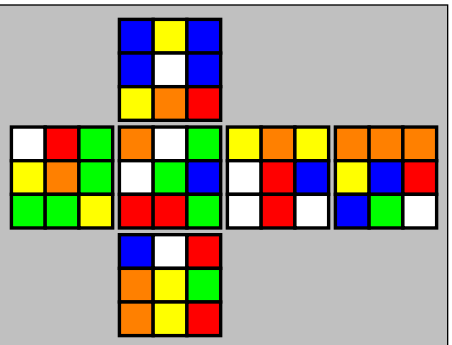
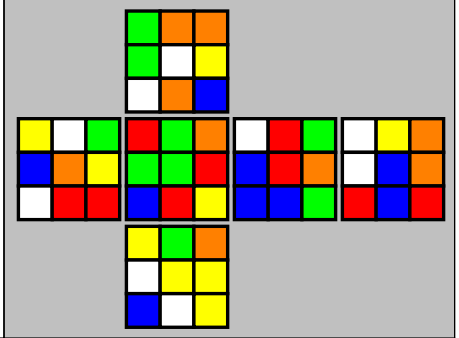
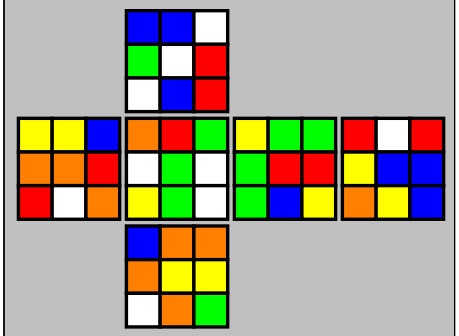
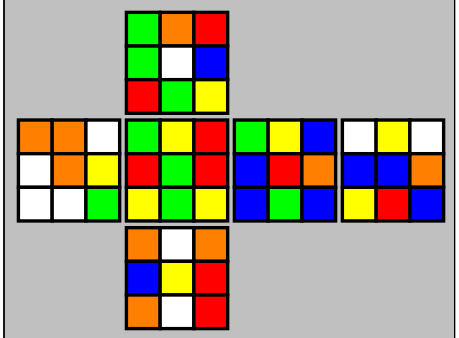
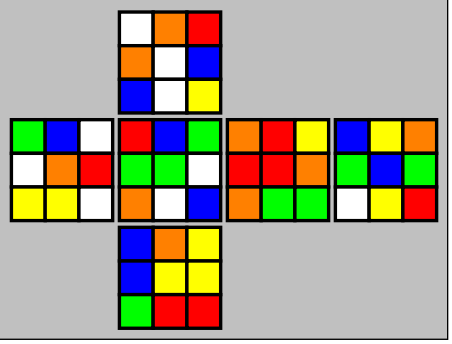
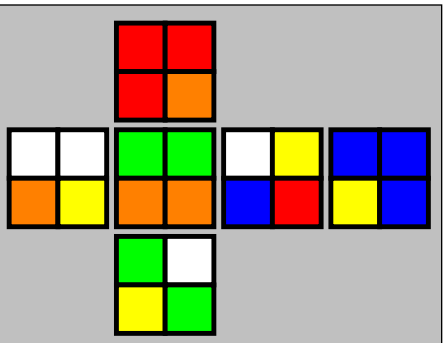
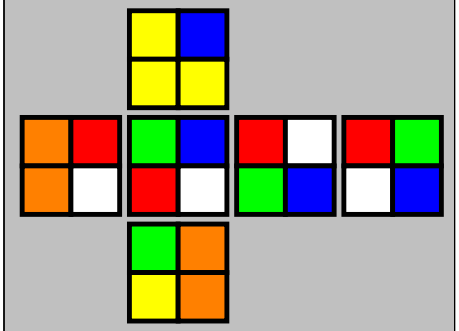
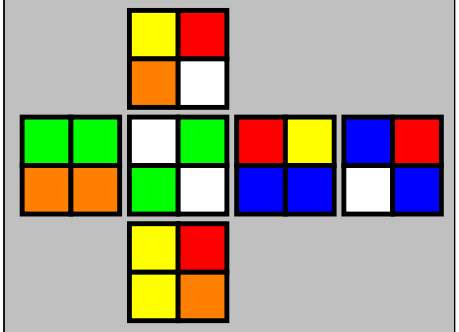
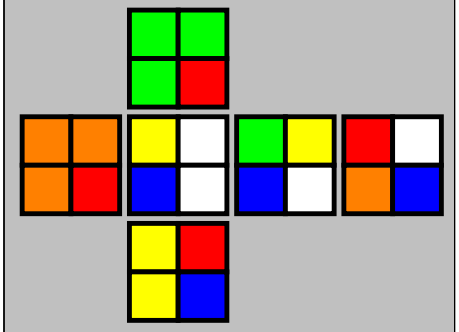
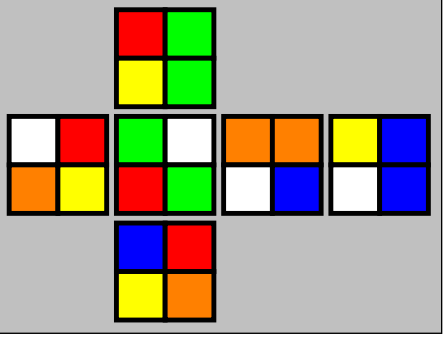
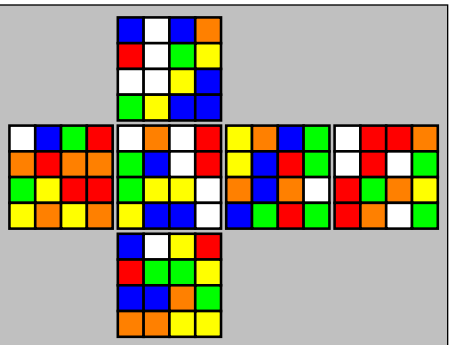
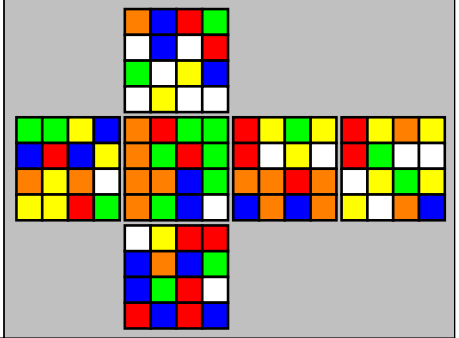
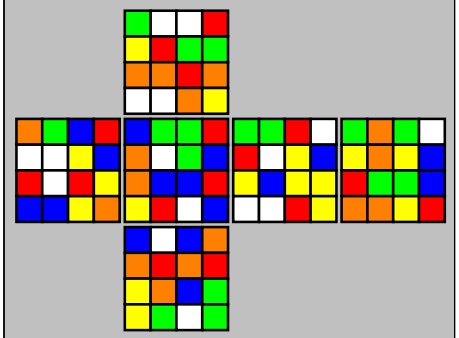
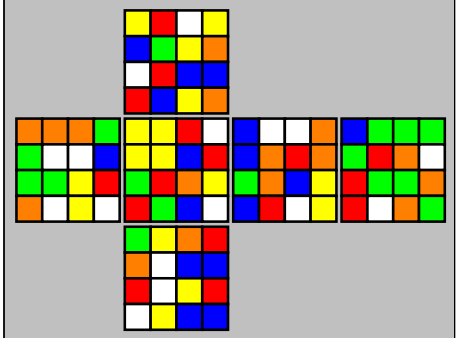
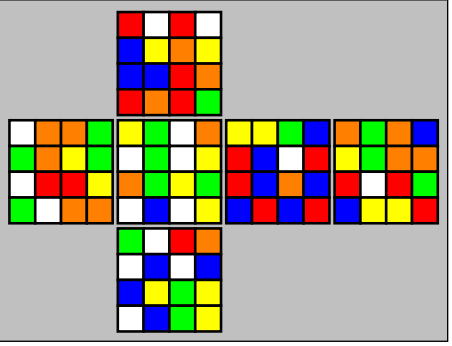
Scrambles for 2019-05-19

1.	R' U2 L' F2 R' B2 F2 D2 L B2 L2 D' L2 U R' F2 U' L' F L2 D'	
2.	U2 D2 R D L F2 D2 B' U R B' U2 L2 F' B2 L2 D2 B L2	
3.	B' R2 U2 F' B' R' F' L' U F U F2 U' R2 U' R2 B2 U D F2 L2	
4.	B' L F' R2 D L2 U2 R' F2 U' F D2 B' R2 F R2 U2 F2 R2 B'	
5.	B D2 F' R2 F2 U2 F L2 R' U' B2 U F L F2 R2 B' L F2	

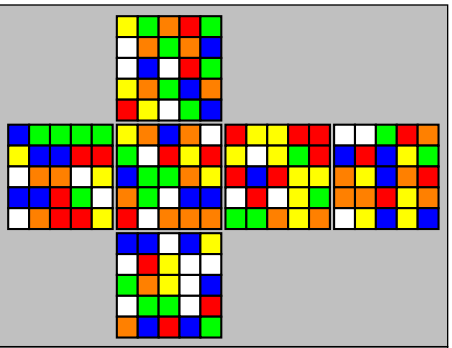
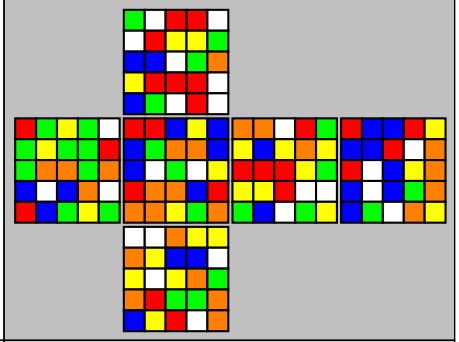
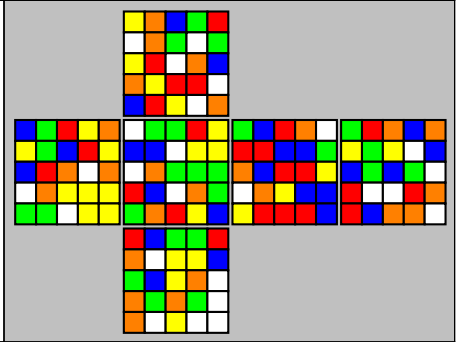
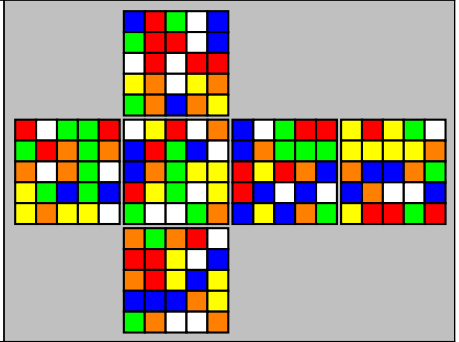
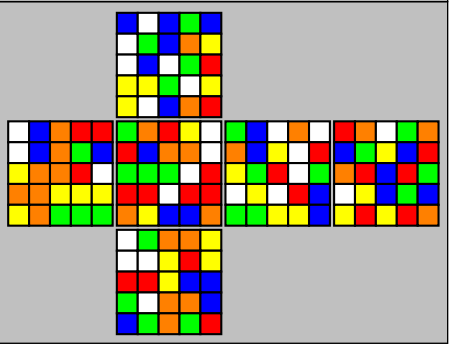
Scrambles for 2019-05-19

1.	U' R' U' R U F U' R' F U2 R	
2.	R' U' R U2 R2 F U' R2 F' R' U'	
3.	U R' U' F U' F' U' R' F U' R	
4.	U R' U' R U R U' R2 F2 R U2	
5.	U' R' F' U' R U' R U' F' R' F'	

Scrambles for 2019-05-19

1.	Fw F' R U' D F Uw U' Fw2 D' F2 Uw' F Fw2 U Fw F2 Rw R L2 Uw Fw2 F2 D B2 Fw L2 R' Uw L2 U F' D2 Fw R F L B' D' Fw'	
2.	Rw Fw2 Uw' D' Rw L' D2 U2 Rw R2 Fw D2 Fw2 U F2 Uw F' D2 F2 Uw' B2 R2 U2 R' L' F Fw2 L' F U D2 F' Fw' R' Rw U' R2 U2 Rw U'	
3.	Rw2 Uw Fw L' D' Rw2 U Rw' R Fw' Uw2 R F' D2 Rw' B2 Uw U R' Uw2 D L' Uw2 B2 U' L' D2 R F' Rw' R2 L Fw2 F' Uw L' Fw L2 R' U'	
4.	Uw L' Uw' U2 Rw' Fw Rw D' B Rw U' R Fw L F2 U' L B Fw' D' Fw B2 Rw' B2 U D F Uw U' R D2 Rw' Fw B2 F' R L' Rw2 F' Uw'	
5.	R2 D Fw2 D' F2 R Rw Uw2 L' U' Rw2 Fw2 R' Fw D' U' R U Fw' B' D2 B' Uw Rw Fw2 R2 F Rw' B2 D2 U B' F R2 D F' Rw2 U' Uw Rw	

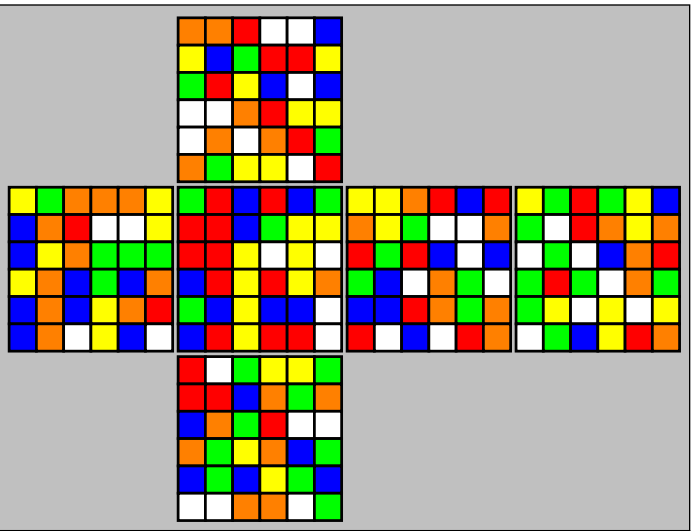
555
Scrambles for 2019-05-19

1.	F Bw' D Fw' Dw Uw Lw2 Rw Bw B' Dw2 Rw Fw2 Rw' U F U Dw Bw' Lw L2 B Lw' F2 Lw Dw2 U' R2 U Lw Bw' R' Fw Rw' B' Rw Fw2 R2 U Lw' Bw2 B' Dw2 D' Lw B' Dw' Fw2 U' F2 U2 Uw2 L2 Dw2 Bw U' B D' F' D'	
2.	L Rw' D' L' Fw' U' B' Dw2 L2 Bw R' Rw2 Lw2 Dw' Rw' Uw' U B2 Fw' Rw' U L B2 R2 B' U Lw2 U' Rw Uw L2 Dw' B' Uw2 Dw L2 D Uw U' Bw2 B Lw2 Bw2 Dw D Rw' L2 Bw2 Lw Fw2 B Lw' R F2 Fw L' B U B' F'	
3.	B' Bw' Dw2 Lw2 F' Bw2 L2 U' Fw' Lw Rw2 U D B F2 U' R2 Uw Fw' Rw2 R' D' Rw' Uw Bw U' Lw U2 Dw' L' B' D' U F Rw Dw' F' Rw' F U' Uw2 Fw2 L Fw2 R' Rw2 D2 B Fw' Dw' D2 R Lw Bw' D2 Bw2 F U2 Fw Lw	
4.	Uw2 Bw Fw F D U2 Rw' R Uw' D2 Lw L' Fw' R2 U' L' Fw Bw U Fw2 Uw2 U' F2 U2 Uw2 Rw Fw2 F Bw Dw2 Rw Bw Uw2 Fw U Uw' Fw2 R Fw F' Rw' Dw F D' L2 Uw' F Uw2 F' D' Fw B' F2 Dw2 B2 Lw' U Dw R2 B'	
5.	R2 U' Uw' D2 Lw' Rw' Dw2 L U' B2 D' Lw Fw' L' B2 Fw' Dw' R F Bw Lw L Rw' Dw R2 Rw Bw2 L D Dw B' F' Dw' B2 U D' Rw2 Dw2 U B U2 Lw Rw Bw R2 Lw2 L2 F Dw' L2 F L' F2 Uw2 Fw2 Dw L' D Rw' L'	

Scrambles for 2019-05-19

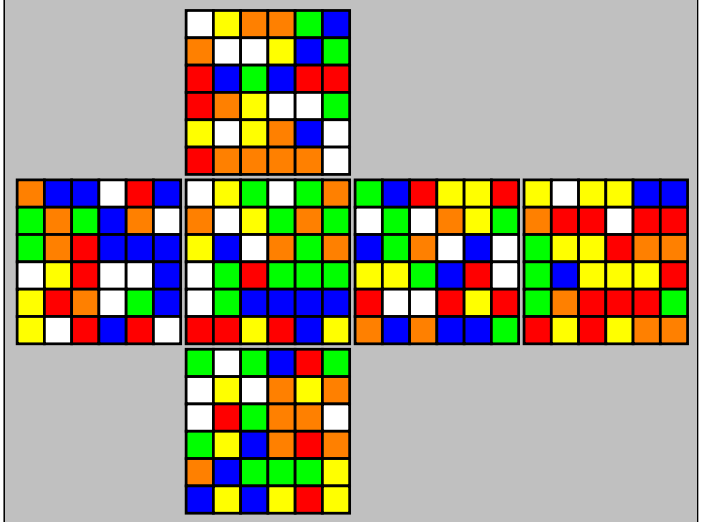
1.

F D2 F2 Rw2 Uw 3Rw2
3Fw2 3Uw2 3Rw' B2 3Fw F2
Fw Rw 3Fw' Dw' 3Uw2 D'
L2 B R Uw2 F 3Uw'
Uw F 3Fw2 Uw B' 3Fw2
Dw' 3Fw2 Lw 3Rw2 R Uw'
U2 Fw F 3Fw Dw2 Uw2
3Fw 3Uw' 3Fw2 3Uw2 D Lw
Dw Bw Uw2 F Bw Lw'
Rw' Uw D Rw Lw 3Uw
F 3Uw 3Rw2 L' Rw' Uw'
U Rw2 Bw' F2 L 3Uw
3Fw Lw U' 3Rw2 Rw' Fw
Uw' Fw



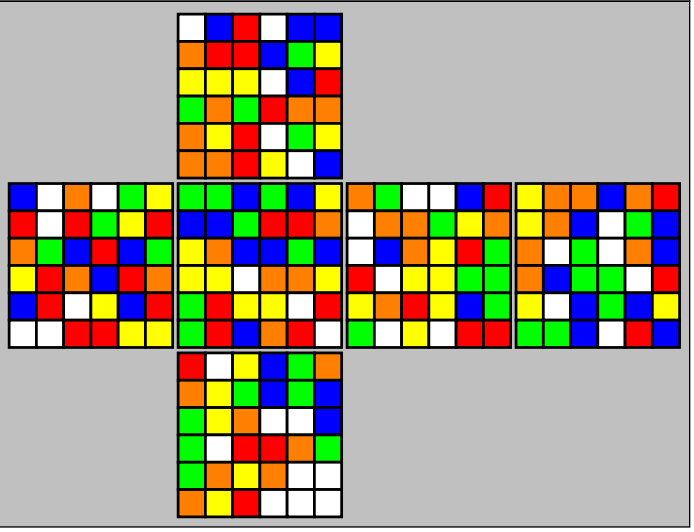
2.

U' R Rw' Uw2 Dw2 L
3Uw2 3Rw L' Rw Lw2 Dw
Lw B Fw2 F' Dw' 3Fw2
U F L' Bw Fw' F
Rw' R2 Fw' U 3Fw' Uw'
Dw L' 3Uw2 F' R2 D2
R' 3Rw2 D Dw B2 R
Fw' F' Rw2 3Rw Lw' Uw'
3Fw' R D Dw' Fw' R'
3Rw2 F' 3Rw2 F L' Lw2
D2 R2 Lw Uw Lw2 Rw
U' 3Rw' D B 3Fw' Uw2
U2 Bw2 3Rw Bw Lw' Dw
Uw' U2



3.

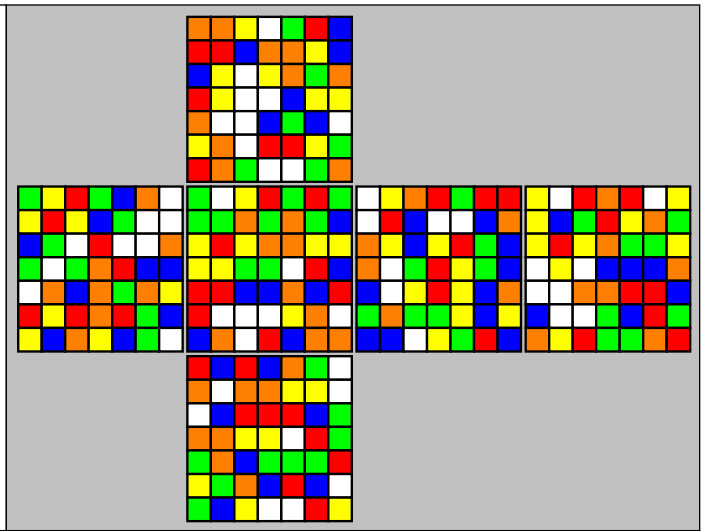
3Rw Lw2 Uw' F' B' L
F2 R 3Fw Dw' 3Rw 3Fw
Uw2 R Fw Bw2 U 3Uw
D2 3Rw2 3Fw D Uw' 3Rw2
3Fw' L' 3Rw Dw2 Fw' Rw2
F' R D Uw2 R2 B'
Lw 3Uw Fw' 3Uw' F' 3Fw'
R' L2 Dw R2 Dw' F2
3Rw' U2 3Rw 3Uw2 Rw' Lw'
D' B' 3Uw2 3Fw2 F' 3Uw'
L B2 Bw2 3Uw 3Fw Bw2
Fw2 Uw' Rw2 3Rw2 3Fw' F'
D' R2 Fw' R' U' Uw2
Lw' D'



Scrambles for 2019-05-19

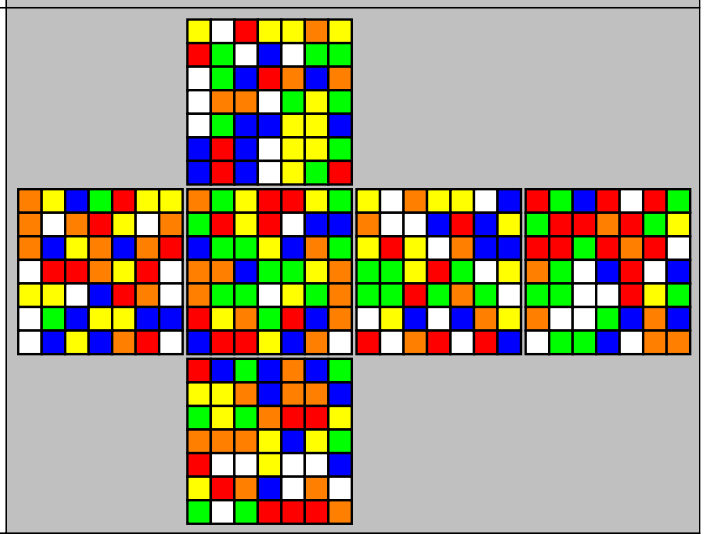
1.

3Dw' Rw2 U Rw 3Uw2 3Lw 3Rw2
Bw2 Uw' 3Rw Rw 3Lw Bw' Dw2
3Dw F Fw' 3Uw' R Rw2 D
Lw2 Fw' 3Dw2 3Rw 3Uw' Uw B'
3Uw2 D Lw2 3Lw' 3Bw 3Lw Lw
Bw2 3Rw 3Fw2 Fw' 3Rw Rw2 Fw
L' 3Uw Rw' 3Bw2 F2 Lw' L2
3Lw2 3Fw L' 3Uw' 3Bw2 R U'
R 3Lw2 Fw Rw Fw 3Uw Uw
3Bw' Rw2 D' Fw' 3Dw2 3Rw R'
3Dw Lw' F R U' B2 3Bw'
Fw F' 3Rw' 3Fw2 U2 Fw2 3Rw
Lw2 Dw2 3Bw B2 3Uw Uw L'
3Dw F' Fw2 L B U2 Dw
Uw 3Uw



2.

R2 Bw' U F' U' L 3Dw2
L' F' 3Bw 3Lw' Bw Lw' 3Lw2
Dw2 3Fw U' Fw D' Bw2 3Dw2
3Uw' L 3Dw2 Bw' 3Dw L F
B' 3Dw 3Lw2 3Bw' Fw L2 U
3Rw2 Fw2 R2 B Dw' R2 3Rw'
Fw2 3Rw Dw2 3Uw U' Uw 3Rw
Fw Lw2 U2 3Lw2 Bw2 3Bw2 3Dw
R L2 3Uw Fw2 F' 3Bw 3Uw'
Dw 3Fw L2 D2 Rw Dw L2
Lw 3Rw' Fw2 Lw2 B F 3Fw'
Uw U' L 3Fw' F Bw Dw'
Lw' 3Fw Lw2 3Bw' 3Rw Uw 3Dw'
3Bw2 3Uw Fw 3Uw' B Fw' 3Bw'
Bw 3Uw'



3.

B' Dw U' B 3Lw 3Bw' 3Uw
3Dw2 Bw U' Fw2 L 3Lw Fw'
Bw2 3Uw B' Bw2 3Rw2 3Uw' B2
Lw2 Uw D 3Lw' 3Bw' B' 3Uw
D2 Uw2 Bw' 3Uw2 D' Dw Rw
Dw2 D2 3Fw' U Dw Rw F'
3Rw' F D' F' 3Rw F2 3Dw2
3Uw2 Dw R Rw 3Fw 3Uw' 3Lw'
Fw2 U' 3Lw2 B2 3Uw' D Bw2
D' 3Dw L 3Rw' Rw 3Dw2 3Uw'
3Lw' Fw Rw2 B2 Dw2 Lw 3Rw'
D2 3Fw' L2 Dw' D2 Fw 3Dw'
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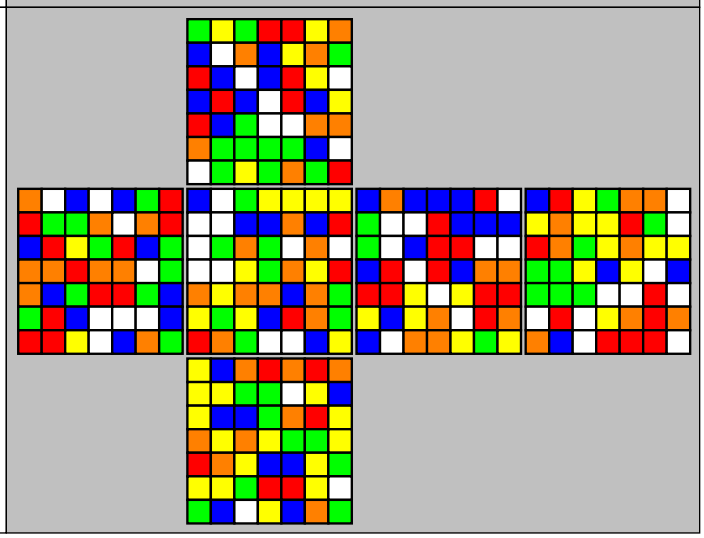
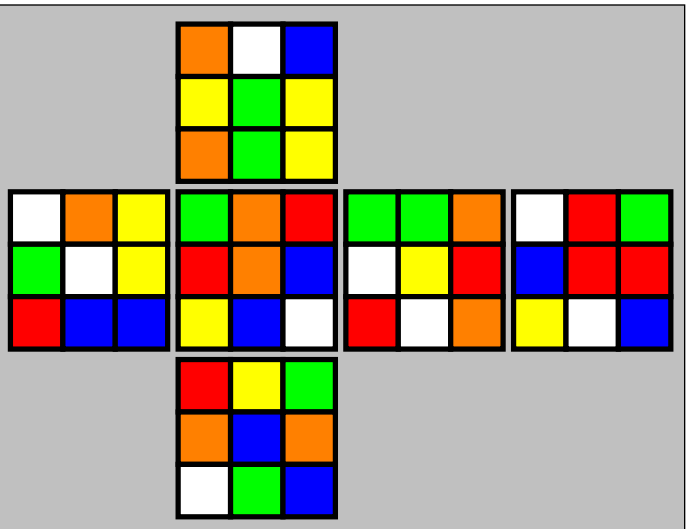
Uw 3Fw D' 3Bw' Fw2 Bw 3Fw'
D Rw'



333bf
Scrambles for 2019-05-19

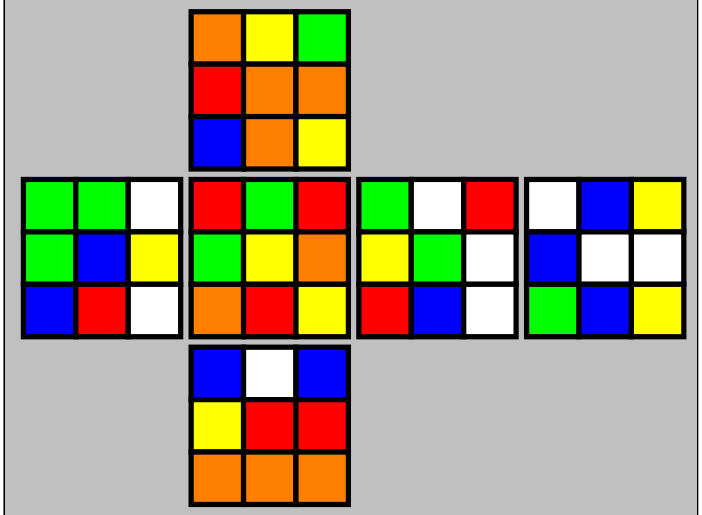
1.

B2 L2 U' L2
U2 R2 B2 U'
F2 D F' U2
L B' D F2
U2 B2 D' L
D' Rw Uw'



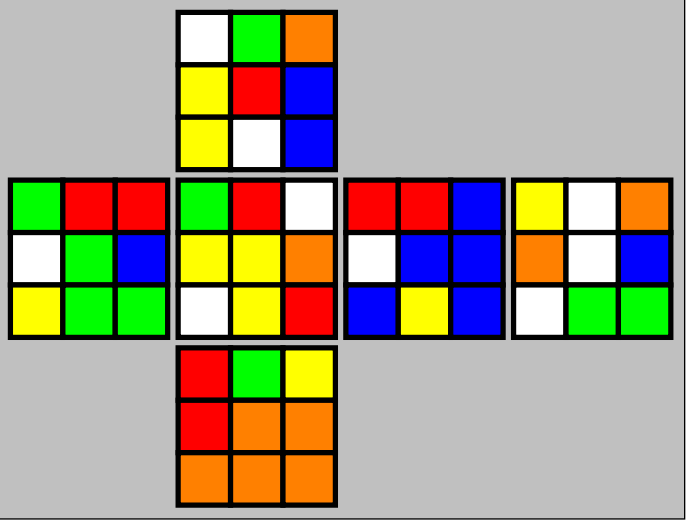
2.

F2 U F2 D2
B2 F2 L2 U'
B2 F R' U'
R2 F2 R' B
R' F' L U
Fw Uw'

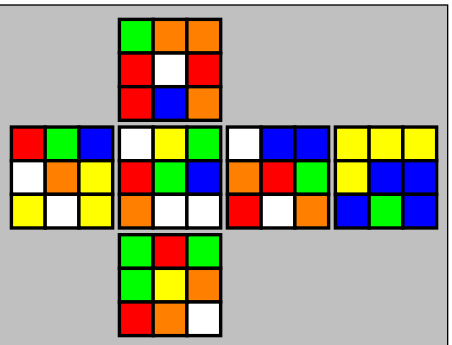
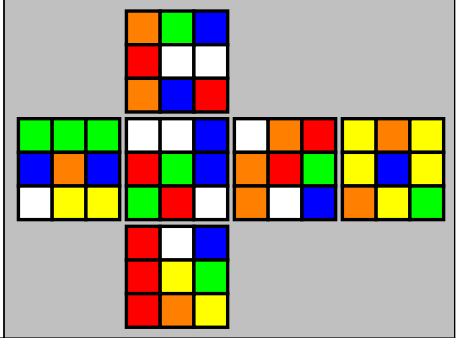
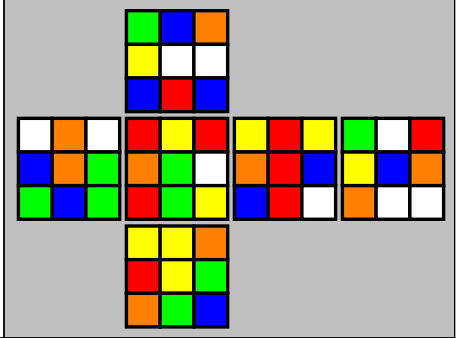
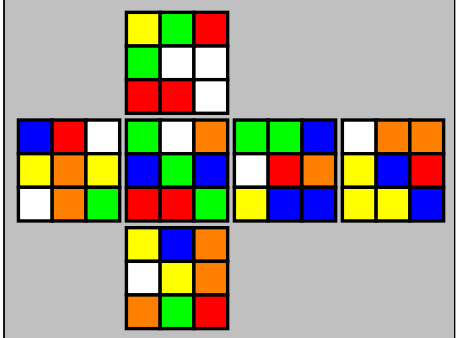
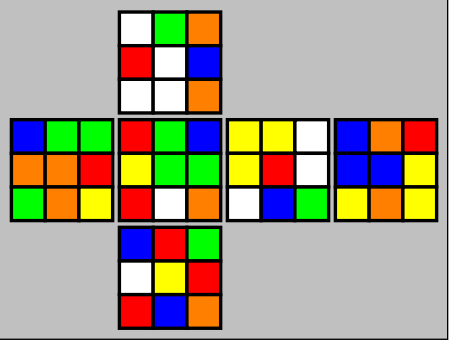


3.

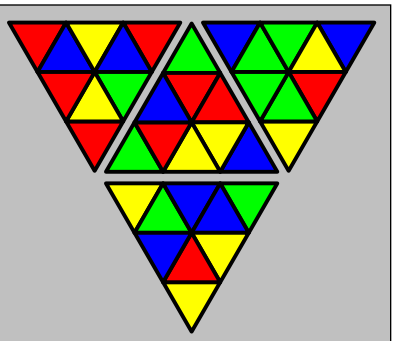
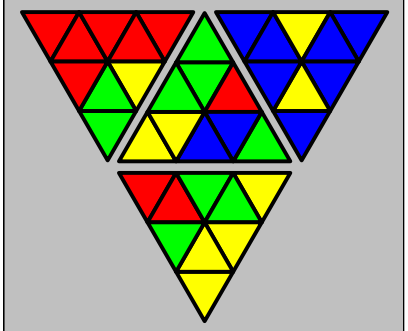
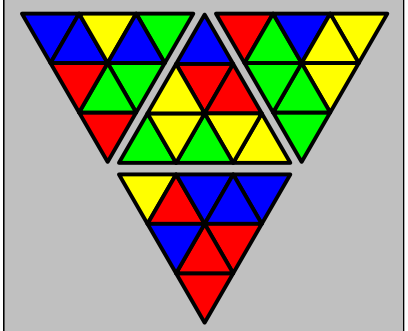
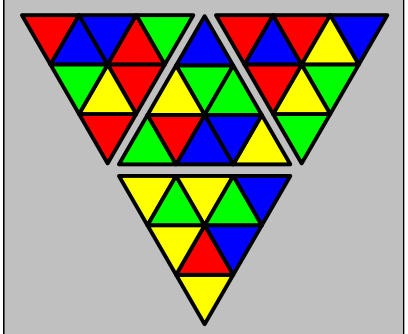
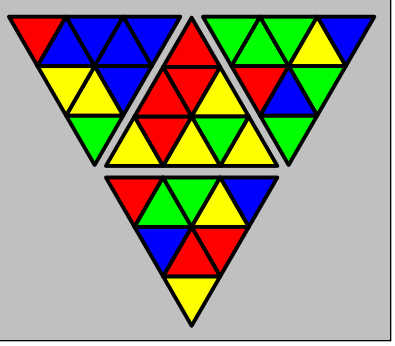
B2 D L2 R2
D' R2 B2 U
R2 U L' F
U' R' U' L
D' U' F D'
Fw' Uw



333oh
Scrambles for 2019-05-19

1.	U L2 U R2 U' R2 U B' L B U R2 D F2 U' B F R' U'	
2.	L2 D2 F' L2 B' U2 F D2 R2 D' R B2 D' U' R D F2 U2 B L'	
3.	U L2 U2 B2 D R2 D2 B2 L2 U2 B2 R U B2 L D B' R D' F' D2	
4.	D2 L' D2 B2 D2 L' R' U2 F' D B' L' U' L2 B U B L B'	
5.	R D2 F U L' F' U' B' L D2 L' U R2 U' R2 D' L2 U' F2	

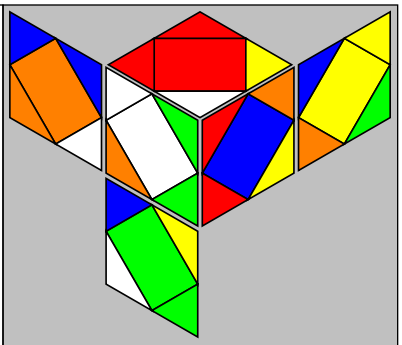
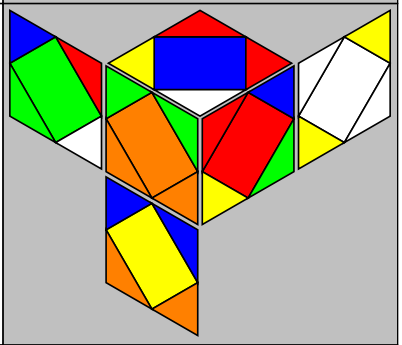
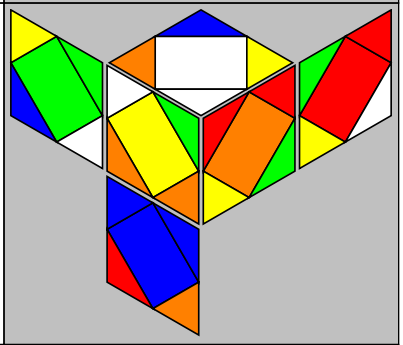
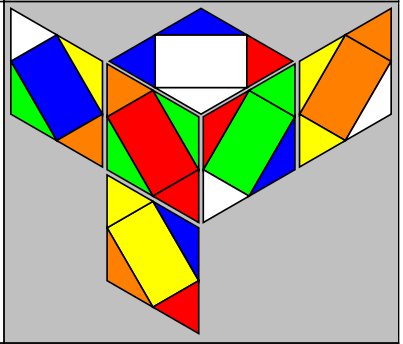
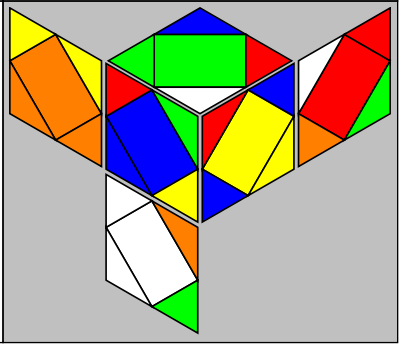
pyram
Scrambles for 2019-05-19

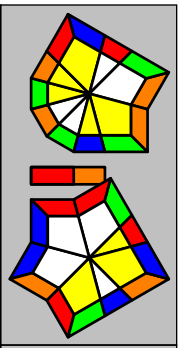
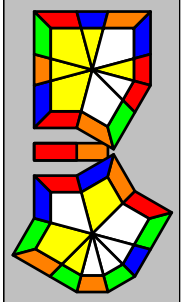
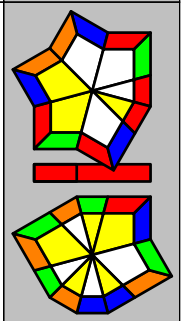
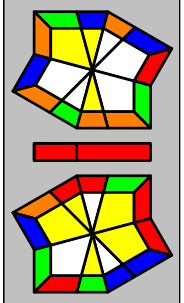
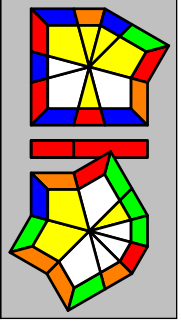
1.	B L U R' B U' R' L B' L' U' u l' r b'	
2.	R' B R L' R L' R' B L B R' r	
3.	U' B' L' R U L' B' L B U' B' u' l	
4.	R' U R B R' L B' U' L' B L u l' r' b'	
5.	U L' B U B' U' B' U' L' U' B' l r b'	

2019-05-19

skewb

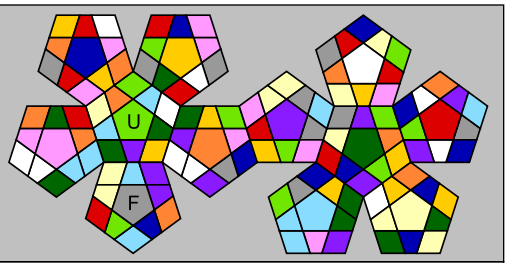
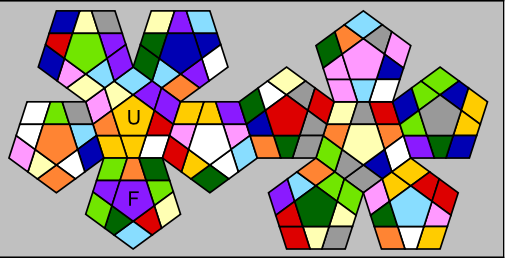
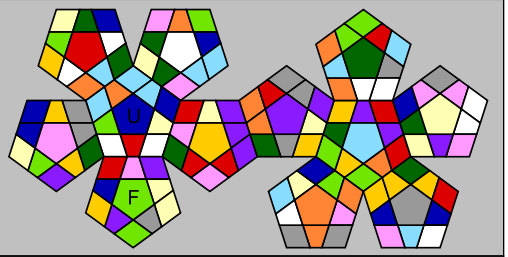
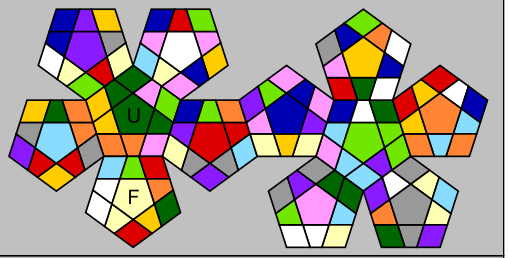
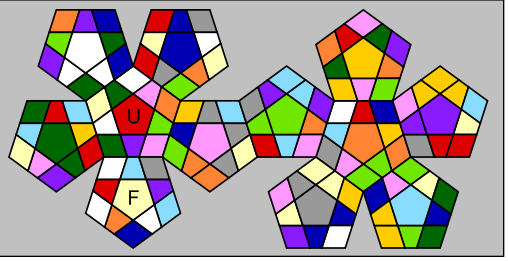
Scrambles for 2019-05-19

1.	L U R B R' U' L R U R U'	
2.	L R L' R' L U' B' R' U' R B'	
3.	R B L U R U' L B' R B R'	
4.	U R' B' U L B L B R B' R'	
5.	R B L' B U R' L U R' B' L	

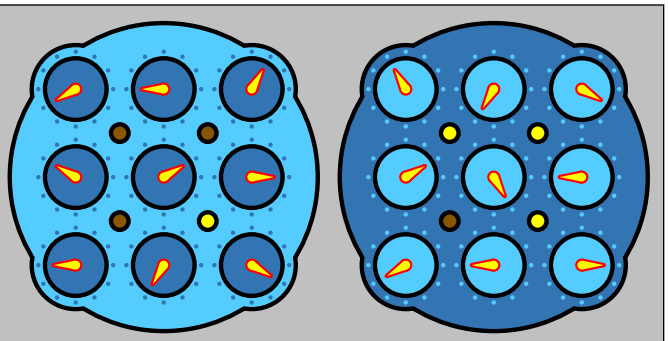
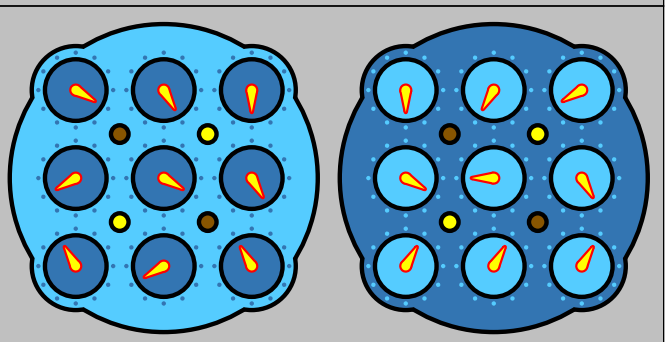
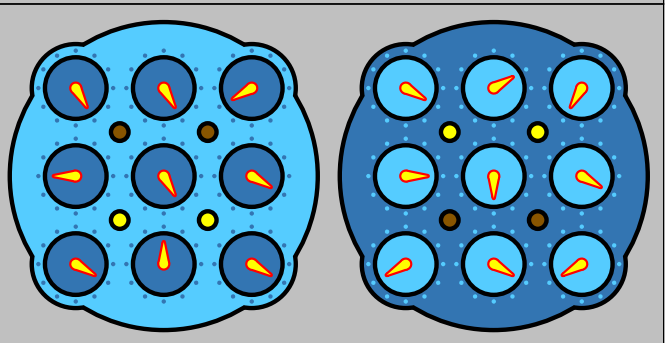
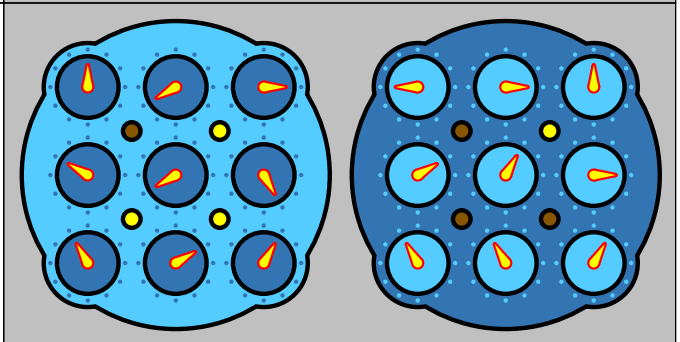
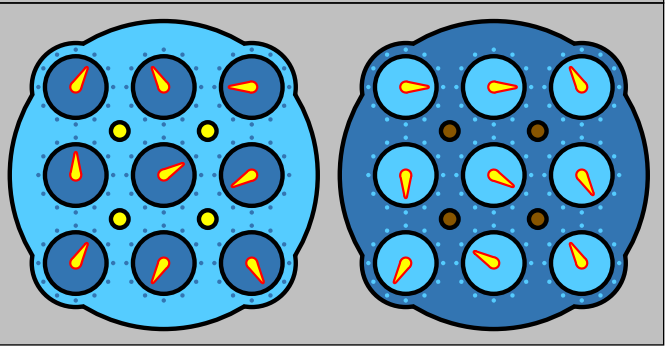
1.	(-2,6) / (-4,2) / (-3,0) / (-2,-5) / (2,-1) / (1,-3) / (0,-3) / (3,0) / (0,-4) / (0,-5) / (2,-4) / (-5,0)	
2.	(0,-4) / (0,3) / (-2,-5) / (2,-4) / (1,-5) / (3,0) / (0,-4) / (-3,0) / (-1,0) / (-4,0) / (-2,0) / (0,-5) / (-4,-4) /	
3.	(-5,0) / (3,3) / (5,-4) / (0,-3) / (-3,0) / (-2,-2) / (0,-4) / (-3,-3) / (3,0) / (0,-2) / (4,-2) / (0,-2) / (0,-5)	
4.	(-5,0) / (-4,-4) / (4,1) / (3,0) / (5,-1) / (3,0) / (4,0) / (-3,-3) / (5,0) / (2,0) / (-4,0) / (2,0) / (5,-3)	
5.	(-2,0) / (3,6) / (2,2) / (0,-3) / (0,-3) / (-5,-2) / (0,-4) / (3,0) / (-4,-5) / (6,0) / (0,-2) / (-1,-2) / (-3,0)	

2019-05-19

minx
Scrambles for 2019-05-19

1.	R-- D-- R-- D-- R-- D-- R-- D-- R-- D++ U R-- D-- R++ D++ R-- D-- R++ D++ R-- D++ U R-- D-- R-- D++ R++ D++ R-- D++ R-- D++ U R++ D-- R-- D++ R++ D++ R-- D++ R-- D-- U' R-- D++ R++ D++ R-- D-- R-- D-- R-- D++ U R-- D-- R++ D-- R-- D++ R++ D-- R-- D++ U R++ D++ R-- D-- R++ D++ R++ D-- R++ D-- U'	
2.	R++ D-- R-- D-- R-- D-- R-- D-- R-- D++ U R-- D++ R-- D++ R-- D-- R-- D-- R++ D-- U' R++ D-- R-- D++ R++ D++ R-- D-- R-- D-- U' R++ D++ R-- D++ R-- D-- R++ D++ R-- D++ U R++ D++ R++ D++ R++ D-- R-- D++ R++ D-- U' R++ D-- R-- D++ R-- D++ R++ D-- R-- D++ U R-- D-- R++ D++ R++ D++ R++ D-- R++ D-- U'	
3.	R-- D-- R-- D++ R-- D++ R++ D-- R-- D-- U' R++ D++ R-- D-- R-- D-- R++ D-- R++ D-- U' R++ D++ R++ D++ R-- D++ R++ D-- R++ D-- U' R++ D++ R++ D++ R-- D++ R++ D-- R-- D++ U R-- D-- R++ D++ R-- D-- R++ D-- R++ D-- U' R-- D++ R-- D-- R-- D++ R++ D++ R++ D-- U' R-- D++ R-- D++ R++ D++ R++ D++ R++ D++ U	
4.	R-- D++ R++ D++ R++ D++ R-- D++ R-- D-- U' R++ D-- R++ D++ R-- D++ R++ D-- R-- D++ U R++ D-- R++ D-- R++ D-- R++ D++ R-- D-- U' R-- D++ R++ D++ R++ D++ R++ D-- R++ D++ U R-- D++ R++ D++ R-- D++ R++ D-- R-- D++ U R-- D++ R++ D++ R-- D++ R-- D++ R-- D++ U R-- D-- R++ D++ R++ D-- R-- D++ R++ D-- U'	
5.	R-- D-- R++ D-- R-- D-- R++ D-- R++ D-- U' R++ D++ R-- D-- R++ D++ R++ D-- R-- D-- U' R-- D-- R++ D-- R++ D++ R++ D++ R++ D++ U R-- D++ R-- D-- R-- D++ R++ D++ R++ D-- U' R++ D-- R++ D++ R++ D-- R++ D-- R-- D++ U R-- D++ R-- D++ R++ D++ R-- D++ R-- D-- U' R++ D-- R++ D-- R++ D-- R++ D++ R-- D++ U	

clock
Scrambles for 2019-05-19

1.	UR2- DR5+ DL2- UL5+ U5+ R0+ D5- L5+ ALL6+ y2 U5- R4+ D5+ L1- ALL1- DR	
2.	UR2+ DR2- DL2+ UL4+ U2+ R5+ D2+ L2- ALL4- y2 U4- R4- D1- L1- ALL2+ UR DL	
3.	UR6+ DR3- DL4+ UL2- U2- R0+ D3+ L0+ ALL0+ y2 U5+ R4- D0+ L1+ ALL3+ DR DL	
4.	UR2- DR2- DL5+ UL4+ U0+ R3+ D5- L1+ ALL3- y2 U6+ R2- D0+ L3+ ALL1+ UR DR DL	
5.	UR4- DR3+ DL4+ UL5+ U5+ R1- D6+ L2+ ALL4- y2 U5- R2+ D3+ L6+ ALL4- UR DR DL UL	

Fewest Moves

-> You have 60 minutes to find and write a solution.
-> Write 1 move per bar. To delete a move, clearly blacken it.
-> Your solution must not be directly derived from any part of the scrambling algorithm.
-> Your solution must be at most 80 moves, including rotations.
-> Your result will be counted in OBTM.
-> Only use notation from Article 12 of the WCA Regulations. If you are uncertain, use only the exact moves listed here:

Face Moves						
Clockwise	F	R	U	B	L	D
Counter-clockwise	F'	R'	U'	B'	L'	D'
Double	F2	R2	U2	B2	L2	D2
Rotations						
Clockwise	[f]	[r]	[u]	[b]	[l]	[d]
Counter-clockwise	[f']	[r']	[u']	[b']	[l']	[d']
Double	[f2]	[r2]	[u2]	[b2]	[l2]	[d2]

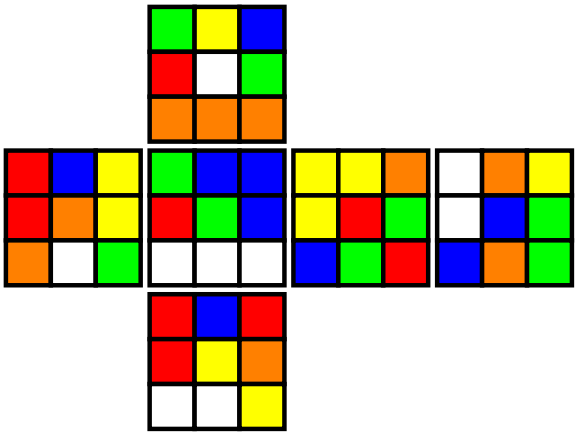
Scrambles for 2019-05-19
333fm

Competitor: _____

WCA ID: __ __ __ __ __ __ __ __ __ __

DO NOT FILL IF YOU ARE THE COMPETITOR.

Graded by: _____ Result: ____



Scramble: R' U' F R' B2 R' D2 R' D2 F2 L2 B D R D' B' U L2 F2 U2 F2 R' U' F

____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____

Fewest Moves

-> You have 60 minutes to find and write a solution.
-> Write 1 move per bar. To delete a move, clearly blacken it.
-> Your solution must not be directly derived from any part of the scrambling algorithm.
-> Your solution must be at most 80 moves, including rotations.
-> Your result will be counted in OBTM.
-> Only use notation from Article 12 of the WCA Regulations. If you are uncertain, use only the exact moves listed here:

Face Moves						
Clockwise	F	R	U	B	L	D
Counter-clockwise	F'	R'	U'	B'	L'	D'
Double	F2	R2	U2	B2	L2	D2
Rotations						
Clockwise	[f]	[r]	[u]	[b]	[l]	[d]
Counter-clockwise	[f']	[r']	[u']	[b']	[l']	[d']
Double	[f2]	[r2]	[u2]	[b2]	[l2]	[d2]

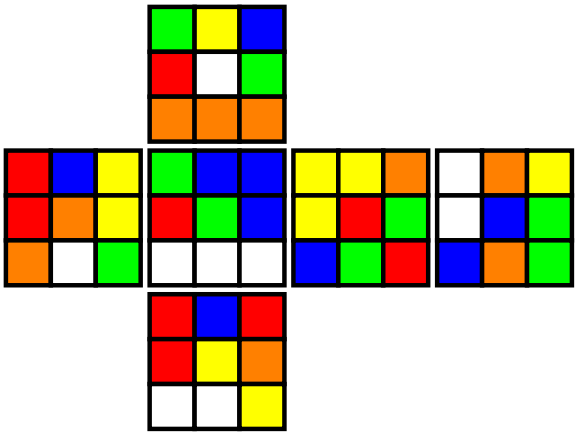
Scrambles for 2019-05-19
333fm

Competitor: _____

WCA ID: __ __ __ __ __ __ __ __ __ __

DO NOT FILL IF YOU ARE THE COMPETITOR.

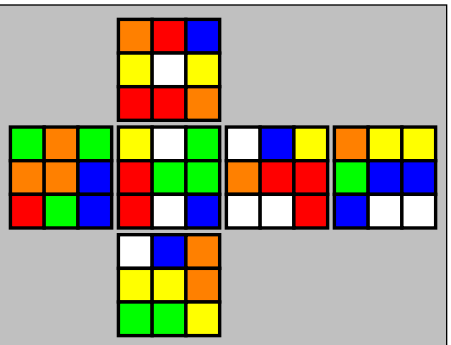
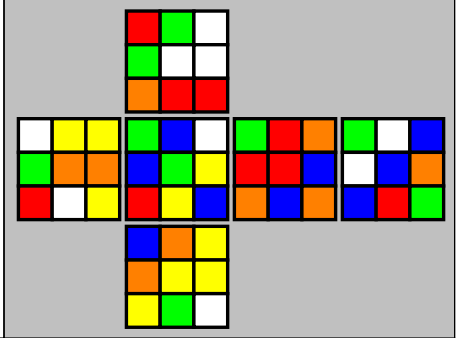
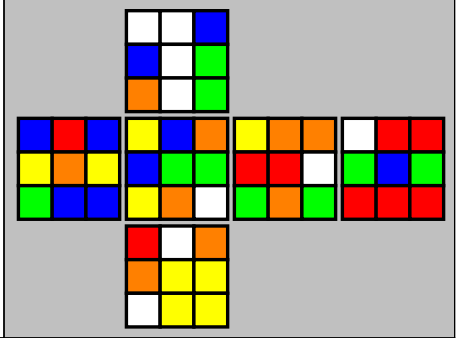
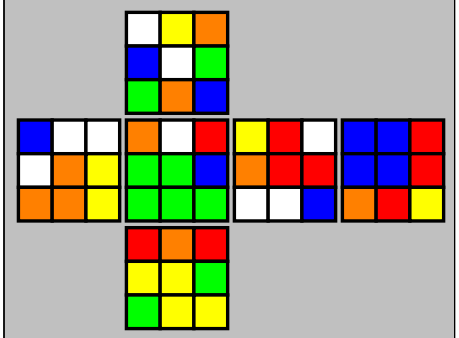
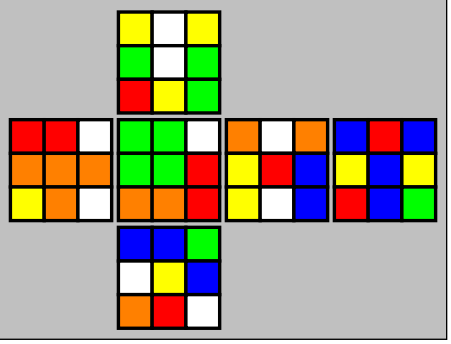
Graded by: _____ Result: ____



Scramble: R' U' F R' B2 R' D2 R' D2 F2 L2 B D R D' B' U L2 F2 U2 F2 R' U' F

____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____
____	____	____	____	____	____	____	____	____	____

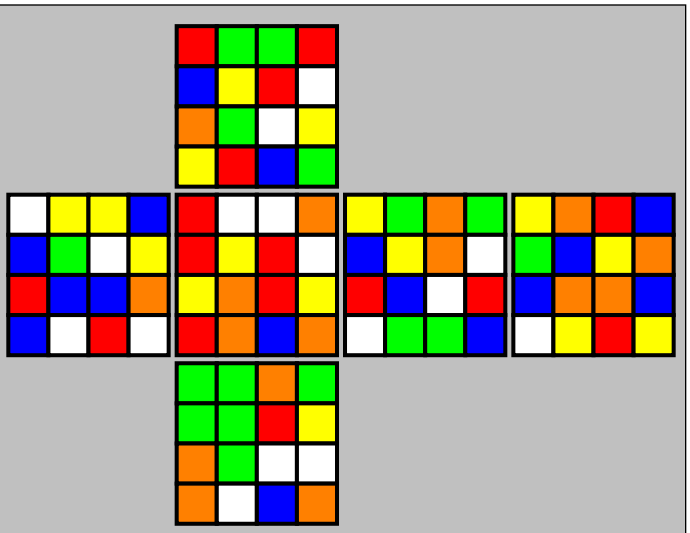
333ft
Scrambles for 2019-05-19

1.	D2 F2 U2 B R2 U2 F R2 U2 L F U2 R' U2 B U' F' U' B2 D'	
2.	F2 U' R2 F' R L2 F L D' F U' D B2 U2 D' L2 F2 B2 D B2	
3.	B' D F' D2 F D' R F' R' U' R2 F2 D2 B U2 D2 B' R2 F D2	
4.	B2 R2 U2 B2 L2 R' F2 L2 B R F' U F' R B2 R' U' F U'	
5.	L' F2 L' B2 F2 R2 U2 L' B2 L B D' L2 U F2 D R2 U2 R	

444bf
Scrambles for 2019-05-19

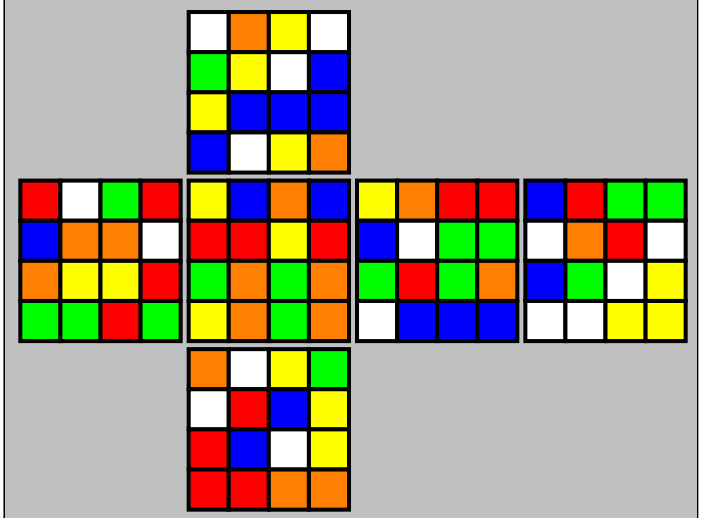
1.

L' F B' R' D
F' U' B2 R F'
U2 F2 L2 U2 R2
L' U2 R B2 R
Rw2 D Fw2 L2 R
D2 Rw2 D' L' B2
U Fw R' Uw2 Fw
R2 D Rw' U Fw2
F Uw U' L x'
y'



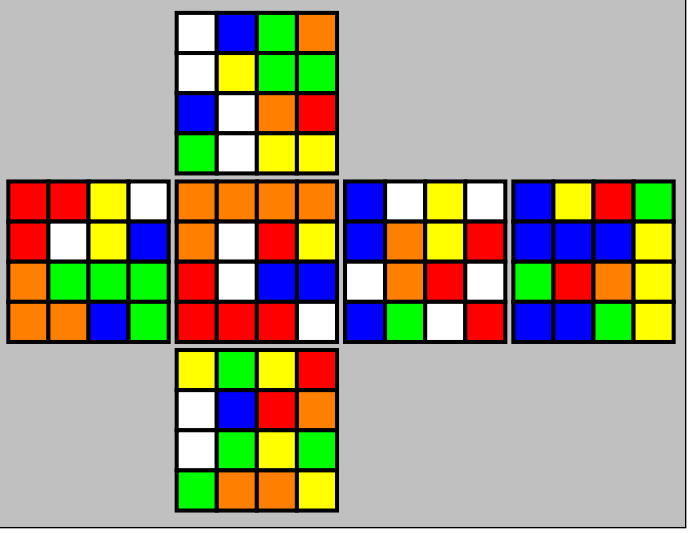
2.

U2 F2 D' R2 F2
D' R2 F2 D U
F2 B R B L2
F' U F L U
R' Uw2 L2 B R
Fw2 Rw2 L' D2 Fw2
R' Fw2 F' L' Uw'
R U2 L2 F2 Uw2
Rw Fw' F Rw U2
Rw F y



3.

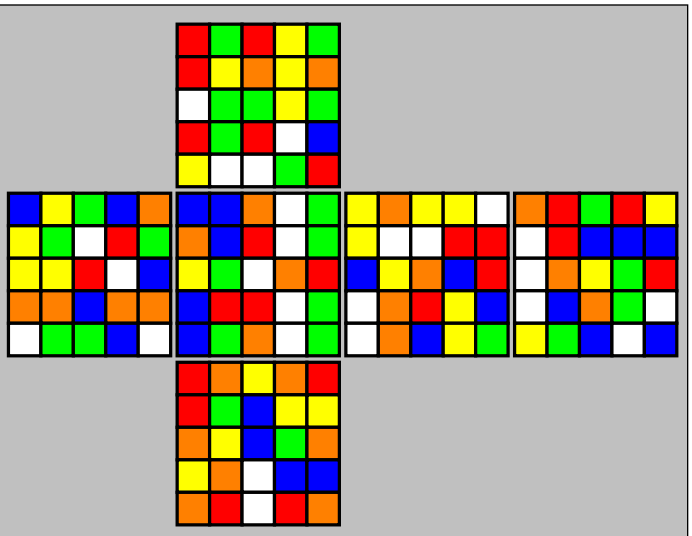
D L2 F2 L2 U'
F2 D' F2 U' R2
U2 L F' D2 R2
D' R2 B D2 L'
Fw2 D' Rw2 Uw2 F2
L' Fw2 Uw2 R U
L' U2 Fw' Rw2 R2
Fw2 L2 U Rw' D'
Fw' F' L' D Rw'
z



555bf
Scrambles for 2019-05-19

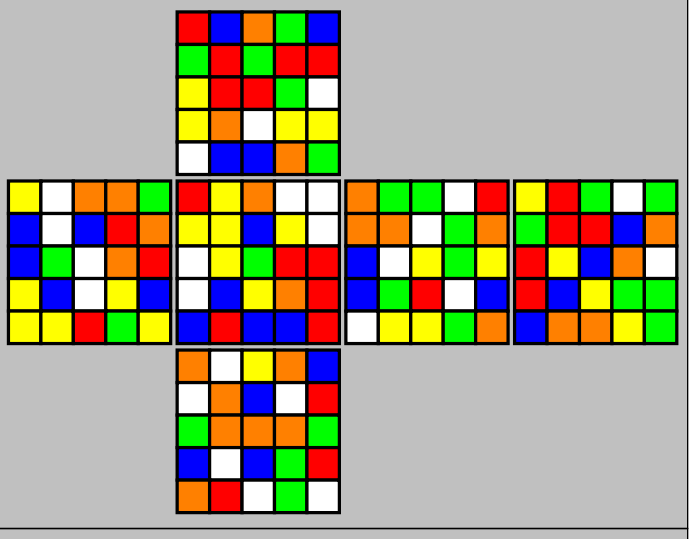
1.

Fw	Lw2	D'	L2	Lw'
R'	Rw	Bw'	D'	R'
B	Rw2	L	Dw'	Uw2
Lw	Fw'	Bw2	Lw	Dw
Uw'	D'	R'	F	Lw
Fw'	L'	R'	B	D2
Rw'	D2	Dw	L'	Uw'
U2	L	B2	D'	L'
Dw	Lw	L2	D'	F'
Lw2	Fw2	R'	L2	Bw'
U'	F'	Bw2	Fw	R
Uw	Bw2	Uw2	Lw	Fw2
3Rw	3Uw2			



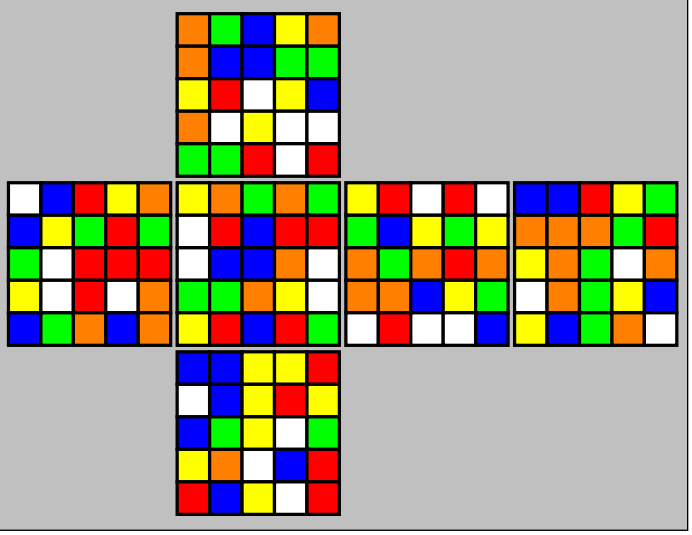
2.

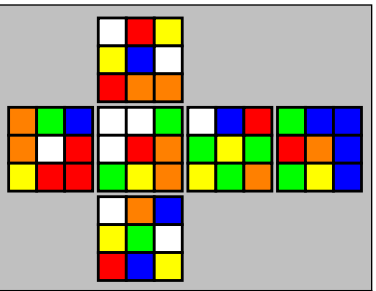
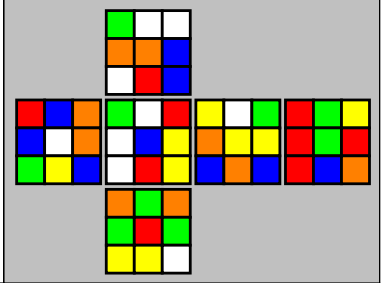
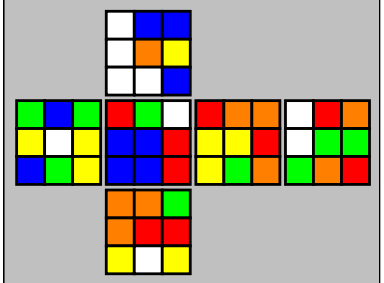
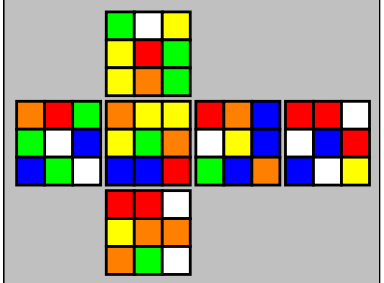
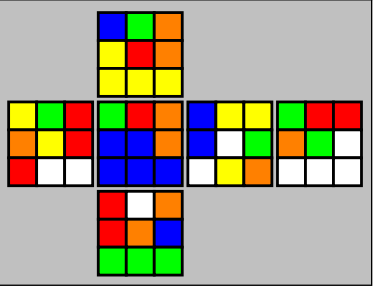
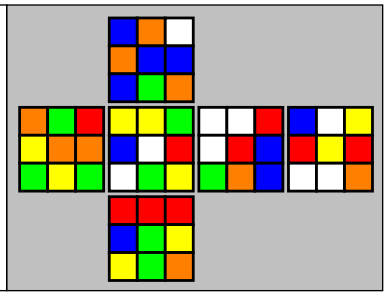
D	Fw'	L	R2	Dw2
Fw	L	D'	F2	Fw
Uw2	Rw'	Dw2	Lw	Dw'
L2	Lw'	R2	Rw'	B'
U'	Dw	Fw2	R2	U'
Lw	L	R2	F'	D'
Uw2	Rw2	R'	B'	Fw2
D	Lw'	D	F	Uw
Fw2	U2	F	Dw	L2
B2	F'	Fw'	Uw	B'
R	U	Dw	Uw2	Rw'
Fw'	Uw'	Dw2	Bw2	L'
3Fw'				



3.

Bw2	Fw	B'	D	R
B'	Bw	Uw2	Lw'	R'
F	Bw'	Fw	B'	D
U	L	D2	Rw	R'
D	L'	Lw2	Dw	Lw2
D	Fw'	U2	R2	D2
Bw2	Lw'	Bw2	U	D
Dw	F	Fw	Uw'	Dw'
U	Rw2	R'	D	Uw2
Dw	B2	F'	R2	Lw2
D2	U2	Rw'	B	L2
Rw	Fw'	F2	Lw'	Bw
3Uw2				



1.	D2 U2 F2 D2 B R2 D2 B R' D' B2 L2 F2 L B U2 R B2 U Rw' Uw	
2.	L B2 F2 U2 R' U2 L' R' B2 U2 R2 F' D L2 U2 B F2 R2 D Fw Uw2	
3.	D F2 D' F2 U' B2 F2 U' L2 R2 F D' R U L2 B U' L2 F L U2 Fw Uw2	
4.	L2 B L2 B' R2 D2 B F2 U2 R2 F2 L' F2 D2 B' R' D L U B2 L' Fw'	
5.	D2 F' R2 B L2 F D2 F2 D2 F' D2 R F D' B2 R U' L U2 L' D Fw' Uw2	

6.	D B2 U' R2 F2 L2 R2 U' L2 U B' U' F2 U2 L2 F L B2 F R2 U' Rw'