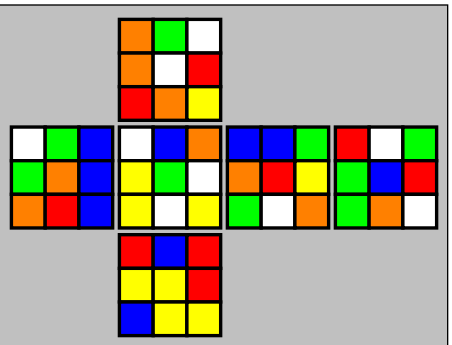
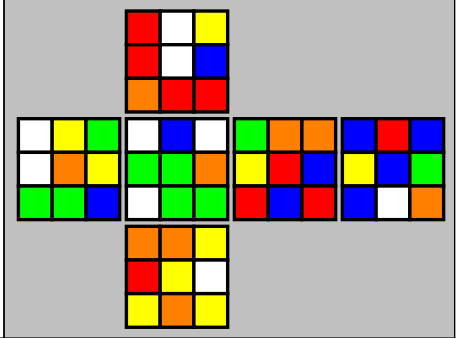
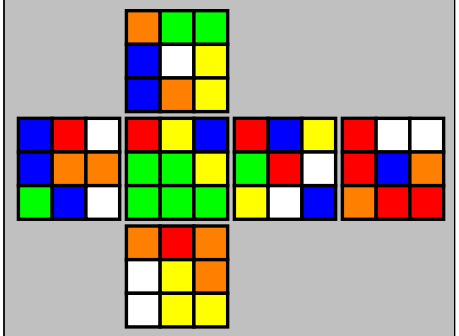
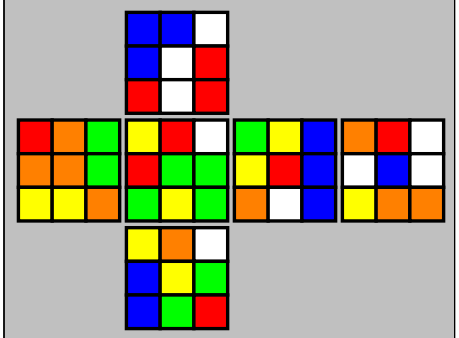
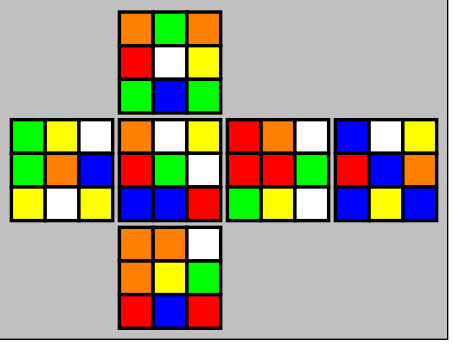
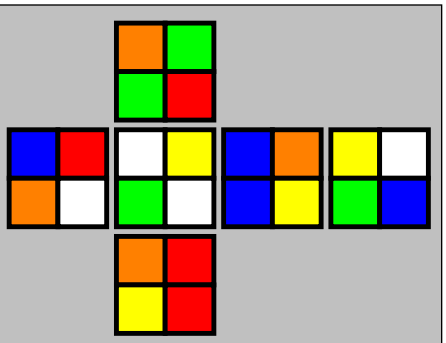
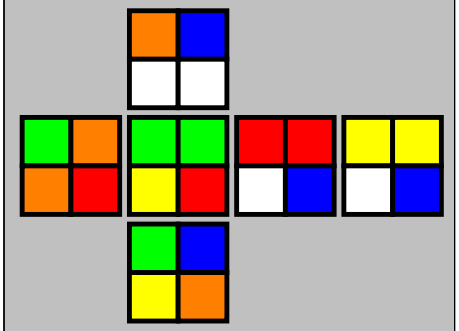
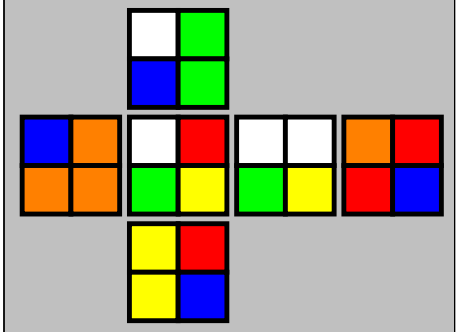
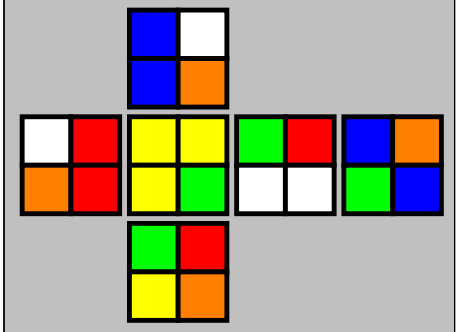
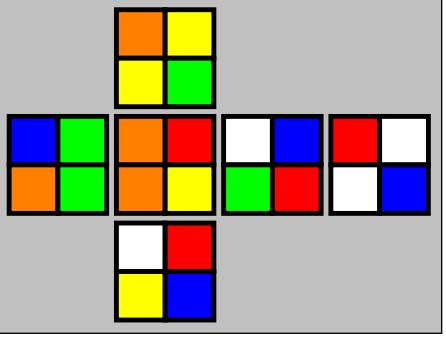
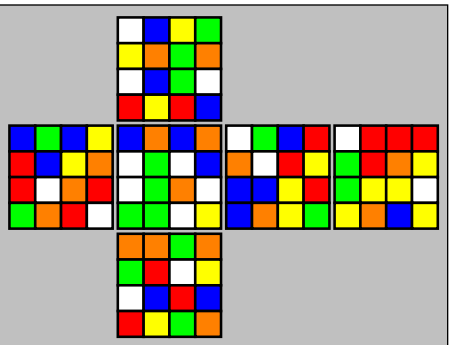
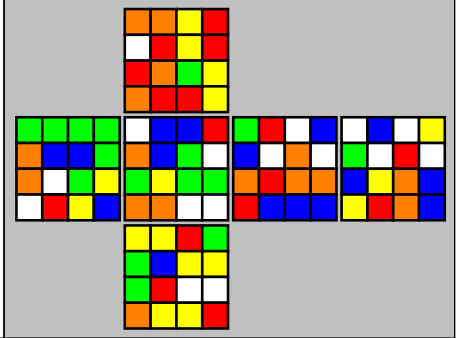
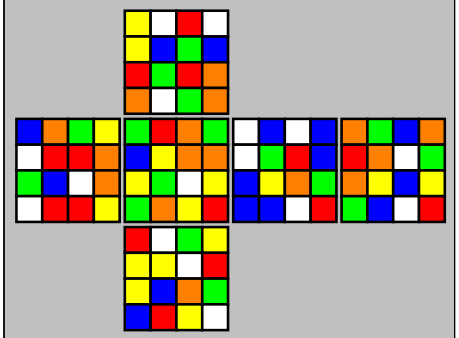
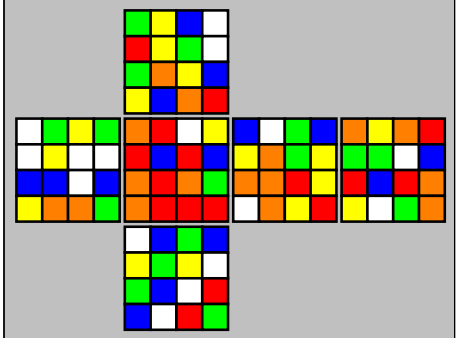
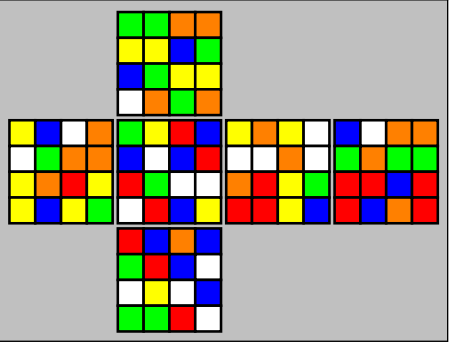
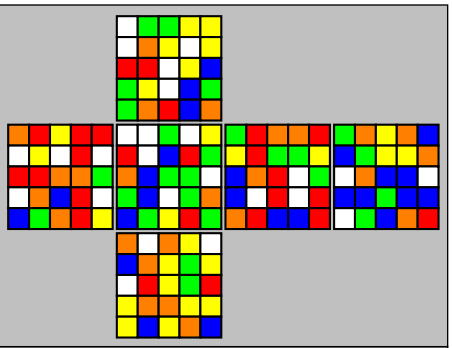
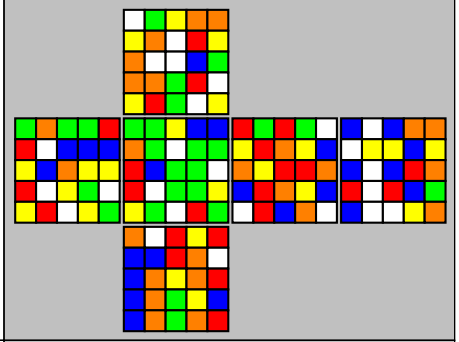
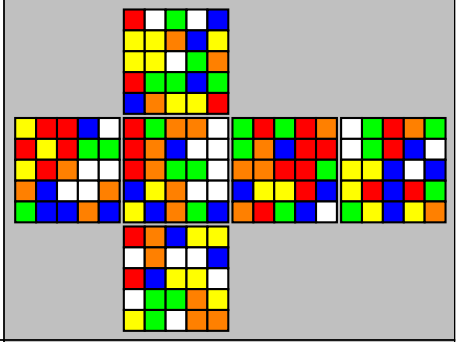
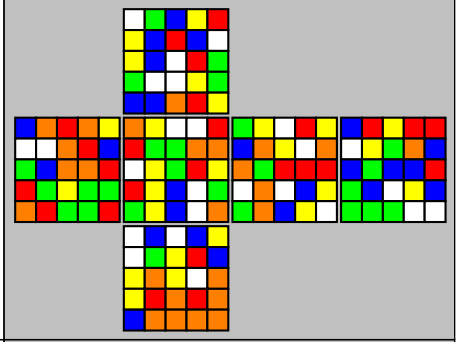
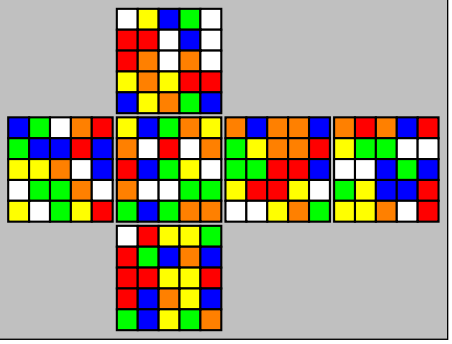
1.	F R D B' U L' U' B2 L U' R U2 L' U2 L2 B2 R' U2 B2 D2 L	
2.	B U' B L2 F L2 U R' D R2 F U2 L2 D' F2 U' L2 F2 D	
3.	R U2 R' F2 R2 B2 L' D2 F' D L F' R2 D L F' L' U L'	
4.	U2 R2 F' D2 L2 B' F2 R2 B' D R' B' R' F R2 B2 D R' F L'	
5.	R' U2 L' F2 D2 U2 L F2 L2 D R2 B' U2 L' F' U F2 D R B'	

Scrambles for 2019-06-10

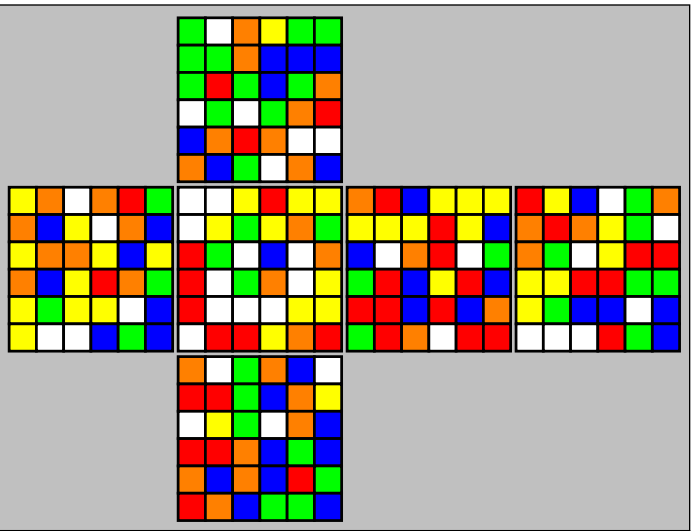
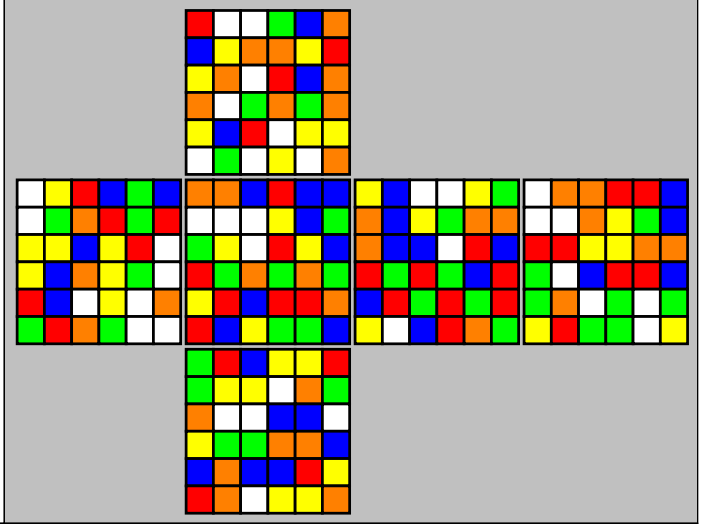
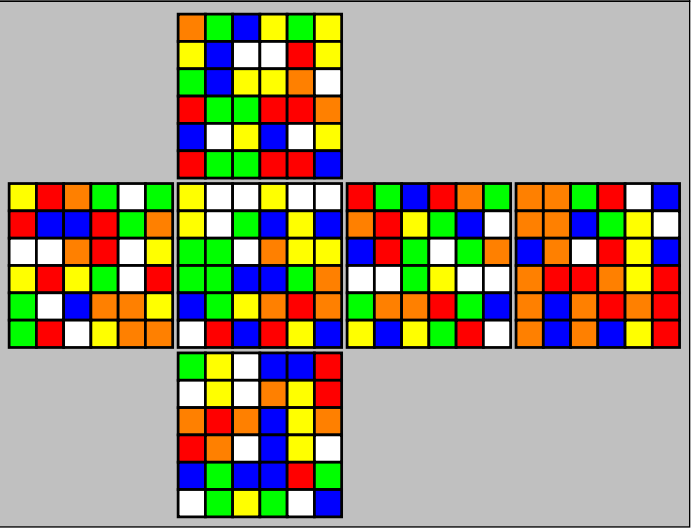
1.	R' F U R' U' R U R' U' F R	
2.	R F' U2 R2 U2 F R U R U' R	
3.	U2 R U' R' U R' F' U R2 U2 F'	
4.	U' R F' U2 R2 U' F R U' R U'	
5.	R F' U2 F U' F U' F R U R'	

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

555
Scrambles for 2019-06-10

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

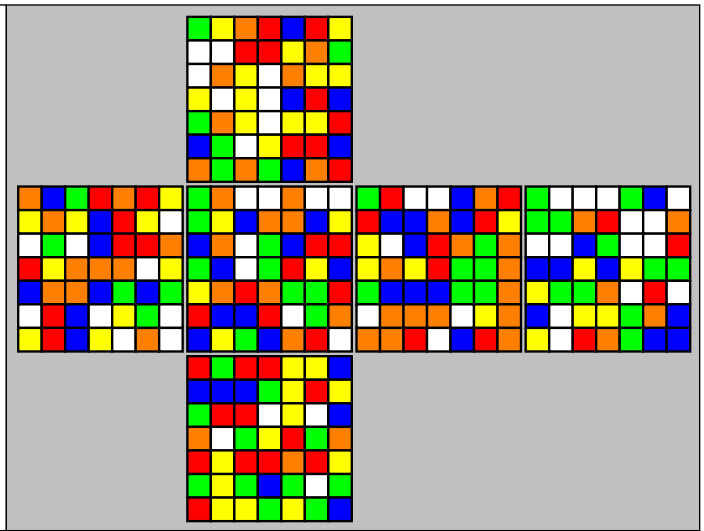
Scrambles for 2019-06-10

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

Scrambles for 2019-06-10

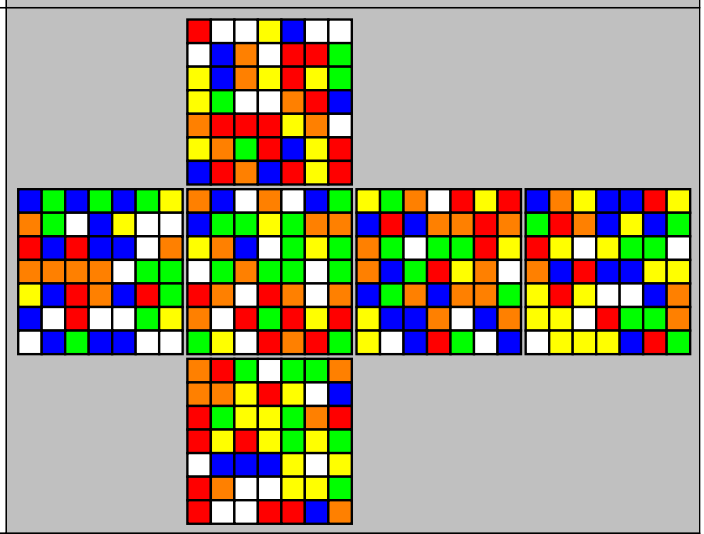
1.

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



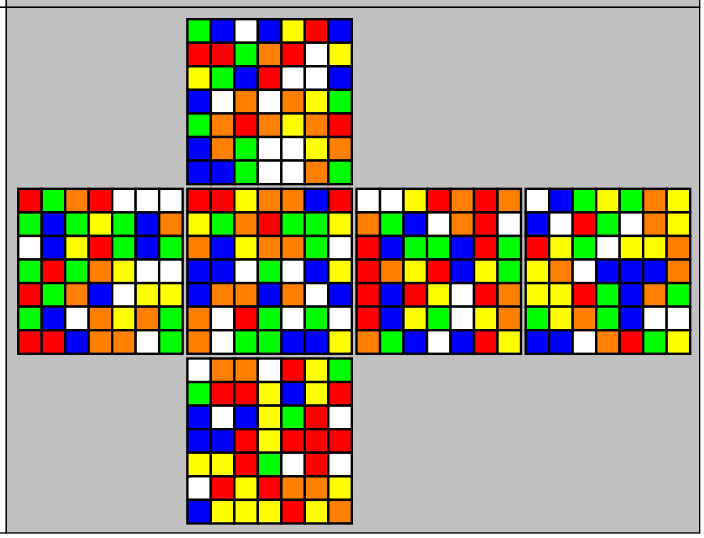
2.

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

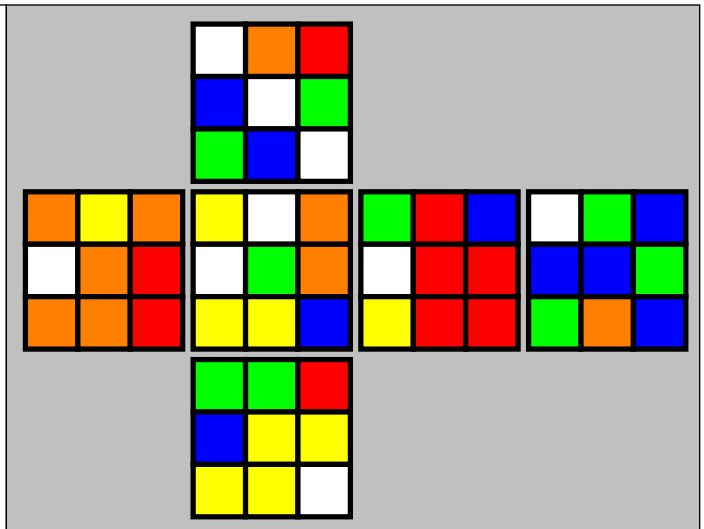
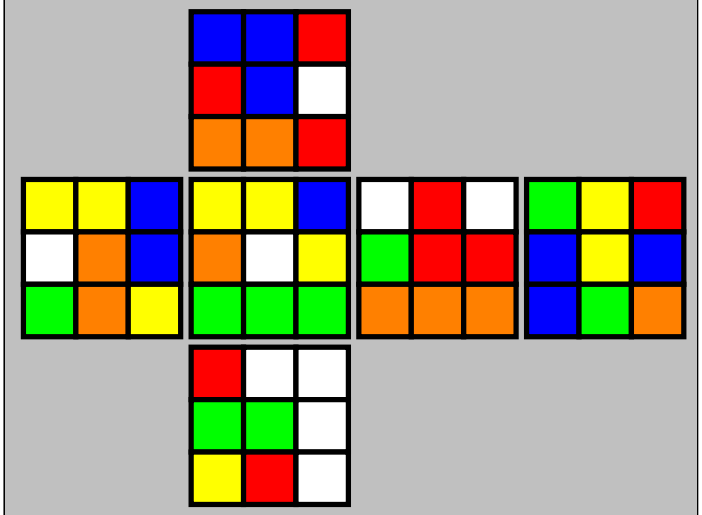
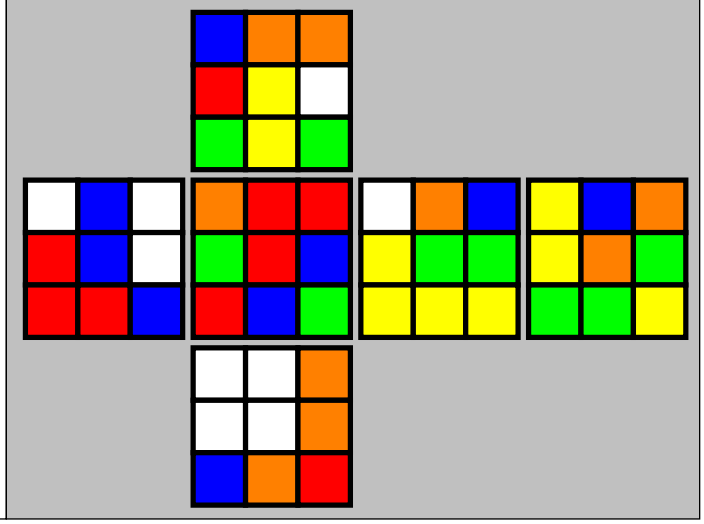


3.

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

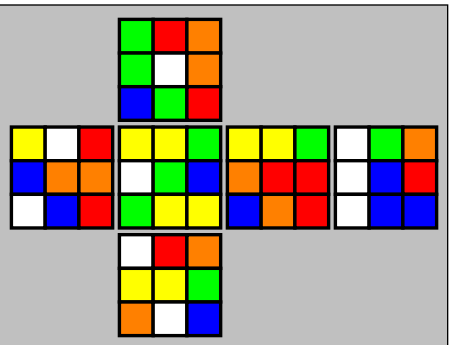
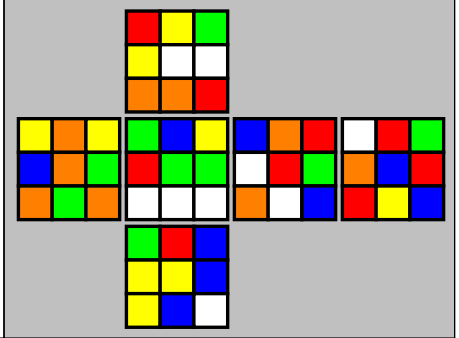
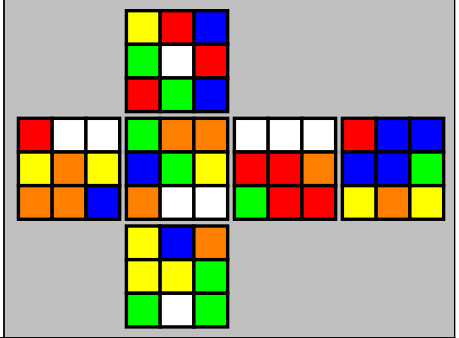
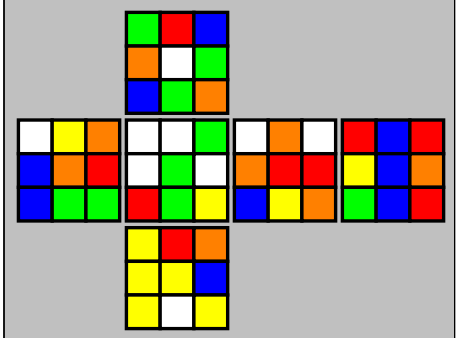
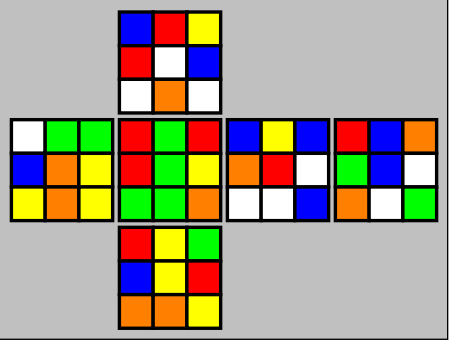


333bf
Scrambles for 2019-06-10

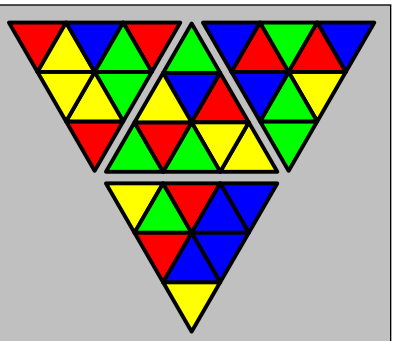
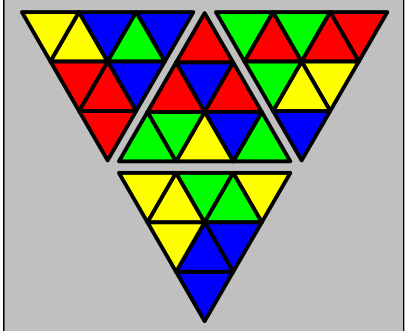
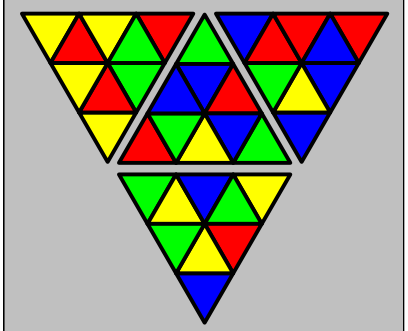
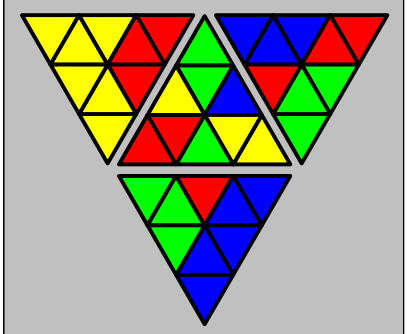
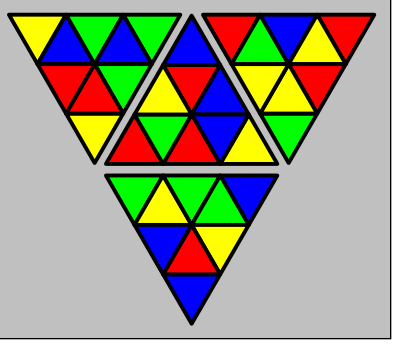
1.	B2 U' B2 U' R2 D' L2 D2 F2 L B D2 L' B' R' F2 L D2 F'	
2.	R U2 L' B2 U2 L D2 R2 D2 F' L2 U L' U' L B' L B2 F' U' Rw'	
3.	L2 D2 U2 F2 L R D2 L B2 D R' D2 F R D U' B' U' R2 U2 Rw2 Uw	

2019-06-10

333oh
Scrambles for 2019-06-10

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

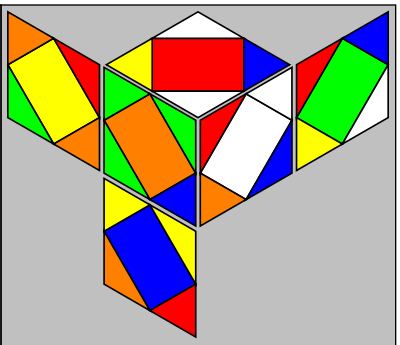
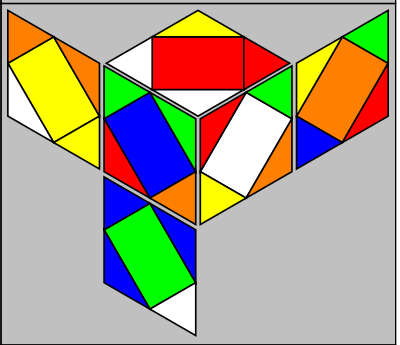
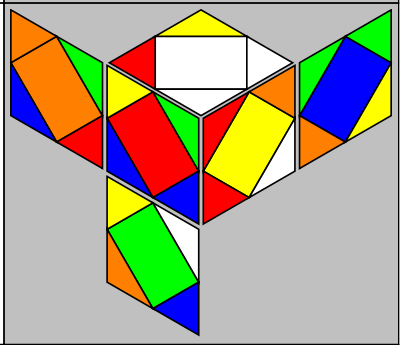
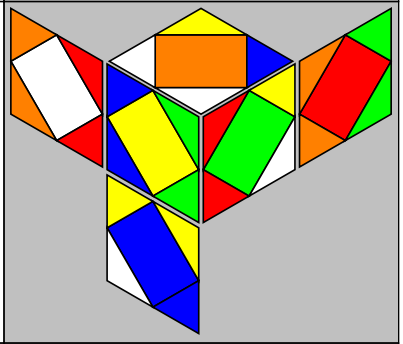
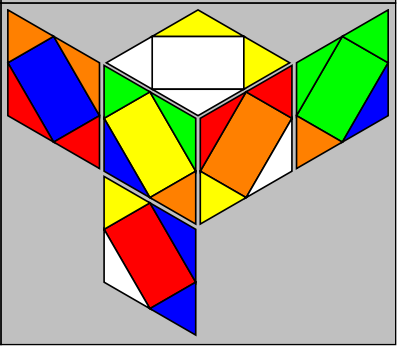
pyram
Scrambles for 2019-06-10

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

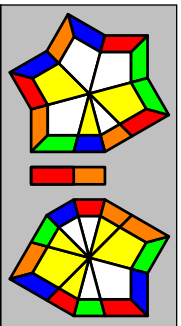
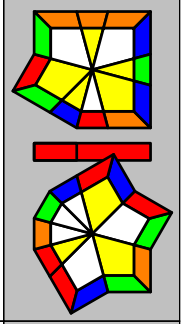
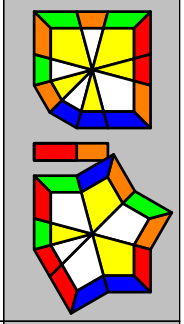
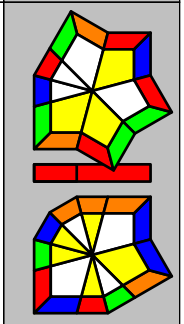
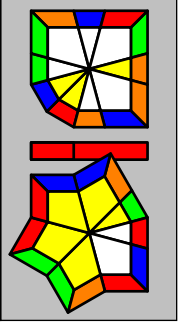
2019-06-10

skewb

Scrambles for 2019-06-10

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

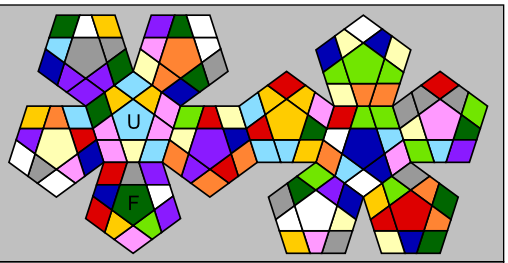
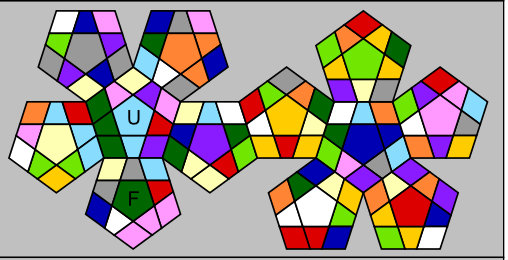
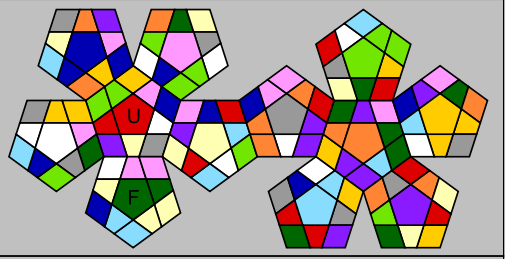
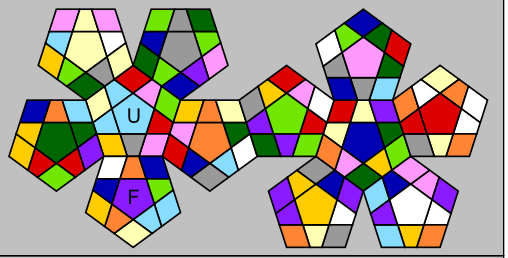
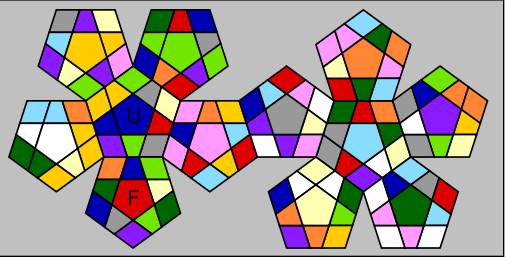
sq1
Scrambles for 2019-06-10

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

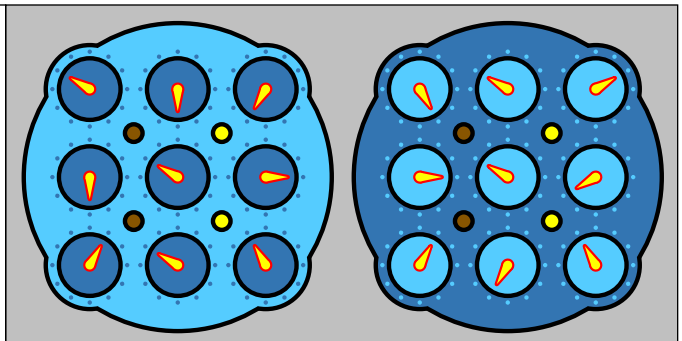
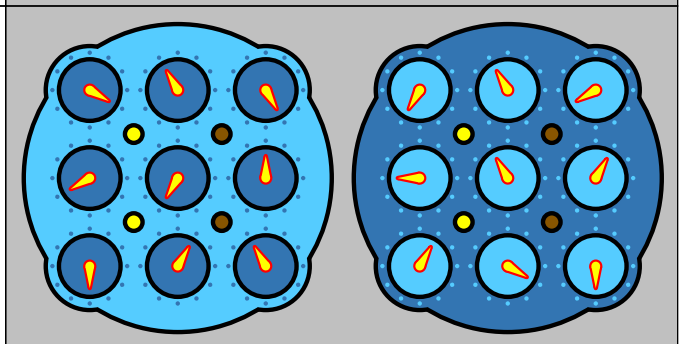
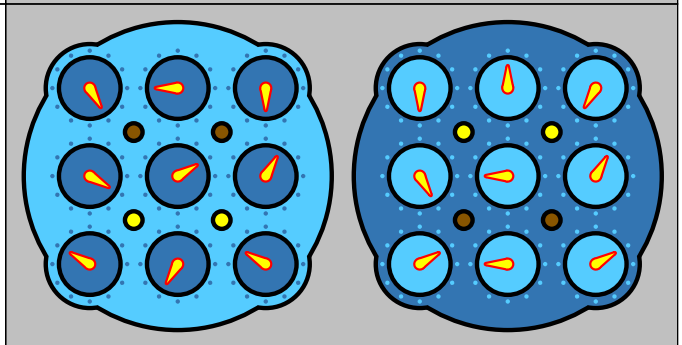
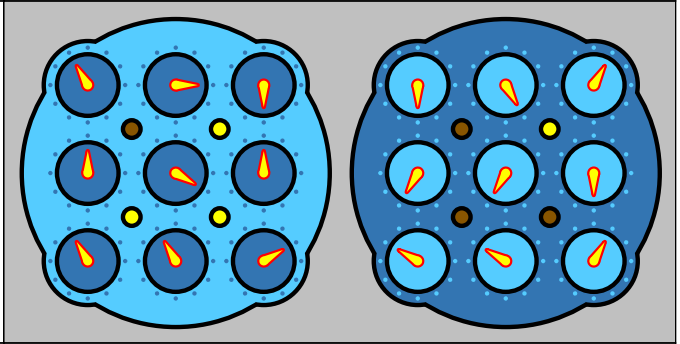
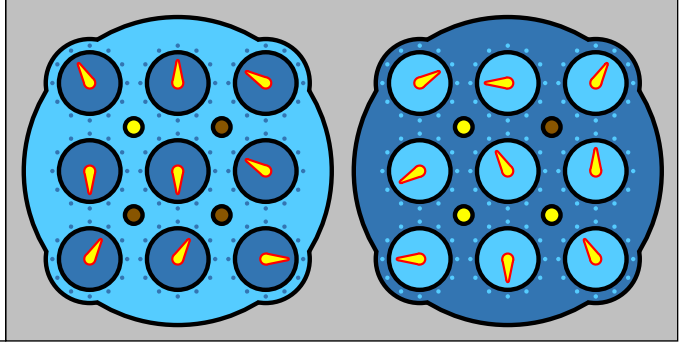
2019-06-10

minx

Scrambles for 2019-06-10

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 2019-06-10

1.	UR4+ DR1+ DL4- UL0+ U1- R2+ D3+ L6+ ALL1- y2 U0+ R4+ D4+ L5- ALL5- UR DR	
2.	UR5+ DR2+ DL5- UL2+ U0+ R5- D3+ L1+ ALL4- y2 U6+ R1- D4- L5- ALL1- DL UL	
3.	UR3+ DR6+ DL2+ UL2- U1- R5- D1+ L4- ALL3- y2 U5- R2- D5+ L1+ ALL3+ DR DL	
4.	UR5- DR0+ DL4- UL1- U3+ R5+ D6+ L6+ ALL3- y2 U5+ R4+ D1+ L4+ ALL2+ UR DR DL	
5.	UR1- DR0+ DL3+ UL5+ U1+ R4+ D1- L3+ ALL3- y2 U5+ R0+ D6+ L4- ALL1- 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]

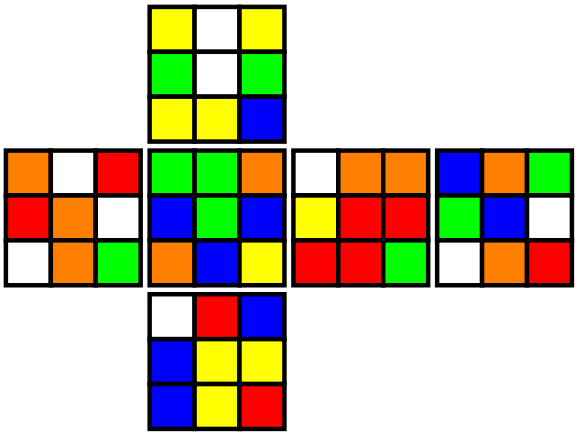
Scrambles for 2019-06-10
333fm

Competitor: _____

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

DO NOT FILL IF YOU ARE THE COMPETITOR.

Graded by: _____ Result: ____



Scramble: R' U' F D2 L2 D L2 U2 L2 U' R2 B2 L B2 D2 L2 B' U2 B D' B D' 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]

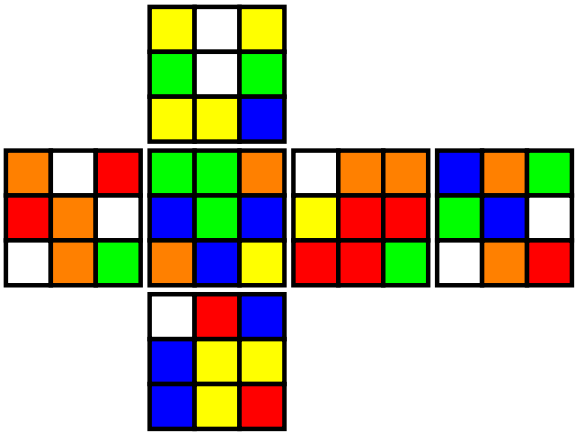
Scrambles for 2019-06-10
333fm

Competitor: _____

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

DO NOT FILL IF YOU ARE THE COMPETITOR.

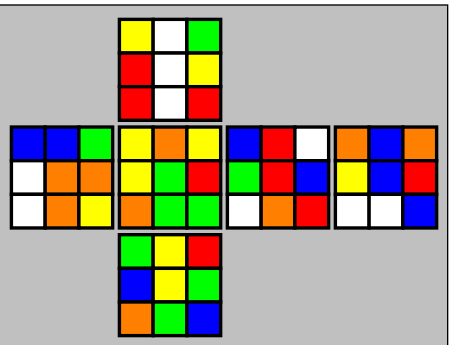
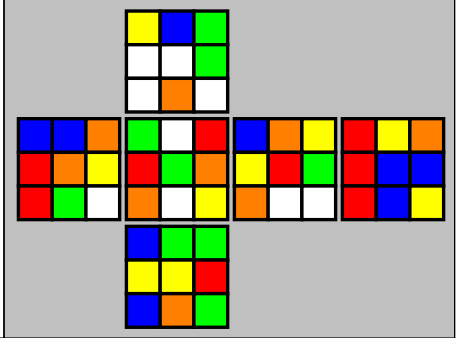
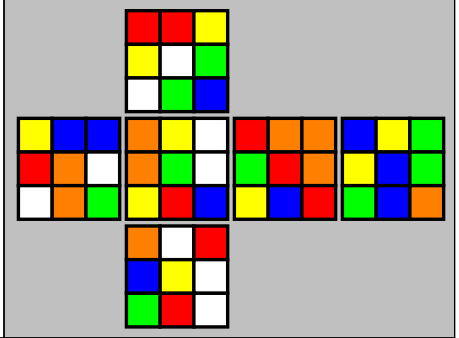
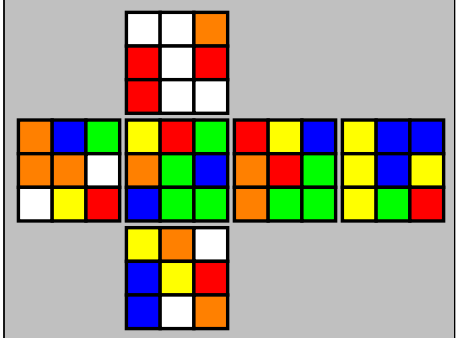
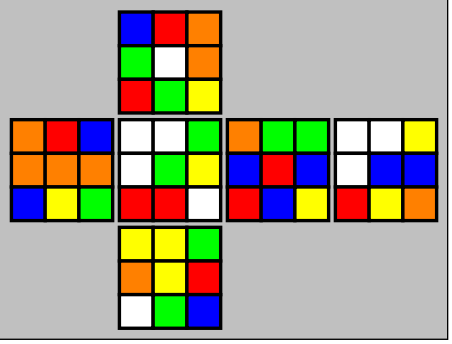
Graded by: _____ Result: ____



Scramble: R' U' F D2 L2 D L2 U2 L2 U' R2 B2 L B2 D2 L2 B' U2 B D' B D' R' U' F

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

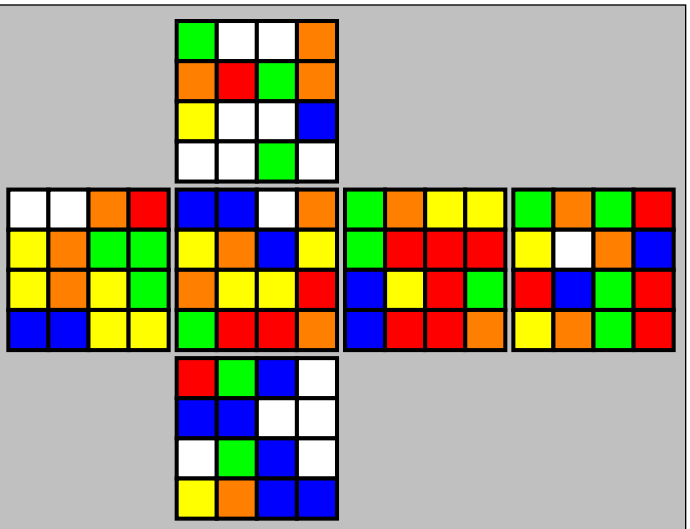
333ft
Scrambles for 2019-06-10

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

444bf
Scrambles for 2019-06-10

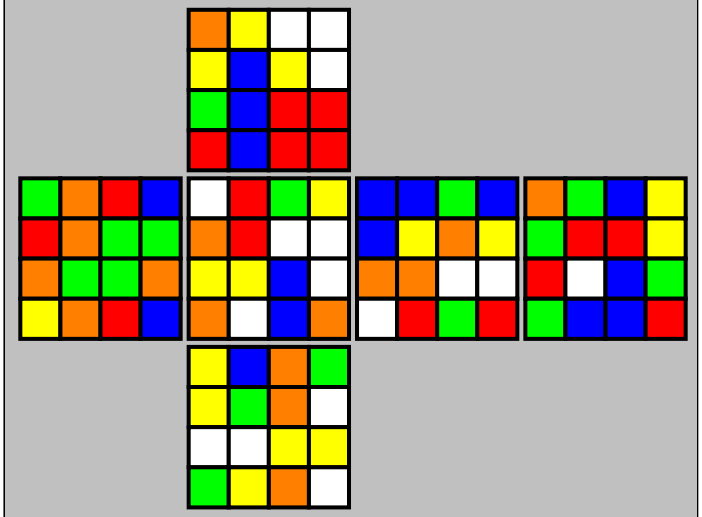
1.

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



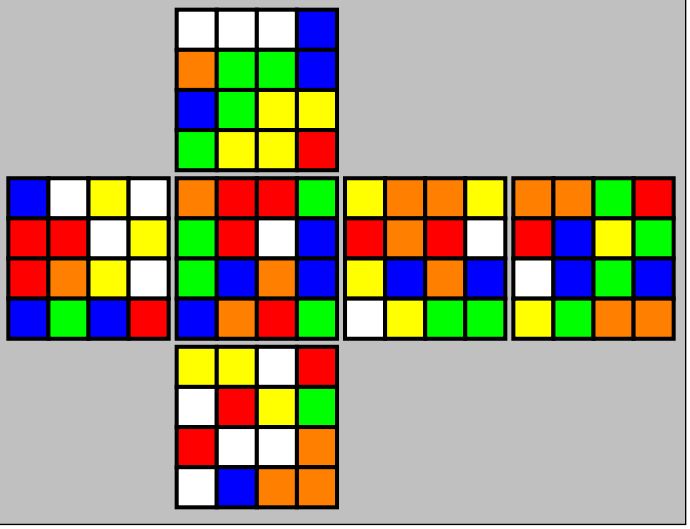
2.

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



3.

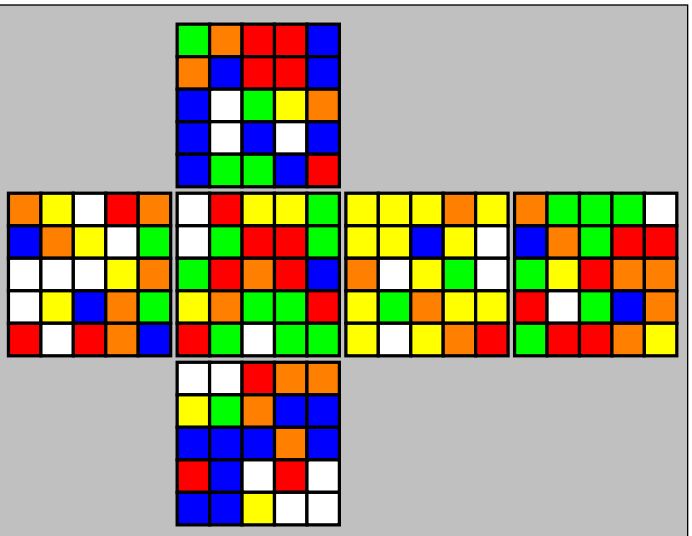
F' R D F B
D' L U R' L
F' L2 B' L2 F
D2 F D2 L2 Rw2
D' U2 L2 B Uw2
B2 Rw2 B' Rw2 D'
Rw2 U Rw' B D
R2 U' B2 Uw Fw
Rw' Uw' Rw2 R' x
y'



555bf
Scrambles for 2019-06-10

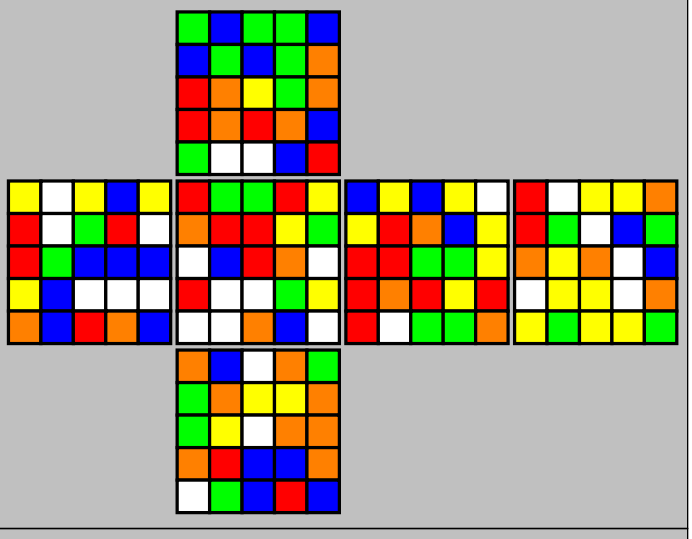
1.

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



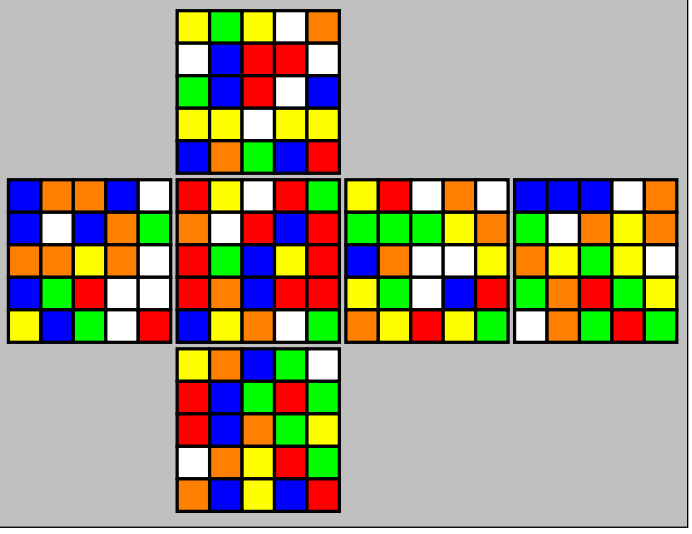
2.

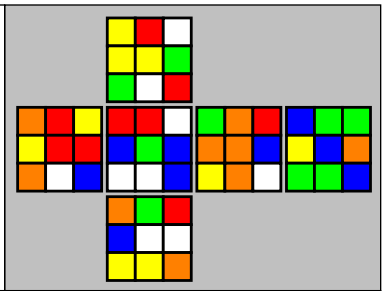
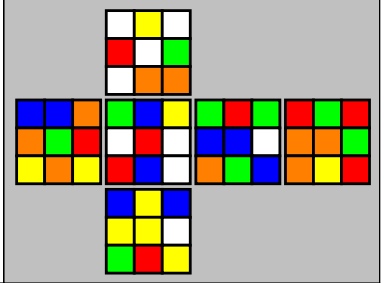
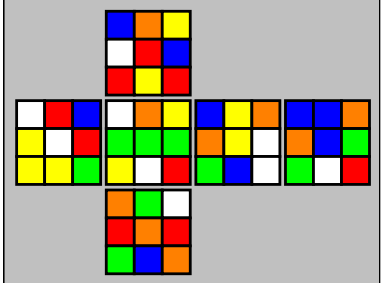
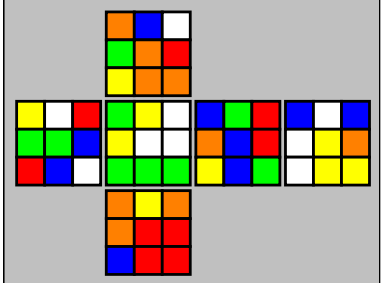
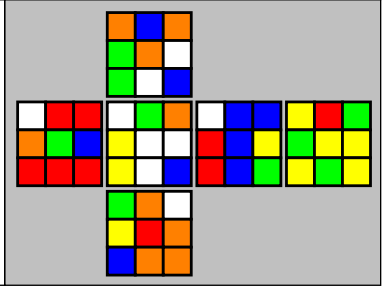
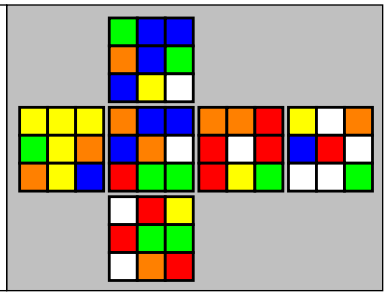
L	Rw'	Uw2	Bw'	Rw2
Lw2	Bw'	Uw2	Rw	Dw
Fw'	L	Lw'	Rw'	B
D	Fw	F	L'	D2
Dw2	U'	Rw2	D	U
B'	Uw	Dw	Fw2	Lw2
Fw	Uw	F	Dw	Rw2
B	Dw2	Bw'	Fw	F
D'	R'	Dw	Fw	F'
Lw	Uw	F2	U	F'
B	Lw'	Fw	Dw'	Bw'
Fw	F'	D'	U	Dw
3Rw2	3Uw			



3.

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



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

6.	R' U2 F2 L B2 R2 D2 U2 R F2 U R2 F' U B D' F' L' D2 U Rw' Uw'