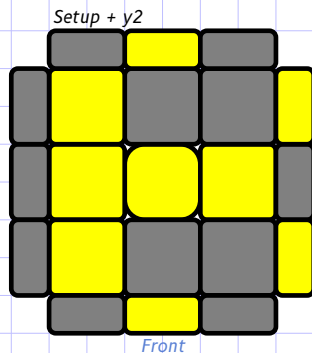
F [U R' U' R] [U R U' R'] F' [U' R' U R]
B' U' [R U R' U'] [R' U R] B [U R U' R']
F' U2 F R U' R' U2 F' U F
F U R' U' F' R [U R U' R'] [U' R' U R]
F U [R U' R] [U' R' U R] U [R U R' U'] R F'
S [U R' U' R] F R2 f' [R' U R]
F R' F' R U2 R U' R' U' [R' F R F']
F U R U' R2 U' R' [U' R' U R] U R U F'
F' f [U R' U' R] F U R U' f'
F R' U' R' [U' R' U R] U R U2 R U' R' F'
F' U F2 [U R U' R'] F' U2 F' U F

R U2 R' F' U F U2 R U' R'
M U' F [U R U' R'] F' U M'
[R U R'] B' R U' R' [U R' U' R] U B
R U [R U R'] F' U2 [R' U R] F R U' R2
F' U F [R U R'] U2 [R' F R F'] [U R U' R']
R U' R2 U' F' U F R U2 R U' R'
R' U [R U R' U] R U' R' F [R U R' U'] F' U2 R
R2 U D' F' [R U R' U'] F U' D R2
B' R U [R U R' U'] R' y U' R' F' R U R
R u R F' [U R' U' R] F R' D' F'
R' B' R U F [R U R' U'] F' R' B R

OLL #10 - S1
B' R' F R' F' R2 B

Setup

Front
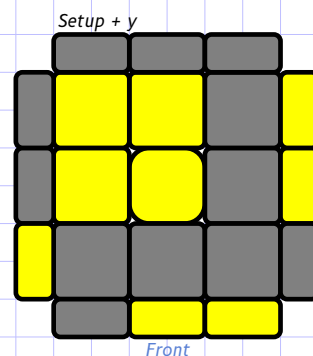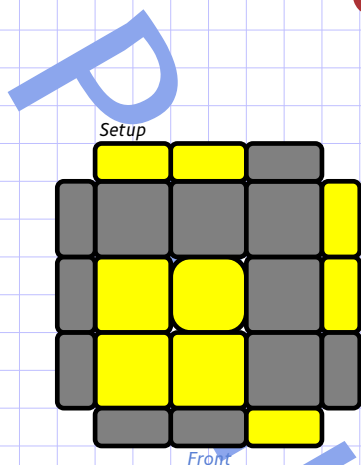
⭐⭐⭐ B' R2 F R F' R B
⭐⭐ R' F' (R U R' U') (R' F R F') U F R
⭐ R' F' U2 (R U R' U) R U2 (R' F R)
⭐ (R U R') F' L' U2 L U F
R' F' U F U' F' U2 F U R
R' F' U' F U (R U R' U') F' U F R
R' F' R F' U2 F U (R U R' U) F
R U (R U' R) F' (R' U R) F R F' U F
B' R' U (R U R' U') F' R B (R' F R)
R U r' F U F2 U' R' F' r
M F U (R' F R F') R U' R' F' M'
(R U R' U) F' U' F R U' R' F' U2 F
R2 U R U' (R' F R F') U F R2 F' R'
R' U F' U F R U' R' U' R (U' R' U R)

Setup + y

Front

⭐⭐⭐ R' U' (R' F R) F2 U F R
⭐ (R U R' U) R U2 (R' U R) y (R U R' U') F'
⭐ F U' (R U R') F' R F (R' U R) F' R'
F R2 (U' R' U R) U R F' (U R' U' R)
(R U R' U') (R U R') F' U' F U2 R U' R'
B' U' R' U F' U F U' R B
F R' F' R B' (U R U' R') U' B
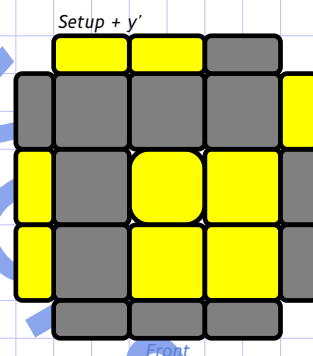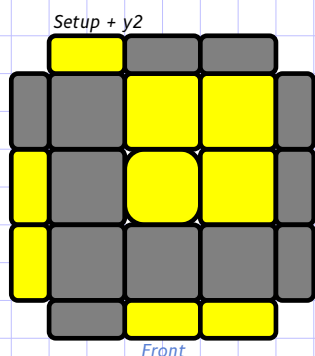R' U R2 B' u R' D' R2 F'
(R' F R F') U' (R U R') F R' F' R2 U' R'
M' F (R' U R U') F' M (U R' U' R)
F R U (R U' R) F' R' U R2 (U R U' R')
B' R2 F R F' R (U' R' U R) B
F U' R2 D (R' U R) D' R2 U F'
(R U' R' U) (R U R' U') R U' R' F' U F (R U R')

Setup + y2

Front

⭐⭐⭐ F' U' F2 R' F' R2 U' R'
⭐⭐ M' U R' U2 (R U R' U) R2 r'
⭐ R U' R' U' F U (R U R' U') (R' F R)
F' U (R U R' U') R' U' F2 R F' (R' U R)
F' R' U F2 (R U R' U') F2 U' R F
R' U' F R' F2 R (U R U' R') F R
(R U R' U) R U2 (R U' R) F' (R' U R) F R
F (R U R') F (R U R' U') F' (U R U' R') U' F'
R' U' R F R' U' R2 U R2 U R F'
R' U' F' U F U' F R' F' R U R
R' U' (R U' R) u (R' U R U') R D' F'
(R U R') U2 F U (R' F R F') U' R' F' R
F (R U R' U') R' U' R' U' R U R2 F' (R' U R)
R' U' b' R U' (R U R') F u

Setup + y'

Front

⭐ F (R U R' U') F' R' F' U' F U R
⭐ (R U R') B' R U' R2 U R B
⭐ R' U2 r U (R' U R) U2 R r'
F (R U R' U') F' U' F (R U R' U') F'
(R U R' U) R U2 R' U' (R U R' U') (R' F R F')
(R U R' U') (R' F R F') U' F (R U R' U') F'
(R U R') F' U L' U2 L U F
L' B2 l U R' U r
R' U2 R U2 R r' U' R' U r
(R U R' U') F' U' F R F (U R' U' R) F' R'
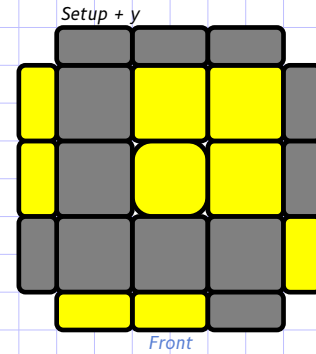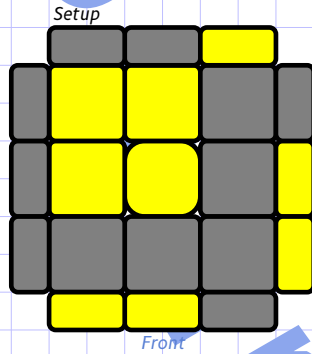B' U (R U R' U') (R' F R F') (U' R' U R) B
F' U' F U2 (R U R' U') (R U R') F' U2 F
R2 U R2 U' R' U' F U (R U R') F' R'
(R U R') F' U' R' U' R F (R U' R' U) (R' U R)

OLL #11 - S2
F R B' R B R2 F'

Setup

Front

⭐⭐⭐ F R2 B' R' B R' F'
F (R U R') F' U F U' R U' R' F'
L U F U' (R U' R' U) F' L'
R2 F R F' U' F' (R U R' U') R' F R2
F (R' F R) F2 U F U2 (R U R') F'
F R U' R' F (U R U' R') F' (R U R') F'
F R' D' (R U R') D R2 U' R' F'
R U' R' (U R U' R) F' (R' U R) F (U R U' R')
(R' F R F') L U' F' U F U L'
(R' F R) (U R U' R') F' U F U' F (R U R')
R U' B U' B' R' U (R U R' U) R U' R'
F R2 D R u' B R2 U R
R' F' (U R' U' R) F (R' F R F') (R' U R U') R
R' U (R' F R F') (R U R' U) y F U (R U R')

Setup + y

Front

⭐⭐⭐ F R (U' R' U R) U2 R' U' F'
⭐ (R U R' U') R' U' F U R2 U' R' F'
⭐ F (R U R' U') R U' R' U2 (R U R') F'
⭐ F (R U R' U') F' U' F (U R U' R') F'
⭐ R U2 r' U' R U' R' U2 M'
⭐ R U2 R' U2 M' U R U' r'
F' U' F2 R' F' R U R U2 R'
(R U R' U') M' U (R U R' U') R U' r'
F U2 (R U R' U) (R U R' U') (R U' R' U) F'
F' U' F R B U2 B' U' R'
F' U' F U' (R U R' U') F' U2 F (R U R')
(R' F R F') U2 (R U R' U') F' U2 F (R U R')
(R' F R F') U' R B U2 B' U' R'
F R' U' R F' (R' U R) F' r U r'

Setup + y2

Front
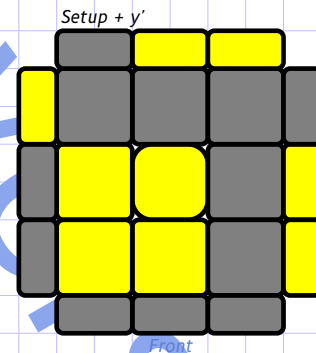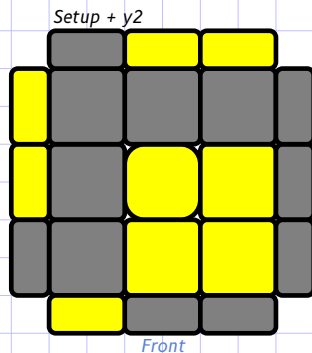
⭐ R' F' U' F U R F (R U R' U') F'
(R U R' U') R2 U' R F R' U R2 U' F'
(R U R' U) F' U F U2 (R U R' U') R U' R'
R' F' U' F U (R U R') F' U' F U R
R r2 F R F' M' U' M' U (R U R')
R r' U' R U2 R' U' R U' R2 r
F' (R U R' U') (R' F R) U' F' U F (R' F R F')
R U2 R2 U' (R U' R' U) F R F' (R' U R)
(R U R') B' R U R2 U' R2 U' R' B
F U M U F' U' F M' U' F'
F' U' F U F R' F' R F (R U R' U') F'
B' U' R' U2 (R U R' U') R (U' R' U R) B
F U (R' F R F') U' S (R U R' U') f'
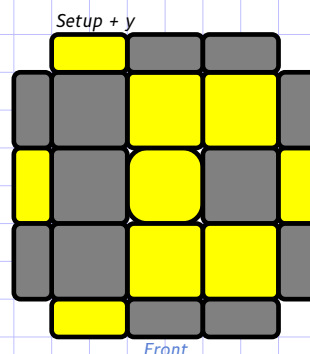F U' R' U' (R' F R) U R U' F' U2 F'

Setup + y'

Front

⭐⭐⭐ R U R2 F R F2 U F
⭐⭐ F U (R' F R F') R' U' R F' (R' U R)
⭐⭐ F (U R U' R') U (R' F R F') U' F'
F' R U B U' (R' F R) B' R'
R U R B' R' B2 U' B' R'
B' R B R' F (U' R' U R) U F'
F R2 B' R' B (R' U R U') R' F'
B' (U R U' R') U' B U2 (R' F R F')
F (U R U' R') F' U F (U R U' R') F'
(R U R' U) F' U' F (R U' R' U) F' U F
F' (R U R' U') (R' F R) U' F' U' F U (R U R')
R U' r' F R' F' U2 (R U R' U) r
B' R2 (U R U' R') U' R' B U' (R U R')
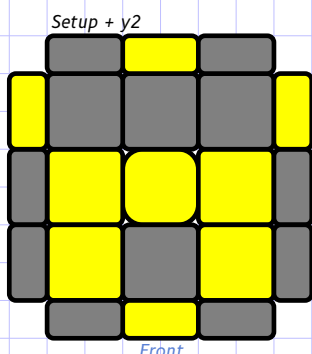R' U' (R U R') F (R U R' U') F' U' R (U' R' U R)

OLL #12 - C1
F B' R B R' F' U' R' U R

Setup
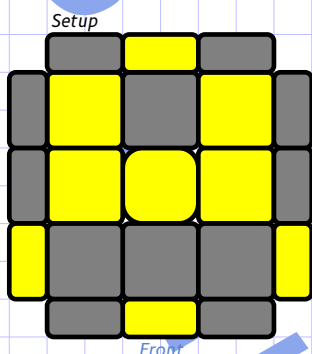
⭐ R U2 R' F (R U R' U') F' U (R U R')
F (R U R' U') R' F' r U R U' r'
R U' R' U2 F' U F (R U R' U') (R U R')
(R U R' U') (R' F R F') R' U' R U' R' U2 R
F (R U R') U2 (R' U R) U F' U (R' U R)
R' U' R U F R B' R' F' B
R U' M' (U' R' U R) U r' U (R' F R F')
M F R U F U' F' M' U' R'
F (R U R' U') R F' U (R' U R) U2 F R' F'
F (R U R' U') F' U2 F (U R' U' R) F' (R' U R)
R U2 R' U R' F' U' F U R2 U R'
B' R B R' F (R U R' U') (R' U R U') F'
(R U R' U') (R' F R F') U R U2 R' U' R U' R'
F R (U' R' U R) U R' U2 F' U' F U' F'

Setup + y

⭐ F' U' F U r (U R' U' R) r'
R' U' R F R2 (U' R' U R) U R F'
(R U R') B' R2 (U R U' R') U' R' B
(R U R' U') R r2 F R F' M' U' M'
F' U' F U' R U' R' U' F R' F' R
F' U' F2 U F R' F' U' F' U R
R' F' R' U' R F2 (R' U R U') F' U R
F' U' F U' M U2 (R U R' U) M'
R' U' (R' F R F') R U' (R' U R U') R' U2 R
F2 U' R F (R U R' U') F' U R' U F2
R' U2 R U F U R2 U' F' (R U R' U') R'
R' U2 (R U R' U') (R U R' U') R F (U R U' R') F'
R' F R' F2 U' F U R U' (R' F R F') R
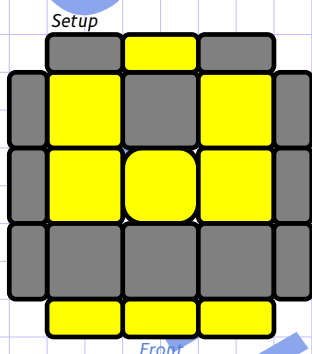R U2 r' U' F U F (R U' R' U) M'

Setup + y2

⭐⭐⭐ (R U R' U') B' (R' F R F') B
⭐⭐ (R U R' U) F' U F U (R' F R F')
⭐ (R U R' U') (R' F R F') R' U2 (R U R' U) R
R' U2 R F (R U R' U') F' U' R' U' R
(R U R' U') (R' F R F') U (R U R' U) R U2 R'
(R U R') U2 M U F' U' F M'
F (R U R' U') F' U' F (U R' U' R) F' (R' U R)
R' U2 R2 U R2 U R U2 (R' F R F')
(R U R') F' U' (R U R' U') (R' F R) U R U2 R'
F R (U' R' U R) U R' y' U (R' U R) U2 R'
F (R U R' U') (R U R') F R' F' R2 U' R' F'
F U R' U' F2 U R (U R U' R') U' F
F U R' U' R2 F' (R U R' U') R' F R F'
R' U2 (R U R' U) F (R U R' U') F2 U F R

Setup + y'
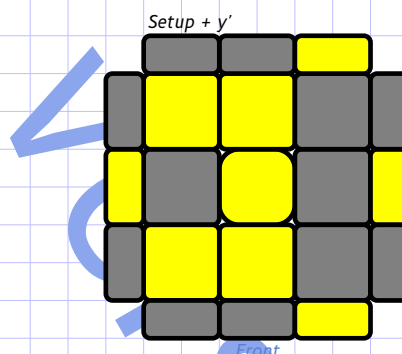
⭐ R U (R U R' U') R' U F R F' U2 R'
R' U' (R' F R F') R F (R' U R U') F'
F U F' U' R' F' r U R U' r'
F' U2 F U' F (R U R' U') F2 U' F
R2 F U' F R F' (R' U R) F (R U R' U') R
B' R' U (R U R' U') F R' F' R2 B
F' U R U' r' U' F' U F M' F
(R U R') F' U2 (R U R' U') (R' F R) U' (R' F R F')
R' U R' F U R U' F' (U R' U' R) U R
R2 U' R F' (R' U R U') F (R' F R F') U R
R' F' U' R' F U' F' R F (R' U R) U R
R F (R' U R U') F' R' F' U' F U (R U R')
S R' F' (U' R' U R) S' U F
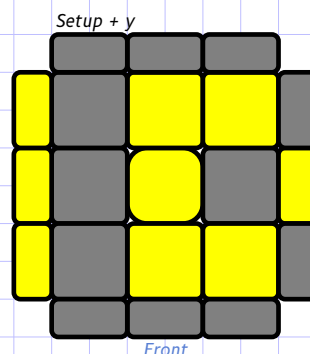R' U' R F R' F' U R U2 R U2 R'

OLL #13 - C2
F U R' F' R F' U' F'

Setup

F U F R' F' R U' F'
F (R U R' U') (R' U R U') F' (U R' U' R)
F R2 U R' U' F' U' (R U R' U') R'
R' F (R U R') F R U F U2 F'
R F R U' R' U' F' r' F M'
F (R U R') U2 B' U F' U' B
F (R U R' U') F U2 R' U2 (R U R' U) R
F R U' r' U2 (R U R' U) M' U' F'
R U F' U' F (R U R') F' U F U R'
F (R U R' U') (R U R') F' (R' F R) U' R' F' R
[R' U R] U2 (R U R') F R2 F' R' U2 R'
F U (R U' R') B' R2 F' R B R'
(R U R') F' R' U' R F R' U R2 U2 R'
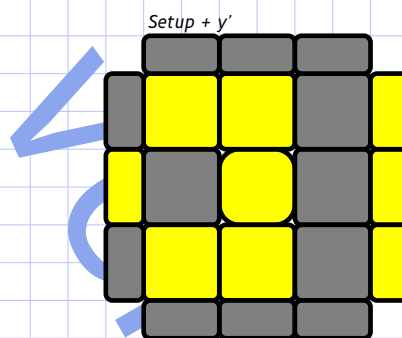(R U R') F' (R U R' U') R' U' F U R2 U2 R'

Setup + y

L F U' (R U R') F' L'
F2 U' (R' F R F') (R U R') F' U' F'
R U2 R' U' F' U2 F R U' R'
R2 U' R U' (R U R') F R' F' U R2
R' U2 R U B U2 B' (R' U R)
M' U' M' U F (R U R' U') F' U' M2
R' F' U' F U (R U R') U2 (R U R' U) R
R' U2 (R U R' U) R U' F (U R U' R') F'
B' U (R U R' U') R' b U S
R' F' U' F U' R U F (R' U R U') F'
(R U R' U) F R' F' U' R2 U' R2 U2 R
F' r F U (R U R') F' R' U' R r'
R r2 U' F U R' r2 F U' F'
R' U' R F (R U' R' U) (R' U R) U (R U R') F'
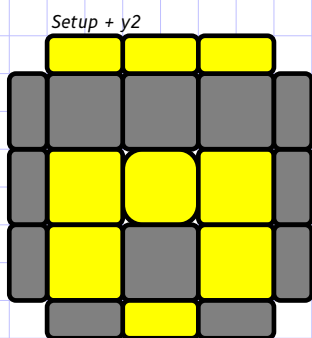
Setup + y2

B' R' U F' U' F R B
F' U' R U' r' F M' U F
R2 (U R U' R') F R U (R U' R') F' R'
F U2 F' U' r' U' F' U r
F (R U R' U') F' (U R' U' R) U' R' U2 R
(R' F R F') U (R U R' U') (R U R') F' U2 F
F' U2 F U (R U R' U) F R' F' R
F R U R2 U' R F' U' R' U2 R
R U' R' U' F U F (R' F R F') (R U R')
F (R U R' U) F' U' R' F U' F' U R
S U' f (R U R' U') F f2
(R U R') F' U' F U' r' F R F' M'
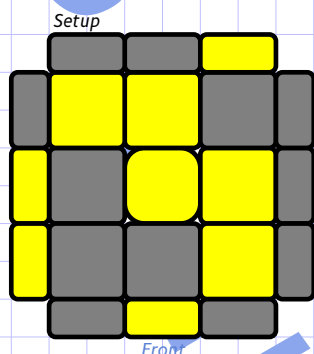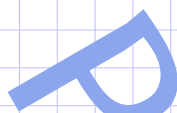F' U2 F U2 F (R U R' U') F' U' (R U R')
B' U' B' l U R' F U

Setup + y'

⭐⭐⭐ R' U' (R' F R F') U R
M F (U R U' R') F' U' M'
M' U R' U' F' U F R2 r'
L' U2 L U F (R U R') F'
R' F' U' (R U R' U') R' F R2 (U' R' U R)
(R U R' U) R U' R' F U F R U' R'
(R U R' U') (R U R') F' U2 F U' R U' R'
R' F' U' (R' U R U') F (U R U' R') U R
(R' F R F') U' F' U F2 (U R U R') F'
F R' F' U' F R F' U' R' U2 R
R' U' R (U' R' U R) B U' B' (R' U R)
M' B' (U' R U R) B U M
B U' F U B' (U R U' R') U' F'
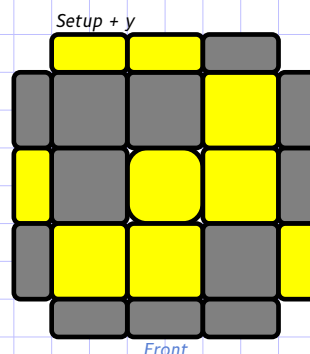F' U B' U' F (U' R' U R) U B

OLL #14 - W1
R' F R U R' U' F2 U F R

Setup

⭐ R' F' U' F2 (U R U' R') F' R
F R' U' R' U' R U R2 F' (R' U R)
(R U R') F' (R U R' U') (R' F R) U' (R' F R F')
F U F (R U R' U') F' (U R U' R') U' F'
R' U' R U' B U' B' U2 (R' U R)
F U' R' U' R' U' R2 U R2 F' (R' U R)
F' U' F2 R' F' R2 (U R' U' R) U' R'
R' U' R U' R' U2 R U' F (R U R' U') F'
R' U' (R' U R U') F U R' U' F' R U R
R' U' R (U' R' U R) F (R' U R U') (R U R' U') F'
R' U2 (R U R') F' U (R U R' U') (R' F R) U R
M' U R U' r' U (R U R') F' U2 F
R' U2 B' R B U R' (U' R' U R) U R
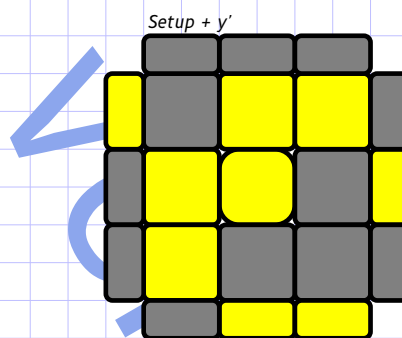R2 U R2 U' R' U' F R' F' (R U R' U') R2

Setup + y

B' (R' U R) S (U R' U' R) F
F' r' U' R F (R' U R) F' M' F
(R U R' U') R' U' F R F' U' R' U2 R
(R U R' U') F' R' U' (R' F R F') R F (R' U R)
(R U R' U') F' U' R U R2 U' (R' F R) U R
R U' R' U' F (U R U' R') F' R U2 R'
R' F' U' F U R U2 (R U R' U') (R' F R F')
R U M F U F' U' R' F' M'
R S (R U R' U') B' (R' F R) u'
R' U2 F R F' U2 (R U R' U') (R U R' U) R2
(R U R') F' U2 F B' (R U' R' U) B
F' U' F R' U' (R' F R F') U (R U' R) U' R'
(R U R' U) R' U' F' U F2 R F2 U F
R' U' F' U' F2 (U R U' R') F' (R U R' U) R
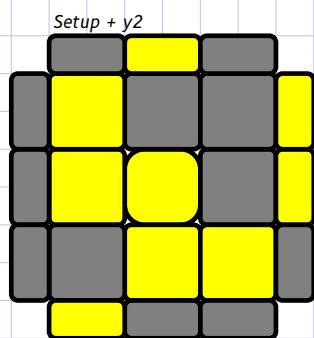
Setup + y2

⭐⭐⭐ (R U R' U') F' U2 F U (R U R')
(R U R') U2 F' U' F U' R U' R'
(R U R' U) (R' F R F') U' (R U R' U') R U' R'
R U R2 U' (R' F R F') U F R F'
(R U R') B' (U' R' U R) B (R' F R F')
R' U' R (U' R' U R) B U B' (R' U R)
F (R U R') F' R' F U' F2 U F R
F B' U' R' U' R U F' (R' U R) B
R' U' F' U F2 (R U R' U') F2 U F R
R2 u R' (U R U' R') D' F' (R U R') F'
R' F' U F R r' U F U' F r
F U F' r F U' R' F' R U r
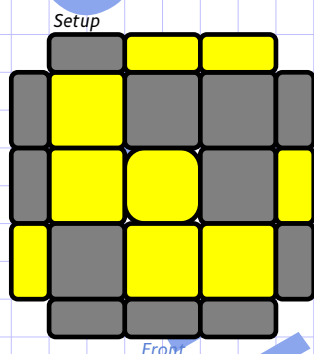R' U F U2 F' U' R F U' (R U R' U') F'
R' B' R F R' F' U' R' U B R

Setup + y'

R U R2 F' U' F U R2 U2 R'
R' U' F' U F U' R F (R' U R U') F'
F' U' F (R U R') F' U F2 (R U R' U') F'
R F (R' U R U') F' R2 F R F' (R U R')
R' U' F' U' F U2 (R' F R F') (R U R' U') R
F R' F' R U (R U R' U') (R U R' U') R U' R'
F R' F' U' R U' R' U2 R U2 (R U R')
F' U' F U' F' U F (R U R') F' U F
R B U2 B' U R' U (R U R' U') (R U R')
R U R2 F R F2 U F2 (R U R' U') F'
(R U R' U') M' U R2 U' r' F U R U' F'
F (U R U' R') (U R' U' R) U' R' U2 R U F'
F R' U' R2 U (R U R' U') R2 U F' (U' R' U R)
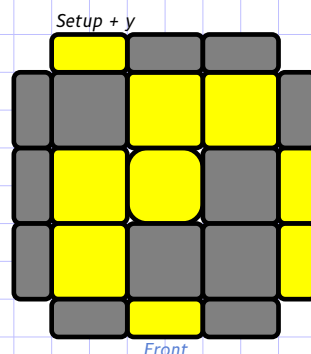(R U R' U) R U2 R' U' R' U' (R' F R F') U R

OLL #15 - W2
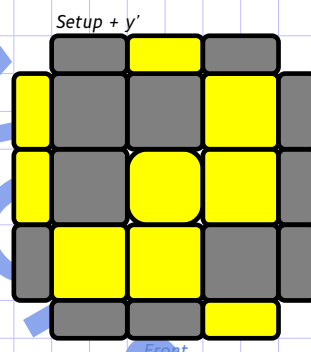## F R' F' U' F U R2 U' R' F'

Setup

Setup + y

⭐ F R U R2 U' F' U F R F'
F U R' F [R U R' U'] R F' [R' U R] U2 F'
F [R U R' U'] B' [U' R' U R] B U F'
R' F' U2 F U' R U' R' U' [R U R' U'] R
R' U' R U F [R U R' U'] F' U' R' U2 R
R' F' U F U [R' F R F'] U [R U R' U] R
R' U' R U' R' U2 [R U R' U'] [R' F R F'] U R
F' U' R' U' R F [R' U R] U F R' F' R
F U F [R U R'] F' [R' F R] U' F' U' F'
R U2 R' U [R U R' U'] R U' F [U R U' R'] F' R'
R U2 R2 U' F' U F R U R U2 R'
F R' E [R U R' U'] R' u R U' F'
[R U R' U] [R' F R F'] U2 r' F R F' M'
[R' U R] U F R' U R2 U' R' F' R' U2 R

⭐⭐⭐ [R U R' U] R U' R' U' [R' F R F']
⭐ F' U' F2 [R U R' U'] F2 U2 F
[R U R' U] [R U R' U'] F' U2 F [R' F R F']
[R U R' U'] [R' F R F'] U' R' F' U' F U R
R2 U' [R U' R] U F R F' R2 U R2
F B' U [R U R' U'] B R U' R' F'
F R' F' R' U [R' U R] U2 R2 U' [R U R']
[R U R' U'] [R' F R] S [U R U' R'] f'
M' U' r' F R U F R U' R' F'
F R' F' R' U R' [U R' U' R] U R U2 R2
F [U R U' R'] U F' R' F U' F' U R
[R U R' U] R' F R2 U R' U' F' U [R U R']
[R' U R] U2 R' U' [R' F R F'] R U' R' U' R
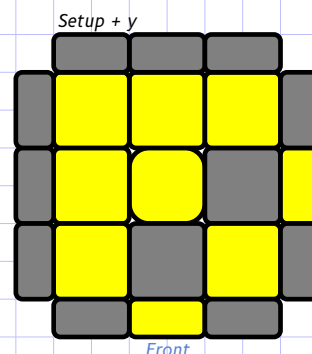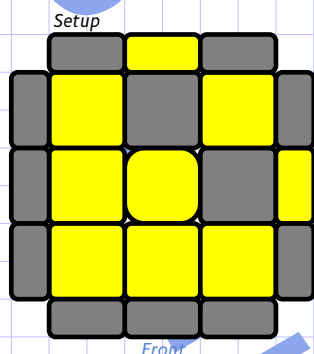F R U R2 U' F R' [U' R U R] U R F2
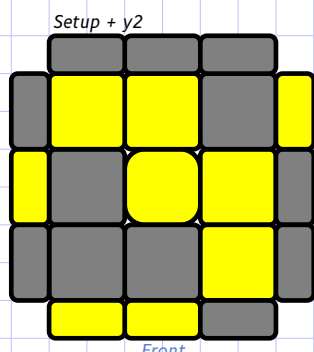
Setup + y2

Setup + y'

⭐ F' U' F U2 [R U R' U] F' U F
R' U2 [R U R' U] R F [U R U' R'] F'
R U' R2 F R F' U [R U R' U'] [R U R']
R' U' R F U R2 U' F' [R U R' U'] R'
F R U' R' S U' [R U R'] f'
F R' U' [R' F R F'] U R U [R U R' U'] F'
F' U' F U R U2 R' U' F' U' F
R' U' R F U' R' U2 R U [R U R' U'] F'
F U F' U F U [R' F R F'] [R U R'] F'
F U' R2 U' R U R U R F' U [R' U R]
[R' U R] U B' [U' R' U R] B R' U2 R
R' F' U' F R F R' U R2 U' R' F'
F [U R U' R'] U [R U R' U'] y' R' U2 [R U R']
F R2 [U' R U R] U [R U R' U'] F' R [U R U' R']

⭐ [R U R' U] F' U F U2 R U' R'
[R U R' U] R U2 R' U F [R U R' U'] F'
B' R U [R U R' U'] R2 B R U' R'
F [R U R' U'] F' U [R U R' U'] [R' F R F']
[R U R'] B' U R U' [R U R' U'] R' U' R' B
F [R U R' U'] F' U F R [U' R' U R] U R' F'
R U2 F R' F' U' R [U R U' R'] U' R'
R U R U' R2 U' [R' F R F'] R U [R U R' U'] R'
R B U B2 [U' R' U R] B R'
L F U' F' U F [R U R'] F' L'
F' U' F R2 r' U' R' F' U F M'
F R U2 R' U' F [U R U' R'] F' U' F'
S R [U R U' R'] F U R' U' f'
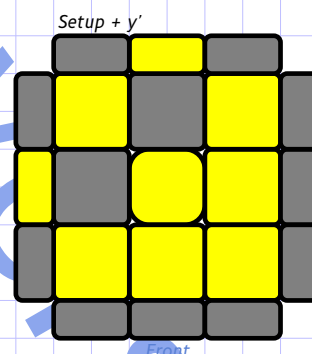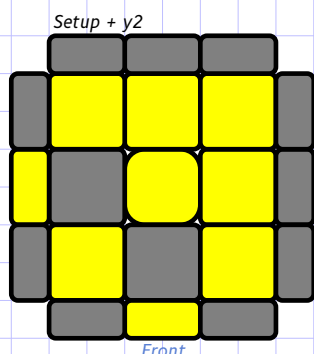[R U R' U] [R' F R] F2 U F U' R U2 R'

OLL #16 - E1
F2 R2 B' R' B R2 F' R F'

Setup

Front

⭐⭐⭐ R2 r' U' R' U M' U' [R U R']
⭐⭐⭐ M U [R U R' U'] M' [U R U' R']
　⭐⭐ S' R' U' R S [R U R]
　⭐ F [R U R'] F' r' U' F' U r
　⭐ R' U' [R' F R F'] U R F [R U R' U'] F'
　⭐ M2 F' R' F M' F' R F M'
　⭐ F [R U R' U'] F' B' [U' R' U R] B
　　 M' U' M U2 M' U' M
　　 M U F U' F' M' F U F'
　　 B' R U R [U R U' R'] U' R' U' B
　　 R' U2 R F U' R' U' R U [R U R' U'] F'
　　 R2 U R2 F' U F R U' [R' F R F'] R'
　　 F [R U R' U'] F' r U' [R' F R F'] U r
　　 F R' F R2 B' R B R2 F2

Setup + y

Front

⭐⭐⭐ F R' U' R' [U' R' U R] U R U F'
　⭐⭐ S' [R' U R] S R' U' R
　⭐⭐ F R2 [U' R' U R] U [R U R' U'] R F'
　⭐ F R' F' M F R F' M'
　⭐ [R' F R F'] B U' F' U F B'
　⭐ R2 r U R U' M [U R' U' R]
　⭐ F [R U R' U'] F' U' R' F' U' F U R
　⭐ R' F' U' F U R U F [R U R' U'] F'
　⭐ R U2 [R U R' U'] R' U F R F' U' R'
　　 M' U' R2 U [R U R' U'] R' U' R' U r'
　　 F U R2 U' R' F' R' U R U [R U R' U'] R'
　　 R' U' R U [R U R' U'] R' F U R2 U' R' F'
　　 R' F U2 [R U R'] F' [R' F R] U F' R
　　 R2 U' [R' F R] F2 U F2 R F' R

Setup + y2

Front

　⭐ R2 F R' [U' R' U R] U [R U R' U'] F' R2
　　 F R' U' R' U' R U R U R U' F'
　　 [R U R'] F' U' F [U R U' R'] U' [R' F R F']
　　 F [R' U R U'] R' U' R' U' R U R2 F'
　　 M' U2 R' U' R U' M U [R' U R]
　　 R' U' R U2 r' U [R U R' U'] M' U' R
　　 R U' F R2 U R U' F' U' [R U R' U'] R2
　　 R' F' U' F U R U' F [U R U' R'] F'
　　 R U' F R' F' U' R [U R U' R'] U2 R'
　　 R U [R U R' U'] [R' U R] U F' U F R U' R2
　　 R2 r' U' R F2 [R' U R] F2 R r
　　 M' U [R U' R'] U R [U R U' R'] U' R' r'
　　 R' U' [R' F R] U R U' y' R' [U' R' U R]
　　 [R' F R] U2 R' U' F' U R F U2 F'

Setup + y'

Front

　⭐⭐ B' R U [R U R' U'] R' U' R' U B
　⭐ M [U R U' R'] U' M' U [R U R']
　⭐ F [R U R' U'] F' R' U' [R' F R F'] U R
　⭐ [R' U R] U2 R2 U' F' U F R U R
　　 F' U2 F [R U R' U'] F' U2 F [R U R']
　　 F' U B' R B R' U' F [R' U R]
　　 M' U M U2 M' U M
　　 R U2 R' U' [R' F R F'] U' F' U2 F
　　 R' F M2 F' [R U R'] F M2 F' R
　　 R' F [R U R' U'] F' [R U R' U] R' F' R2
　　 R2 r' [U R' U' R] U' M' U [R U R' U'] R'
　　 F' U2 F [R U R'] F' U F R U2 R'
　　 F U' F' U2 F2 [U R U' R'] F' U' F'
　　 M' U M' U2 M U M2 U M'
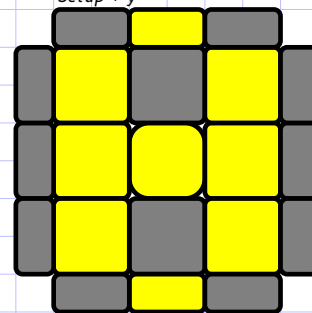
OLL #17 - E2
B' R' F R F' B U' F' U F

Setup
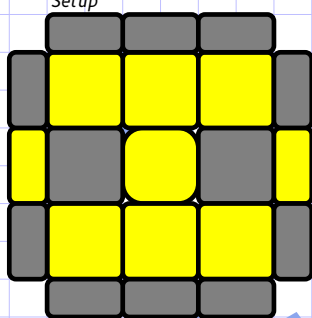
Front

[R U R' U'] M [U R U' R'] U' M'
R' U' R S' [R' U R] S
[R' U R] S' R' U' R S
B' U' [R U R'] B U' [R' F R F']
[R U' R' U] M' U' [R U R' U] M
M' F [R U R'] F' r' U' F' U R
[R U R' U] R' r U' R [U' R' U R] r'
[R' F R] F2 U F [R U R'] F' U' F
F' U F M F' U' F U M'
F [U R U' R'] F' f [R U R' U'] f'
F U F [R U R' U'] F2 U2 F U F'
F U [R U R'] F' U2 F [R' F R] F2
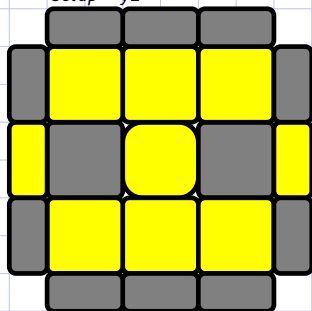R2 U' F U R' U' R2 F' [R' U R U'] R2
F' U' F U F B' R' F' R B

Setup + y

Front

⭐⭐⭐ [R U R' U'] M' U R U' r'
F U R' U' R' [U' R' U] U R F'
B' U R U [R U R' U'] R' U' R' B
R F U F' M' F U' F' r'
R [U' R' U R] r' U' R U R2 r
R' F [R U R' U'] F' R F [R' U R U'] F'
[R' U R U'] R' U' R r' U [R U R' U'] r
F R' F' R2 U' R' F' U' F [R U R']
[R U R' U'] [R' F R] [U' R' U R] U F' U [R' U R]
M2 U' F2 U M' U' F2 U M'
R U2 F [R U R' U'] F' U' R' U2 [R U R']
F U R U R U [R U R' U'] R' U' R2 U' F'
[R' U R] U M U' R' U' R U2 M'
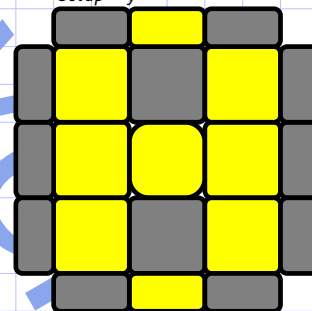R' U' R U' M' U [R' U R] U2 M

Setup + y2

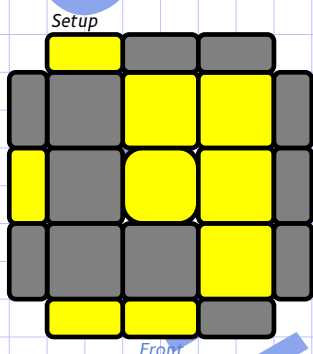**Front**

[No specific algorithms for this orientation]

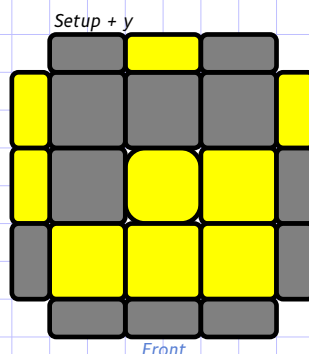**Setup + y'**

Front

[No specific algorithms for this orientation]

OLL #18 - P1
R' F R U R' U' F' U R

Setup
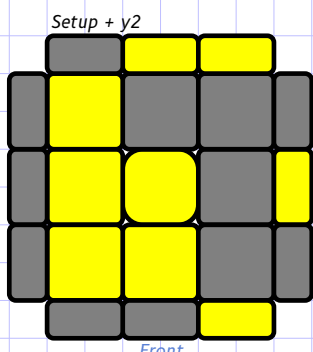
Front

⭐⭐⭐ R' U' F (U R U' R') F' R
⭐ [R' F R F'] U (R U R') F' U2 F
F' U2 F2 (U R U' R') F2 U F
F' U F (R U R' U') (R' F R) F2 U' F
F R U' R2 U2 R2 U R' F' (R' U R)
[R' F R F'] U' F' L' U r U
[R' F R F'] R U (R U R' U') R' U' F R F' R'
R2 U' R B U2 B' (R' U R) U R
(R' U R U') R' U (R U R' U) F' U F U R
F (R U' R' U) F' r U' F U r
R' U2 (R U R' U) R' U' R F' (R' U R) F R
[R' F R F'] U2 R' F' R (U R U' R') U F
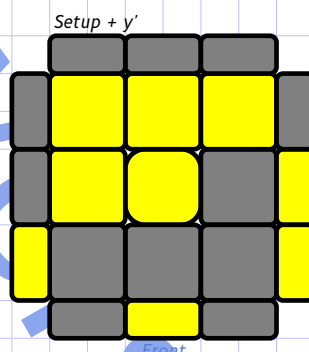M' U R U' r U (R U R' U) F' U F
S R' U' R U R B' R' F

Setup + y

Front

⭐⭐ [R U R' U'] R' U' F R F' (R' U R)
⭐ S (R U R' U') f' U' F
R r' F' U' F U F R' F' r
R U B' U' D' [R' U R] u R F'
F U' R U' R' F (R U R' U') F' U2 F'
R U2 R' U' F' U F U R U2 R'
B' U F (R U R' U') F' (U' R' U R) B
R' U2 (R U R' U) R U2 (R U R' U') [R' F R F']
M F U' (R' F R F') (R U R') F' M'
R' U' R' F R2 U' R' U2 (R U R') F' R
F' U' F R U r' F' U F U' M'
R r' F R' U' R F' R' U F' r
F' U2 F U R U B U B' R'
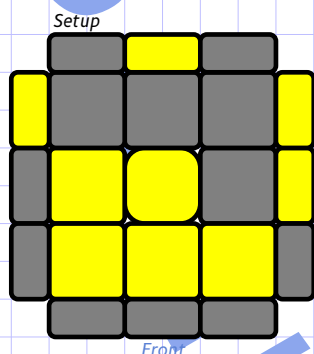(R U R' U) F' B' U (R U R' U') (R' F R) B

Setup + y2

Front

⭐ R' F (R U R' U') F2 U F R
F B' (U' R' U R) U F' U' B
B' R' F' U F (R U R' U') R B
R' U' F' U' F U R U2 R' U' R
R' U' R U' F (R U R' U') F' U' R' U' R
R' U' [R' F R F'] (R U R' U) F R' F' R2
R U' R2 U' [R' F R F'] R U (R U R' U') [R' U R]
F R' F' R U2 [R' F R F'] R U2 R'
B' R' F' (R U R' U') R' F R2 U' B
F [R' F R F'] (R U R') F' r' F2 r
[R' F R] B' R' F' [R' F R F'] R B
R' U' (R U' R) U R2 U R U2 [R' F R F']
B' U' (R U R') S U' R' U F
F U R' U' R' f' (R' U R) U S

Setup + y'

Front

⭐ F R' F' R U (R U R' U') R U' R'
R' U' F' U (R U R' U') (R' F R) U R
(R' U R) U (R U R' U') [R' F R F'] U' R' U' R
M' U R U' r' U2 F' U2 F
R' u' F R' F' D B (R' U R)
F' U' F U2 F (R U R' U') F2 U' F
B' R B R' U' R' F' U F R
R' U' (R U R' U) R U (R U R' U') R' U' F R F'
F U (R U R') F' (R' F R) U2 R' F' R
F R' F' U' R U (R U R' U') R' U R2 U2 R'
M' U F R U' R' U' F' r' F R
R F R' U R' U2 (R' U R) U R2 F' R'
F R' F R' (U' R' U R) U R F2 (U R' U' R)
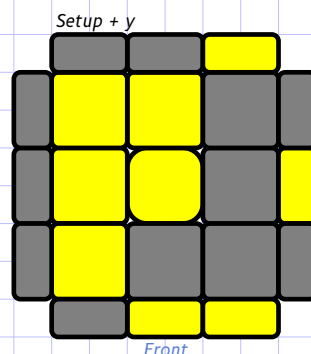M' F (R U R' U') R' F' R2 r' (U R U' R')

OLL #19 - P2
F R' F' U' F U R U' F'

Setup

Front

⭐⭐⭐ F U R' U' F' U F R F'
⭐ R U2 R2 U' F' U F R2 U' R'
R U B U' [R' F R] B' R' F'
B' R' U (R U R' U') R y U2 [R U R' U] R
R U2 [R U' R] F' [R' U R] F R2 U' R'
B' R B R U' R' U' [R U R' U] R
R r' U' (R U R' U') [R' F R F'] U R' r
R' U' [R' F R F'] U F (R U R' U') F' U R
R U R2 U' R' [U' R' U R] F R F' [R' U R]
F R' F' R U' F' U' F R U2 R'
M F U F' U' F' r U R'
R' U' R' U2 R U F' [R' U R] F U R
[R U R' U'] R' U2 F U R U' F' U [R' U R]
[R U R' U'] R' U2 [R U R' U] R U2 [R' F R F']

Setup + y

Front

⭐⭐⭐ [R U R' U] F [R U R' U'] F' U [R U R']
⭐ F B' [U R U' R'] U' B U F'
F U R U' F' r U R' U' r'
[R' U R U'] F U R' U' F' R [U R U' R']
[R' F R F'] U' F' U' F U F' U F
[R U R'] U2 R' F' U' F U R2 U' R'
R' U' R U' [R U R' U'] R' U F R F' [R' U R]
F U [R' F R F'] U' R' F' R [U R U' R']
F R B U' B' R' U' [R U R'] F'
F [U R' U' R] S R2 f' [R' U R]
R' F' U F R U' r' U' R U M'
F [U R U' R'] U' R' U2 R U F' [R' U R]
F R' U' R2 U [R U R' U'] R U R U F'
R' U2 [R U R' U'] [R U R'] F R' F' R U R

OLL #20 - P3
R' F' U' F U R

Setup

Front

⭐⭐⭐ R' U' F' U F R
B' R' F' U F U' R B
R U R' U' F' U2 F [U R U' R']
F U R' U2 R2 U R2 U R F'
R F R' U R' U' R' F' [R U R U'] R2
R2 U' R U [R U R' U'] R' F' U F [R U' R]
F U' B' U F' U2 [R' U R] B
[R U R' U'] F U R U' [R' U R U'] R' F' [R U R']
R' U' [R' U R U'] F' [U R U' R'] U F R
F' L' U r U R B' R'
R' U' F' U2 F U' [R' F R F'] U' R
[R' F R F'] [U R' U' R] U F U' F [R' U R]
[R U R' U'] [R' F R] U F R' F' R U' F'
[R U R' U'] B' [U R U' R'] U2 [R' U R] B

Setup + y

Front

R' U' F R' F' R U R
F' U' F U2 [R U R'] F' U2 F
M' U' r' F U' R F [R' U R] F'
R' U' R' F' U F [R' F R F'] U' R2
F R U' R' F' U' r' F2 r
M' U' F R U' R' F' r' F R
M' U' r' F U F U' F' U' R
F' U' R' F U' R' F' R U R F
F R' F' R U [R U R'] U2 [R' F R F']
M' F [U' R' U R] U F' r' U2 R
R' F' U F2 [R U R' U'] F2 U' F R
F U' R' U2 [R U R'] F' U R [U R U' R']
F U2 F' U r F [R' U R] F' r'
R' U' F' U R U' r' F M' F R

Setup + y2

Front
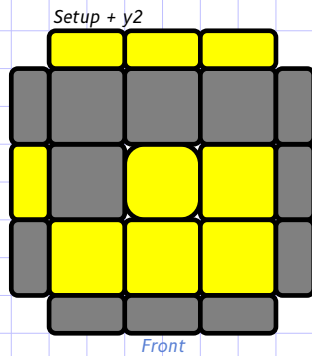
[R U R'] F' U2 F R U' R'
B' [R' U R] U2 R' U' R B
[R U R' U'] F' U' [R U R' U'] [R' F R]
F' U2 F U' [R U R'] F' U2 F
R' U2 [R U R' U] F [R U R' U'] F' U R
F' [R U R' U'] [R' F R] U' [R' F R F'] [R U R']
B' R' U F [R U R' U'] F' R B
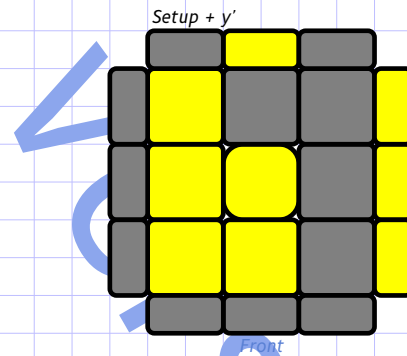F' U [R U R'] F' U2 F U' [R' F R]
[R U R' U'] F' U' R' F [R U R'] F' R F
[R U R'] F' U2 [R U R' U'] R' F R2 U' R'
F' U B' R' U [R U R' U'] R B U F
F' U' r U' L' U B U
[R U R' U'] R' F U' [R' F R F'] U R U F'
L U' F R' U R F' [R' U R] L'

Setup + y'

Front

F U F' r' U' F U r
R' F' U F U [R' F R F'] U' R
F' U2 F U [R U R' U'] F' U2 F
R' F [R U R' U'] R' F' R F' U F R
R [U' R' U R] F [R U R' U'] [R' U R U'] F' R'
[R U R' U'] B' [R' F R F'] [U' R' U R] B
B' R U [R U R' U'] R' U' R2 U R B
R' F' R [U R U' R'] U F [U R U' R']
R' U' F' U [R U R' U'] [R' F R F'] U F R
[R' U R] B U' B' R' U' R [U' R' U R]
[R' F R] B' R' F' R [U' R' U R] B
R U' r' F R' F2 U' F U r
B' R' U F [R U R' U'] R' F' R2 B
R2 r' F [R' U R] F' R' U' R' F' r

OLL #21 - P4
F R U R' U' F'
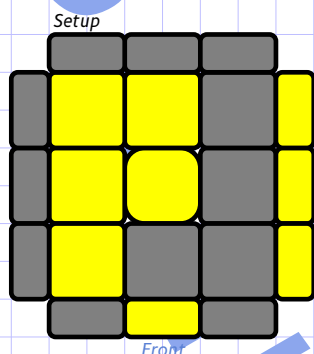
Setup

⭐⭐⭐ F (U R U' R') F'
L F (R U' R' U) F' L'
(R' U R U') F (U R' U' R) (U R U' R') F'
(R U R' U') (R' F R) U R U' (R' U R U') R' F'
R U' R' F' U F (R U R' U) R U' R'
R' U' F' U F R2 U (R' U R) U2 R'
M' U' (R U R') F' U2 F R U' r
R U F' B U B' U' F U' R'
F U2 R U (R U R' U') (R' F R F') R' U2 F'
R B R' U' (R' U R U') B' (U' R' U R)
F' U' F (R U R' U') (R' F R) F2 U2 F
R' U' F U2 F2 U' F2 U' F' R
B' R2 F R F' U (R U R' U') R B
F U R' U' R' (U' R' U R) U R (U R U' R') F'

F R U' R' U2 (R U R') F'
R' U' R B U2 B' (R' U R)
(R' F R F') U' R U' R' F' U F
F U R U2 (R' U R) U2 R' U' F'
(R U R' U') (R' F R F') U' F (U R U' R') F'
F U (R U R' U') R' U2 (R U R' U) R F'
F U (R U R' U') B U' F' U B'
R' r' U' R F2 (R U R) F2 r
(R U R' U') R' F R2 U' R' U2 (R U R') F'
F U B' U (R U R' U') B (R U R') F'
R U2 R' U' F' U' F U R U2 R'
B U B' U2 R' U' (R' F R F') R
F U2 B' U' (R U R') B U2 F'
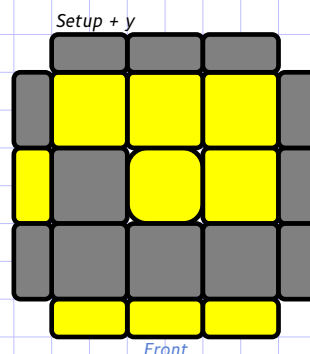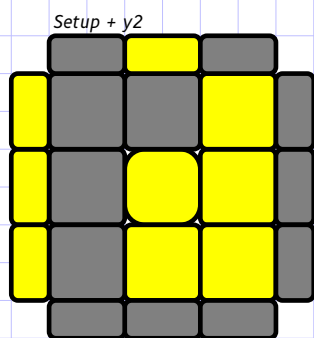F' R' F U' F (U R U' R') F2 R F

Setup + y2

F' U' F (R U R' U) F R' F' R
(R U R') F' U2 F U R U2 R'
R (U R U' R') U F U R U' R2 F'
(R U R' U) F' U' (R U R' U') (R' F R F') U F
F U' (R' F R F') U' F' r' F r
M F' r F U (R U R') F' R'
(R U R') B' R2 B R' U' R2 U R
R F U' (R U R' U') (R' F R) U2 F R' F'
B' (R' U R) B U L U2 L'
M2 F (R U R' U') F M' U' M' U F2
R U' F U' (R' F R F') U2 (R U R') F' R'
F' U' F R f R B' u'
(R U R' U') R' F2 R F2 U F (R U R') F'
L F U' F' L' B' U B
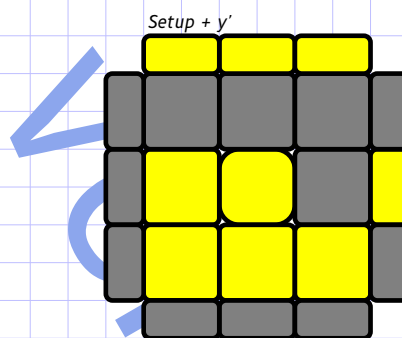
Setup + y'

F U (R' F R F') U' F'
(R U R') U2 F' U' F R U2 R'
M U' F (R U R' U') F' U M'
B' (R' U R) F (U R' U' R) F' B
(R' U R) U B U2 B' (U' R' U R)
(R' F R) U (R' F R F') U' F2 U F
F U R2 U' R F' (R' U R) F R F'
R U F R' U F R F' U' F' R'
R' F' R U (R U R' U') R U' R' U' F (R U R')
(R U R' U) R U2 (R' U R) y (U R U' R') F'
F U F' R' r' U' R F' (R' U R) r
R' F (R U R') F' R F (R' F R F') U' F'
B' (U' R' U R) B R' U2 (R U R' U) R
B' U F U' B U2 R U' R' F'

OLL #22 - I1
F R U R' U' R U R' U' F'

Setup

Front
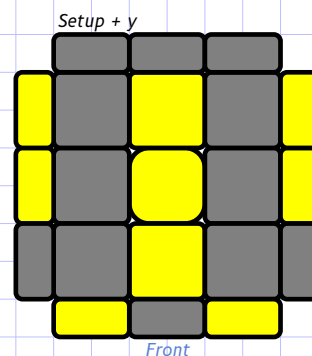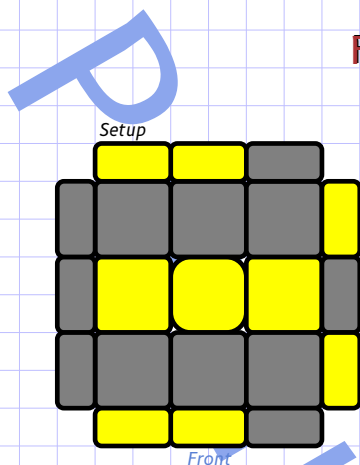
⭐⭐⭐ F U R U' (R' U R U') R' F'
⭐ B' U' (R' U R U') (R' U R) B
(R U R' U') F' U' F (R' F R F') (R U R')
R F U R2 U' R F' (R U R' U') R2
F' U2 F U2 F U R' U' F' U R
R U2 r' F M' U2 (R' F R) U F'
F2 U F' R F U' F' (R' U R U') R' F'
R' F (R U R' U') F' R U' (R U R U') R' U2 R
F (R U R') F' U F U' y' (R' U R) U2 R'
F (U R U' R') F' U' F U (R' F R F') U' F'
F R2 B' R2 F' U' R U B U' R'
R' F U F2 U F2 U' R U' R' F' R
R' F R2 U R2 U' R F' R' U R2 U' R'
F' U2 F U' (R U R' U) F R' F' R2 U' R'

Setup + y

Front

R' U' (R' F R F') R U' R' U2 R
R U2 R' U2 R' U' F U R U' F'
R2 U' R F' (R' U R) F U' F' U F R
F (R' F R F') U' F' U r' F2 r
R U2 R' F' U' (R U R' U') (R' F R F') U F
R U2 R' U' R B' R B R' U' R'
F R' U' R2 U' R2 U F' U F R F'
R' U' (R' F R F') (R U R') F (R U R' U') R' F' R2
L F2 R' F' R U' (R U R') F' L'
R' U' R U R' U' F' U' F (R U R') U2 R
(R U R' U) R U' R' F' U F (R U R' U') R U' R'
R2 D (R' U R) D' R' U' y (R U R' U') F'
R' U2 F' U F U' (R U R' U') R U' R' U' R
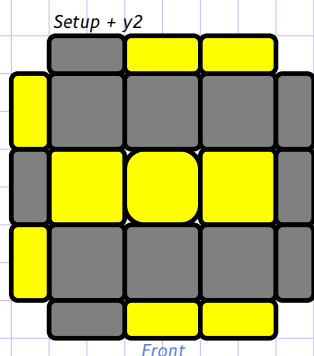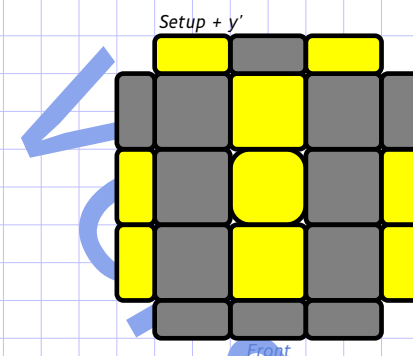R' U' F' U F (R U R' U') F R' F' R U R

Setup + y2

Front

R' U2 R U2 F (R U R' U') F' (R' U R)
F U2 F' U' F (R' F R F') U' F'
R' U2 R U2 (R U R' U') (R' F R F') (R' U R)
F (R U R' U) F' U R F (R' U R) F' R'
F (R U R') U2 (R' U R) U F' R' U2 R
F U R' U' F' U R U2 R U2 R'
F (R' U R U') F' (U R' U' R) F (R U R' U') F'
R U2 R' U2 R' F R2 U R' U' F'
F (R U R' U) F' U F R' U' R F' (R' U R)
F (R U R' U) F' R F R' U2 R F' R'
F (R U R' U) F' R' U y' (R U R' U') B
R' F (R U R' U') F' (R' F R) (U R U' R') F' R
(R U R' U') B' (R' F R F') y U2 (R U R' U) R
F (R' F R F') U F R' F' R U (R U R') F'

Setup + y'

Front

R' U2 (R U R') F R' F' R U R
R U R B' R' B (R' U R) U2 R'
R' U' (R' F R F') U R2 U (R' U R) U2 R'
R' U' (R' F R F') (U R U' R') U2 (R U R' U) R
F U2 F' U F (R U' R' U) (R U R' U') F'
R' U' F U R U' F' U2 F' U2 F
B' R' U (R U R' U') R F B (U R U' R') F'
F (U R' U' R) F' (R' U R) U2 F (R U R' U') F'
R' U2 (R U R' U) R U' R' U' F' U F R
(R U R' U) R U' R' F' U F U R U2 R'
R U2 R' U (R' F R F') U2 (R U R' U) (R U R')
(R U R' U) (R' F R F') y U' F R U' R' F'
L F (R U' R' U) (R' F R) F2 L'
(R' U R U') F (U R' U' R) F' U' F (R U R' U') F'

OLL #23 - I2
R' F' U' F U' R U R' U R

Setup

Front
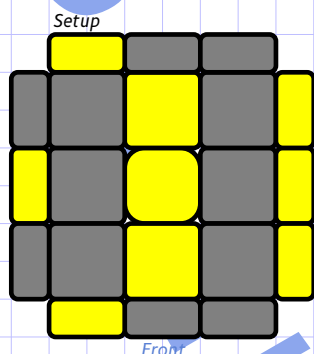
[R' F R F'] U F [R U R' U'] F2 U' F
R' F' U' F U [R U R' U'] R U' R' U2 R
L F [R' F R F'] U F' U' L'
[R U R' U] R U2 R' U F [U R U' R'] F'
R' U' R F R U [R U' R] F' [R U R' U'] R'
L F R U' [R' U R U'] R' U F' L'
[R U R' U] [R' F R F'] U' [R' F R] F2 U F
[R U R' U] [R' F R] F r U L' U
R' U' F' U F' L F L' F R
[R U R' U] R U2 R' F U [R' F R F'] U' F'
R' U' [R U' R' U] b' R F u
[R U R' U] R U' R' U2 F' U' F R U2 R'
B' [R' U R] F [U R U' R'] [U R' U' R] F' B
R U R U' r' F [R' U R U'] R' F' U' M'

Setup + y

Front

F [R U R' U'] F' U' R' U2 [R U R' U] R
R U' R' F' U' F U2 [R U R' U'] [R U R']
F U [R U' R] B' R' B R' F'
[R U R' U'] [R' F R F'] U R' U2 [R U R' U] R
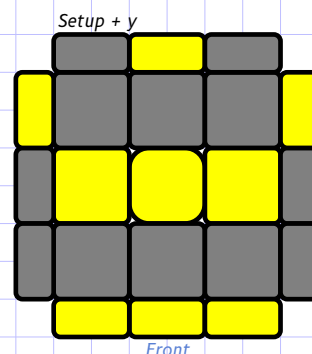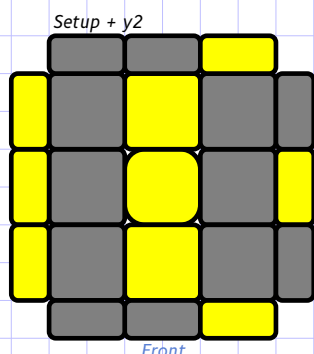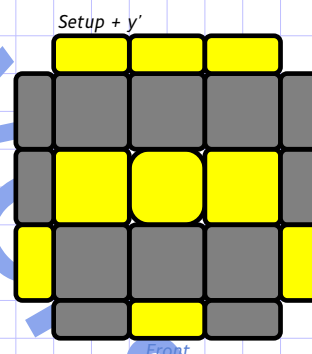F [R U R' U'] F' U2 [R U R' U] R U2 R'
[R U R' U'] [R' F R F'] U2 [R U R' U] R U2 R'
B' U' R' U [R U R' U'] R y [R U R'] U2 R
F U' [R U R' U] R2 r' U' R' U M' F'
F R' F' R U2 F [R U R' U'] F' U [R U R']
R F [R' U R] F' R' U F U' R U' R' F'
[R U R' U'] B' U F' U' F B R U' R'
F [R U R' U'] F' U' F [R' U R U'] F' [U R' U' R]
F [R U R' U'] F' L U' R' U L' U' R
R' U' F R' F' R2 U F [R U R' U'] F' [R' U R]

Setup + y2

Front

⭐⭐⭐ R' F' U' F U' [R U R' U] R
R' F' U' F2 [U R' U' R] F' R' U R2
R' U2 R2 u [R' U R U'] R D' F'
R' F' U' F R U [R U R' U'] [R' U R] [U R U' R']
R' U' F R' F' R F R' F' R U R
[R U R' U] F R' U' R2 U' R2 U F' U R
R' F' U' F U R U [R U R' U] R U2 R'
R U2 R' F' U F U2 [R U R' U'] R U' R'
R' F' U' F U y F' [R U R' U'] [R' F R] U2 R
R' U' F U F' R F2 R' F' R U' F'
[R U R' U'] R' U2 r U R' U R2 U2 r'
F R' F' R U [R' F R F'] [R U R'] F' U F
F' U' [R U R' U'] [R' F R] y' U R' U' [R U R' U] R
R' F' U' F2 U R U' [R U R' U'] F' U' [R U R']

Setup + y'

Front

⭐⭐ F [R U R' U] F' U' F U' F'
⭐ B' U' R' U [R' F R F'] R B
F [U R U' R'] U [R' F R F'] R U' R' F'
F U [R' F R F'] [R' F R F'] U' F'
F [U R' U' R] F' R2 F R F' U R
[R U R' U'] [R' F R F'] [U R' U' R] U' R' U2 R
F U R U' R2 F' R U2 R U2 R'
F [R U R' U'] F' U' R U2 R' U' R U' R'
F' U2 F U' [R U R' U'] [R U R'] F' U2 F
F [U R U' R'] F' r U [R' U R] U2 r'
[R' U R] B U B' U2 R' U' [R U R' U'] R
F R F' R2 F [R' U R U'] R2 F' U R
[R U R' U'] R' F [R U R' U'] R F' U' R' U2 R
F [U R U' R'] U' [R U R'] F' U' F U2 F'

OLL #24 - I3
F R' F' U2 R U R' U R2 U2 R'

Setup

Front

Setup + y

Front
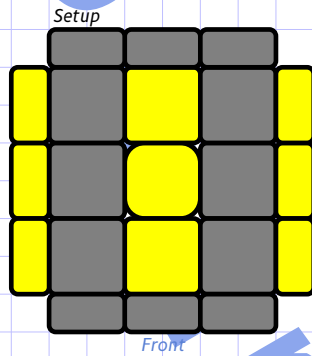
⭐⭐ R' U' [R' F R F'] [R' F R] [U R U' R'] F' R
⭐⭐ R U2 R2 U' R U' R' U2 F R F'
⭐⭐ R' U' F R' F' R F [U R U' R'] F' R
⭐ R' U2 R2 U [R' U R] U2 B' R' B
⭐ R' U' R F R' U R2 U' [R' U R U'] R' F'
⭐ R U' r' U [R U R' U'] M' U' F R' F' R
⭐ [R' F R] F2 U' F [R U R'] U2 F' U F
⭐ B2 R U [R U R' U'] R' y R2 U' R' F' R
⭐ [R U R'] B' R U' R2 [U R U' R'] U R B
⭐ F R' U' R2 U' R2 U2 F R F' U' F'
⭐ [R' U R] U F [U R U' R'] F' [R' U R U'] R' U2 R
⭐ R U' F R' U R2 U' R' F' U' [R' U R U'] R'
[R U R' U] R U' R2 F R F' U' F' U2 F
[R' F R F'] U2 F' U2 F U F [R U R' U'] F'
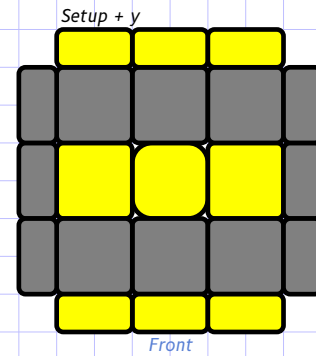
⭐⭐⭐ R' F U R U' R2 F' R2 [U R' U' R]
⭐⭐⭐ [R U R' U'] F' U F [R' F R F'] U2 [R U R']
⭐⭐ F U [R' F R F'] R' U' F' U F R F'
⭐ R B' U' R' U R2 B R2 U' [R U R']
⭐ [R U R' U'] R' F U' R F' [R' U R] U F U' F'
⭐ R' F R' U R' F' R' F R2 U' R2 F'
⭐ R' F [R U R' U'] F' U R U' [R U R' U'] R U2 R'
⭐ F U' R' U2 [R' U R U'] R' U R2 U R F'
⭐ F R' F' R2 F [R U R' U'] F' U [R' U R U'] R'
⭐ F' U2 F U' [R U R' U] R U' R' F' U F
⭐ [R' F R] U R U' R2 F' R2 [U' R' U R] U R'
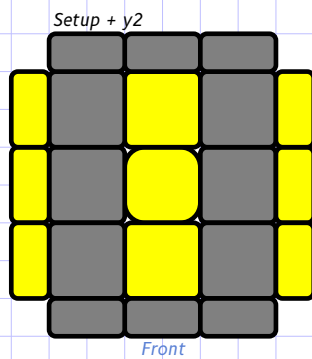⭐ F' U2 F2 U F' U F U2 R' F' R
[R' U R U'] F U R' U' R2 [U' R' U R] U R' F'
R' F R' F' R' U R U' [R' F R F'] [U' R' U R]

Setup + y2

Front

[No specific algorithms for this orientation]

Setup + y'

Front
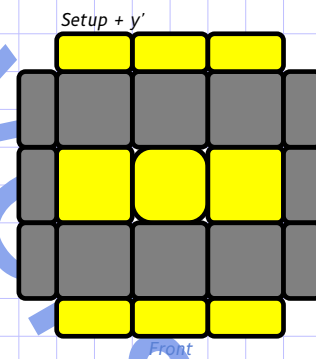
[No specific algorithms for this orientation]

OLL #25 - I4
F' R U B U' R' F2 R B' R' F'

Setup

Front

Setup + y

Front

⭐ R' F' U' F U F' [R U R' U'] [R' F R] U R
⭐ [R' F R] U2 R' F' R U F [R U R' U] F'
⭐ [R U R' U] R' U' F' U F R U R U2 R'
⭐ R' U' R F [U R U' R'] F' U2 R' U2 R
⭐ [R U R'] U2 [R U R' U'] R U' F [U R U' R'] F' R'
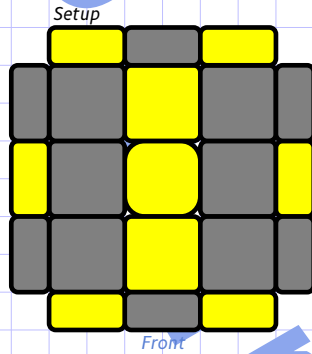⭐ R' U' F' U F [R U R' U'] F [U R U' R'] F' R
⭐ R' F' U F [R U R'] F' U F [R' F R F'] R
⭐ F R' F' R U2 F' U F U' R U2 R'
⭐ [R U R' U] R' U' R [U R U' R'] U' R' U F R F'
⭐ [R' U R] U F [U R U' R'] F' U F [R' U R] F'
⭐ R U' F U R2 U' [R U R' U'] R' F' [R' U R U'] R'
R' U' R F U' R2 U [R U' R] U R F' [R' U R]
[R U R' U'] [R U R'] F' U2 F R [U' R' U R] U2 R'
F R B R' F2 R U B' U' R' F
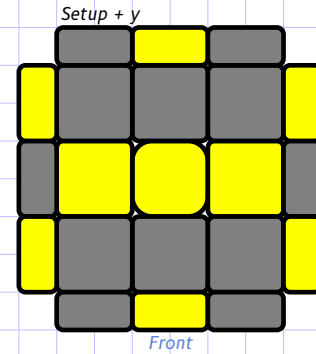
⭐⭐⭐ F [R U R' U'] R F' r U R' U' r'
⭐⭐⭐ F [R U R'] U2 R' U2 R U F' [R' U R]
⭐⭐⭐ [R' F R F'] U2 [R U' R' U] F' U2 F
⭐⭐ F [R U R' U'] F' R' U' R F [R' U R U'] F'
⭐⭐ R' U F' U' F [R U R' U] [R' F R F'] U R
⭐⭐ F R U R2 U' R F' R' U' [R U R' U] R
⭐⭐ F [R U R'] F [U R' U' R] F' [R' U R] U2 F'
⭐ R F U R2 U' [R' U R U'] [R U R' U'] R F' R'
⭐ B' U' R' U F' U F [R U R' U'] R B
⭐ F U R' U2 R' [U R' U' R] U2 R U F'
⭐ F U2 R U2 R' U [R U R' U] [R U' R' U] F'
⭐ F [R U R' U'] F' [R U R'] B' [R U' R' U] B
⭐ F R2 F' [R' U R U'] [R U R' U'] R F R F' R
⭐ F U [R U R' U'] F' U2 F U2 R U' R' F'
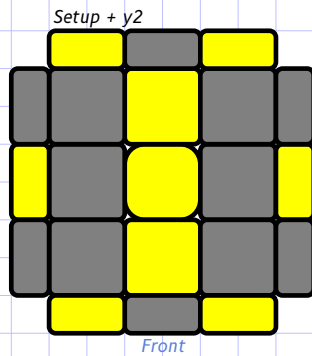
Setup + y2

Front

[No specific algorithms for this orientation]
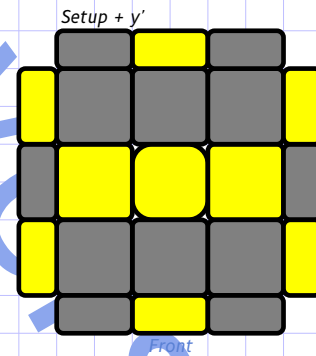
Setup + y'

Front

[No specific algorithms for this orientation]

OLL #26 - F1
F R' F' U' F R F' R' U R
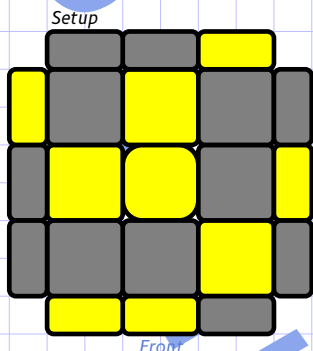
Setup

Front

⭐⭐⭐ [R U R' U'] R' F R2 U R' U' F'
⭐ R' U' R F R' F' U F R F'
R U R2 F' U' F U (R U' R) U' R'
R' U' F' U F U' R U' R' U2 R
R' F' R (U R U' R') F (R' F R F') [R U R']
R' U' R' (U' R' U R) U R U (R' F R F') [R U R']
[R U R' U'] [R' F R F'] U R' F' U' F U R
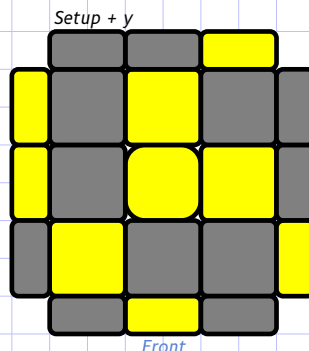R U R2 F' U' F R2 U' R' U (R' U R)
B' R' U F' U' F U' R U B
[R U' R] U (R U R' U') R' U' R2 U2 [R' F R F']
[R U R' U'] B' R' U' R U B R U' R'
R U' R' U' F' U2 F U (R U R' U') R U' R'
[R U R' U'] B' [R' F R F'] R' U' R U B
[R U R' U'] F R [U' R' U R] U R' F' U' R U' R'

Setup + y

Front

⭐⭐ R' U' [R U' R' U] [R' F R F'] U R
⭐ R' U' [R' F R F'] U F' U' F U R
⭐ F R' U' R2 U' R2 U R F' [R' U R]
F [R U R' U'] R (U' R' U R) U2 R' U' F'
R' U' [R' F R F'] U R U' F [R U R' U'] F'
M' U' r' F [R U R'] F U' F' U R
F U F' U' F U' [R' F R F'] [R U R' U'] F'
R' U' [R' F R] U F' R F U' [R U R' U'] F'
F' U' F U' F R' F' R F' U2 F
R' U' [R' F R F'] R F [R' U R U'] [R U R' U'] F'
R' b' [R U' R' U] [R' F R] u
M' F' U' F [R U R' U'] M U2 [R U R']
F [R U R' U'] F' r U2 R' U' R U' r'
S [U R' U' R] [U' R' U R] S' [R' U R]
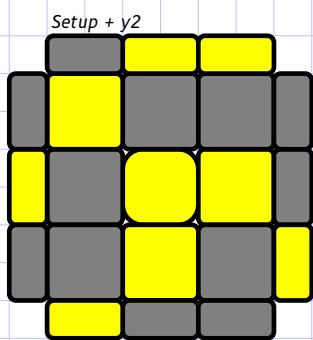
Setup + y2
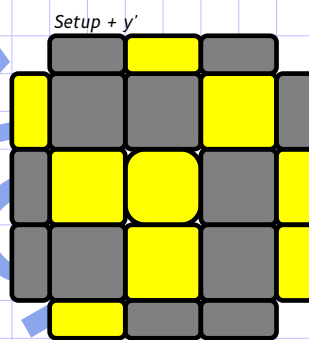
Front

R' U' R U' F U' R' U' R U [R U R' U'] F'
M U R U2 R' U' [R U' R' U] M'
[R U R' U] F' U F U' R [U' R' U R] U2 R'
[R U R'] U2 [R' F R F'] U2 [R U R' U] [R U R']
R' U' R S [U' R' U R] S' [R' U R]
F [R U R' U'] F' U' F U R U' [R' U R U'] R' F'
R F [R' U R] F' r2 U' F' U R' r2
F' L' U B' U' f [R U R] F
R' F' U' F U F [R U R'] F' R F U' F'
[R U R' U'] R' U' F R F' U' [R' U R U'] R' U2 R
F' U' F R' U' [R' F R F'] R2 U' R2 U2 R
[R U R'] F2 U' F U' F' U2 F2 R U' R'
F U R' U' F' U [R U R'] F R F2 U F
B' U' R' U2 R S [U R' U' R] F

Setup + y'

Front

R2 r' U2 R' U' R U' R' U' M'
R U2 R2 r U' R [U' R' U R] r'
[R U' R] U' F R F' R' U2 R U' R2
B' [U' R' U R] U F U' B U F'
B' U' B R B' [R' U R] B R'
F R2 U [R' U R] F R' F' U2 R2 F'
B' U [R U R' U'] R' U' R U B R U' R'
F [U R U' R'] U [R' F R F'] R' U' R F' [R' U R]
B' U [R U R' U'] [R' F R F'] R' U' R U B
F U R U' [R' U R U'] R' U [R' F R F'] U' F'
B' R' U' R2 U B U' R' [U' R' U R]
B2 R' U [R U R' U'] R y R U' [R' F R F'] R
R F [R' U R U'] B U' B' U F R'
F [U' R' U R] U F' R' U [R' F R F'] U R

OLL #27 - F2
R' F R U R' F' R F U' F'

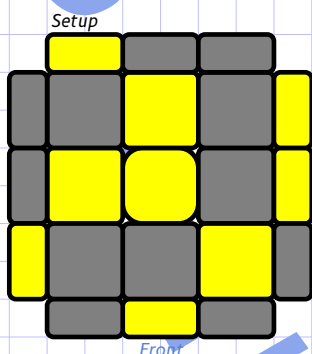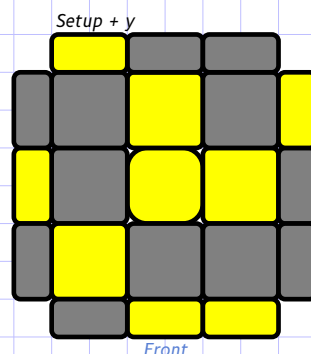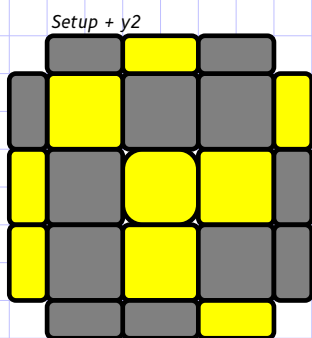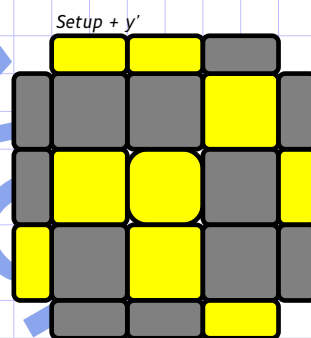*Setup*

Front

⭐ F U F' (R' F R) U' R' F' R
⭐ R' U2 R2 r' U (R' U R U') M'
  F U' R' U' R U (R U R' U') F' (R' U R)
  L F U' (R U R' U) F' U' L'
  F (U R U' R') U F' U F U2 F'
  F R U R2 U' F' U R (U R U' R')
  R2 r U2 (R U R' U) R U R r'
  F' U' F2 (R U R' U') F' U F' U F
  F (R U R') r' F R F' M' U' F'
  R U R2 U' (R' F R F') U R (U R U' R')
  F (R U R' U') F' U R' U' (R' F R F') U R
  R' F' U F M' U R U' r' U' R
  F (U R U' R') U' B' U F' U' B
  R' F U F' R F U' (R U R' U') F' (R' U R)

Setup + y

Front

  (R U R' U) B' U (R U R' U') R' U' R U B
  S (U' R' U R) S' R' U (R U R' U) R
  R' U' (R U R' U) (R' F R F') R U' R' U2 R
  F' U2 F U M' F' U F M
  (R' F R F') U (R U R' U) y' F (R' U R U') F'
  (R U R' U) R2 r' U' R' U M' U' R U' R'
  F U R U2 (R' U R) B U B' R' F'
  F U (R U R' U) (R U R' U') F R' F' R U2 F'
  (R U R' U) R2 U R' U' R' U F R F' U' R'
  (R' U R U') (R' U R) U2 R2 F R F' (R U R' U) R
  F (R U' R' U) (R U R' U) R U2 R' U' (R U R') F'
  R2 U' F R F' (R U' R' U) F' (R' U R) F R
  R' U' (R U' R' U) F' U F U' F' U F R
  L F U' (R U R' U) F' y' U' (R U R' U') F'

Setup + y2

Front

  F (R U R' U') R' F' U' F R F' (R' U R)
  (R U R' U) R U2 R2 U' (R' F R F') U R
  F U (R U R') F' U F (R U R' U) (R U R' U') F'
  B' U R' U (R U R' U) R U2 (R' U R U') B
  (R U R' U') R2 (U R U' R') U (R' U R) F R2 F' R'
  F' U' F R2 U (R' U R) U2 R2 F' U F
  B' R U (R U R' U') R2 B U R U2 R'
  F R2 U' R U' F R' F' (R U R' U) R2 F'
  R r' U2 R' U2 (R U R' U) R U' R' r
  F U' R' U' F R F' (R' U R) U2 (R U R') F'
  (R U R' U) R U2 B U B' (R' U R) U2 R'
  M2 F (R' F R) F2 R' F2 r U' M'
  R U2 R2 U' R F' (R' U R) F U R U2 R'
  (R U R' U) R U' (R' U R U') R' F' U F R U' R'

Setup + y'

Front

⭐⭐⭐ (R U R' U) (R' F R F') R U2 R'
⭐ R' U' R U F (R U R' U') F' (R' U R)
⭐ R' U' R U (R U R' U') (R' F R F') (R' U R)
  F U F R' F' R U' (R U R' U') F'
  R r' U R' U2 (R U R' U) (R U R') r
  F R (U' R' U R) U R' F' U' F (R U R' U') F'
  R' U' R2 B U B' U' R' U (R' U R)
  (R U R') B' R B U' B' R' B
  R' U' R U R B' R2 U' R U B
  F (R U R' U') R U R2 U' F' U F R F'
  R' F' U F2 R' F' R U (R' F R F') R
  (R' F R F') (U R U' R') F' U F2 R' F' R
  (R U R') F' U' F U' R' U' F R F' (R' U R)
  F U F' U F U' F R' F' R U' F'

OLL #28 - F3
R U2 R' F R' F' R2 U2 R'

Setup

Front
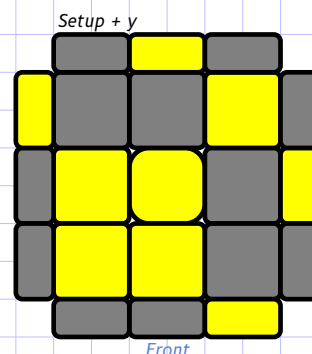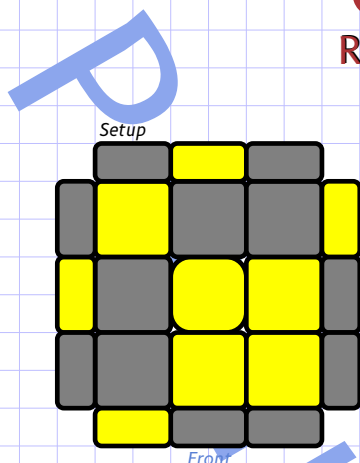
⭐⭐⭐ R U2 R2 F R F' R U2 R'
⭐ R' U2 (R U R' U) R U2 F (R U R' U') F'
R' U2 (R U R' U) R U' R' F' U' F U R
R' F (R U R' U') F' U (R U R') F' U' F U R
R' F (R U R' U') F' U R F (R U R' U') F'
M2 B U2 B' M' U2 R' U' r
R U2 B (R U R' U') B' (R' F R F') U2 R'
R U (R U R' U') R' U2 F R F' R' U2 R U' R'
F R U (R U R' U') R' U2 F R F' U R' U F'
F (R U R') U2 R F (R U R' U') F' U R' U F'
R U2 R' U F' U' F R (U' R' U R) U2 R'
R' U R2 U R' (U R' U' R) U' R' U' F R F'
(R' F R F') U (R U R' U) F (R U R' U') F2 U2 F
R U' R2 U2 R2 U R2 U F R F' (R U R')

Setup + y

Front

⭐⭐ F U2 F' U' (R' F R) U' R' F' R
⭐⭐ F U (R' F R) F2 U F U2 F'
⭐ F (R U' R' U) F (R U R' U') F' (R U R') F'
F U (R' F R F') U' (R' U R U') F' (U R U' R)
R U2 R' U' R U' R' U' (R U R' U') (R' F R F')
B' U' F (R U R' U') F' (U' R' U R) U B
(R U R' U) (R U R') U2 R y (U R U' R') U' F'
(R U R' U) R' U2 R2 U R F R2 F' (R' U R)
F U F R' F' (R U' R) (U' R' U R) U R' F'
R' F' R U' F' U' F U' R U' R' U' F
F U F R' F' R U' F' (R U R' U') (R' F R F')
R' U' R B U F (R U R' U') F' B' (R' U R)
(R U R' U) M' U' L' U2 (R U R') U2 R
(R U R') B' (R' F R) D R2 u' M'

Setup + y2

Front

⭐⭐ F R' F' U' F R' (U' R' U R) U R F'
⭐⭐ R' U2 F (R U R' U') F2 U F U R
⭐⭐ R' U2 (R U R' U) R U (R U R' U') (R' F R F')
⭐ F (U R U' R') F' U R' U2 (R U R' U) R
⭐ R' U' F' U F (R U R' U') R U' R' U2 R
⭐ F (U R U' R') F' U2 (R U R' U) R U2 R'
⭐ R' F (R U R') F U F U' F' U' F' R
R2 U R F' U' F U R U' R2 U' R2
F2 U' F' (R U R' U') F' U F2 U F2
F R U (R U R' U') R' U F R F' U' R' U' F'
R2 F R F' R U2 (R' U R) U2 R' U' R
S' R' F (R U R' U') F' U R S
F R' F' (U R' U' R) F R2 U R2 U' F'
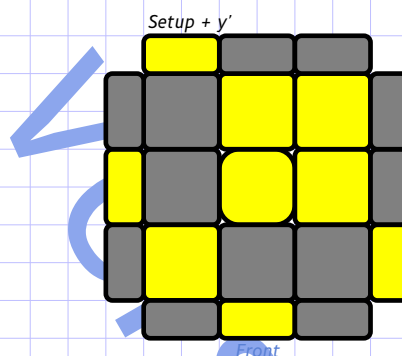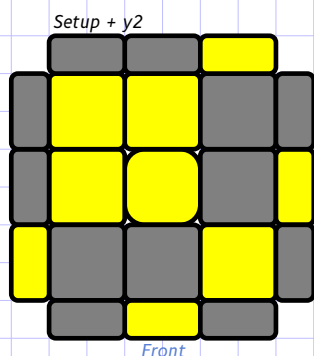L F U' (R U R' U') F' y' U (R U R') F'

Setup + y'

Front

⭐⭐⭐ R' U' F R' F' R2 U' R' U2 R
⭐ F R F' U (R U R' U') F' U F U R'
⭐ R' U2 R U F R' F' U F R F'
R U2 R' U' R (U' R' U R) y (R U R' U') F'
R' U (R U R' U') R U R' F' U R U' R2 F' R2
M' U R U F' U (R' U R) U2 F U' r'
R F U' R2 U' R U R U2 R U' F' R'
R U' r' U' F' U F M' F (R U R' U') F'
R' F' U r' F' M' U' R F R' U R2
R' U' (R' F R F') (R' F R) U F' R F U' F'
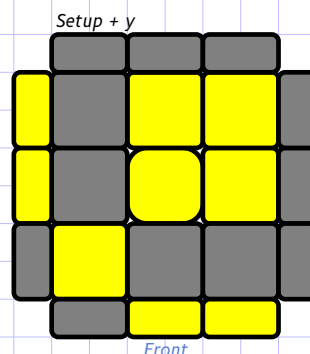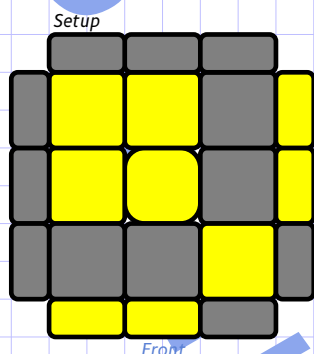F R U' R' U2 (R U R' U) y' (R U R') U2 R'
F U' (R U R' U') F (U R U' R') F' (R U' R' U) F'
R' U' (R' F R F') U R U' (R U R' U') (R' F R F')
F U' R' U2 (R U R') F R' (U' R' U R) U R F2

OLL #29 - F4
R U R' U' R' F R F'

Setup

Front

Setup + y

Front

⭐⭐⭐ F R' F' R [U R U' R']
⭐⭐⭐ [R' F R F'] U' F' U F
R' F' U F [R' F R F'] U' R
R' U F' U' F R U2 [R' U R]
F U' [R U R'] F' U2 F U' F'
M' U R U' r' U' F' U F
R2 U' R F' [R' U R] b U
R' U2 R U R2 F R F' U R
R' F' R [U R U' R'] U F [R' F R F']
F B' R' F' R B [U R U' R']
[R U R' U'] R' F R2 [U' R' U R] U R' F'
R' U' [R U' R' U] F [U R U' R'] F' R
R' U' F [U R' U' R] F2 [R' U R] F R
R F R U' R2 U' R2 U R' F' R'

F B' U [R U R' U'] B U' F'
M' U' r' F R U F U' F'
R B U B' R' U' [R' F R F']
R U [R U R'] F' U2 F R U' R2
F U' [R' F R] F2 r' F r
[R U R' U] [R U R' U'] F' U2 F [U R U' R']
[R U R' U] R U2 R2 U' F' U F R
R' F' U' F2 R' F' R U' [R U R' U] R
F' U F [R' F R F'] [R U R' U'] F' U' F
F U2 F [U R U' R'] F' [R U R' U] F'
F' U [R U R' U'] R' U' F2 U R U' F'
R U2 R' U2 B' [R' F R F'] B
F2 U2 F' U' [R U R' U] F U F2
[R U' R] F R' U R U' R' F' [R U R' U'] R

Setup + y2

Front

Setup + y'

Front
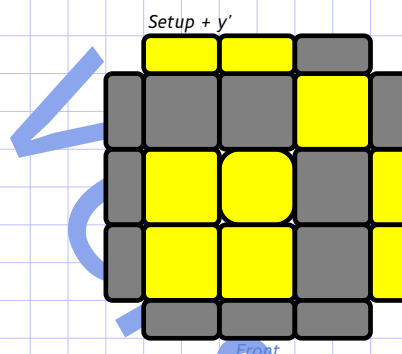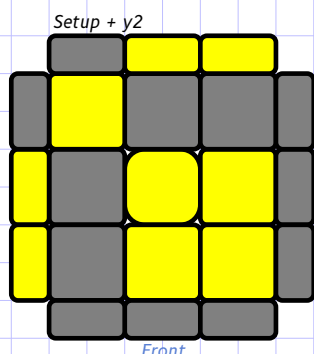
L' U' L F U [R U R'] F'
F [R U R'] F' U' F' r U r'
R' F U' [R' F R F'] U [R U R'] F' R
F [R U R'] U2 [R' F R F'] [R U R'] F'
F U r' U' R U M' U' F' [R' U R]
[R U R' U] R' U' R U' R' U2 F R F'
F [R U R' U'] F' U' [R U R' U'] [R' F R F']
F [R U R' U'] R' U' [R' F R F'] U R U F'
B' U2 R' U' [R' F R F'] R U' B
R' F' U' F U R2 U R' U' [R' F R F']
[R U R' U'] R' U' F R F' R' U' [R U R' U] R
F [R U R' U'] F2 U' F [R U R'] F' U F
F' U' [R U R' U'] [R' F R] U2 F R' F' R
F U F' U2 r F [R' U R] F' r'

R U2 R' F R' F' R2 U2 R'
[R U R'] b' R' U' R' U F
[R U R'] F' U [R U R' U'] R' F R2 U' R'
F B' R B R' F' [U' R' U R]
S R [U R U' R'] F R' f'
[R U R' U'] [R' F R F'] B' [U' R' U R] B
F' U2 F U2 r [U R' U' R] r'
S [U R' U' R] F R' f' [R' U R]
F' U2 F R U' R' U' F R' F' R
R2 U2 R U F' U' F U' R' U' R2
R B U' B' R' U F R' F' R
R2 U R' U' R' U F U R U' F' R'
R F [R' U R] F' R' F [R' F R F'] U' F'
R F' [R' U R] F R U' R' F R2 F' R

OLL #30 - K1
R' U' R F R' U R2 U' R' F'

Setup

Front

Setup + y

Front

⭐⭐⭐ F R U R2 U' R F' [R' U R]
R' F R' F' R2 U R' U' [R' F R F'] R
F [R U R'] F' U2 R F [R' U R] F' R'
F [R U R'] F' R' U F U2 F' U' R
F [R U R'] F' U' R' U F U' F' U' R
F [R U R'] F' U R' U F U F' U' R
F [R U R' U'] R U' R' U' R U2 R' U' F'
R' F [R U R' U'] F' U R2 U [R' U R] U2 R'
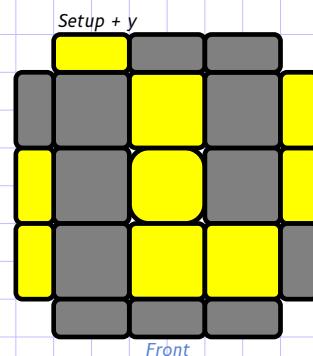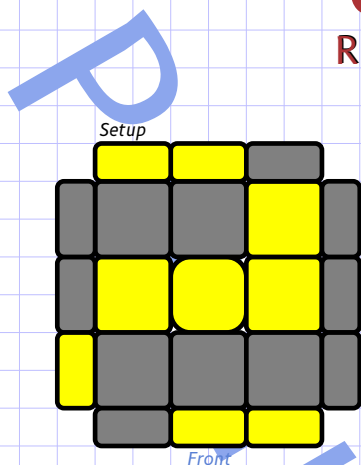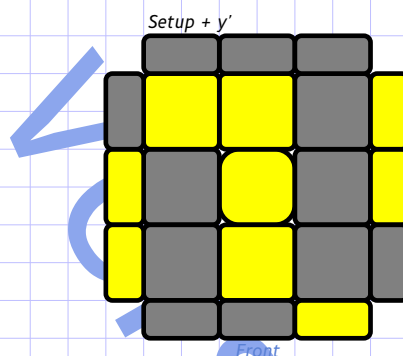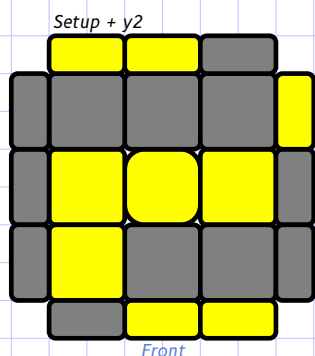[R U R' U'] [R' F R] U R U2 R' U [R U R'] F'
F [R' U R U'] F' U' R' U' F' U2 F R
F R' U' R U [R U R'] F' U' F [R' U R] F'
R' U' F' R B [R' F R] U B' [R' U R]
R' F [R U R' U'] F' [U R U' R'] U2 [R U R' U'] R
R U' r' F R' F' U' F' U F r

⭐⭐⭐ F R' F' U' F R F' [R' U R]
⭐ [R U R' U'] R' U' F' U F R2 U' R'
[R U R' U'] [R U R'] F' U2 F R U2 R'
F R U' R' F [R U R' U'] F' [R U R'] F'
[R U R'] B' [U' R' U R] B [U R U' R']
F U' [R' F R F'] U [R U R' U'] R U' R' F'
R F U' R' F [R U R' U'] R F' [R U R'] F' R'
R U' F U F R2 F' [R U' R] F' R'
R' U2 R U' r' U [R U R' U'] M' U' R
F U' B' [R' F R F'] B [R U R'] F'
[R U R' U'] r' U2 R [U R U' R'] U R' U r
R' U' R F [R' U R U'] R [U' R' U R] U R' F'
[R U R' U] [R' F R F'] U' F' U F R U' R'
F [U' R' U R] U F' U R' F' U F R

Setup + y2

Front

⭐ F U R U' R2 F' R [U R U' R']
⭐ [R U R' U'] [R' F R F'] [R U R' U] R U2 R'
[R U R' U'] [R' F R F'] U' R' U2 [R U R' U] R
R' U2 [R U R' U'] R U F [U R U' R'] F'
F U R U2 R' F R' F' R U F'
F [U R U' R'] F' [R' F R F'] U' F' U F
F U' [R U R'] U2 [R U R' U] [R U R' U'] F'
F R [U' R' U R] U R' F' [R U R' U] R U2 R'
R' U2 R U' R' U' [R' F R F'] R [U' R' U R]
F [U R U' R'] U' [R U R'] F' U2 F U' F'
F U [R' F R] F2 r' U' F' U r
R' U' [R' F R] [U R U' R'] F2 U' F U R
F U' R' U2 [R U R' U'] R2 U R2 U R F'
R' U2 [R U R' U] R F U [R' F R F'] U' F'

F U' [R U R'] F' U' F U2 [R U R' U'] F'
R U2 R' U' [R' F R F'] [R U R'] F' U F
F' U' F U2 [R U R' U] [R U R'] F' U F
[R U R' U] R U2 R' B' [U' R' U R] B
R' U' R' D' [R U R'] u F' [R U R' U'] F'
F U' R' U' R U F' R B' R' B
B' [U' R' U R] B U' F [U R U' R'] F'
R U F' [R U R' U'] R' F U' B' R' B
R' F' U F U2 [R' F R F'] U [R U R' U'] R
F [R' U R U'] F' M [U R U' R'] U' M'
R B R' U2 [R U R' U] R U2 B' R'
R' U2 [R U R'] F R' F' R2 U' R' U2 R
R U2 R2 U' R2 U' R2 U F' U F R
R' U' R [U' R' U R] F R' F' U F R F'

OLL #31 - K2
F U F' R' F R U' R' F' R

Setup

Front
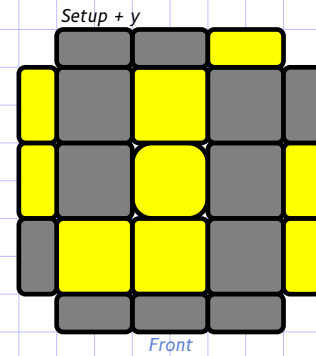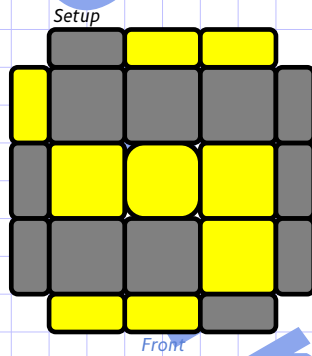
⭐⭐⭐ R' F (R U R') F' R F U' F'
(R U R' U) r' U' R2 U' R2 U2 r
F (R U R' U') F' U F (U R' U' R) F' (R' U R)
F' U' F U' F (U R U' R') F2 U F
R' U' R F (R U R) F' y' U' (R' F R F')
(R' F R F') (R U R' U) y' R U (R U R' U') R' U' R'
F R F U (R' U R) F' R' F U2 F2
(R U R' U') (R' F R) (U' R' U R) U F' R' U2 R
B' (R' U R) U2 R' U' R (U' R' U R) B
(R U R') b' U' R' (U R U' R) U F
(R U R') F' (R U R' U') R' U' F U (R U' R) U' R'
R' F (R U R') F' U' R U F U' F' (R' U R)
R U2 R' U2 R U' R' F' U' F (R U R')
(R' U R U') F R' U' R' U' (R U R' U) R' U' F'

Setup + y

Front

⭐⭐⭐ B' U (R U R' U') B (R' F R F')
⭐ F (R' F R) U' (R' F R F') (R U R') F2
R' F' U' F2 U F R F U' F'
(R U R' U) (R U' R' U) (R' F R F') R U2 R'
F' U' R U' R' U' F' U2 F (R' F R)
F' U f (R' F R) (U R U' R') f'
R F' U' F R' F' R (U R U' R') F R
R' U' R U' R' U2 R F (U R U' R') F'
R' F' U' F (R U R') F' (R U R' U') R' F R2
F R' U' R F' (R' U R) U F R U' R' F'
F (U R U' R') F' r' F' U' F U r
R' F' U' F R F U' R' U2 R U F'
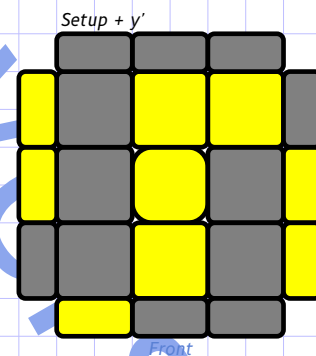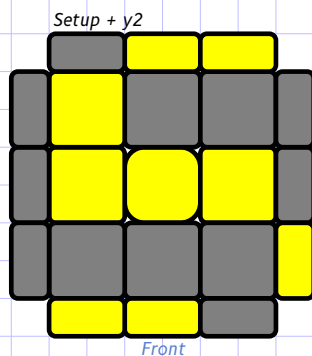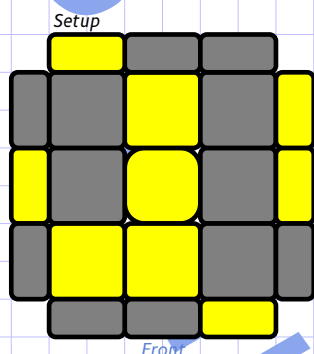R' F' U' F U R F (U R U' R') F' (R' U R)
F R' U' R2 F R' F' R2 U R U F'

Setup + y2

Front

⭐⭐ B' U' R' U2 (R U R' U') R B
⭐ (R U R') U2 F' U' F U2 (R' F R F')
F U R' U' F R' (U' R' U R) U R F2
F' U2 F (R U R' U') (R' F R F') R U' R'
B' U' R' U R2 B R' (U' R' U R)
(R U R' U') (R' F R F') R U2 R' U' R U' R'
(R U R') U2 F' U F R U' (R' U R U') R'
(R' U R U') M' F (U R U' R') F' M
(R' F R F') U2 R U' R' U2 F' U F
R U2 R' U' R U' R2 U' F' U F R
F' U2 F R2 U R' U' (R' F R F') U' R'
(R U R' U') (R' F R F') U' R' U' R U' R' U2 R
(R' U R) r U' R F' U' F U R U' r'
R' F (R U R' U') F2 (U R' U' R) F R' U R2

Setup + y'

Front

⭐ R' U' F' U2 F (R' F R F') U' R
⭐ R' U' R F (U R U' R') F' (U' R' U R)
⭐ B' U F U' B U (R U R' U') F'
R' U' (R' F R F') U (R U R' U') R U' R' U2 R
R' U (R' F R F') (R U R' U') R B' R B R'
R F (R U R) F' R' U' F' r U r'
R' U' F U F2 R F' U' F' U F
R' U' R F R' F' R (U R U' R') (U' R' U R)
R' U' R F R' F' U R U (R U R' U') R U R'
R' U' F U R (U R U' R') U F (R' F R F')
R' U' (R U' R) U B U' B' R2 U R
R' U' F U F R U' R F' (R' U R) F R
R2 U R U F' (R' U R) U F U' R' U R2
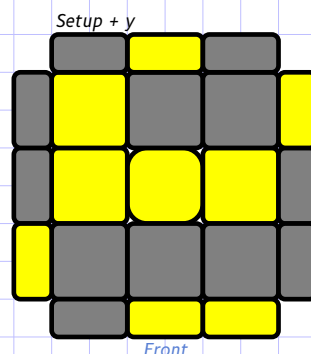R' U' R U' (R U R') F' (R' U R) U F R U' R'

OLL #32 - K3
F' R U B U' R' F R B' R'

Setup

Front

Setup + y

Front
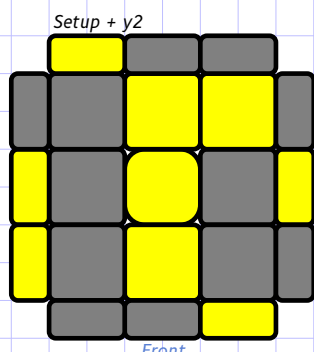
⭐ F U' R F [R U R' U'] F' U R' U F'
⭐ F2 R' F' R F' U' F [R U R' U] F'
⭐ R B R' F' R U B' U' R' F
[R U R'] B' [U' R' U R] [U R U' R'] U' B
R U' R' F R' F' [R U R' U'] R' [U' R' U R] U R
[R U R' U] r U R' U' M U [R U R']
R U r' U R U' M' U' r' U' M'
[R U R' U'] R2 U R' U' R' U' F R F' U R'
F U' R2 U R' U' [R' F R F'] U R' U F'
F' r F R F' U' F' U F M' F
[R' U R] U2 R' U' F [U R U' R'] F' [R U R' U] R
[R U R'] u F' R' U' F2 U R F u'
[R U R'] B' U' [R' U R U'] y R F [R' U R] F'
R' U' [R' F R F'] R [U' R' U R] F [R' U R U'] F'

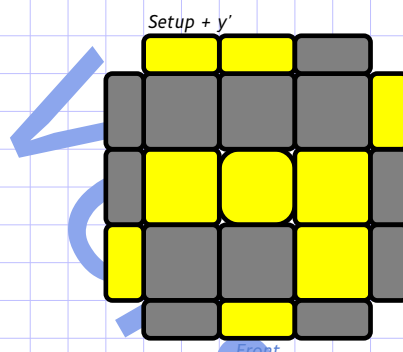⭐⭐⭐ F [R U R' U'] F' R' U2 [R U R' U] R
⭐⭐ F [R U R' U'] F' U [R U R' U] R U2 R'
⭐ R' F' M F' r U [R' F R]
⭐ F [U R U' R'] F' R' U' F' U F R
⭐ F U F [U R U' R'] F' [R U R'] U2 F'
⭐ R' U' R F' [R' U R] F [R U R' U'] F' U' F
F [R' U R U'] F' M' U R' U' R2 r'
[R U R'] F' U' F [U R U' R'] U R U2 R'
F B' [U R U' R'] F' U2 [R' U R] B
B' U' [R U R' U'] [R' U R] [U R U' R'] U' B
R U2 R' U' [R U R' U'] [R U R'] U2 [R' F R F']
R' F2 U F' [U R U' R'] F U' F2 R
F R F' L' F U R' U' F' L
F [R U R' U'] [R' U R] U F' R' U F U F' R

Setup + y2

Front

Setup + y'

Front

⭐⭐⭐ R' U2 [R U R'] F [U R U' R'] F' R
⭐⭐ R' F' U' F U R2 U [R' U R] U2 R'
⭐ R' F' U' F [U R U' R'] U2 [R U R' U] R
⭐ R' U' R F [R' U R] F R' F' R U' F'
R' U' F [U R U' R'] F' U' F' U F R
R' U2 F' U F U' R U2 R' U [R U R' U'] R
[R' F R] F2 U' F [R U R' U] F' U2 F
[R U R' U] R U' R' U' F' U2 F U [R U R']
R F U' R2 U' F' U F R2 U F' R'
R' U' R F R' F' U' [R U R' U] R2 U2 R'
R2 U' F R [U R U' R'] [U' R' U R] U R' F' R2
F R F' U' F U F R2 F' R U' F'
L F R' U' R U F' [U' R' U R] L'
F' U' F2 [R U R' U'] F' [U R U' R'] F' U F

⭐ [R' F R F'] U [R U R' U] R U' R' F' U F
⭐ F R F' R [R U R' U'] F R' F' [R' U R]
⭐ F [R U R' U'] [R' U R' U] [R U R' U] R U' R' F'
R' U' R U [R U R' U'] R' U r U R U' r'
F U R2 U' R F R' U R2 [U' R U' R']
R F D' [R U R'] D R' U' R F R'
S [R U R' U'] B' R2 U' R U F
F U [R U' R'] [U' R' U R] U R F' [U' R' U' R]
R' [U R' U' R] F R' F' U R [U R U' R'] U' R
F U' B' U F' [R U R' U'] [R' F R F'] B
F R F' U2 R' U [R U R' U'] R U2 F R' F'
R' U' R U' M' U R' U' R2 r' U [R' U R]
R U' R' U' F' U' F [R' F R F'] U2 [R U R']
F U' R' U [R' U R U'] R U R F' U' R' U' R

OLL #33 - K4
B R' U' F' U R B' R' F R
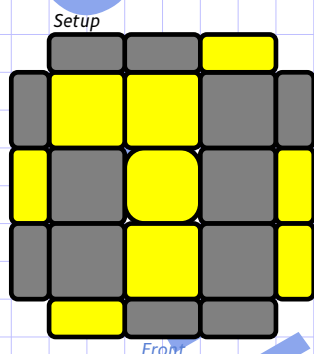
Setup

Front

⭐⭐⭐ R' F' R [U R U' R'] U' F U [R U R']
 ⭐⭐ R' U' F' U F R F [U R U' R'] F'
  ⭐ [R' F R F'] U' F [R U R' U'] F2 U2 F
  ⭐ R' U' R F [U R U' R'] [U' R' U R] U F'
    F R S R f' U' F R' F'
    R2 U' R F [R' U R U'] F' [R' F R F'] U R
    F R2 U' R U' F' U F R' U R2 F'
    R U2 R' U2 [R' F R F'] U F [R U R' U'] F'
    R' U' R U' r' U' R U M' U' R' U' R
    R' U' R F R' F' U F R [U R U' R'] F'
    R U' F U R2 U' F' [R U R' U'] R2 [U R U' R']
    [R' U R] U F R' U' R' [U' R' U R] U' R U F'
    R' F' U' F U [R U' R] U2 R' U' R U' R'
    R' S [R' F R] U' B' u [R U R']

Setup + y

Front

⭐ [R' F R F'] [R U R' U'] R' U' R F' [R' U R] F
⭐ R2 F R F' [R U R'] F' U' F U' R
⭐ R2 D [R' U R] D' R2 U' [R' F R F']
⭐ [R' F R F'] [R U' R' U] [R U R' U'] F' U' F
⭐ [R U R'] S [R U R' U'] S' R U' R'
  F' [R U R' U'] [R' F R] U' F' U F [U R U' R']
  R [U R U' R'] F U R' U' R' F' [U' R' U R]
  [R U R' U'] R' F D' [R U R'] D R U' F'
  F' L' F R F' U' L U F R'
  [R U R' U'] [R' F R] U' R' U' R U F' [U' R' U R]
  F R2 [U R U' R'] U F R2 F' U' R' F'
  [R' U R U'] [R' F R] U R2 F' R2 F U' F'
  [R U R'] F' [U R' U' R] F [R' U R] U2 [R' F R F']
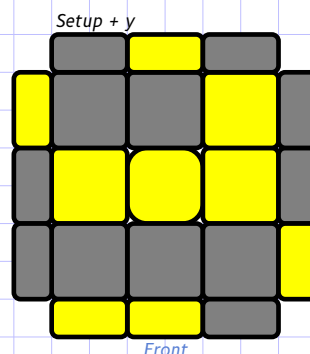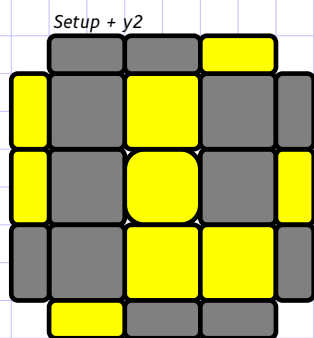 [R U R' U'] R' [U R U' R] F R2 U R U' R' F'

Setup + y2

Front

⭐ R' U2 [R U R'] F R' F' R U' [R U R' U] R
⭐ F U2 R' U' F R F' [R' U R] U2 F'
⭐ R' U2 R2 U R2 F' U F R2 U' R'
⭐ R' U' R F R F' [R U R' U'] R' F R' F'
⭐ R U2 R' U' [R U R' U'] F' U F R U' R'
⭐ R' U' R2 [U R U' R'] F R2 F' [R U R' U'] R'
  R U2 R' U [R' F R F'] [U R U' R'] U' [R U R']
  R U2 R2 U' R' [U' R' U R] U R U' [R' F R F']
  F R' F' U' F R F' R' U' [R U R' U] R
  F R U' r' F U F U' F' M' F'
  L' B' [R U R' U'] B [U R U' R'] L
  R' U' [R U' R' U] F' U F U2 [R U R' U] R
  F [U R' U' R] F' R' U F [R U R' U'] F' U R
  F [U R' U' R] F' U [R U R' U'] R' U F R F'
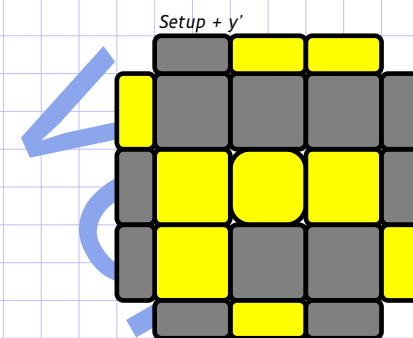
Setup + y'

Front

⭐⭐⭐ R' F [R U R' U'] F' R U' R' U2 R
⭐⭐⭐ R' F' [R U R' U'] R' F2 R F' U R
 ⭐⭐ F [R U R' U'] F' R U2 R' U' R U' R'
  ⭐ F [U R' U' R] [U R U' R'] [U' R' U R] U F'
  ⭐ F [R U R' U'] F2 U' F U' F' U2 F
  ⭐ R F R' U R' U' R2 U R2 U' F' R'
  ⭐ F U R' U' F' U F R [U R U' R'] F'
  ⭐ F' [R' F R] U' R' F' R U' F U [R U R']
  ⭐ F U F' R' F U' F' [R' F R F'] U R
  ⭐ [R U R' U] [R U R' U'] F' U [R U R' U'] [R' F R]
    F' R' U F2 [U R U' R'] F2 U' R F
    R B M' B r' U' R B' R'
    F R U' R' U2 R U2 R' U' [R U R' U'] F'
    F [R U R' U'] F2 U B U' F U B'

OLL #34 - A1
F U R' U2 R2 U R2 U R F'

Setup

Front
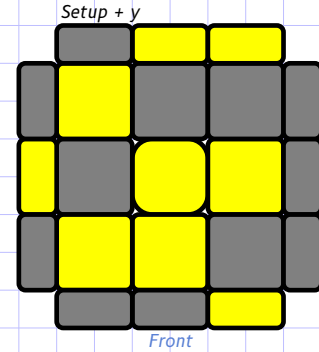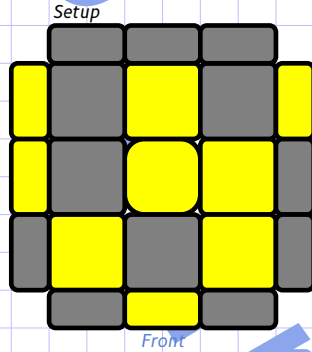
⭐⭐⭐ [R' F R F'] U (R U R' U) F' U F
⭐ [R' F R F'] R U2 R' U' F' U' F
⭐ F R' U' R2 U' R2 U2 R U' F'
⭐ R2 U' R F R' U R2 U' R' F' R
　 M' F U F' r' F U' F' U R
　 R' U' F (U R U' R') F' U2 (R U R' U) R
　 R' U' R U' (R' U R U') R' U F' U F R
　 F U (R U R' U) F' U y' (R U R' U') (R U R')
　 F' (R' F R) U' R' F' R U F (R' F R F')
　 R' U2 R (U' R' U R) U R' F' U' F U2 R
　 R' F' U F U' M' F' U' F R2 r'
　 [R' F R] U' R' U2 (R U R') F' U' (R U R' U) R
　 R' U2 R (U' R' U R) F (R U R' U') F' U (R' U R)
　 F U F' (R U R' U) F U F' U (R' F R F')

Setup + y

Front

⭐ [R U R' U] R U2 R' U (R U R' U') (R' F R F')
　 R' U' F' U' F2 (U R U' R') F' U2 R
　 [R U R'] U2 F' U' F (R' F R F') R U2 R'
　 F (U R' U' R) F' U F (R U R' U') (R' U R U') F'
　 R U2 R2 F R F' R (U' R' U R) U2 R'
　 [R U R' U] (R U' R) B' R' y U' R F' [R' U R]
　 R' U r' F R F' M' F' U F U' R
　 S [R U R' U'] f' U F U F' U F
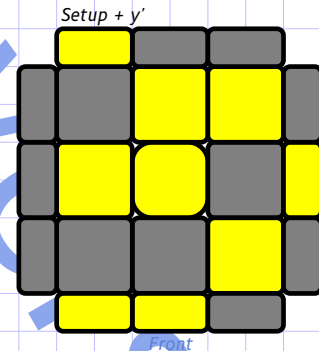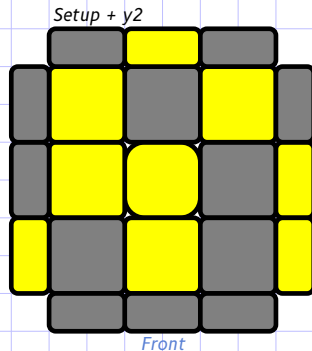　 [R U R' U] R U2 B [R U R'] B' R U' R2
　 [R U R'] B' [R U' R' U] R' U' (R U R' U') R U B
　 R' F' U' F U' (R U R' U) (R U R' U') F' U F R
　 R' F' U F R S [R U R' U'] R' S'
　 F (U R' U' R) F' U' R' U2 R F (R U R' U') F'
　 F U R U2 R' F R' F' R U (R U R' U') F'

Setup + y2

Front

⭐⭐⭐ M U (R U R' U') (R' F R F') M'
⭐ B' U' R' U F' R B (R' F R)
　 [R U R'] U2 F' U' F U' (R U R' U') R U' R'
　 B' R B' R2 U (R U R' U') R B2
　 R' U' F' U' F U R U2 R' U (R U R' U) R
　 B' U' R' U2 (R U R') U2 R U B
　 R' U' R (U' R' U R) U (R U R' U') R' U F R F'
　 R' F (R U R' U') F2 U F U2 (R U R' U) R
　 F U F' U F U2 R (U' R' U R) U R' F'
　 [R' U R] U R2 U' F' U F R (U R U' R') U' R
　 [R U R'] B' [R' F R] F2 U F U' B
　 R' U' R2 B R' [U' R' U R] U B' [R' U R]
　 R' F R' F' (R U R' U') F' U F2 R F' R
　 R2 U' R U (R U R' U') F' U F U' R' U R2

Setup + y'

Front

⭐⭐⭐ [R U R' U'] R U' R' F' U' F (R U R')
　 F (R U R') B' (U R U' R') U' F' B
　 F R' U' R2 U' (R U R' U') R2 U F' (R' U R)
　 R U R2 U' R' (U' R' U R) U F R F'
　 F R' U' R' U' (R' U R U') R U F' (R' U R)
　 R' U' R (U R U' R') U' F' (R' U R) F (R U R')
　 M' U (R' U R) U2 R' r' F R F'
　 F B' R2 F' U' (R U R' U') R' U B
　 R' U2 R2 U' R' U' R' U2 F R F'
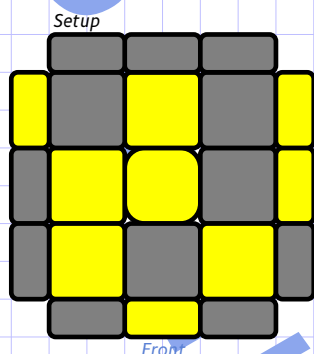　 R' U2 R U F R' F' U R (U R U' R')
　 R' F' U2 F (R' F R F') R U' R' U' R
　 R' U' F' U (R U R' U') (R' F R) U' (R U R' U) R
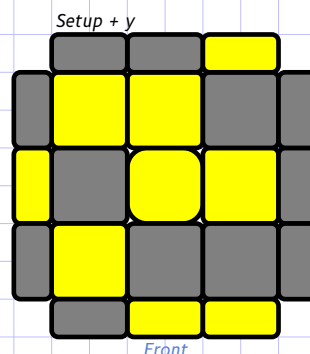　 F (R U R' U') F' U2 (R U R' U') (R' F R F')
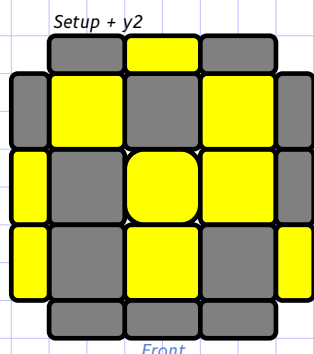　 R' F R2 F' (R' F R F') (R U R' U') R U R2

# OLL #35 - A2
R B R' F R B' U R' U' F'

Setup

Front

⭐⭐⭐ F [U R U' R'] [U R' U' R] F' [R' U R]
⭐ R [U R U' R'] F U R2 U' F' [R' U R]
⭐ F R' F R2 U' R' U' [R U R'] F2
[R U R' U] R U r' U' F' U F M'
B' U' [R U R' U'] [R' U R] B [R' F R F']
R' F' U' F U R U [R U R' U'] [R' F R F']
R' U' F' U F U2 [R U R' U'] [R U R' U] R
F U R U2 R' U' R U2 R' U' F'
R U R2 U' R' F [U' R' U R] U R F'
F R F' r U R2 U R U2 r'
[R U R' U'] [R' U R] [U R U' R'] U' R' F R' F' R2
F U R2 U' R2 F' [R' U R U'] F R F'
F R' F' U [R U R' U] [R U' R] U' R2 U' R
[R U R' U] R U' R' F' U' F U R U2 R'

Setup + y

Front

S U2 F R [U' R' U R] U R' f'
R' U' R2 U' R' U F' [R' U R] F U' [R U R']
R U' L U' R' U L' U [R' F R F']
R' U' R U' R' U2 R U' [R U R' U'] [R' F R F']
L U F U' R F' L' F R' F'
F2 U2 F' [R' F R] U' [R U R'] U2 F2
R U2 F [R' U R U'] F' U R' U [R' F R F']
F U R U2 R2 U2 R2 U R' F' [R' U R]
F U2 R U R2 U' R' [U' R' U R] U R U' F'
M' U R U' r' U' F R' F' R2 U' R'
R' U' F R' F' R2 U' [R U R U'] R' U2 R
R' U' F U F R F' U' R' F' R2 U' R'
F [R' F R F'] U' F U R U' R2 F' R F'
M' B U2 [R U R' U] B' U R U r'

Setup + y2

Front

R B' R' U [R U R' U'] [R' F R F'] R B R'
R U2 R' U' F' U F [R U R' U'] R U' R'
[R U R' U] R [U' R' U R] y U' R U' R' F'
R r' U F [R U R'] F' U' R' F' r
R2 U R' B' R U' R2 U R B R'
F U [R U R' U'] B' [U' R' U R] B U' F'
M2 U' F U M' F' r F U' F' R'
F R U R2 U' R F' [R' U R] F [R U R' U'] F'
F U R U R2 U' F' U F R U2 F'
B' [R U R' U] R U2 R' [U' R' U R] U B
F [R U R' U'] R U2 R' F' U F [R U R' U] F'
S U F [R U R'] B' [U R U' R'] U'
F U' R' U' F U R2 U' R' F' [R U R'] F'
F' U2 F U [R U R' U'] [R U' R' U] F' U2 F

Setup + y'

Front
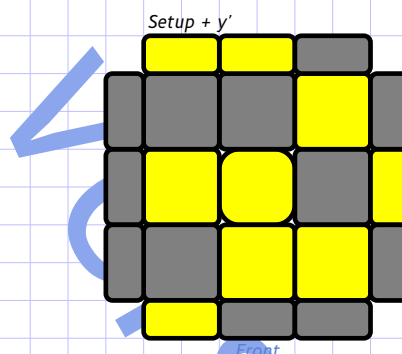
⭐ F R' F' R F U2 F U [R U R']
⭐ F R U r' U [R U R' U'] M' U F'
[R U R'] F D R' [U' R' U' R] u' R'
[R U R' U] [R' F R F'] B' U [R U R' U'] B
S' R' U' R f [R' U R U'] F'
F R' F' R U' F' U' F U' R U' R'
R' F U F2 U F2 U2 F' U R
[R U R' U] R' U' [R U' R' U] F R F' [R' U R]
F R' F' [R U R' U'] [R' F R F'] U F R F'
F R U R2 U' R F' R' F' U F R
R' U' F' U' F U' R U' R' U' [R U R' U'] R
R' U' [R U R' U] R B U B' R' U' R
R' F [R U R'] F' R U F U2 [R U R' U'] F'
F R F' [R U R' U'] R' S' U' S

OLL #36 - A3
F R2 D R' U R D' R2 U' F'

Setup

Front

Setup + y

Front
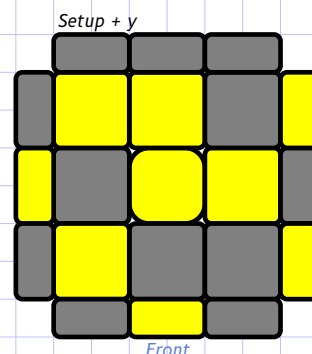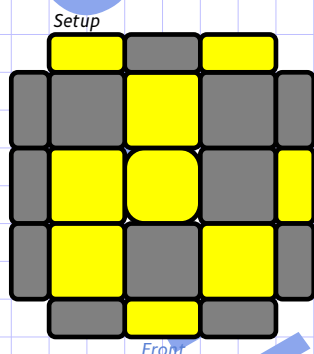
⭐⭐⭐ [R U R' U] R U2 R' F [R U R' U'] F'
⭐⭐ R2 r F' U' F U [R U' R] r'
⭐⭐ F [U R U' R'] F' R' U2 [R U R' U] R
⭐ F [U R' U' R] U R2 U' F' [R U R' U'] R'
⭐ F R' F' U2 [R U R' U] [R U' R] U' R'
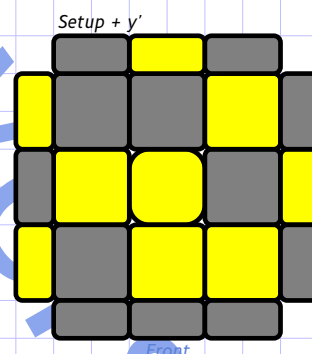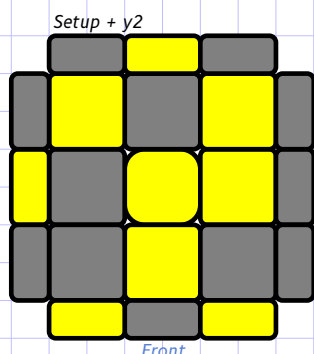⭐ F R' F' U2 R [U R U' R'] U [R' U R]
⭐ F R' F' U' F U R U' [R U R' U'] F'
⭐ R' F' U F [R' F R F'] U [R U R' U] R
⭐ R' F' r F [R U R'] F' U R r'
⭐ [R U R' U'] R F [U R' U' R] [U R U' R'] F' R'
⭐ R2 U' R F' [R' U R] F U2 [R U R' U] R
⭐ F [U R U' R'] F' U [R U R' U] R U2 R'
⭐ [R' F R F'] U [R U R' U] y F [R U R'] F'
  F U R2 D R' U' R D' R2 F'

⭐ [R U R' U] R U' [R' U R U] R' U' [R' F R F']
  R2 r U' [R' F R F'] U R U R r'
  R [U' R' U R] U F [R U R' U'] F' [R' U R U'] R'
  F R2 F2 U [R' U R] U2 F2 R2 F'
  F R2 [U' R' U R] U [R U R' U'] R [U R U' R'] F'
  R' F2 r U F [R U R'] F' U R r'
  R' U' R [U' R' U R] F R' F' U R [U R U' R']
  R' F' U' F [R U R' U] [R U R'] F' U' F U' R
  F' U2 F2 [R U R' U'] F' U' F' U' F [R U R']
  R' U' [R' F R] U F U F U' F' U' F' R
  R' U' R2 [U' R' U R] U [R U R' U'] F R F' U R
  R2 U' [R' F R F'] U [R U' R] U' R' F' U' F R
  S U R U2 R' B' U [R U R' U'] F
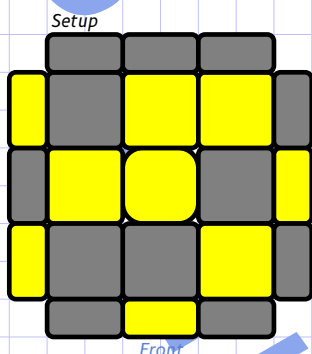 F' U' F2 [R U R' U'] F' [R U' R' U] F' U2 F

Setup + y2

Front

Setup + y'

Front

⭐ [R' U R U'] R' U [R U R' U] F' U2 F R
⭐ [R U R' U'] [R' F R F'] U F [R U R' U'] F'
⭐ F [U R' U' R] F' U F [R U R' U'] F' [R' U R]
  [R' U R U'] B U B' U' R' U [R U R' U'] R
  [R U R' U'] [R' F R F'] r' U' F' U F r
  R' U2 F R' F' R U' [R U' R' U] [R U R' U'] R
  R U' R' U' F [U R U' R'] F' U' R U' R'
  R U R [U R U' R'] U F R2 F' U2 R'
  R r' U2 R' F' U' F U [R U R'] r
  R U [R U R' U] R F R' F' U2 R' U' R'
  R r2 U' F' U F L F' M'
  R F' U2 F U [R U R' U] F U R U' F'
  R r2 F U' R F [R' U R] F' M U' M'
  R U2 R2 U2 R2 U R F R2 F' [R' U R]

⭐⭐ R' U' R U [R U R' U'] R' F U R U' F'
⭐ F U' F' U2 F [U R U' R'] U' F'
⭐ R U2 F R2 F' U' [R U R' U'] R' U' R'
⭐ R' F' U' F R U F [R U R' U'] F' [R' U R]
  R U2 R' U' R U' R' U' F [R U R' U'] F'
  [R U R' U'] F' U2 F [U R U' R'] U' R U' R'
  R' F' U' F R U [R U R' U'] [R' F R F'] [R' U R]
  F [R U R' U'] [R U R'] F' r' U' F' U r
  R U2 R' U' R U' R2 F' U' F U R
  F [R U R' U'] f' R' U' R S [R' U R]
  R U2 F R2 F' U [R' U R] U [R U R' U'] R2
  R U R2 U' R' [U' R' U R] F U R U' F'
  [R U R'] F' U F R U' R2 U2 [R U R' U] R
  F2 [R U' R' U] F [R U R' U'] F' [R U R'] F2

OLL #37 - A4
R' F2 D' F U' F' D F2 U R

Setup

⭐ F R U R2 U' R' [U' R' U R] U R F'
⭐ [R' F R F'] [R' F R F'] [R U R' U'] [R U R']
⭐ R' U2 [R U R' U] R U F [R U R' U'] F'
⭐ R' F [R U R'] F' R F U' [R U R' U'] F'
⭐ R' F [R U R' U'] F' U F' U' F U R
  F R U2 R U [R U R' U'] R' U' R2 U' F'
  R [U R U' R'] F U R2 U' [R' U R U'] F'
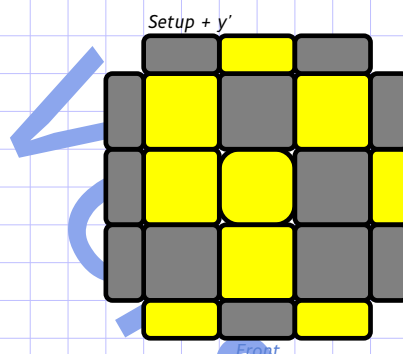 F [R U R'] F' M' F U' F' M
  R' U2 R2 [U R U' R'] U F R2 F' [R' U R]
  F U R' U' R' F' U' [R U R' U'] R2 U2 R
  R2 U' R2 U [R U R' U'] R2 F R' F' U R2
  [R U R' U'] R' U' R U R y R' U' F' U R
  R' F' U' F U' [R U R'] F [U R U' R'] F' R
  R' U2 B' R' B U R F' [R' U R] F

Setup + y
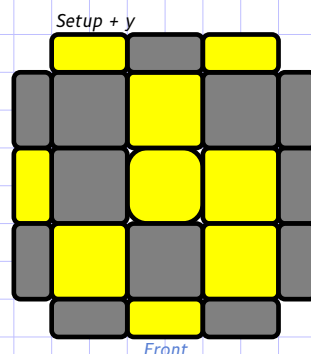
⭐⭐ [R' U R] U2 R' U' F' U F U R
  [R U' R' U] F' U' F [U R U' R'] U' [R U R']
  R U' [R' U R U'] F [R U R' U'] F' R' U' [R U R']
  [R U R' U'] R' U' R' U' R U F R2 F' [R' U R]
  R F R2 U' R' U' R U2 [R U' R] F' R'
  F R [U' R' U R] U R' F' U2 F [R U R' U'] F'
  F' R' U L' U' L U' R F [R' U R]
  [R U R' U'] R' F U' R2 U' R2 U2 R U' F'
  R' U' R F R2 F' U' [R U R' U'] R2 U2 R
  F [R U R' U'] R' U' R2 U' R2 U R F' [R' U R]
  F' U' F [R U R' U'] R U' R' U2 F' U F
  [R' U R] U B' [U' R' U R] B U [R' U R]
  R U2 R' U2 F' U' F [R' F R F'] [R U R']
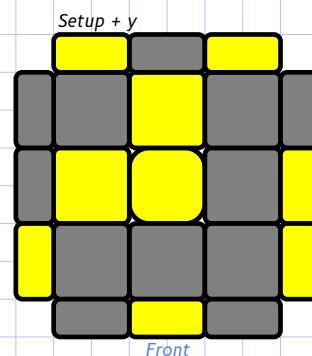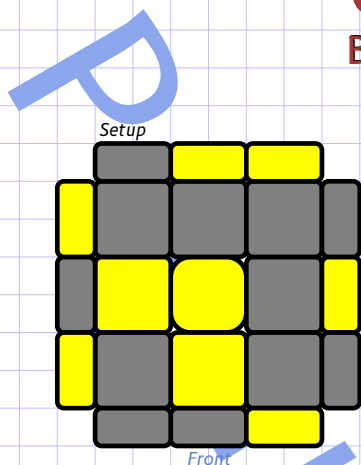 B' R' U' R U2 [R U R' U'] B [R' F R F']

Setup + y2
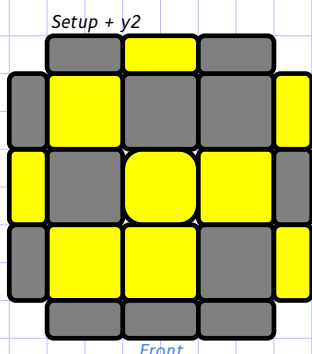
⭐ M2 F [U R U' R'] F' U' M' U M'
  [R' U R U'] R' U' F [R U R' U'] F' R [U' R' U R]
  F r' F R F' [U R U' R'] U' M' F'
  F U F' R r2 U' F' U R' r2
  [R' U R U'] R2 F' U' F U [R U' R] [U' R' U R]
  [R U R' U'] F' U' F U R F [R' U R U'] F' R'
  M2 F [U R U' R'] F U' M' U F2 M'
  R' U F U' F' U' R U' F U' [R U R' U'] F'
  F' U2 F2 U [R' F R F'] U' F' R U' R'
  R' F' U F U2 M' F' U' F R2 r'
  M' F U F' R2 r U' F' U R' r2
  F [R U R' U'] F' R' U' [R U' R' U] F' U F R
  [R U R' U] R U2 R' U' R' F [R U R' U'] F' U R
  F' U' F [R U R'] F' U F U F [R U R' U'] F'

Setup + y'

⭐⭐⭐ M U F [R U R' U'] F' M'
⭐ R' U' R U F [R U R' U'] [R' U R U'] F'
⭐ R' U' R U R' U2 R F [R U R' U'] F'
  R2 r' B U B' U' R' U M'
  F U F R F' U' R' [U' R' U R] U R F'
  R' F U' F' R U F [R U R' U'] [R' U R] F'
  B' U' R2 D' [R U R'] u F2 R
  F R' U' R F' [R' U R] U F U' [R U R' U'] F'
  F U' F' [U R U' R'] U F [R U R' U'] [R' U R] F'
  B' U F [R U R' U'] B [R U R' U'] F'
  B' R B U2 R' U' [R U' R' U] [R' U R]
  R' U' R U' R' U2 [R U R'] F U' F U R
  R F U' R2 U' [R' F R F'] U R2 U F' R'
  R' U' F' U' F M' F' U2 F R2 r'

OLL #38 - L1
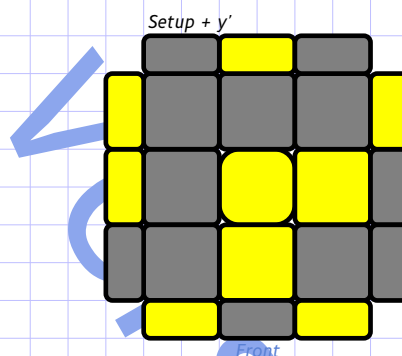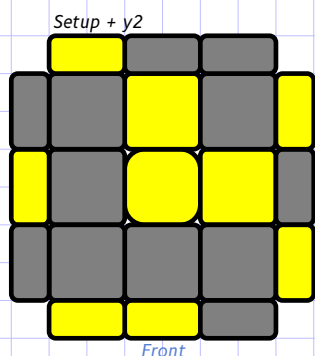## B' U' R' U R U' R' U R B

Setup

Front

Setup + y

Front

⭐⭐⭐ B' R' U' (R U R' U') R U B
R' U2 (R U R' U') R U' R' F' U F U' R
F' U2 F U' (R U R' U) (R U R') F' U F
R' U (R U R' U) (R U' R' U) F U' F U2 R
R' U2 (R U R' U') R U2 R B' R' B
L' B' U R' U' (R U R' U') R B L
F U (R' F R F') U' F' R U2 (R U R' U) R
(R U R' U) (R U' R' U) F' U F U' R U2 R'
(R U R') F' R' U2 R U F (R U' R' U) (R' U R)
(R U R' U) R' U' R F' (R' U R) F U R U2 R'
L U F (R U R' U) (R U R' U') F' U2 L'
F (R U R') U2 F' U2 F (U R U' R') U' F'
F' U' F (R U R') F (R U R' U') y' R' U (R' U R)
R' U (R U R') F (U R U' R') F' R U' R' U' R

⭐⭐⭐ R' F (R U R' U') F' (R' F R F') U R
⭐ F (U R U' R') F' (R U R' U) R U2 R'
⭐ (R U R' U') (R U R') F' U' F U' R U2 R'
⭐ R' F' U' F U R U' F (R U R' U') F'
⭐ R' F' U' F (R' F R F') U' (R U R' U) R
F (U R U' R') F' U' R' U2 (R U R' U') R
F R' F' R U2 R (U' R' U R) U2 R'
R' F' U' F R F (R' U R U') (R U R' U') F'
R' F' U' F R' F (R U R' U') R F' R' U R2
R (U R U' R') F R' U R' U' R' F' (R' U R)
(R' F R) U2 F' U' F U' F2 U2 F
F R' (U R' U' R) U R U' R2 U R2 U' R F'
F' U' (R U R' U') R' F2 R y' R' U (R' U R)
(R U R' U) (R' F R F') R U2 R' F (R U R' U') F'

Setup + y2

Front

Setup + y'

Front

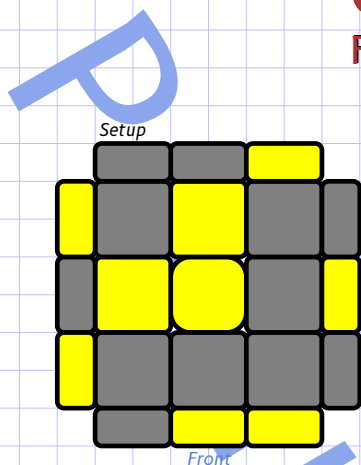⭐ R' U' (R' F R F') (R' F R F') U R
R' U' F R' F' R U' (R U R' U') (R U R' U) R
F' U' F (R U R' U') (R U' R' U) F' U2 F
(R U R' U) R (U' R' U R) U2 R' F (R U R' U') F'
R' F R2 F U (R' U R) U2 F' R2 F' R
R' F' U' F (R' F R F') U F' U' F U R
R' U' R B U2 B' R' U' (R U R' U) R
F U (R' F R F') R U' R' F' U' F (R U R' U') F'
F' U' F2 R U' R' U' (R U R') F' R U' R'
R' U F' U' F U (R U R') F' U' F U2 R
F R U' R' F (U R U' R') F' U2 (R U R') F'
F R' U' R2 U' R2 U R F' U' R' U2 R
R' U F' U' F U R F (R U R' U') F' U (R' U R)
R' U' F' U F U' F R' F' R U' (R U R' U') R

F' U' F U' F' U2 F2 (R U R' U') F'
F' U' F U2 (R U R' U') (R U R' U) F' U F
(R U R' U') R' U' F U R y' (R' U R) U2 R'
B' R' U (R U R') U2 (R U R' U') R U B
(R U R' U) F' U F U (R' F R) (U R U' R') F'
B' U F (R U R') U2 (R' U R) B U F'
R' U' (R U R' U') R U2 R' U' F' U' F U' R
R' U2 R U' B U' B' (R' U R U') (R U R)
(R U R' U) R U' (R U R' U') R' U F R F' U2 R'
(R U R' U') R' U2 (R U R' U) F R F' R U2 R'
R' U2 (R U R' U') (R U R' U) R2 y (U R U' R') F'
F R U' R' U2 (R U R') F' U' F (R U R' U') F'
F' U2 F R U' (R' U R U') R' U F' U2 F
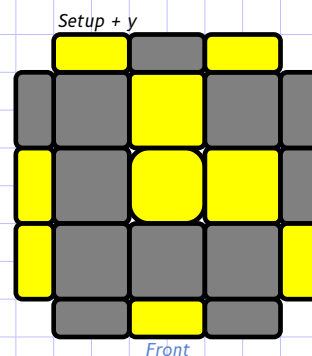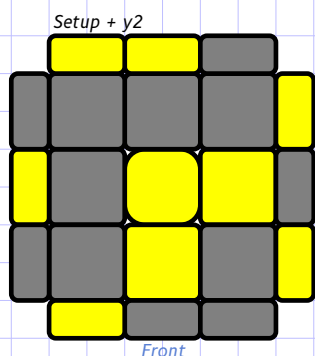R2 U' R U' (R U R' U') F U R' U' F' U2 R2

OLL #39 - L2
F U R U' R' U R U' R' F'

Setup

⭐⭐⭐ F [R U R' U'] [R U R' U'] F'
R U2 R' U' [R U R'] U2 [R' F R F']
F R' F' U2 [R U R' U] R2 U2 R'
L F U' [R U R' U'] [R U R'] F' L'
F [R U R' U'] F' U R' F' U' F U R
R' U2 [R U R' U'] [R U R'] F [U R U' R'] F' R
R' U' R U' [R' U R U'] R' U [R' F R F'] U R
F R' F' U' R U [R U R' U'] [R' U R U'] R U' R'
F R' F' U' R U [R U R' U'] [R U' R' U] [R' U R]
R' U' F' U F R2 U2 R' U' R U' R'
[R' F R F'] U2 F' U F U' F' U2 F
R' U F' U' F [R U R' U] R U' R' U2 R
F [U R U' R'] F' R' U2 [R U R' U'] [R U R' U] R
F [R U R' U'] R2 D [R' U R] D' R2 U' F'

Setup + y

[R U R' U'] [R U R'] U2 R y U [R U R' U] F'
R U2 R' U F' U' F U2 [R' F R F']
F [R U R' U'] F' R U2 R' U2 [R' F R F']
[R U R'] F' U2 F R U' y [R U R' U'] F'
F R U' R' U' R U2 R' U' [R U R' U'] F'
[R U R' U'] R' F U' R2 U' R2 U R F' [R' U R]
R U2 R' U F' U F R U' [R' U R U'] R'
[R U R'] U2 F' U F R U' R2 F R F'
M' U' r' U' F U R F U' [R U R' U'] F'
F U' [R' F R F'] U' R U2 R' U' [R U R' U'] F'
R' U' [R U' R' U] [R' F R F'] R F [R' U R U'] F'
F R' F' r U2 R [U' R' U R] U2 r'
B' [R' U R U'] R' F' U' F U' R U B
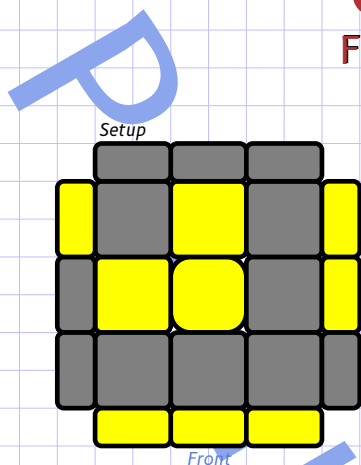F [R U R' U'] F' U' [R' F R F'] U2 F' U2 F

Setup + y2

[R U R'] F' U2 F [R U R' U'] R U' R'
[R U R' U] R U2 R' U' F [R U R' U'] F'
[R U R' U] R U2 R2 F' U' F U R
F R U' R' U2 F [R U R' U'] F' [R U R'] F'
[R U R' U'] M' U2 R U' B U' B' r'
R U2 R' U F' U' F U' [R U R' U'] R U' R'
[R U R' U] R' U2 R' [U R' U' R] U2 F R F'
F' U2 F U [R U R' U'] R U' R' U2 F' U F
F U [R' F R F'] U' F' U F [R U' R' U] F'
F U R2 r' U' [R' U R U'] R' U M' U' F'
R' U' R U' [R' U R U'] R' U2 R F [R U R' U'] F'
R' U2 [R U R' U'] R2 U R2 U R U2 [R' F R F']
R' U' R B U2 F [R U R' U'] F' B' [R' U R]
B' [R' U R] U2 F [R U R' U'] F' R' U' R B

Setup + y'
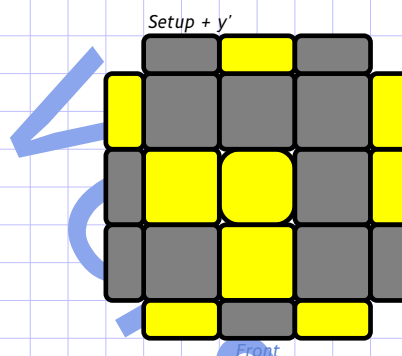
F [R U R'] F R' F' R U' [R U R' U'] F'
[R U R' U] [R' F R F'] R [U' R' U R] U2 R'
F U' [R U R' U'] F' U' F [R U R'] U2 F'
[R U R' U'] [R U R'] F' y' U2 [R' F R F'] R
F U F R' F' R F R' F' R U' F'
R U2 R' U' [R U R' U'] F' U2 F R U' R'
F [R U R' U'] F' [R U R' U] [R' F R F'] R U2 R'
R' U' R U F [R U R' U'] R' F' U' [R U R' U] R
[R U R'] F R' F' R [U R U' R'] U F' U F
[R U R'] F R' F' R U y' R' U [R' F R F'] R
B' R B R' U2 [R' U R U'] R' U2 R
R U2 R2 F R F' [R' F R F'] R U2 R'
R U2 R' F R' F' U' R2 U' R2 U2 R
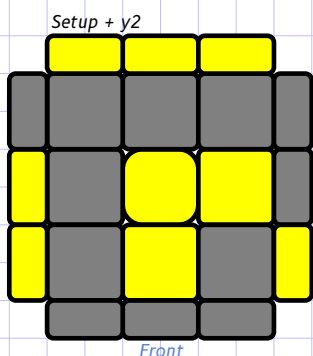R' F' R [U R U' R'] U F U [R U R' U'] R U' R'

OLL #40 - L3
F' R U2 R' U2 R' F2 R F'

Setup

Front

Setup + y

Front

⭐⭐ F (R U R' U') R U R2 U' R F' (R' U R)
⭐ F R' F2 R U2 R U2 R' F
⭐ R2 U' R F (R' U R U') F2 U F R
⭐ F U' F' U2 F U (R U R' U') (R U R') F'
   (R U R' U') R' F R2 U R2 U' R F' (R' U R)
   (R U R' U) R U2 R' U2 (R U R' U') (R' F R F')
   F (U R U' R') F' R' U' R U' R' U2 R
   F U2 F' U' F U' R (U' R' U R) U R' F'
   R2 F (R' U R) F' R2 F R U' R2 F' R
   R' U' R (U' R' U R) F R' U R2 U' R' F'
   F (U R U' R') F' (R' U R U') F (U R' U' R) F'
   R' F (R U R') F' R F2 R' F' R U' F'
   R' F R' F' R2 U R' U' (R U R' U') (R' F R F') R
   (R' F R) B' R' F2 U F U' R B
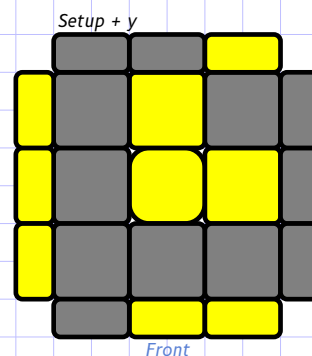
⭐ F (R U R' U') F' U' R' U' F' U F R
   F (R U R' U') F' R' U' F R' F' R U R
   (R U R' U') R' U' F U' R2 U R2 U R F'
   (R' U R) U2 R' U' F' U F U' (R U R' U) R
   R U2 R' r' U' R2 U' R2 U2 r
   R' F R' F' R2 U' R' U F' U' F R
   F U' R U R2 U' R2 U' R' U F' (R' U R)
   R' F R' F' R2 U2 B' R B R'
   F R' F' U' F U' R2 U R2 U R F'
   F (R U R' U) F' U r F (R' U R) F' r'
   F (R U R' U') R U' R' F' U' r' F2 r
   F (R U R' U') R' F' R U (R U R') U2 (R' F R F')
   F (R' F R F') R U' R' F' r' F2 r
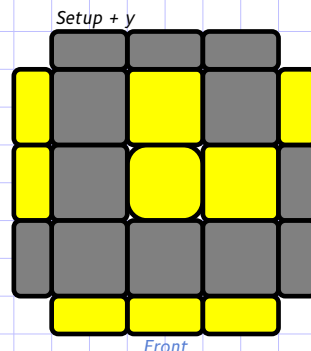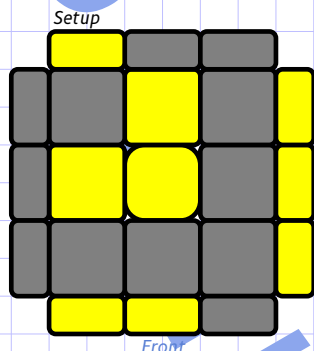   (R U R' U') R' U' R2 F R F' R2 U R2 U' R'

Setup + y2

Front

Setup + y'

Front

⭐⭐⭐ B' R' U (R U R' U') R (U' R' U R) B
⭐⭐⭐ R' U2 (R U R' U) R F (R U R' U') F'
⭐⭐ F' U' F2 R' F' R U' (R' F R F')
⭐ R' U2 (R U R' U) (R U R') F' U' F U R
⭐ F' U' F U' (R U R' U') (R' F R F') R U' R'
⭐ R' F' U' F U (R U R' U') (R' F R F') U R
   R' U (R' F R) (U R U' R') F2 U F U' R
   (R U R' U) (R' F R F') U' F' U2 F R U' R'
   (R U R' U') R U F U R2 U' R F' U R'
   (R U R' U') R' F2 R U' (R' F R F') (R U R') F2
   F (R U R' U) R' U' F R F' (R' U R) U2 F'
   F' U' F U' R2 U R U' (R' F R F') U' R'
   R' U F U' F' U' R F U' R U' R' F'
   R' F (R U R' U') F' (U R U' R') F' U' F U R
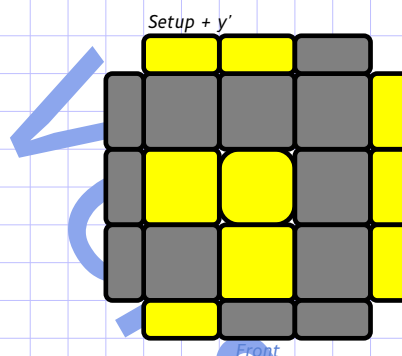
⭐ R F' U2 F U2 F R2 F' R
⭐ (R U R' U) R U' R' F' U2 F R U' R'
   F (U R U' R') F' B' (U' R' U R) B
   R U2 R' U' (R U' R' U) (R U R' U') (R' F R F')
   (R U R' U) R U' R' U' F' U' (R U R' U') (R' F R)
   F U (R' F R F') R' U' R F' U' R' U2 R
   R' U' (R' F R F') U R U2 F (R U R' U') F'
   R U' R' U' R F (R U R' U') F' R' U (R U R')
   F (U R U' R') U F' r' U' F' U r
   R' U' (R' F R F') (U R U' R') F' U' F U R
   (R U R' U') (R' F R F') U F R' F' R (U R U' R')
   B' D' R U' (R U R') u R2 U2 R'
   (R U R') F' B' U F U' B (U R U' R')
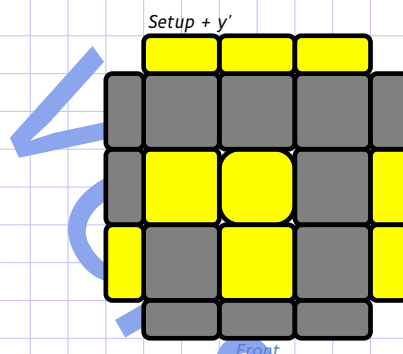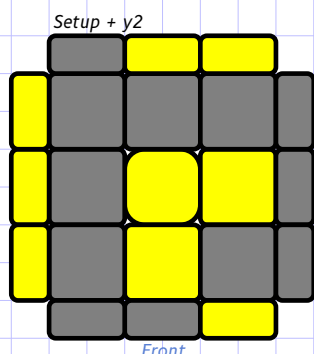   (R' U R) U2 R' U' R U' R' F' U' F U' R

OLL #41 – L4
R F' U2 F U2 F R2 F' R

Setup

Front

⭐⭐⭐ R' F R2 F' U2 F' U2 F R'
⭐⭐⭐ [R' U R U'] R2 F R2 U R' U' F' R
⭐⭐⭐ R2 [U R U' R'] F R' U R2 U' F' R'
⭐⭐⭐ R' U2 [R U R' U] R U' [R U R U'] [R' F R F']
⭐⭐ R' U' [R' F R F'] U R F [U R U' R'] F'
⭐⭐ R' U F' U' F2 [R U R' U'] R' F' [R U' R]
⭐⭐ B' [U' R' U R] F B [U R U' R'] F'
⭐⭐ R' U' F' U F R U' [R U R' U] R U2 R'
⭐ F R2 U R2 F' R F [R U' R] F' R
⭐ F R F' [R U R' U'] R' F R F' [U' R' U R]
⭐ [R U R' U] R U' R2 U' R' F R2 F' [R' U R]
⭐ R' U' R [U' R' U R] B U2 B' [R' U R]
⭐ F D R' [U R' U' R] u' R2 U2 R
⭐ F R' F' [R U R' U'] [R' F R] U R2 U' R' F'

Setup + y

Front

⭐⭐⭐ F' R U2 R' U2 R' F2 R F'
⭐⭐⭐ R U2 R' U2 R' F [R U R' U'] R F' [R' U R]
⭐⭐⭐ F R U' R' U' [R U R' U] R U' R' F'
⭐⭐⭐ R U2 R' U' R U' R' F [R U R' U'] F'
⭐⭐ R' U2 [R U R' U'] [R U R' U] F' U' F U R
⭐⭐ F R [U' R' U R] U2 R2 U' R F' [R' U R]
⭐⭐ F U' R' U2 [R' U R U'] R U2 R U' F'
⭐⭐ F [R U R' U'] F2 U' F2 R' F' R2 U' R'
⭐ R' U2 [R U R' U] F' U' F [R' F R F'] U R
⭐ R' U2 [R U R' U] R r U [R' U R] U2 r'
⭐ F' U F U2 [R' F R F'] [R U R' U'] F' U F
⭐ [R' F R F'] r [U R' U' R] y [R U R' U'] f'
⭐ R U2 R' B' U [R U R'] U2 [R' U R] B
⭐ [R U R'] B' U R U2 R' U2 [R' U R] B

Setup + y2

Front

⭐⭐⭐ R U R2 F R F' [R U R'] F' U F
⭐⭐ F [U' R' U R] U F' R' U F' U F R
⭐ F [R U R' U'] F' U2 R' U' [R' F R F'] U R
⭐ [R U R'] F R [U' R' U R] U R' F2 U F
⭐ R' U2 R r U R2 U R2 U2 r'
⭐ [R U R' U] R' U' R2 U' R2 U F' U F R
⭐ R B' R B R2 U2 F R' F' R
 F [R U R' U'] F U' [R' F R F'] [R U R'] F' U' F'
 [R U R' U] F' U' F [R U R'] y' [R' U R U'] [R' U R]
 [R U R' U] F' R U2 R' U2 R' U' F U R
 [R U R' U] F' U F U' B' U [R U R' U'] B
 [R U R' U] F' U' F R [U' R' U R] U R' F' U F
 B' U F U' B U2 [R' F R F'] U' F'
 F U2 F' U' F U' F U' [R U R' U] r

Setup + y'

Front

⭐⭐⭐ F [R' F R] F2 U F U' [R U R'] F'
⭐⭐ F [U R' U' R] F' [R' U R] F [U R U' R'] F'
⭐⭐ R' F [R U R' U] F2 U' F2 U' F' R
⭐ R' F' U' F U R U F [U R U' R'] F'
⭐ R' F [R U R' U'] F' U R F [U R U' R'] F'
⭐ R' U2 [R U R' U] R U2 F [U R U' R'] F'
⭐ [R' U R U'] F [U R' U' R] U [R' F R F'] U' F'
⭐ F [R' F R F'] [R U R'] F' U r' F r
 F [R' F R F'] U F R' F' R U' [R U R']
 R' F' U' F U R F U [R' F R F'] U' F'
 R' F' U F U' F' U2 F U' [R U R' U'] R
 R' U' R U' R' U2 R U2 [R U R' U'] [R' F R F']
 R' U' R U F D' [R U R' U'] D F' [R' U R]
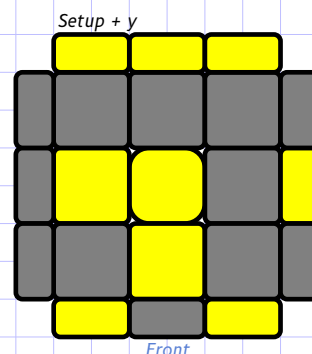 B' R' U' [R U R' U'] R2 U R' B R U' R'

OLL #42 - L5
## F R' F R F2 U2 L F' L' F
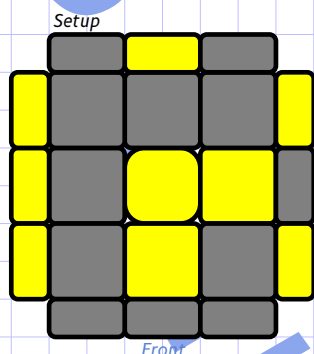
Setup

Front

R' U2 R U' R' F' U F U (R U R' U) R
F R U R2 F (R U R' U') F' U R U2 F'
(R U R' U') (R' U R) U F' U F R' U R2 U2 R'
B' U (R U R' U') F' B U2 F U (R U R')
R' U' F R F' U (R U R' U') (R' U R) F' U2 F
F' U' (R' F R F') U' F' U F2 U' R U' R'
R' U2 R2 U R2 U R2 U' R' U' (R' F R F')
R2 u (R U R' U') D' F' U (R' F R F') U F'
F' U' F R U' R' U' R2 B' R' B R'
F (R U R' U') F2 U' F U r (U R' U' R) r'
R' F' U' F U (R U R' U') (R U' R' U) F' U F R
R U B' R2 U' (R U R') y R F2 (R' F R)
F U' S (R U R' U') S' (R U' R' U) F'
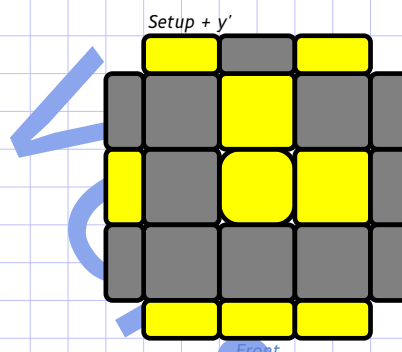F' U (R U R' U) F2 M' U' R U' r' U' F

Setup + y

Front

R U' (R' U R U') R' U2 F' U F (R U R')
F U (R' F R) F2 R' F U' F' U R
R' F (R U R' U') F' (R' F R) F2 U F R
B' R' U (R U R' U') R U F U' B U F'
R' U2 (R U R' U') r U (R' U R) U2 R r'
R' U F' U F (R U R' U) R U2 R' U' R
B' R' U (R U R' U') R y U' R U' R' U2 R
R' F (R U R' U') F' R2 y R' F' R2 U' R'
R' U2 r U R' U' (R U R' U) R U2 R r'
F (U R' U' R) F' R2 F R F2 U F R
F' U2 (R U R' U') (R' F R) U' (R' F R F') R U' R'
R' F' U2 (R U R' U) R2 U2 (R' F R) U2 R'
R U2 R2 U' R2 U' R2 U (R' F R F') U R
F' U2 F U2 F R' F' U2 (R U R' U) R
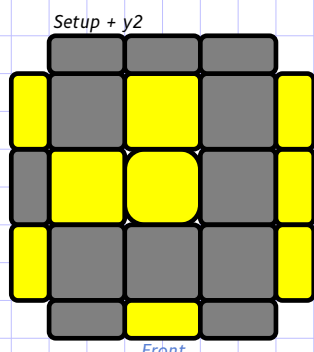
Setup + y2

Front

⭐⭐⭐ F (R U R' U') R (U' R' U R) U R' F'
F (R U R') F R' F' U' R F' (R' U R)
F (R U R' U') F' (R U R' U') (R' F R F')
M' U' R U2 (R U R' U') (R U R' U) R2 r'
F (U R U' R') U R U2 R' U (R U R') F'
F R' F' U' F2 R' (U' R U R) U R F2
B' R2 F R F' (R' F R F') R B
R' U2 (R U R' U) (R U R') F (R U R' U') F' U R
F (U R' U' R) F' U' R' U (R' F R F') U R
R' U' R U' r' (U R U' R') U2 R U M'
R U R2 U' R' F (R' U R U') R F' (R U R' U') R'
F R' U R2 U' R2 U R' U' (R' U R U') R F'
M' U2 (R U R' U) R U L' (U R' U' R)
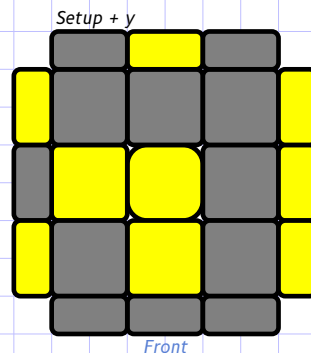M' U' r' F (R U R') F R U' R' F' R

Setup + y'

Front

⭐ (R' F R F') U' F R' F' R2 U' R'
R' U2 (R U R' U') R2 r' U (R' U R U') M'
R' U' (R' F R F') (R U' R' U) F' U F R
(R U R' U') (R' F R) U' (R' F R F') U2 (R U R') F'
F (R U' R' U) F' U' F2 R' F' R F'
(R U R' U') (R' F R F') U' F R' F' R (U R U' R')
R' U2 R2 r' U R' U' (R U R' U) R U M'
(R U R') B' U (R U R' U') B U2 (R' F R F')
M' (U R' U' R) U' (R' U R U') R' U2 R2 r'
F' U' F (R U R') F R' F' R U' (R' F R F')
(R' F R F') U2 (R U R') F' U F U' R U' R'
R U' R' U' F (U R U' R') F' U2 (R' F R F')
B U2 B' R' F' U' F (R' F R F') R
(R U R' U') (R' F R F') U' (R' F R) y' R' (U' R' U R)

OLL #43 - L6
R' F R' F' R2 U2 B' R B R'

Setup

Front
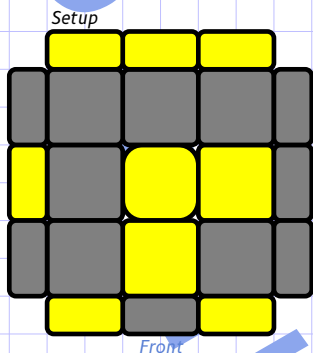
⭐ R2 r' U2 R' U' (R U R' U') (R U' R' U) M'
⭐ F (R U R' U') F' R' F' U' F U' (R U R' U) R
⭐ R B' R' B U2 R2 F R F' R
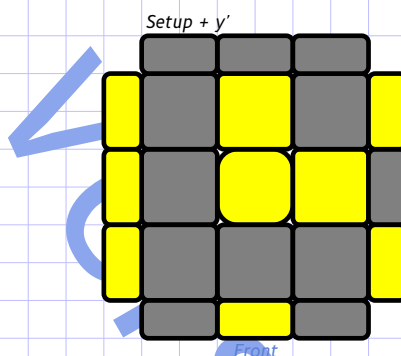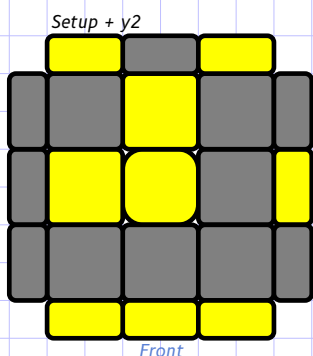⭐ R' U R' F' (R' U R) F (R U' R) U F' U F
⭐ F R U' R' U2 (R U R' U') (R' F R F') (R U R') F'
  R B' R' U (R U R' U') R B R' U F' U F
  (R U R' U) (R' F R F') U2 R' U' F R F' (R' U R)
  (R U R') D F' U F (R' F R F') u' (R' U R)
  (R U R') F' (R U R' U) y' R2 F R2 F' U' R
  B U B' R' F' U2 F U' (R U R' U) R
  (R U R') F' (U R' U' R) U' F U' R' U' F R F'
  R' U (R U R' U') R F U R F R' F' R2 U' R F'
  R' F' U' F U' R F (R U R' U') F' U' R' U' R
  F' U2 F U F R F' R' F2 (U R' U' R) U' R'

Setup + y

Front

⭐⭐⭐ F R' F' (R U R) F R F2 U F
⭐⭐ M U' R' U2 (R U R' U') r U (R' U R)
⭐ R' F' U F U' R U R2 F R F' R
⭐ R2 r' U (R' U R U') (R' U R) U2 R' U' M'
⭐ R' U F' U F U R U2 (R' U R U') (R' U R)
⭐ B' R' U' (R U R' U') R U' R' U' R B
⭐ (R U R' U) r (U' R' U R) U2 R' U' R r'
⭐ F (R U R' U') R' F' R F' U2 F U (R U R')
⭐ F (U R U' R') (U R' U' R) F' R' F' U F R
⭐ (R U R') F' U' F (R' F R F') U F R' F' R
⭐ B' R' U (R U R' U') R y (R U R') U2 (R U R' U) R
⭐ (R U R' U') R' F2 R F2 U F U' (R U R') F'
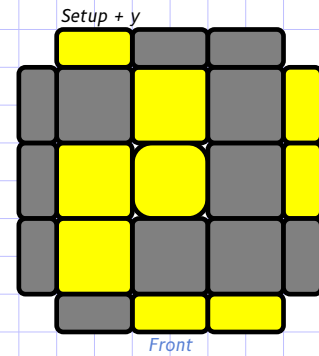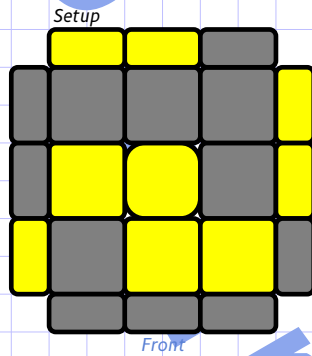 (R U R') F' R' U2 (R U R' U) R U' F R U' R'
  F' R U B U' R' F2 R B' R' F'

Setup + y2

Front

⭐⭐ R' F' U' F U R U' (R U R' U') (R' F R F')
⭐⭐ F (R U R' U) F' U' F (R' F R F') U' F'
⭐⭐ R U' R2 U' F' U F R U (R' F R F')
⭐⭐ (R U R' U) R U2 R2 F (R U R' U') F' U R
⭐⭐ (R U R') B' (U R U' R') U' B (R' F R F')
⭐ F U (R' F R F') R U' R' (U R' U' R) F' (R' U R)
⭐ R U2 r' U' (R U R' U') R U' R' U2 M'
⭐ M' U2 R' U2 (R U R' U') R2 r' U (R' U R)
⭐ R U2 R' U2 M' (R U R' U') R U' r'
⭐ F R' U' R2 U' (R U R' U') R U2 R U F'
⭐ M' U (R U R' U) (R U' R' U) R2 r' U2 R'
⭐ R' F' U2 R U F (R' U R) F' U' (R' F R)
⭐ R' U' F' U F (R U R' U') R F (R' U R U') F'
⭐ B' U' (R U R') B (R' F R) F2 U F

Setup + y'

Front

⭐⭐⭐ R' U' F R' F' R2 F (R' U R U') F'
⭐⭐⭐ (R U R' U') M' U2 R (U' R' U R) U2 r'
⭐⭐ R U2 R' U' F' U' F (R U R' U') R U' R'
⭐⭐ F (R U R' U') F' R' U' F (U R U' R') F' R
⭐ L F (R' F R F') (R' F R) F2 L'
⭐ R' U' F R2 (U R' U' R) F' R2 F R' F'
⭐ (R U R' U) (R U R' U') F' U2 F U2 R U2 R'
⭐ F R U2 F' U (R' U R) U2 F R' U' F'
⭐ (R U R' U) R2 r' (U' R' U R) U2 R' U2 M'
⭐ M' U2 R' U' R U' r' (U R U' R') U2
⭐ F (R U R' U') R U' R2 U2 R2 U R' F' (R' U R)
  R U2 R' U' R' U' R2 F (R U R' U') F' U R
  F (R' F R F') R' F2 r U' R U2 r'
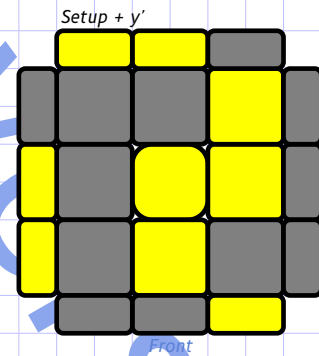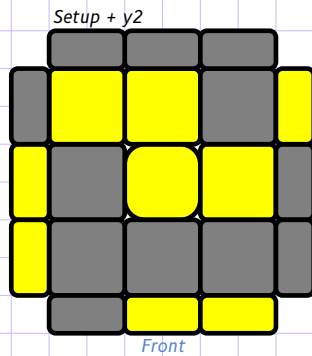 F' U2 F R' F (R U R' U') R F' (R' U R) F' U F

OLL #44 - B1
F R2 B' R' B R' F'

Setup

Setup + y

⭐ F R B' R B R2 F'
F' U2 F U2 F R' F' R
[R U R' U'] [R' F R] U [R' F R F'] U' F'
F [R U R' U'] F' U F [U R U' R'] F'
R B' R' F R2 B R2 F'
F [R U R' U] F' U' F R U' R' F'
[R U R' U'] [R' F R F'] U F [U R U' R'] F'
R r' U [R U R' U] R U2 R2 r
F R U [R U' R'] F' [R' U R] F R F'
R' U2 [R' F R F'] R U2 [R' U R U'] [R' U R]
F' U' R' U' F U [R U R'] F' R U F
B U L U2 L' B' [R' U R]
B' R' U F' [R U R' U'] R' F R2 B
B' R' U' [R U R' U] F' U' F R B

⭐⭐⭐ F U [R' F R F'] R U' R' F'
⭐ R' F' U' F [R' F R F'] U R
⭐ F R' F' R U2 R U2 R'
F U' [R U R'] F' U' F U2 F'
R' U2 [R U R' U] F' U' F U R
F [R U R' U'] [R U R' U] F' U' F U' F'
R' U2 [R U R' U] R U' F [R U R' U'] F'
R' U2 R U F [R' U R U'] [R U R' U'] F'
F [U R U' R'] [U' R' U R] U F' U [R' U R]
R F U R2 U' R2 U [R U' R'] F' R'
R' U' R' F [R U R' U'] R F2 [R' U R] F R
[R U R' U] [R U R'] S [R U R' U'] S'
R' U' F' U F [R U R'] U2 [R U R' U] R
R' F2 r U2 R U' L' U

Setup + y2

Setup + y'

⭐ R' U' F R' F' R U' [R U R' U] R
M' U' [R U R' U] R2 r' U2 R'
[R U R' U] R U2 R' F [U R U' R'] F'
F' U2 F [R' F R F'] U F' U F
F U R U2 R' F' r' F r
R' U' [R' F R F'] U R2 y [R U R' U'] F'
F [U R U' R'] F' U' F [U R U' R'] F'
F U' [R U R'] F' r F [R' U R] F' r'
R' U' D' F U' [R U R' U] F' u F
R' U' [R U' R'] U R2 F' U F R2 U' R'
[R' F R F'] U [R U R'] y' U R' U' [R U R' U] R
M' F U F' M U F U2 F'
F U' R' U2 [R' U R U'] R U R F' [R' U R]
[R U R'] U2 F R' F' U' R U [R U R' U'] [R' U R]

R' U2 R U' R' F' U F U' R
R U2 R' U' [R' F R] F2 U F
M U2 [R U R' U] r U2 R'
F [R U R' U'] R' F' U' F U R U' F'
R D' [R U R' U'] u [R' U R' F' R
R' U2 [R U R' U] R2 U R' U' [R' F R F']
F [R U' R' U] [R U R' U] [R' F R F'] U' F'
F R U' R' F [R U R' U'] F' U [R U R'] F'
R U' r' U' F2 U F R' F r
R U F U R F R' F' R' U' F' R'
[R' U R] U R2 U2 R U [R' F R F'] [R' U R U'] R
R B U B2 R B R' U' R'
R' U F' U F R U' R' F R' F' R2
R2 U R' U2 R F R' F' U R' U R'

OLL #45 - B2
B' R2 F R F' R B

Setup

Front
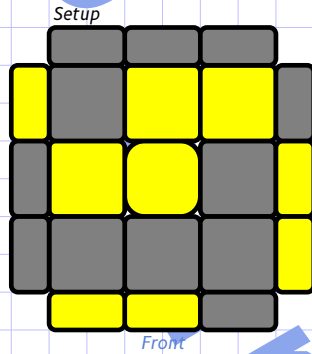
⭐⭐ [R' F R F'] U2 F' U2 F
F [R U R'] F R' F' R U' F'
R' U F' U' F [R U R'] U2 R
B' R' F R' F' R2 B
F U2 F' U' F U' [R U R' U'] F'
R' U' F R' F' R F' U F R
F [R U R' U'] [R U R'] y' [R' U R] U2 R'
F R2 B' R2 F' R B R'
R' U [R U R' U] R U r' U [R U R' U'] r
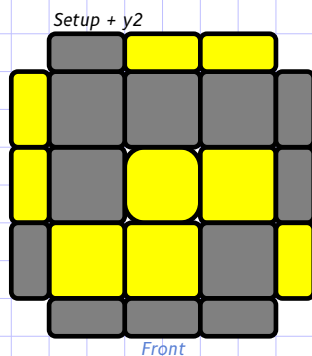M' U' R' U' R U' R' U2 R2 r'
F R U' R2 U' R U' [R U R'] F' [R' U R]
F [R U' R' U] F' U' r' F2 r
F [R U R' U'] F' U' R' U' [R' F R F'] U R
F' U' L' U2 L F R U' R'
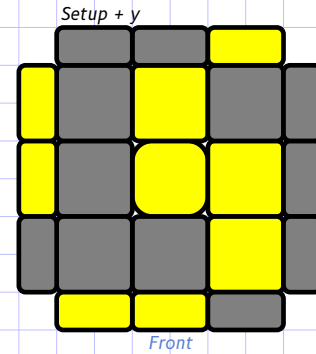
⭐⭐⭐ R U2 R' U2 [R' F R F']
R' F' U' F2 R' F' R U R
R' F' R U' r' F M' F R
M' U2 R' U' R U' r' U2 R
R' F [R U R' U'] R U' R' U2 [R U R'] F' R
R' F2 U F' [R U R' U'] F U' F2 R
F' M' U' R U' L' U [R' U R] U
[R U R' U'] [R' F R F'] U' R' U' F' U F R
R F R2 F' U' F R' F' [R U R' U'] R2
[R U R' U'] R' U' F R' F' R U R2 U' R'
F' L F R' F2 L' F2 R
R' U r' F' R F' U' F2 U r
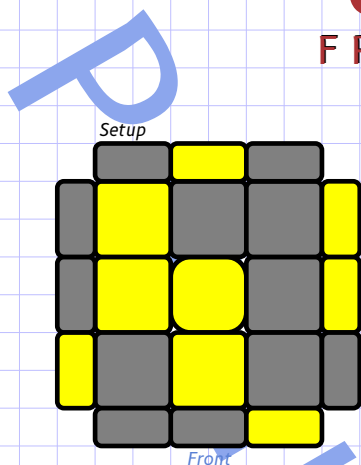R' F' U' F [U R U' R'] U' F' U F R
F [R U R' U'] F' U' F R' F' R [U R U' R']

Setup + y2

Front

F U2 F' U F [R U' R' U] F'
F' [R U R' U'] R' U' F R F' [R' U R] F
R' F' U' F U F [R U R' U'] F' U R
R U2 R' U2 F' U2 F U [R U R']
F' U' F [R U R' U] r [U R' U' R] r'
R' F' U' F R U [R U R' U'] R' U F R F'
F' U' R' U' F' [R' F R] F U R F
F U' R U' F [U R U' R'] F' R' U F'
R' U' R U' R' U2 [R U R' U'] F' U F R
F' L' f U' B' U2 F
F U' R U' R' F' U F [R' F R] F2
R U2 R2 U' F' U F R U' [R' F R F']
[R U R' U] F' B' U [R U R' U'] B [R' F R]
[R U R' U] R' U' R F' [R' U R] U F R U' R'

Setup + y'

Front
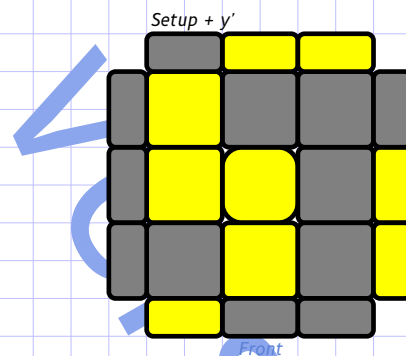
R U2 R' F R' F' [R U' R] U' R'
R' U' F' U F [R U R' U'] F' U F R
R' U' F' U2 F U [R' F R F'] U' R
F U [R' F R F'] U F' U' F U' F'
F U2 R U' R' F [R U R' U'] F' U' F'
B' R' U' [R U R' U'] R y U' [R U R' U] R
[R' F R] B' R' F' U [R U R' U'] R B
B' U' R B' R' B [R' U R] B
R F [R U R] F' R' r' U' F' U r
R' U' B U' [R' F R F'] U B' U R
R' F [R U R'] F' R r' U' F' U r
R B U' B' U R' U' F' U2 F
F [U R U' R'] F' B' R' U [R U R' U'] R B
R F R' U R' F R2 F' U' F' U R'

OLL #46 - B3
F R2 B' R' B R' U R U' R' F'

Setup

Front

⭐ F (R U R' U') R B' R B R2 F'
R U2 R' F R' F' R U' (R U R' U') R U' R'
F (R U R' U') (R U R' U) F' U' F R U' R' F'
B' D' R U' (R U R') u (R U' R) U' R'
F (R U R' U') R U (R U' R) F' (R' U R) F R F'
R U2 F R2 U' R2 U R2 U F' U R'
F (R U R' U') F' U F U (R' F R F') R U' R' F'
F B' R U (R U' R) U R2 U' F' B
F (R U R' U') F2 U2 F U2 F R' F' R
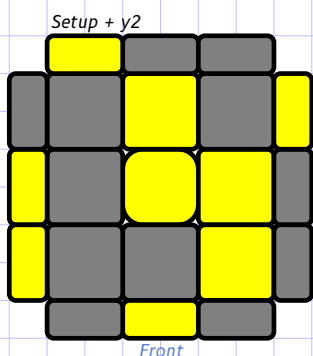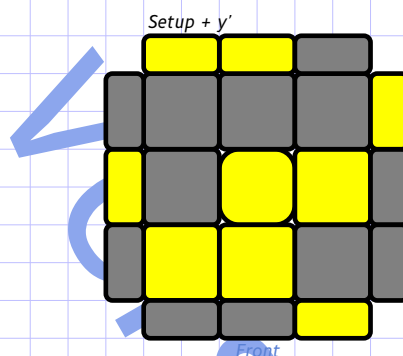F R U F R' F' U' R U R U' R2 F'
F (R U R' U') R F' U y R U' M' U' r'
F U (R U R' U') F U R U' R2 F' R U' F'
R U2 (R U' R) F' (R' U R) F R U R U2 R'
F' U F2 (U R U' R') F' (R U R' U) F' U F

Setup + y

Front
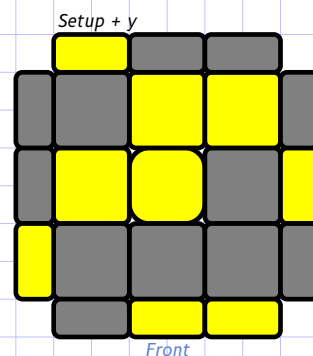
⭐ F U' R' U' R U (R U R' U') (R' U R U') F'
⭐ F R U F R2 F' U' (R U R' U') R2 F'
F (R U R' U') (R U R') F' R' F U' F' U R
R F R' (U R U' R) U R U' (R U R' U') R F' R'
F U (R' F R F') (R' F R F') R U' R' F'
F (R U R') U2 B' U (R U R' U') F' B
R' U2 R U F R2 (U' R' U R) U R F'
R' U2 R2 r' U F (R' U R U') F' M'
F (R U R') F' r F R F' R' U' R F' r'
R' F U F' R F U' (R U R' U') (R' U R U') F'
(R U R' U) R' F (R U R' U') F' U (R U' R) U2 R'
F R2 D (R' U R) D' R2 U' (R U R' U') F'
F' U F U' R U' R' U' (R U R' U') F' U F
F (R U R' U') F' R' F (R U R' U') F' U R

Setup + y2

Front

⭐ R' r U (R U R' U) R U2 (R' U R) r'
F U (R U R' U') F' U' R' U' F U F' R
R' F' U' F2 R' F' R2 U' R' U2 R
F (U R U' R') U R U2 R' U2 (R U R') F'
(R' F R F') U' F R' F' R2 (U R' U' R) U' R'
F R2 F' U' R' U (R U R' U) R U' F R2 F'
F R U' R2 U2 R2 U R2 U R U' F'
R2 U' R2 F R' F' R' F R' F' U R2
(R U R' U) (R U R) U' R' F L U R2 U' F' (R' U R)
R2 U' F R2 F' R' F R2 F' U (R U' R)
(R' U R) U2 R' U' F' U' F U' F' U' F R
(R' U R) U2 R' U S (R U R' U') S' R
R2 F' U r' F' M' U' R F R' U R'
F U' R' U2 R U R2 (U' R' U R) U R U F'

Setup + y'

Front

⭐⭐⭐ R2 r' U (R' U R) U2 R' U M'
⭐ (R U R' U') F' R' U' R F (R' U R U') (R U R')
⭐ R' U2 (R U R' U) (R U R' U') (R' F R F') U R
⭐ (R U R' U') R U' R' U' R y (R U R' U) F'
⭐ R' F' U' F U R U2 F (R U R' U') F'
⭐ (R U' R' U) B' R U (R U R' U') R2 B
(R U R' U') F' U F U' F' U' F U' (R U R')
R' F' U' F (U R U' R') F' U' F U R
(R U R' U) (R U R') S' (R U R') S
(R' U R) U2 R2 U' F' U F R U' (R U R' U) R
F (R U R' U') F' U F U R U' (R' U R U') R' F'
F' U (R U R') F' R' F2 R U F U F
(R U R' U') F' U' F U R' F' R (U R U' R') F
F (R U R' U) F' U F (R U' R' U) (R U R' U') F'

OLL #47 - B4
B' R2 F R F' R U' R' U R B

Setup

Front
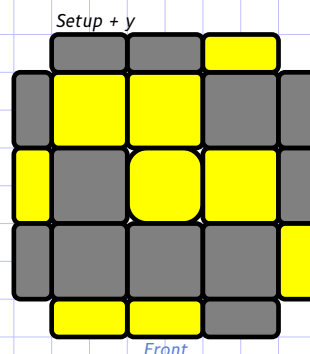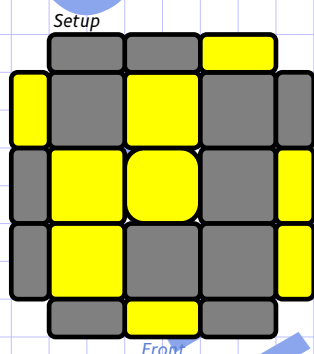
⭐⭐⭐ F U R U2 R' U (R U R' U) R U' R' F'
⭐⭐ B' R' U' (R U R') F R' F' R2 B
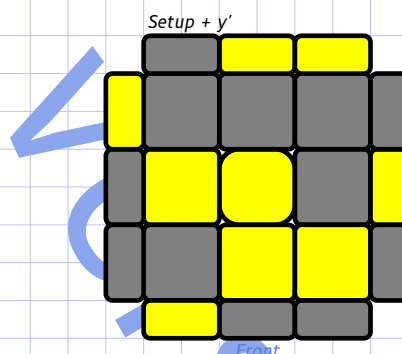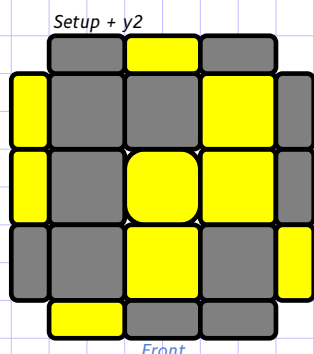⭐ M' (U R' U' R) U' R' U2 R U M
⭐ F D R' (U R' U' R) u' R' U (R' U R)
⭐ R2 U R F' U' F U' R' U (R U R' U') R2
⭐ R' U F' U' F (R' U R U') (R U R) U' (R U R')
⭐ R' U (R U R' U) R U2 R' U (R' F R F') U2 R
⭐ R' U (R U R' U) R U2 B U' B' (U R' U' R)
⭐ R' U' R U' r' U (R' F R F') U R U' M'
R' F' U' R' F' R F U' (R U R' U) F2 R
(R U' R' U) F' U F U F' U' F (U R U' R')
R2 U' R F' (U' R' U R) F R' U' (R U R' U) R2
R' U2 (R U R' U) F' U' F U' (R U R' U) R
B' R' U' F (R U R' U') F2 U F R B

Setup + y

Front

⭐⭐⭐ R' U' (R U R' U) (R U R) F' U' F U' R
⭐⭐ [R' U R U'] F R' U' R' U' R U R2 F'
⭐⭐ R2 r U' R U' R' U2 (R U' R) r'
⭐⭐ (R U R' U') R2 U' R F R' U R U' R' F'
⭐⭐ (R U' R' U) F' U' F U2 (R U R' U) (R U R')
⭐ (R U R' U') R U' F (U R U' R') F' (R' U R U') R'
⭐ (R' U R U') (R U' R) U' R U R2 U (R' F R F')
⭐ (R U R' U) R' F R2 (U' R' U R) U2 R' U' F'
⭐ F U F (R U R' U') F' U (R U R' U) (R U R') F'
⭐ R' U2 R r' (U R U' R') U2 (R U R') r
⭐ R' U' R (U' R' U R) S' (R' U R) S
⭐ F (R U R' U') R U' R' U' (R U R' U) R U' R' F'
⭐ R2 U' F R F' R F R F' R2 U R2
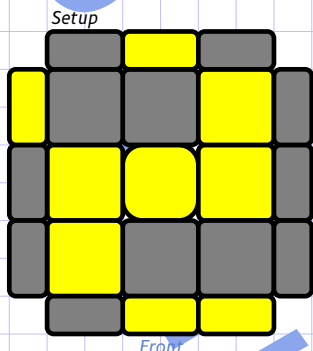⭐ F U' R U2 (R' U R) U2 (R' U R U') R' U F'

Setup + y2

Front

⭐⭐⭐ F (R U R' U') F' U F (R U R' U') F'
⭐⭐ F (R U R' U') F' r U' R' U' F U F r
⭐⭐ F' U' F U (R U R' U') R' U' R F' (R' U R) F
⭐ (R U R') F' (R U R' U') R' F2 R F2 U F
⭐ (R U R' U') R U' F U F' R2 F R U' F'
⭐ F' U' F (U R U' R') U (R U R' U) F' U' F
⭐ R U R U R2 F R F2 U F U R'
⭐ F U R U' (R' U R U') R' F' U' F (R U R' U') F'
⭐ (R U R' U') F' U2 F (U R U' R') U2 (R' F R F')
⭐ R U2 F (R' F R) F2 U r' F M'
⭐ R U2 F B (R U R' U') F' B' U2 R'
R U' F' U' F R F R2 F' U' R' U' R'
R' F' U' F U' R U2 F (R U R' U') F' (R' U R)
(R U R' U') (R' F R F') U (R U R' U') (R' F R F')

Setup + y'

Front

⭐⭐ F (R U R' U) F' U' (R' F R) U' R' F' R
⭐⭐ R' U (R' F R F') (R U R' U') R U B U' B'
⭐ B' U (R U R' U') R' U' R (U R U' R') U B
⭐ F U' F' U2 F U (R U R' U) (R U R') F'
⭐ (R U R') F' L' U' L F2 (R U R' U') F'
⭐ R' F' U' F R U (R U R' U') R' F U R U' F'
⭐ F U2 F' U' r' U' R' F' R U r
⭐ B' R' U' F' (R U R' U') R' F R2 U B
⭐ R' F U' F' U R U F (U R U' R') U' F'
⭐ F R' U' (R' F R F') U F R F' (R U R') F'
⭐ R' r2 U2 R' U2 (R' F R F') M' U' M'
M U' F' U' F U' F' U2 F M'
F U2 R U' F (R U R' U') F' U R' U2 F'
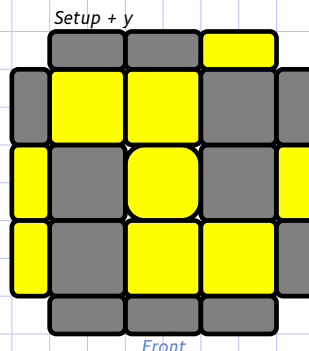F U (R' F R F') U2 (R' U R) U F' R' U2 R

OLL #48 - B5
R L' U' B' U B L U R'

Setup

Front

⭐⭐⭐ R U' r' U' F' U F M'
⭐⭐⭐ [R U R'] F' U' F U R U2 R'
⭐ [R U R' U'] R' F U R U' F' [U R' U' R]
[R U R' U'] [R' F R] U F' U F U2 F'
[R' F R F'] U [R U R' U'] [R U R' U] F' U F
[R' F R] B' R2 F' [R U R'] U B
[R U R' U] R U2 R' U' F [U R U' R'] F'
M U' [R' F R] U M' F U' F'
F [R U R' U'] R B' R' F' R B R'
[R U R' U'] [R' F R F'] U2 R' U2 [R U R' U] R
[R' F R F'] U2 F' U2 F2 [R U R' U'] F'
F [R U R'] U2 R' U' R U F' [U' R' U R]
[R U' R' U] [R U R' U] F' U' F U2 [R U R']
[R U R' U'] R' U' R U y F U' R' F' R

Setup + y

Front

⭐ F [R' F R] F2 U F [R U R'] F'
R' U' [R' F R F'] U [R U R'] U2 [R U R' U] R
[R' U R] U F [U R U' R'] U' R' U' R U F'
F' U' F [R U R'] F' U' y' [R U R' U] R
R' F' R' U' R F [R' U R] U2 [R U R' U] R
R' F' r F U [R U R'] F' U' R r'
R' U' [R' F R F'] U' R U F [R' U R U'] F'
R' U' R B' D' F R F' u R
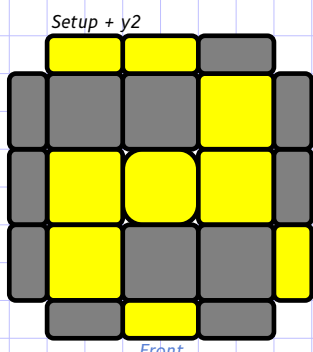M' F [R U R'] F' r' F' R F U' F'
R' U' F U F' r F U' F' R r'
F U r' U' R2 U M' U' R' F' [R' U R]
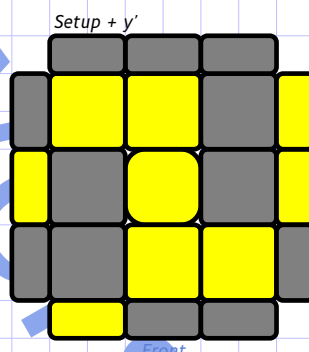F U' [R U R'] F' U2 F [R' F R F'] U' F'
M' U' M F' U' F' U F [R' F R]
F U' F2 M2 F' [R U R' U'] F M2 F

Setup + y2

Front

⭐ [R' U R] U2 R' U [R' F R F'] [R U R' U'] R
[R U R' U'] M' U R2 U' r' F R' F'
F' U f R' [U' R' U R] S'
F [R U R' U'] F' R' U' R U' R' U2 R
F U R U' [R' U R U'] R' [U R' U' R] F' [R' U R]
F [R U R' U'] F' [R' U R U'] F [U R' U' R] F'
[R' U R U'] R' U' [R U R' U] [R' F R F'] U2 R
F U R' U' R2 U [R U' R'] F' [R U R' U'] R'
F R U' R' F' U' F2 R' F' R F'
R U2 R' U' R U' R' F [U R U' R'] F'
R U' R' F' R' U' R F U [R U R' U'] [R' U R]
F [U R' U' R] F' U' R' U F' U F R
R' F [R' U R U'] R2 F' R2 U R' U' R2
[R' U R U'] R' F [U R U' R'] F' U' [R U R' U'] R

Setup + y'

Front

⭐⭐ R' r' U' R F' [R' U R] F r
⭐ R' U' R F R' F' U R [U R U' R']
[R' U R] U F [U R U' R'] F' R' U2 R
F [U R' U' R] F' [R' U R] F [R U R' U'] F'
R' U' R U' [R U R' U'] R' U2 F R F'
[R U R' U] R U' R2 F R F2 U F
F R U2 R' F' U F [R U R' U] F'
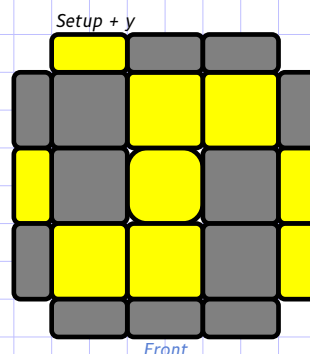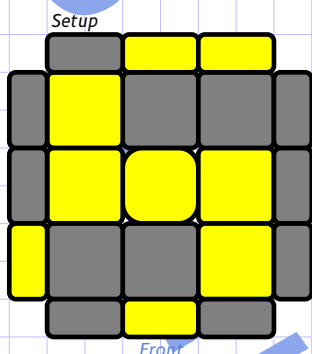F' R' F' R F U' F [R U R' U] F2
F R B R' F' R U B' U' R'
R U [R U R' U'] R' U F R F' R' U' R U' R'
M F R' F' R [U R U' R'] U' M'
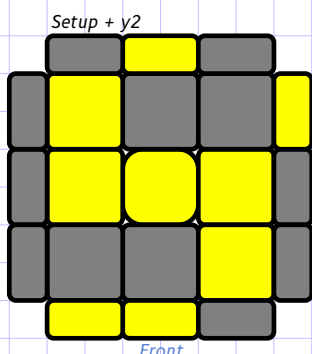R2 U' [R' F R F'] U R U' [R' F R F'] R
F R U [R U R' U'] R' U F R F' U2 R' F'
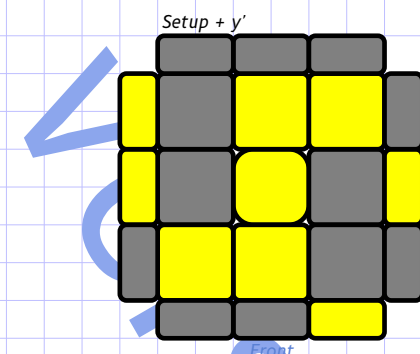R U2 R' U' [R U R' U'] [R' F R] F2 U F

OLL #49 – B6
R' U' F U R U' R' F' R

Setup

Front

⭐⭐⭐ R' F [R U R' U'] F' U R
R' U' R U [R U R' U'] R' U F R F'
[R U R'] F' U' F [R U R' U'] R U' R'
F U' B' U [R U R' U'] F' B
F [R U R'] F' R' F U' F' U R
F [U R' U' R] f' [R' U R] S
F' R' F2 [R U R' U'] F2 R F [R' U R]
R' F R' F' R2 U' R' F' U' F R
F U F' r F R' U' R F' r'
F U R F R2 F' U' [R U R' U'] R2 F'
R' F D [R U R' U'] u' R' U B
[R' F R F'] U R U R B' R' B R'
F U' R' U' [R' U R U'] R' U' R2 U R F'
B' R' U' [R U R'] F R B R' F' R

Setup + y

Front

F' U f [U R U' R'] S'
R L F [R' U R] F' R' U' L'
[R U R'] B' R B U' R' [U' R' U R]
R' F' U' F [R' F R] [U R U' R'] F' R
R U' R2 U' F' U F [R U' R] U2 R'
B' R' F' R B R' U' F U R
[R U R' U'] r' F R [R U R' U'] F' U' M'
R' U [R U' R' U] [R' F R] F2 U F R
M' U [R' F R F'] U' F' U F M
S U F R' F' U' S' [R' U R]
L [U R' U' R] F [R' U R] F' U' r'
F' U' M U' [R' F R] U M' U F
R U [R U R' U'] R' U F R F' [U' R' U R] U2 R'
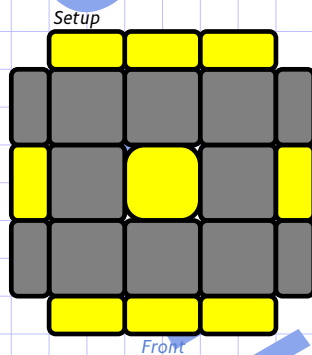R' U' F' R F [R' U R] F' R' U' F U R

Setup + y2

Front

F [R U R' U'] F' [R U R' U] R U2 R'
F [R U R' U'] F' U' R' U2 [R U R' U] R
R' U2 [R U R' U] [R U R' U'] F' U F R
[R U' R' U] [R U R' U'] F' U F U' [R U R']
R F R F' [R U R'] F' U' F U' R2
[R U R' U'] M' U' F' U' F U' R U' r'
F U R U' R2 F' R U [R U R' U'] R U' R'
[R U R'] F' U2 F [R' F R] F2 U F
[R U R' U'] [R' F R] U' R' U2 R U F' [R' U R]
[R U R' U'] R' F R2 F' r U R' U' r'
R' F' L' F R F' U' L U F
R' F' U2 F R U' R' F' U' F U' R
F [R U R' U'] F' R U' r' F R' F' r
F' [U R' U' R] F [R U' R' U] [R' F R F'] [R' U R]

Setup + y'

Front

[R U' R] U' R F' [R' U R] F R2 U R'
F' U [R U R' U'] F' U F U [R' F R]
R U2 R' U2 R' U' F R F' [R' U R]
R U' r' F U F U' F' R' r
R' F' U F R U R2 F R F' R
[R U R'] F u R' F' R D' L'
R' U' R' U2 R U F' [R' U R] U F R
R' F U' F U R U' [R U R' U'] R U2 R'
R B U' B' U R' U' F' U2 F
M2 F' U' F' U F R' F R R' r2
R' U' F' U' F [R' F R F'] R U' R' U' R
F U [R' F R F'] R U2 R' U2 [R U R'] F'
R r' U' F R' F' R [U R U' R'] U R' r
B' l U F U' F' R' F U

OLL #50 – O1
R' F R F' U2 R' F R F2 U2 F

Setup

Front

Setup + y

Front

⭐⭐ [R U R' U] [R' F R] F2 U F U [R' F R F']
⭐ F U [R' F R] F2 U' F' r U r'
⭐ F' U2 F2 R' F' R U2 F R' F' R
[R' U R] U2 R' U' F' U F2 [U R U' R'] F' R
F U [R' F R F'] U2 [R' F R F'] [R U R'] F'
F U F [R U R' U'] F' U [R U R' U'] [R U R'] F'
F U [R' F R F'] U' F' U' [R U R' U'] [R' F R F']
F [R U R' U] F' U' F U' F' U' F [R U R' U'] F'
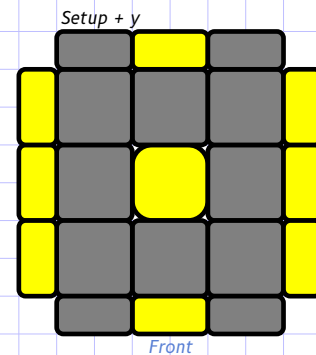F U' R U' R' U' [R' F R] F2 U' F U' F'
[R U R' U] [R U' R' U] [R' F R F'] U2 [R' F R F']
F [R U R'] U2 [R' U R] U F' R' U F' U F R
F' U' r U' L' U2 B [U R' U' R]
F [R U R' U] [R U R'] F R' F' R2 U2 R' U F'
F' U' L F' L' F2 [R U R'] F' U F

⭐⭐⭐ R U2 R2 F R F' U2 [R' F R F']
⭐ R' F' U' F U' [R U R' U] R F [R U R' U'] F'
⭐ R' U' F R' F' R2 B U B' [R' U R]
⭐ R' U F' U F U F R' F' R2 U [R' U R]
⭐ R U2 R2 F [R U R' U'] F' U R U [R' F R F']
⭐ R' U' [R' F R F'] U F [R U R' U'] F2 U F R
B' U' R' U2 [R U R' U'] F R' F' R2 B
F [R U R' U'] F' R U B' [U' R' U R] B R'
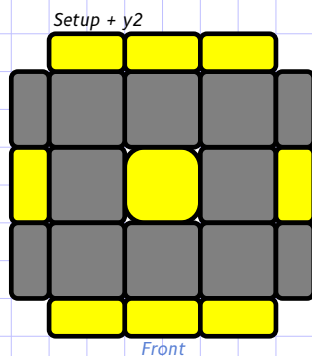R' U' F R' F' R U R2 U R' U' [R' F R F']
R U B' R B R2 F' U' F R U' R'
[R U R' U] F' U F2 U [R' F R F'] U' R' F' R
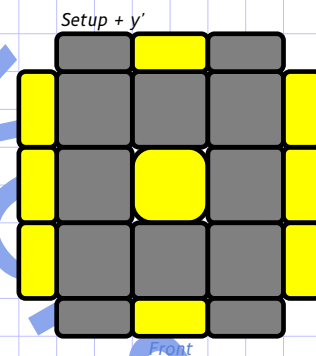R2 F R F' [R U R'] F' U2 F R U2 [R' U R]
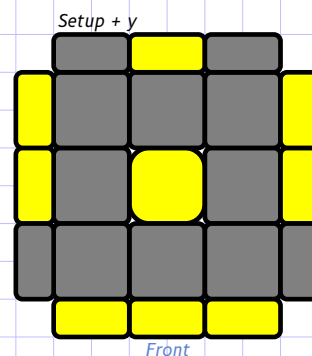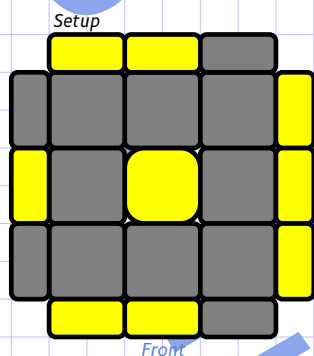R U2 R' U F' U' F R U' R' U' [R' F R F']
R' U' [R' F R] F2 U' F U R U2 R' U' R

Setup + y2

Front

[No specific algorithms for this orientation]

Setup + y'

Front

[No specific algorithms for this orientation]

OLL #51 - O2
R U2 R2 F R F' U2 R' F R F'

Setup

Front

Setup + y

Front

⭐⭐ F (U R U' R') F' R' U' (R' F R F') U R
⭐⭐ R' U' (R' F R F') U (R U R' U') F' U F R
⭐⭐ (R U R') F' U' (R U R' U') (R' F R) U' (R' F R F')
⭐ F U F' r' U' F' (R' F R F') U r
⭐ (R U R' U) F' U2 F R U' R2 F R F'
⭐ F R' F' R U2 F R' F' R2 U2 R'
⭐ R' U' F' U M F' r U (R' F R)
⭐ B' R B R' U' R2 F R F' U R
  B' (U' R' U R) B R' U' (R' F R F') U R
  B' (R' U R) U2 R' U' F R' F' R2 B
  R U S (R' U R U') b U' B' R'
  F U' (R U R') F' U2 F2 R' F' R U' F'
  F R2 B' R' B U' R' U2 (R U R') F'
  R' F' U F U2 F (R U R' U') F2 U' F R

⭐⭐⭐ (R' F R F') U2 (R' F R) F2 U2 F
⭐⭐ F (R U' R' U) F (R U R' U') F' U (R U R') F'
⭐⭐ F R U' R' U2 (R U R' U) (R' F R F') U' F'
⭐ F U F' r U' F' R U' R' U2 r
  F U F' U r' U2 (R U R') F2 U r
  F U F' U r' U' R' F' R F' U r
  F U F R' F' (R U' R) U' R' U2 (R U R') F'
  R' U' (R' F R F') U' M' U R U' r' U2 R
  (R' F R F') U2 F' U F R U' R' F' U F
  F (R U R' U') F' U2 F U (R' F R F') R U' R' F'
  F R U' R2 U' F' U F R U2 (R U R') F'
  F R U' R' U' F (U R U' R') F' U' (R U R') F'
 (R' F R) F2 U' F R U2 R' U F' U F
  F U M F' U F U' r U' R' F'

Setup + y2

Front

Setup + y'

Front
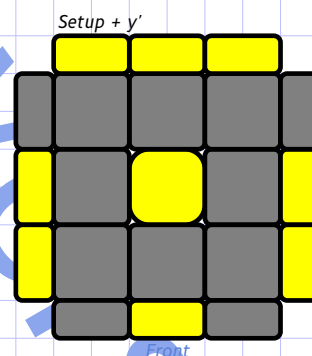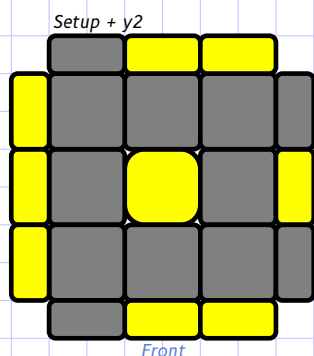
⭐⭐⭐ F (R U R' U') F' U2 F (U R U' R') F'
⭐⭐ R' F' R U' r' F M' U' F U R
⭐ M' U' r F R U F U' (R U R' U') F'
⭐ R' U' F R' F' R U R F (R U R' U') F'
⭐ F (R U R') U2 (R' F R F') U (R U R') F'
⭐ F (R U R' U') F' U F U (R' F R F') U' F'
  R' F' U' F U R r' U2 (R U R' U) r
  R' F' U' F U' r U (R' U R) U2 R r
  M' U2 R' U R U' r' U F' U F R
  F (R U R' U') F2 U' F (R U R' U) F R' F' R
  L F U' (R U R' U') F' y' U2 (R U R') F'
  F (R U R' U') F' R U B' R B R' U' R'
  R U B' R B R' U' R' F (R U R' U') F'
  F U (R' F R F') U' R' F' U' F R F' (R' U R)

⭐⭐ (R U R') F' U' F (R U R') U2 (R' F R F')
⭐⭐ F U (R' F R F') U' F' U' F (R U R' U') F'
⭐⭐ F R U r' U F' U' F M' U' F'
⭐⭐ F' r' F' R U' F U F M' U F
⭐⭐ F (R U R') U2 (R' F R F') R U2 R' U' F'
⭐⭐ (R U R') U2 F R' F' R2 y (R U R' U) F'
⭐⭐ (R U R') F' U F R2 B' R' B U' R'
⭐⭐ F (R U R' U) B' (R' F R F') B U2 F'
  F U (R' F R F') U' F' R' F' U' F U R
  (R U R' U') (R' F R) U2 F' U F (R U' R' U) F'
  R' F' U' F U' (R U R') F (R U R' U') F' U R
  B' R' U F' U2 R U B U' (R' F R)
  R' F' U' F U R r' F' U' F U r
  (R' U R) U2 R' U' F' U F2 R' F' R U R
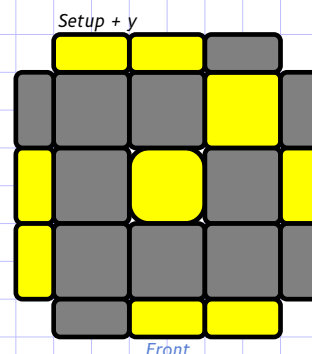
OLL #52 - O3
R' F2 R2 U2 R' F' R U2 R2 F2 R

Setup
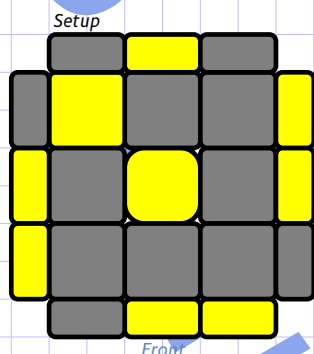
Front

⭐⭐⭐ F (U R U' R') F' U F (R U R' U') F'
⭐ F (R U R' U') F' r' U2 (R U R' U) r
 F R U' R' U' (R U R' U') (R' F R F') (R U R') F'
 F (U R U' R') F' r' U' F' U F r
 L F R U2 R' U' (R U R' U) F' L'
 R' F2 R2 U2 (R' F R) U2 R2 F2 R
 F U R' U' R' F' R' U (R U R' U') R U F R F'
 F R U' R' U' (R U R' U) y' R' U' (R' F R F')
 R r2 U' F U M2 F R U' R' F' R
 R' F' U F U F' U' F2 (R U R' U') F' U R
 F (R U R' U') (R U R' U') F' R' F' U' F U R
 R' U' (R' F R F') R U' R' U2 R F (R U R' U') F'
 B' (U' R' U R) B R B U B' U' R'
 F (R U R' U') F' U' F' U' F2 R' F' R2 U' R'

Setup + y

Front

⭐⭐⭐ R' U' F' U F R F (R U R' U') F'
⭐⭐ F (R U R' U') (R U R') y' R' U' (R' F R F')
 ⭐ R' U' F' U F (R U R') F' U' F U R
 ⭐ R' U F' U F (R U R') F' U F U R
 ⭐ (R' F R) U' R' U2 (R U R') F2 U F R
 ⭐ F (R U R') r' U' R U M' U' F' (R' U R)
 R' U' F (U R U' R') F' R2 y (R U R' U') F'
 F (R U R' U') F' U2 F R' F' R (U R U' R')
 F (R U R') F' U2 r F (R' U R) F' r'
 F (R U R' U') F' U2 (R' F R F') U' F' U F
 R' U2 (R U R') F' U F2 (R U R' U') F' U R
 F (R U R' U') (R U R') U2 (R' F R F') (R U R') F'
 (R' F R F') U (R U R') y' R' U F' U F R
 F (R U R' U) F' U2 R' F' r U R r'

Setup + y2
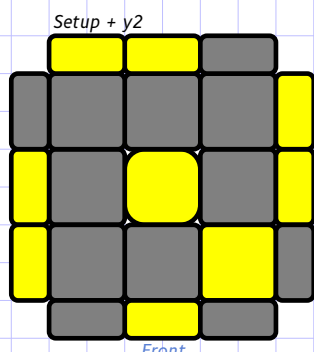
Front

⭐ F (R U R' U') F' r' F' U' F U r
⭐ (R U R' U') (R' F R F') r' F' U' F U r
 R2 U' R F' (R' U R) F2 (R U R' U') F' U R
 R' F' U2 F2 (U R U' R') F' (R U R' U) R
 F R' F' R (U R U' R') U' (R U R' U') (R' F R F')
 F (R U R' U') F' (R U R') F' U2 F R U' R'
 F (R U R' U') F' U' R' U' F R' F' R U R
 F (R U R') F' r2 U' R F' R' U r2
 (R U R' U') (R' F R F') U' R U' F R' F' R U R
 R' U' F R' F' R U (R U R' U') (R' F R F') U R
 F R' F2 M2 F R F' M' U' M' F
 (R U R' U') F' U2 F2 (U R U' R') F' R U2 R'
 R U2 R' U' F' U F (R U R') U2 (R' F R F')
 F' U (R' F R) U' F U' F' U F R' F' R

Setup + y'
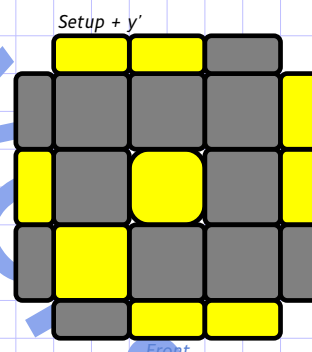
Front

⭐⭐⭐ F U (R U R') F' U F (R U R' U) F'
 F2 R' F' R F U2 F (R U R' U') (R U R') F'
 F U R U' B R' F' R U B' U' R'
 F U B' (U R U' R') U' F' (U' R' U R) B
 B' U' (R U R' U') R' F U R U' F' U B
 F R' F' R U R' U' R' U' R F R' F' U R'
 F U2 F' U' r' U' F' (R' F R F') U r
 F U R U' F' (R U R' U) F R F' R' U2 R'
 R r' U R' F2 R U r' F R' r2
 F U F' U r' U' F R' F2 R U r
 F U R U2 F (R U R' U') (R' U R U') F' R' U F'
 F U F (R U R' U') F' U R U2 (R' U R U') R' F'
 F (R U R' U') F2 U' F2 R' F' R U' (R' F R F')
 (R U R') F' U F2 u R' F' R D' L'

OLL #53 - O4
R' F2 R2 U2 R' F R U2 R2 F2 R

Setup

Front
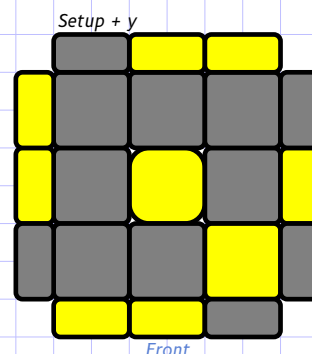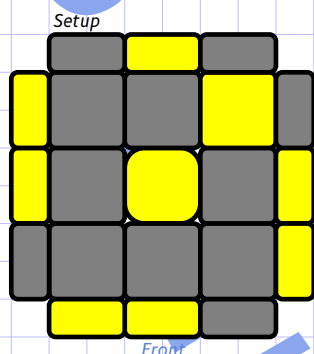
⭐⭐ R' U2 (R' F R F') U' F' U' F U' R
⭐ B' (U' R' U R) U (R U R' U') B [R' F R F']
R' U' F (U R U' R') F' U' (R' F R F') U R
F R (U' R' U R) U R' S (R U R' U') f'
R' U' R U' R' F (R U R' U') F2 U2 F R
L F U (R U R' U) (R U R' U') F' U2 L'
(R' U R) B U' B' U R' F' U' F U' R
L D (R' F R) u' F' U' (R' F R F')
F R' U' R (U R U' R') U' (R' F R F') (R' U R) F'
M2 F' r U' R' F2 R U2 R' U M'
R U2 R' F (R U R' U') F2 U2 F (U R U' R')
B' R B R' F (U' R' U R) U (R U R' U') F'
(R' F R) F U' F U F U R' F' R U' F
R' F2 R2 U2 R' F' R U2 R2 F2 R

Setup + y

Front

⭐ [R U R' U'] [R' F R F'] U2 F [U R U' R'] F'
⭐ [R U R' U'] [R' F R] U' [R' F R F'] U [R U R'] F'
R' F' U' F U R U2 F [U R U' R'] F'
R U B U' [R' F R] B' U R' U' F'
R U F U F' r U' [R U R' U'] F' U M'
[R' F R F'] U' F' U F [R U R' U'] [R' F R F']
[R' F R] U' M' U2 r' F' R F U' F'
R U' F R' F' U R U [R U' R] F R F'
[R' F R F'] U' F' U F2 R [U' R' U R] U R' F'
R U' B U' B' R' U F' U' F [R U R']
[R U R'] F' U2 F R U' R' F [U R U' R'] F'
M2 F' r U R' U2 R' F2 R U' M'
L F U' R [U' R' U R] U2 R' F' L'
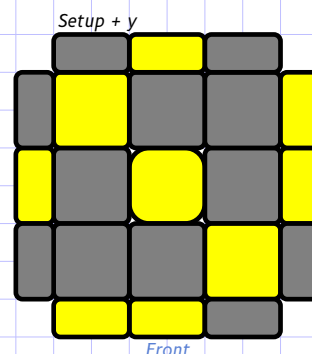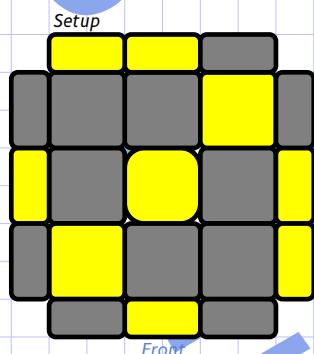B' R' U' R U F U [R U R' U'] B U' F'

Setup + y2

Front
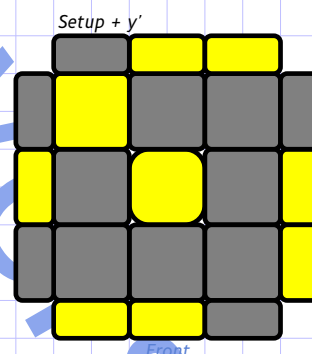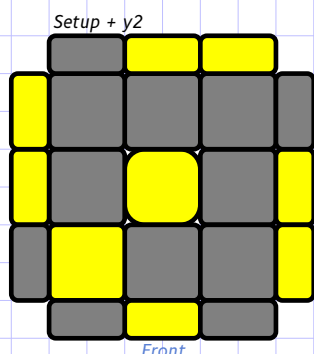
⭐⭐⭐ F [U R U' R'] F' U' F [R U R' U'] F'
⭐⭐ F [U R U' R'] F' R' F' U' F U R
⭐⭐ F U' R U' R' U' [R' F R F'] U2 F'
⭐ B' [U' R' U R] B U' F [R U R' U'] F'
⭐ R' U' [R' F R F'] U R2 y [U R U' R'] F'
B' [U' R' U R] B R' F' U' F U R
R' F' U' F2 R U' R' U2 [R U R'] F' R
R' U' F' U F R F U R U' [R' U R U'] R' F'
R' F' U' F U2 F U [R' F R F'] U' F' R
R U B U' B' R2 F [R U R' U'] F' U R
F U [R' F R F'] U' R' F' U' F U R U' F'
F' U' [R U R' U'] [R' F R F'] U2 F2 [U R U' R'] F'
[R' F R F'] U' F' U F2 U R U' [R' U R U'] R' F'
F U' [R U R'] F' U2 F R U' [R' U R U'] R' F'

Setup + y'

Front

F R' F' R [U R U' R'] U [R U R' U'] [R' F R F']
R' F [R U R'] F' M2 U' F' U R' r2
M' U' r' F R U2 F U' R U' R' F'
B' U' R' U F' R B R' U' F U R
F [U R U' R'] F2 U' F [R U R' U'] F' U2 F
B' U' F [U' R' U R] U B [U R U' R'] F'
M' U' R B2 R' U' r B' R r2
R' U' F' U2 F2 [U R U' R'] F2 U' F R
R U' [R' F R F'] R' U' F U R U' F' U2 R
R U' [R' F R F'] U R2 y R' F' R [U R U' R']
[R U R' U] [R' F R F'] r' U' R2 U' R2 U2 r
R' U' F' U F R F' L' U' L U F
R U' F' U F R U R B U B' U' R'
F [U R' U' R] U R B' U' R' U B U' F'

OLL #54 - O5
R' U2 F R U R' U' F2 U2 F R

Setup

Front

★★★ F [U R U' R'] U' [R' F R F'] [R U R'] F'
★★★ F [U R U' R'] F' U' [R U R' U'] [R' F R F']
　★ R' F' U2 F2 [U R U' R'] F' U2 R
　★ F U' [R U R'] F' U' F U' R U' R' F'
　★ F [U R U' R'] U F U' F' r U r'
　　F U R U' R2 U' [R' F R F'] U R U F'
　　F r' U' F R F2 [R' U R] F M' F'
　　F U R B' U' R U B U' R2 F'
　　B' U' R U B R' U' [R' F R F'] [R' U R]
　　F R' F' R U2 R U' B U' B' R'
　　[R' F R] U' [R' F R F'] U [R U R'] F2 U2 F
　　[R' F R F'] U [R U R'] F [U R U' R'] F2 U F
　　F R B [R U R'] B' U R U2 R2 F'
　　F U [R U R' U'] F' r U2 [R U R' U] F' r

Setup + y

Front

★★★ F [U R U' R'] F' U [R U R' U'] [R' F R F']
★★ F R' F' R2 r' [U R U' R'] U' M'
★★ [R' F R F'] U' M' F' U F M
★★ R' U' F [U R U' R'] F2 U' F U R
　★ F B' [U' R' U R] B U [R U R' U'] F'
　★ R' U' F' U F R U2 [R U R' U'] [R' F R F']
　★ R F' U F U M' F' U' F R2 r'
　　F R U' R' F [U R U' R'] F' U [R U R'] F'
　　F [U R U' R'] F' U F R [U' R' U R] U R' F'
　　[R' U R] U2 R2 U' F' U F2 R F' U R
　　F M U F [R U R' U'] R' F' r F'
　　B' U' R' F U R' U' F' U R2 B
　　R' U' F [U R U' R'] F' R U' F [R U R' U'] F'
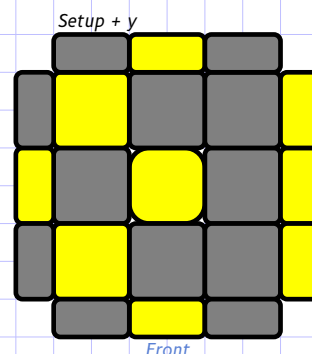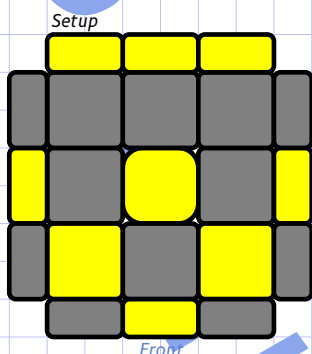　　R2 F R F' U' r [U' R' U R] U R r'

Setup + y2

Front
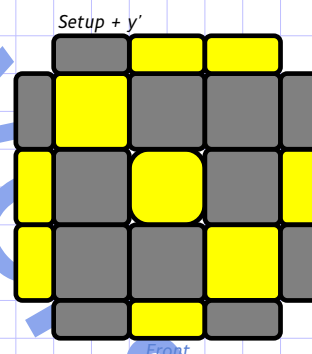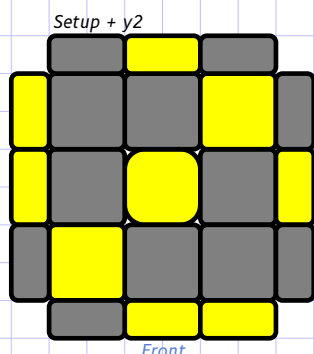
★★ R' U F' U' F [R U R' U] F' U F R
　★ R' U' F' U F R2 U R' U' [R' F R F']
　★ S [R U R' U'] B' R' [U' R' U R] F
　★ F R U2 R2 U' F' U F R U2 F'
　　[R' F R F'] U2 F' U L' U L F
　　R' U' F' U F U' [R U R' U] F R' F' R2
　　R' U' F' U F2 [R U R' U'] F' U' [R U R' U] R
　　M' U M U2 [R' F R] U F U' F'
　　F U' R U' R' F' U' F [R U R'] [R U R'] F'
　　R U' R2 U' F U R U' F2 U F [R U R']
　　[R U R'] F' U F [R U R' U'] F' U2 F R U' R'
　　R U2 R' U F' U' F2 [R U R' U'] F' U [R U R']
　　F' U' F R U' R2 r F' U F R r'
　　R' U' F' L U F' U' L' U F2 R

Setup + y'

Front

★★★ [R U R' U] [R' F R F'] U2 [R' F R F']
★★ [R' F R] U' M' U2 r' U' F' U R
　★ R' U' [R' F R F'] R U F [R U R' U'] F' [R' U R]
　　R' F' U F2 [R U R' U'] F U' F' U' F R
　　F [R U R' U'] F' U' R U' F [U R U' R'] F' R
　　[R' F R F'] U' F' R U' r' F M' U F
　　R U' B U' [R U R' U'] B' [R' F R F'] U R'
　　F U B' U' R U B R' U' F' [R' U R]
　　[R U R' U'] [R' F R] U' [R' F R F'] R U2 R' U' F'
　　R U2 R2 F R F2 U F U [R' F R F']
　　M' U R U' r' U' F' U F2 [R U R' U'] F'
　　S R' U' R U F R [U R U' R'] f'
　　[R U R' U] [R' F R F'] U R B U' B' U R'
　　S R' F [R U R' U'] R S' R' F' U R

OLL #55 - O6
R' F R F' U2 F' U L' U L F

Setup

Front

⭐⭐⭐ F (R U R' U) F' U F (R U' R' U) F'
⭐⭐ F U R U' R2 F' U' F R F' (R' U R)
⭐ (R U R' U) (R' F R F') U2 M' U R U' r'
⭐ R U R2 F' U' F U R U2 (R' F R F')
⭐ F U R U2 R' F (R U R' U') F' (R U R') F'
⭐ F (R U R' U) F' U2 F' L F L'
⭐ F (R U R' U') F' U' R U2 R' U2 (R' F R F')
⭐ (R' F R F') U (R U R' U) F' U F2 (R U R' U') F'
⭐ (R U R' U') B' R' U' R U B U' (R' F R F')
⭐ F U F' (R' F R) U' R' F2 U' F U R
⭐ (R U R' U) F' U F U2 (R U R') U2 (R' F R F')
⭐ B' (R' U R U') (R U R' U') R' U' F R F' B
⭐ B' R B R' U' F (R' U R U') (R U R' U') F'
⭐ F' U' F2 R' F' R2 U R' U2 (R' F R F')

Setup + y

Front

⭐⭐⭐ [R U R'] F' U F R U' y [R U R' U'] F'
⭐⭐ [R' F R F'] U2 [R' F R] y' R' U [R' U R]
⭐ B' U' [R' U R U'] [R U R'] B U' [R' F R F']
⭐ [R' F R F'] U' F' U F U2 F [R U R' U'] F'
⭐ F R U' R' U' [R U R'] F' U' F [R U R' U'] F'
⭐ R2 U' F R F' U [R U R' U'] F' [R' U R] F R
⭐ F U F' r' U' F' R U M' [U' R' U R]
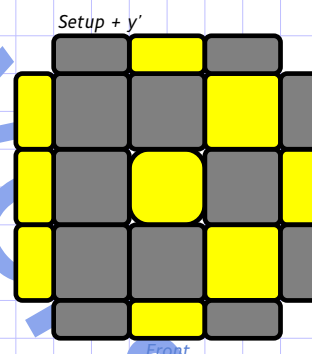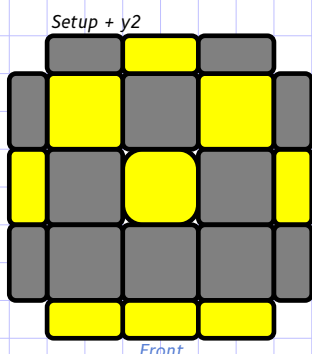⭐ [R' F R F'] U' F' U L' U' L U F
⭐ F U2 F' r' U2 [R U R'] F2 U r
⭐ F' r' F' U' R F [R' U R] F' M' U F
⭐ F U2 F' r' U' R' F' R F' U r
B' R' U [R U R' U'] R y [R U R'] F' U' F U R
F R U' R2 U' [R' F R F'] U R U' [R U R'] F'
F U' [R U R' U] F' U2 F U [R U R'] U2 F'

Setup + y2

Front

⭐⭐ F R' F' R [U R U' R'] U F [R U R' U'] F'
⭐ F R' F' R U2 F R' F' [R U' R] U' R'
⭐ F R U2 R' F' U F [R U R' U] [R U R' U'] F'
⭐ R' U' F' U2 F M' F' U' F R2 r'
⭐ R2 r F U F M' U' F' U' R' r2
R' U F' U' F R U [R U R' U'] R' U2 F R F'
R r2 U' F U M' U' F2 U F r
M U F U' F' M' F U [R U R' U'] F'
M U F [R U R' U'] R' F' M' F R F'
B' [U' R' U R] U F U' B U [R U R' U'] F'
F B' R B U' R' U2 [R U R'] F' [R' U R]
M' U' r F R U F2 R' F' R U' F'
F U F' r' U' R' F' R F' U F r
F' U' F R U R' U' [R' F R F'] U F' U F

Setup + y'

Front

⭐⭐ R B U B' U R' U2 [R' F R F']
⭐⭐ [R' F R F'] U2 F [U R U' R'] F2 U F
⭐ F' U' F2 [R U R' U'] F' U2 F R' F' R
⭐ R' F [R U R' U'] F' U R2 y [U R U' R'] F'
⭐ R' U' F' U F2 [R U R'] F' R F U' F'
⭐ [R U R' U'] M' U R B' y U' f' [R' U R]
⭐ R' F' U' F U' R U' R' F' U F U' R
⭐ [R U R'] B' R B R' U' [R' F R F'] [R' U R]
⭐ [R U R' U'] [R' F R F'] U2 R' F' R [U R U' R']
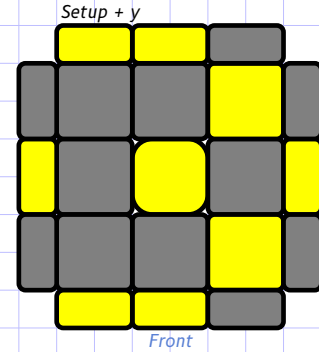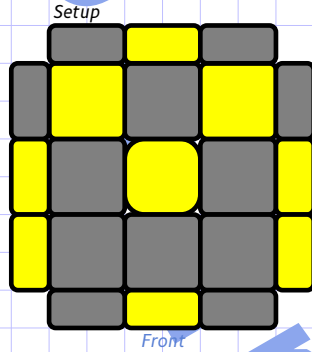⭐ R' F' U' F U' R U2 R B' R' B
⭐ [R U R' U'] r' U' F U F' M' F R U' F'
⭐ [R U R' U'] R' U' F R F' B U B' [R' U R]
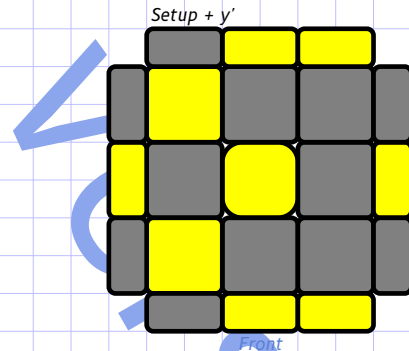⭐ F R U2 R' U' F U2 F U [R U R' U'] F'
⭐ R' U' R F R' F' U F R2 U R' U' F'

OLL #56 - O7
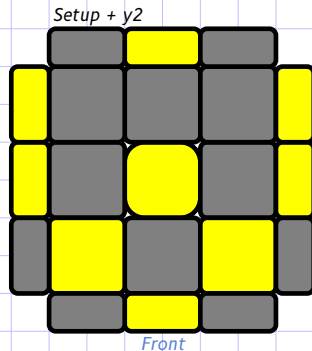## R' F' U2 F2 U R U' R' F' U2 R

Setup

Front

⭐⭐⭐ R' U2 F [R U R' U'] F2 U2 F R
⭐ B' [U' R' U R] U F [R U R' U'] F' B
F [U R U' R'] F' U R F [R U R' U'] F' U R
R' U2 [R U R' U'] [R' F R F'] U' F' U' F U' R
M' U' r' U F U [R' F R] U' F' U' R
[R U R' U] F2 U2 [R' F R] U2 F' R' F' R
[R' U R] B U B' U' R' U F' U2 F R
R r' U [R U R' U'] L F' U' R U R2
[R U R' U'] [R U R'] F' U2 F2 R' F' [R U R'] U' R'
F [R U R' U] F' U' F U' F' U F [R U R' U'] F'
R2 r' B U' B' M' U' R' F' U F
M' F U' R' U' R U F' M2 U' R' U r
F R F' r' U D [R U R' U'] R' D' r
B' U' R' U R2 u [R U R' U'] D' F' U R

Setup + y

Front

⭐⭐⭐ R' U' F' U F2 [R U R' U'] F' U R
⭐⭐ S' [R U R'] S U' [R' F R F']
⭐ F R U' R' F R' F' R U [R U R' U'] F'
⭐ [R U R'] F' U2 F [U R U' R'] U' [R' F R F']
B' R2 U' F U R U' F' R U B
F R2 U B' U' R' U B R' U' F'
B' R2 U2 R U F' [R' U R] F R B
[R U R' U'] R r2 F R F M' F2 U' M'
B' R' U [R U R' U'] R B R' F' U' F U R
[R' F R F'] U' F' U F U' R y [R U R' U'] F'
F U M' U' [R U' R' U] R2 r' U R F'
R' U' [R U' R' U] F' U F R F [R U R' U'] F'
F2 f' R U' R' S U [R U R'] F'
R' U' F' U F U' R U [R U R' U'] R' U F R F'

Setup + y2

Front

⭐ [R U R' U'] [R' F R F'] r' U2 [R U R' U] r
⭐ F R' F' R [U R U' R'] U' F [R U R' U'] F'
⭐ F U R U' R2 F' U' F U R U' F'
⭐ M' F' U' F M U F R' F' R
R' F' U F [R' F R F'] U' F' U' F U R
M' F U F' R r F r U' F' r
[R' F R F'] U2 F' U F2 R' F' R2 U' R'
[R U R'] B' U' R' F U R U' F' U B
F [U R U' R'] U' B' R' U' R U F' B
M U' R' U' [R U R' U] M' F R' F' R2
[R U R'] U2 F' U' F2 [R U R' U'] F' U [R U R']
F R' U' R' [U' R U R] U F R F' [R U R'] F'
R' F2 U' L U F U' L' F U R
L F2 U R' U' F' U R F' U' L'

Setup + y'

Front

⭐ F R U' R' U' F [R U R' U'] F' [R U R'] F'
⭐ F r' F R [U R U' R'] F' U' M' F'
⭐ F U2 R' F' U' F U R2 U2 R' F'
F U [R U R'] U2 R' U' F R F' [R' U R] F'
R' U' R B U' F [R U R' U'] F' B' [R' U R]
B' U' F [R U R' U'] F' U' R' U2 R B
F U F R [U' R' U R] U R' F' U [R U R' U] F'
R' U' F [U R U' R'] F2 U' F U' [R U R' U] R
F U F' U' R' F' R U2 M' U' M
F U2 F' r' U' F R' F2 R U r
F U' B' R' U' R U2 [R U R' U'] B U' F'
R' U [R U R' U] [R' F R F'] U F' U2 F U2 R
B' R B U2 R' [U' R' U R] U2 [R' F R F']
F U2 R U2 r' U F [R U R' U'] F' M' F'
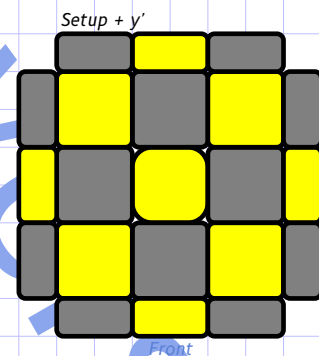
OLL #57 - O8
F R U R' F' R L2 D' B' D R' L2

Setup

Front

Setup + y

Front
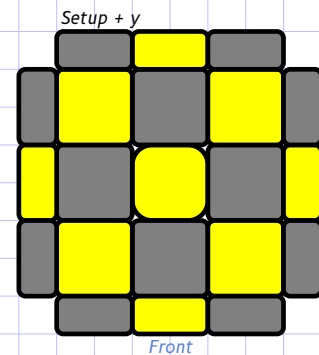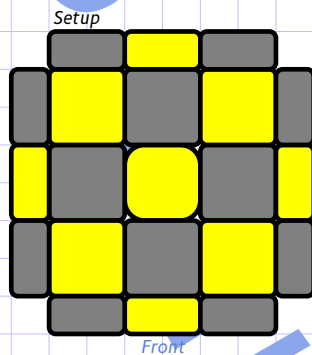
⭐⭐⭐ S [R U R' U'] R' [U' R' U R] S'
⭐⭐⭐ R' U' F' U F [R U R' U'] [R' F R F'] U R
⭐⭐⭐ M' F U' F' M2 F U F' U' M'
⭐⭐ M' U' R' U R U M2 U' R' U r
⭐⭐ F B' [U' R' U R] U [R U R' U'] F' B
⭐⭐ R2 r U R U' M2 [U R' U' R] U' M'
⭐⭐ M U [R U R' U'] M2 U R U' r'
⭐⭐ F U [R' F R F'] U' F' U F [R U R' U'] F'
⭐ S U2 [R U R' U'] R' U' S' [R' U R]
⭐ B' R U [R U R' U'] R2 B U' [R' F R F']
⭐ [R U R' U] F [R U R' U'] F2 U2 F [U R U' R']
⭐ M' U2 F2 U' M2 U' M' U2 F2
⭐ F U F M' F' U' F' U' M2 U' M'
⭐ M' U' M2 U F' U' F' M' F U F

[No specific algorithms for this orientation]

Setup + y2

Front

Setup + y'

Front
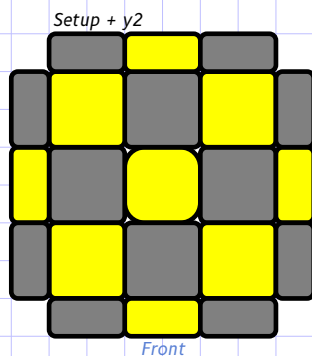
[No specific algorithms for this orientation]

[No specific algorithms for this orientation]