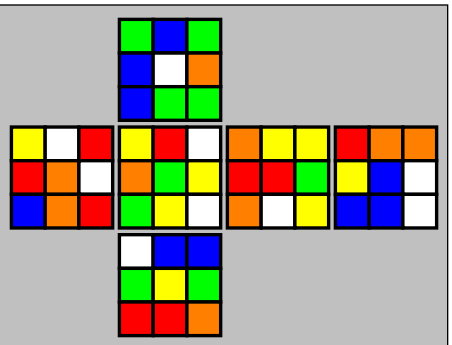
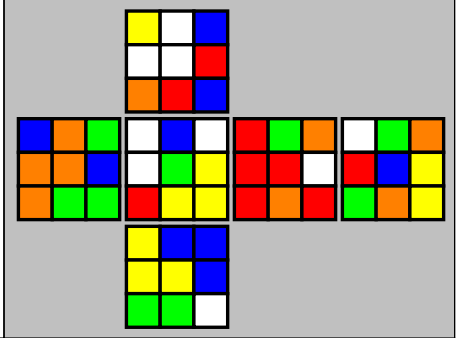
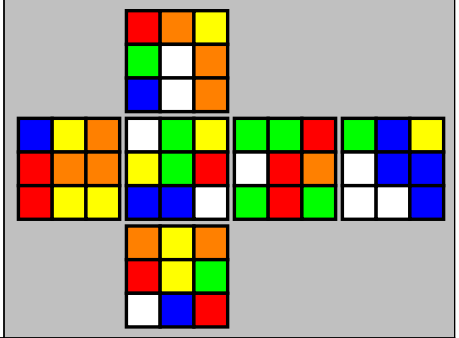
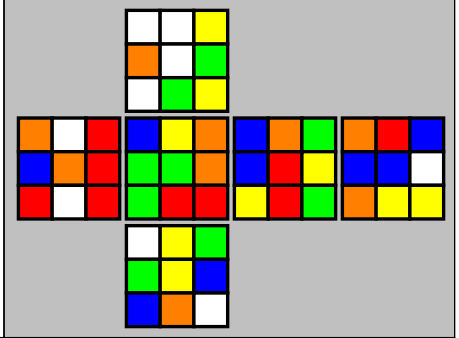
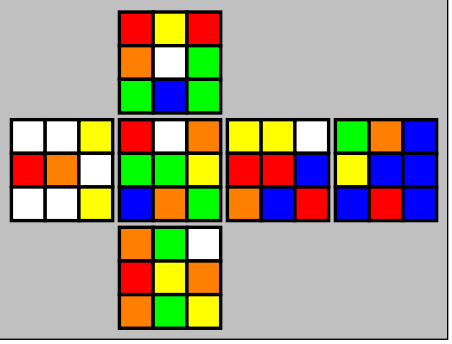
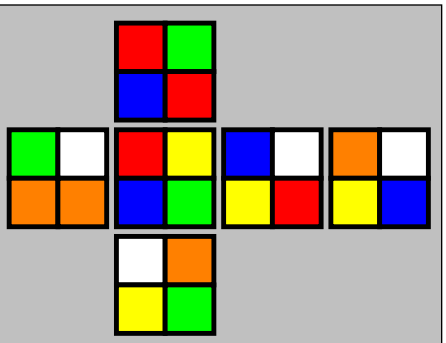
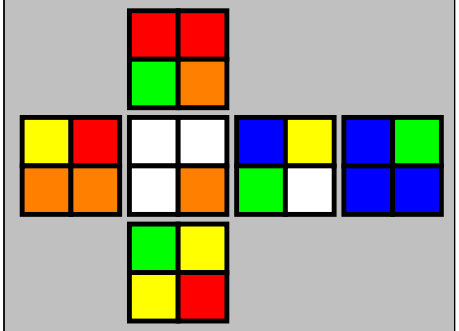
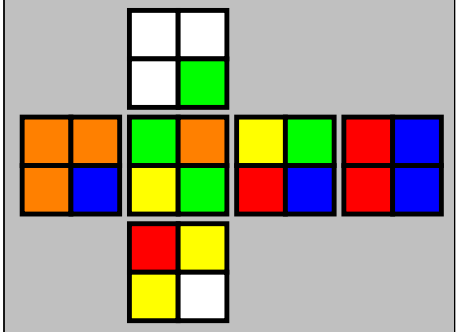
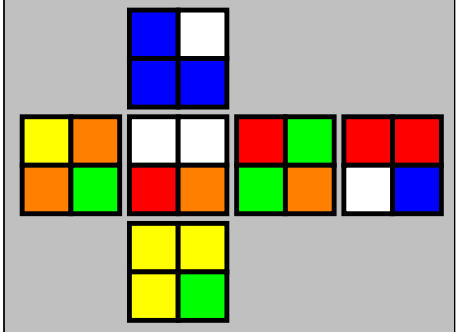
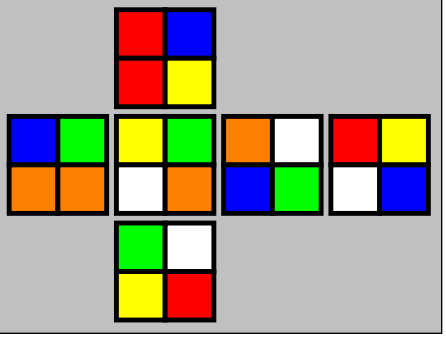
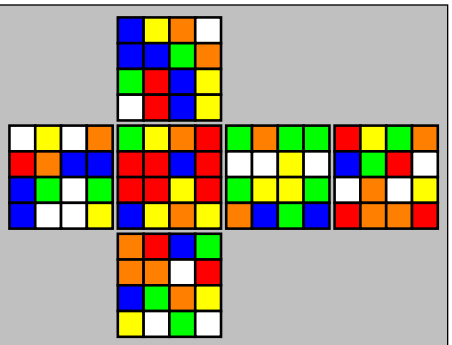
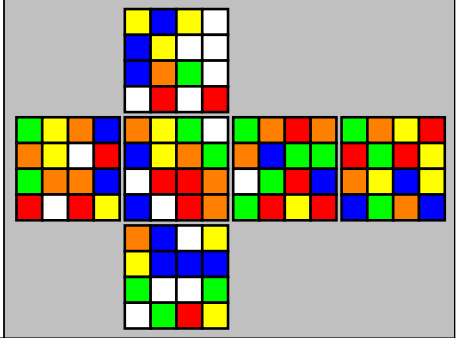
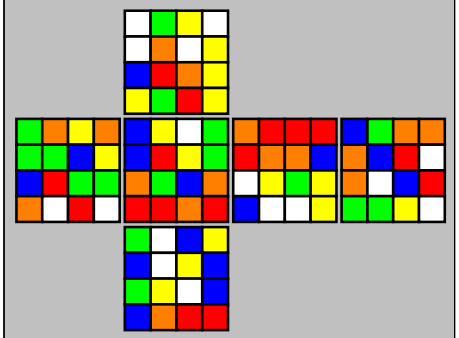
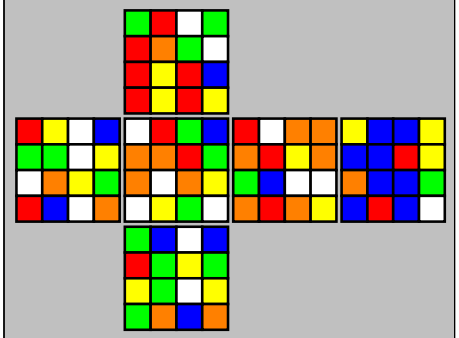
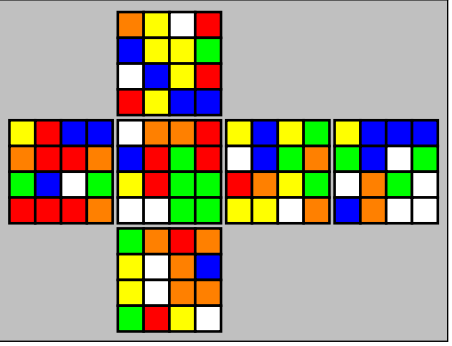
333
Scrambles for 2019-05-29

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

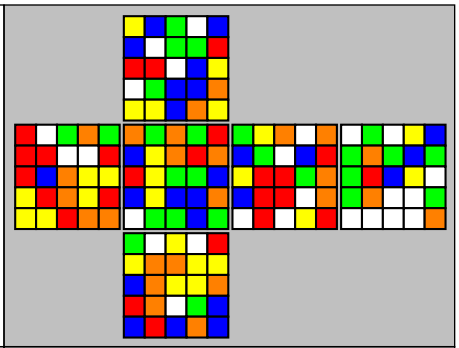
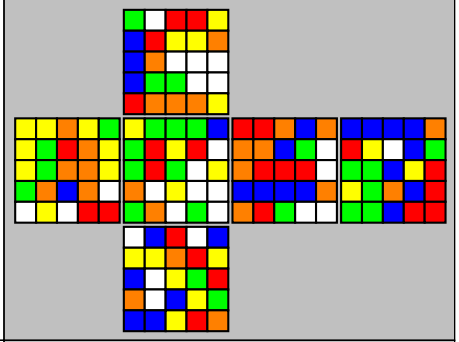
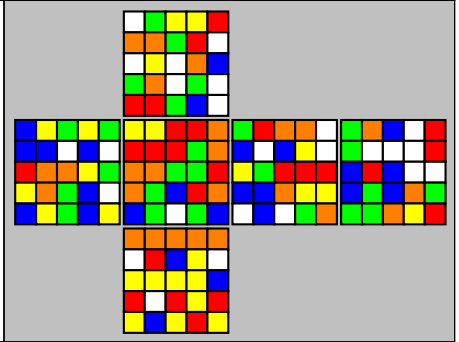
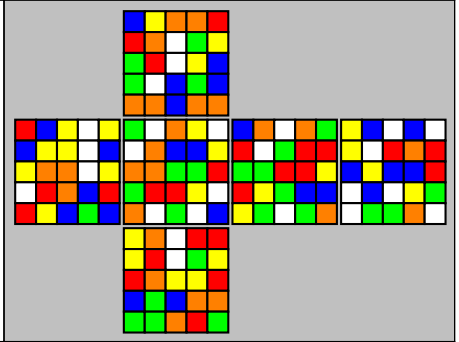
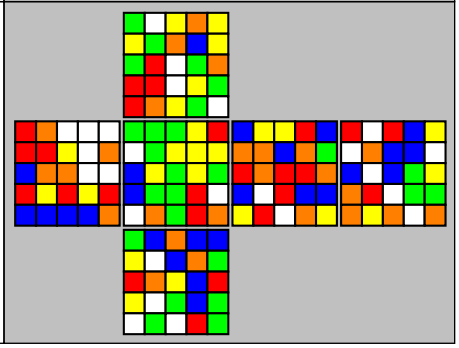
Scrambles for 2019-05-29

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

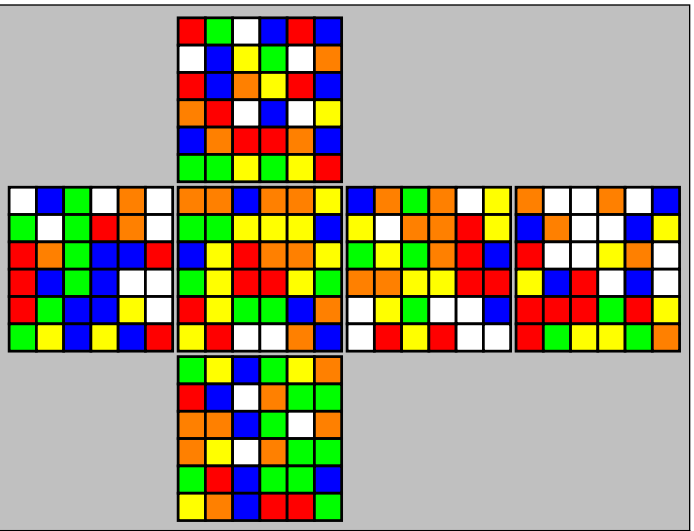
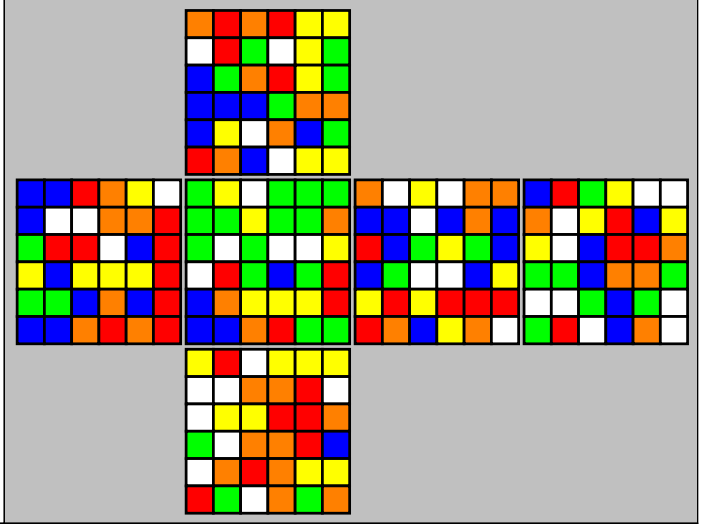
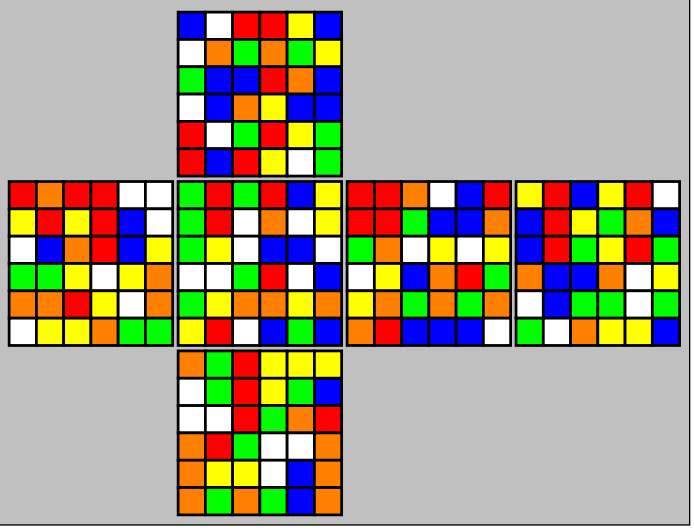
Scrambles for 2019-05-29

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

555
Scrambles for 2019-05-29

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

Scrambles for 2019-05-29

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

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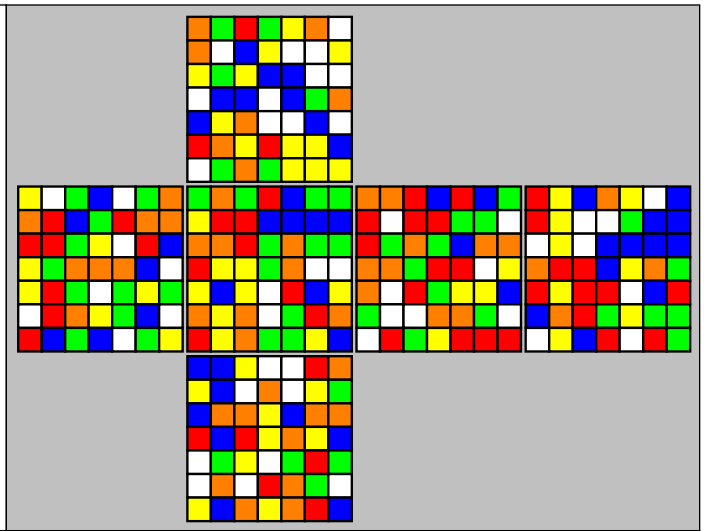
Scrambles for 2019-05-29

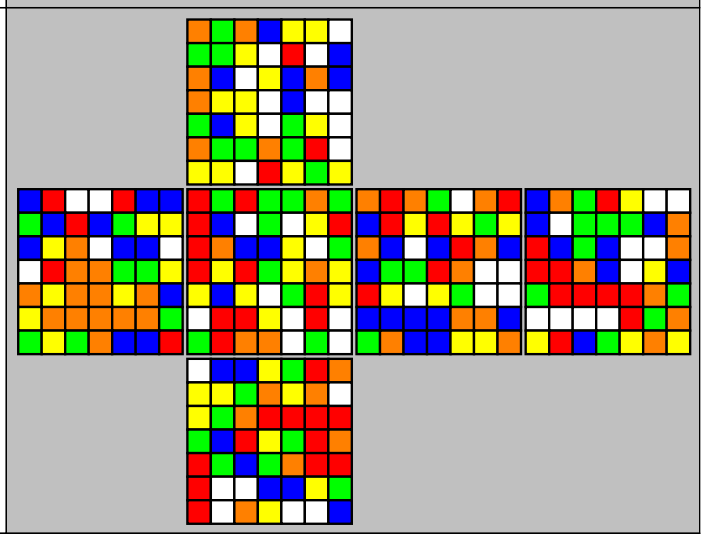
1.

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



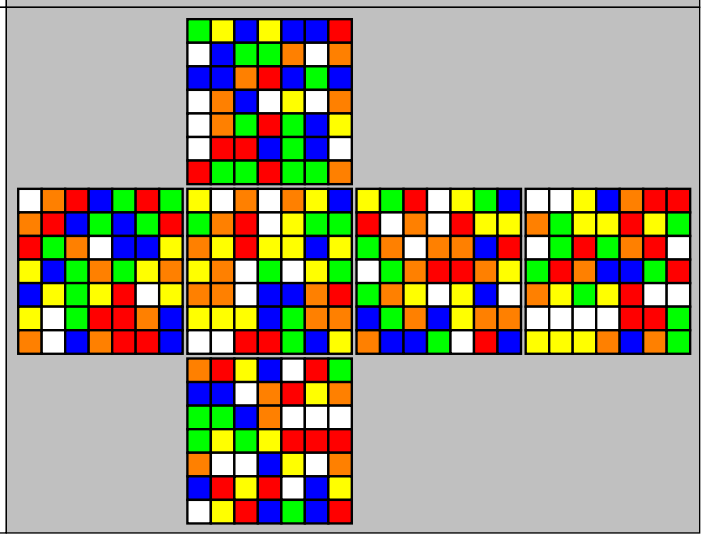
2.

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



3.

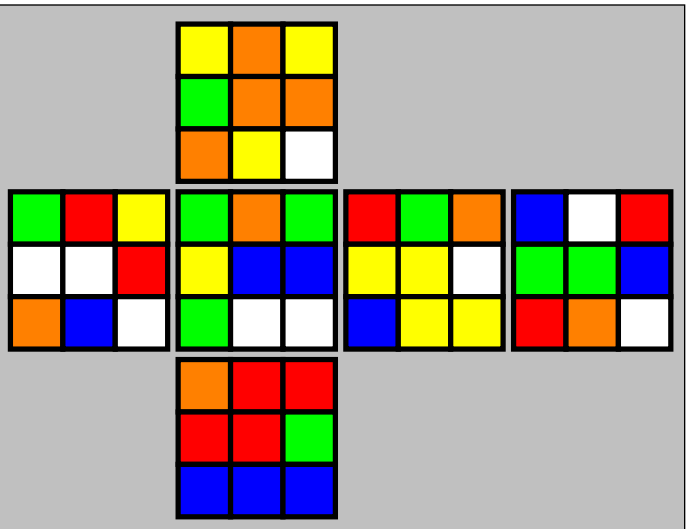
D Uw 3Rw' R Fw 3Fw2 R
Dw' 3Lw2 L2 U' 3Lw2 U' 3Lw
D' B' Dw2 L' 3Dw' 3Bw2 3Dw
3Bw' Rw' 3Lw 3Dw' Dw2 Uw B2
Bw' U2 Bw2 D Rw 3Dw2 R'
3Uw' F U' Fw' L 3Uw' 3Lw'
Dw Rw' L 3Bw2 3Lw 3Dw2 3Uw'
3Lw Dw' 3Fw' L Bw' Dw L'
Fw R Uw' 3Dw2 R2 3Lw' 3Fw'
Fw' 3Dw2 Uw2 Rw' 3Dw' R2 3Dw2
3Uw2 D F2 Dw 3Uw2 Bw2 F'
D2 R2 3Uw' B'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



333bf
Scrambles for 2019-05-29

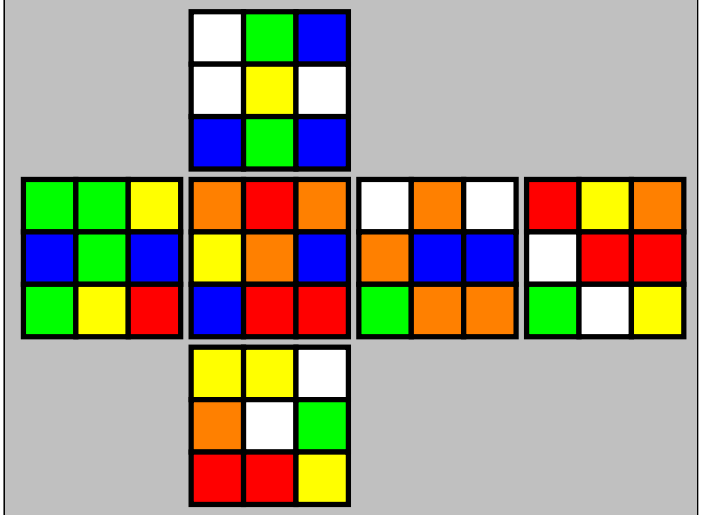
1.

L' U2 L' U2
B2 L R F2
R B2 D R2
D U2 F L2
F D R2 U
Fw Uw2



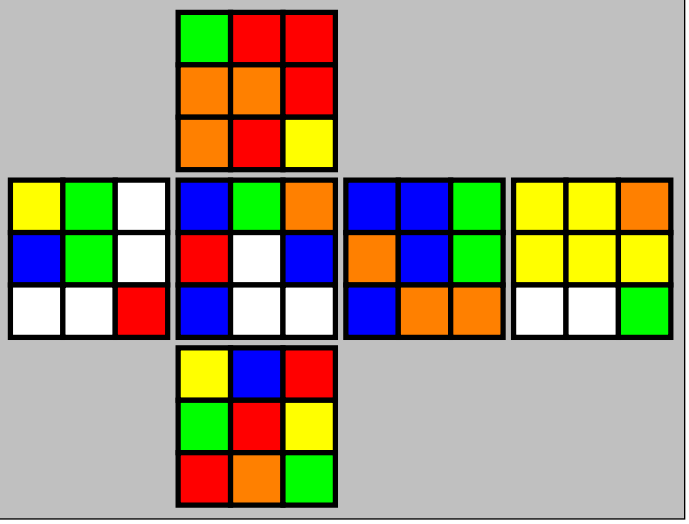
2.

R2 F2 L2 D
U' R2 D' B'
L' U B' R2
B2 L F' D'
R' F' Rw2 Uw'



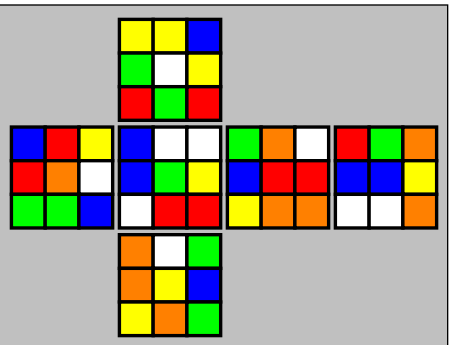
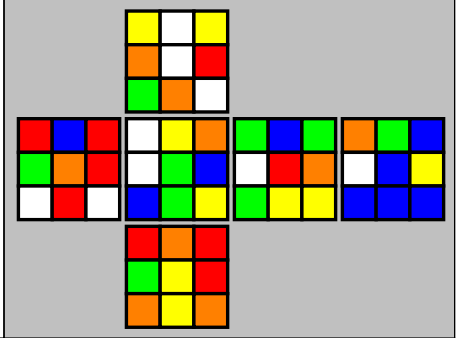
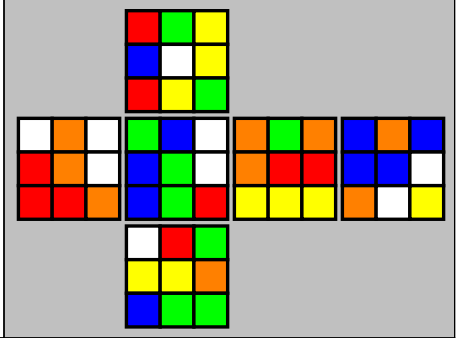
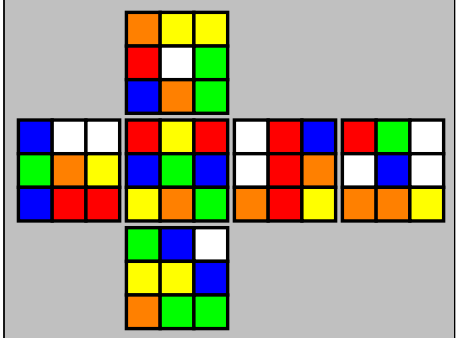
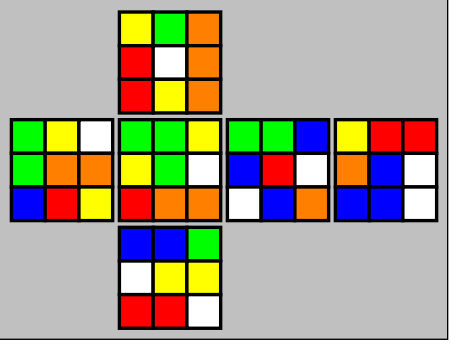
3.

U2 L2 D2 B' L2 F2
R2 D2 F L' D R'
D2 U2 L' F' L' R
B L Fw Uw



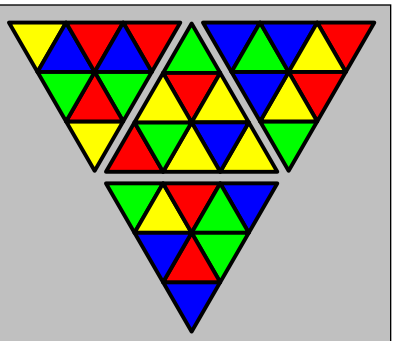
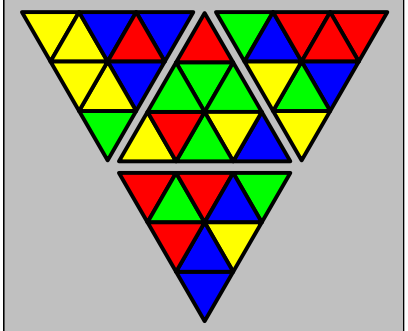
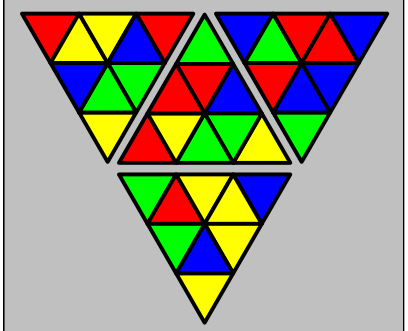
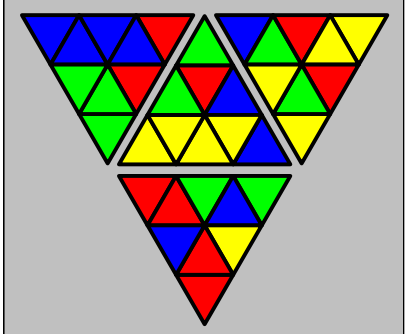
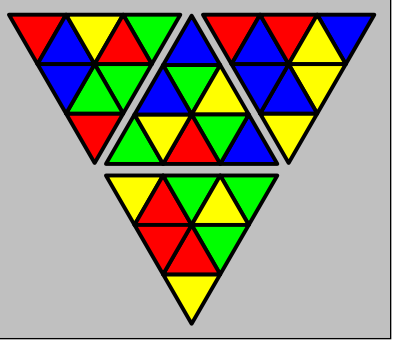
2019-05-29

333oh
Scrambles for 2019-05-29

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

2019-05-29

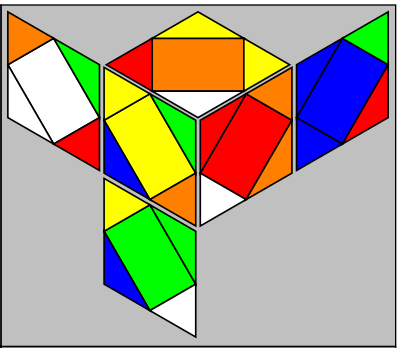
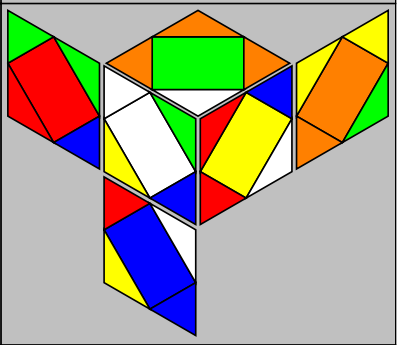
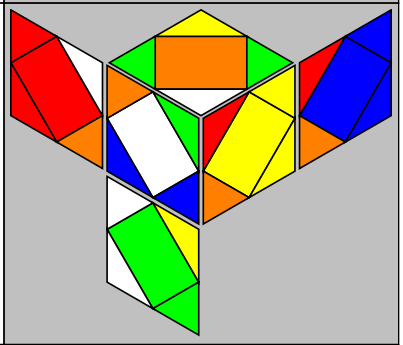
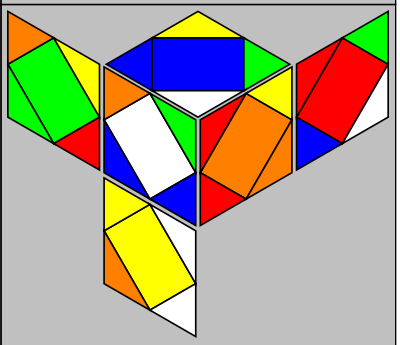
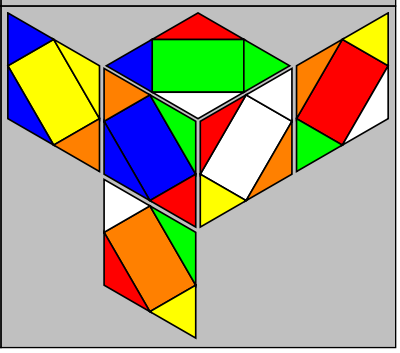
pyram
Scrambles for 2019-05-29

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

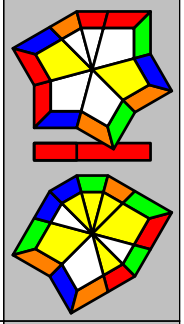
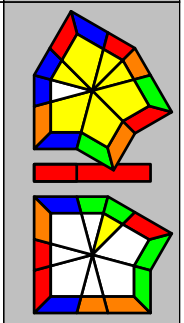
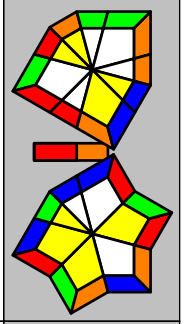
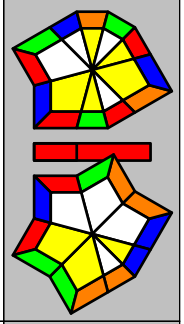
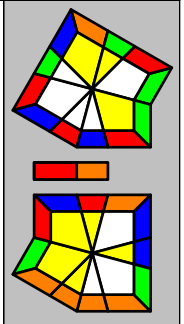
2019-05-29

skewb

Scrambles for 2019-05-29

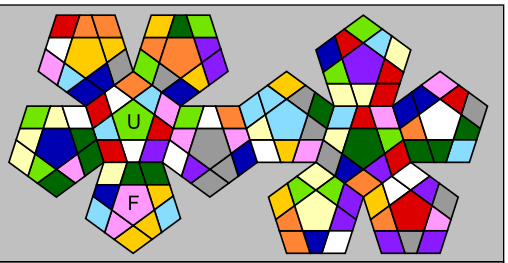
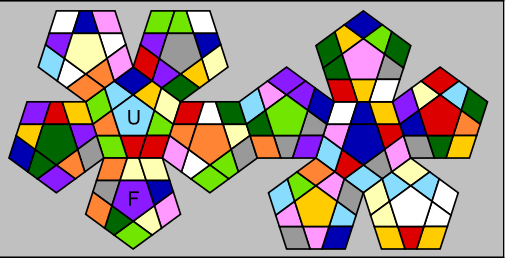
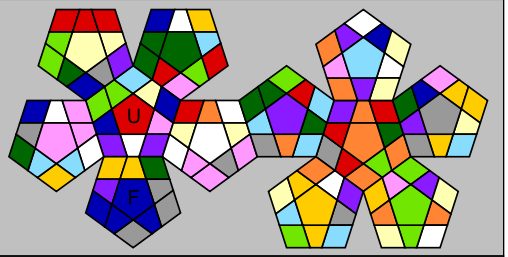
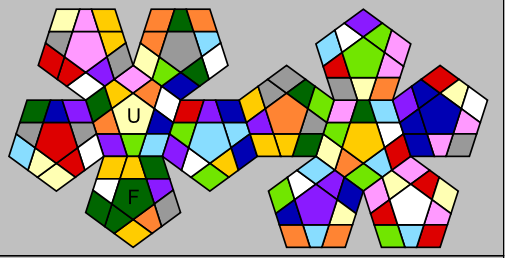
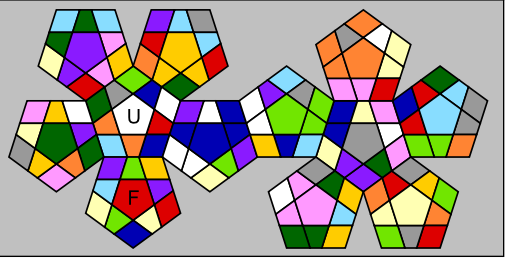
1.	B R L R' B' U B U' B' L' B'	
2.	L R L B' U' L B L R' B' U'	
3.	U B L' B U L B L' B R' L	
4.	U R B' R' L R' B' R' L B R'	
5.	L U L' R B' L' B L U' B L	

Scrambles for 2019-05-29

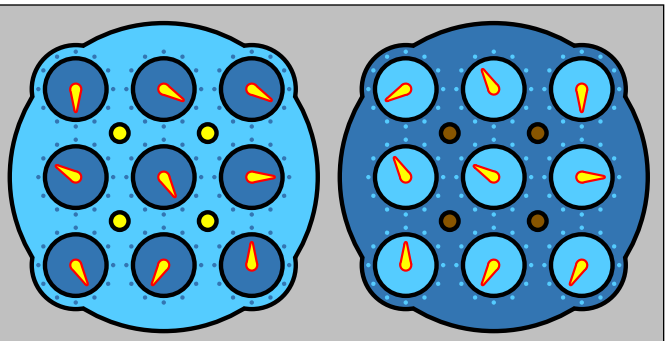
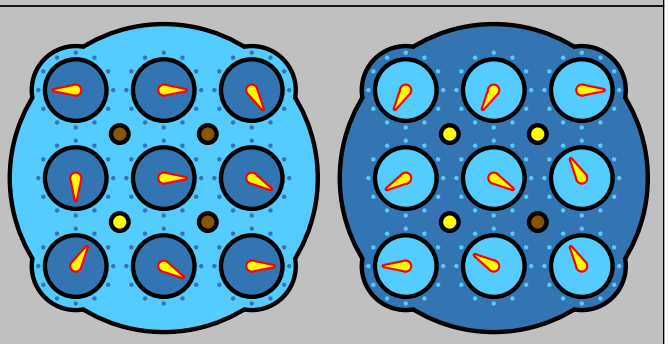
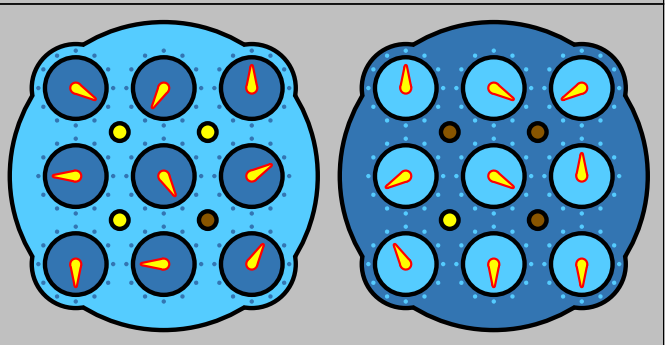
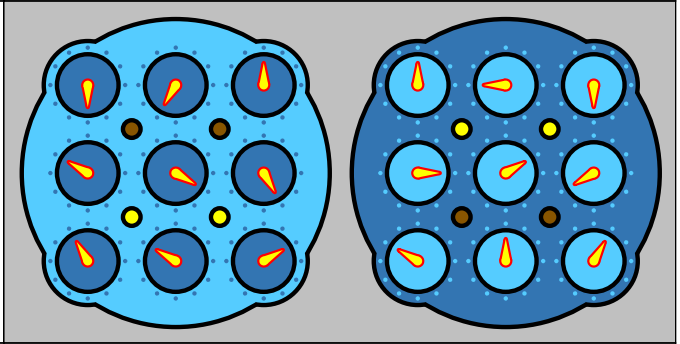
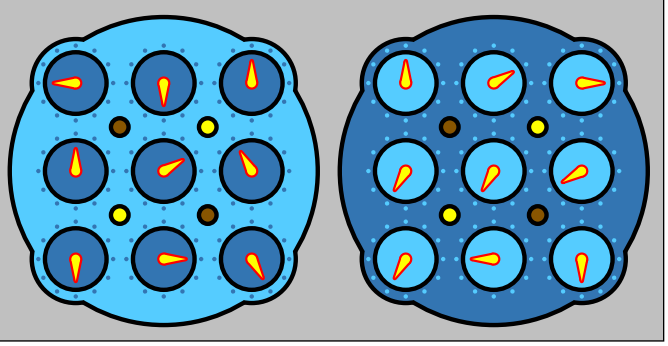
1.	(0,5) / (6,0) / (-2,4) / (-1,-1) / (0,-3) / (1,-2) / (0,-1) / (-3,-3) / (-3,0) / (-2,0) / (4,0) / (4,0) / (0,-4)	
2.	(0,5) / (4,4) / (6,3) / (-4,-4) / (-3,0) / (0,-3) / (-2,0) / (3,0) / (3,0) / (5,0) / (-4,-5) / (-1,0) / (2,-5)	
3.	(0,5) / (1,1) / (0,-3) / (3,-3) / (3,0) / (-3,0) / (-1,0) / (0,-3)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

2019-05-29

minx
Scrambles for 2019-05-29

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 2019-05-29

1.	UR3- DR2- DL1- UL5- U1- R4+ D2+ L1+ ALL3+ y2 U2- R5- D1+ L2+ ALL3- UR DR DL UL	
2.	UR0+ DR0+ DL5- UL1+ U5+ R4- D2+ L3- ALL4- y2 U1- R3- D0+ L1- ALL4- DL	
3.	UR5- DR4- DL5- UL5+ U2- R5+ D3- L4+ ALL3- y2 U4- R4- D2- L3+ ALL0+ UR DL UL	
4.	UR4- DR2- DL4+ UL1- U5- R5+ D3+ L3+ ALL1- y2 U6+ R6+ D3- L1- ALL4- DR DL	
5.	UR2- DR1+ DL4+ UL3- U3+ R1+ D0+ L2- ALL5+ y2 U1- R2+ D4- L3+ ALL2+ UR DL	

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]

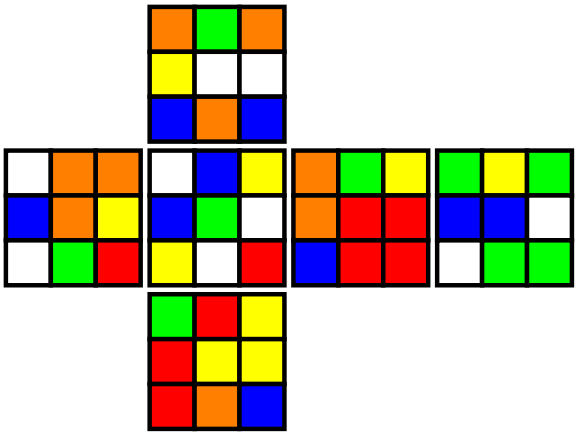
Scrambles for 2019-05-29
333fm

Competitor: _____

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

DO NOT FILL IF YOU ARE THE COMPETITOR.

Graded by: _____ Result: ____



Scramble: R' U' F R2 B' R2 U2 R2 B2 R2 B' F R' U2 B R F2 R F2 D' B2 F2 D R' U' F

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

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]

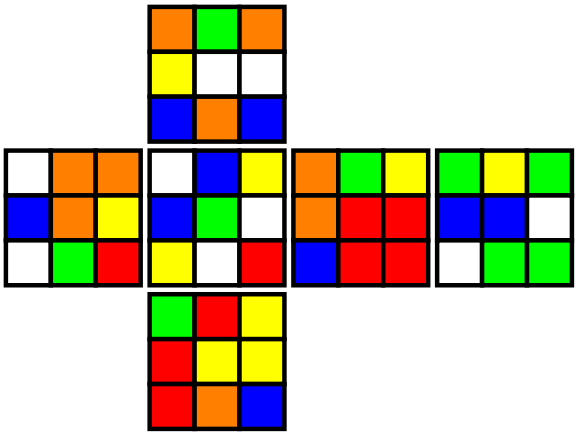
Scrambles for 2019-05-29
333fm

Competitor: _____

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

DO NOT FILL IF YOU ARE THE COMPETITOR.

Graded by: _____ Result: ____



Scramble: R' U' F R2 B' R2 U2 R2 B2 R2 B' F R' U2 B R F2 R F2 D' B2 F2 D R' U' F

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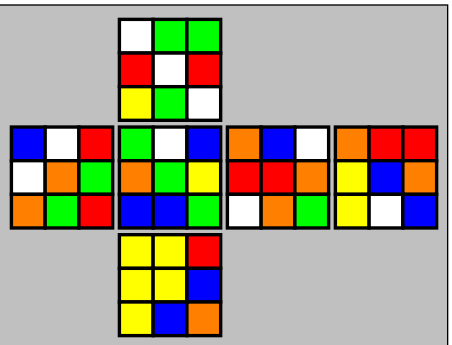
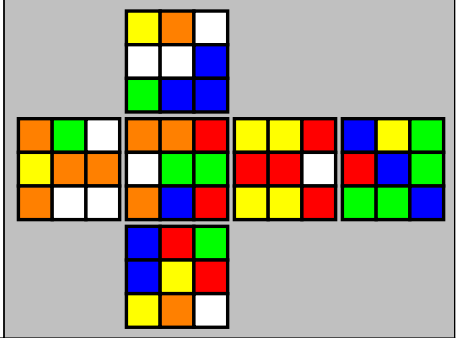
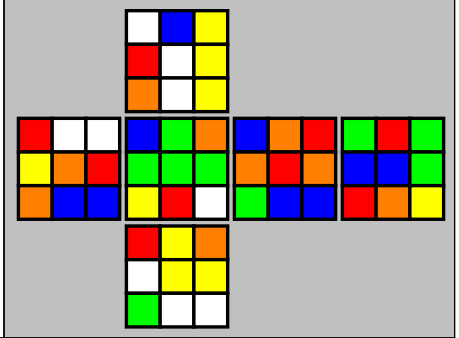
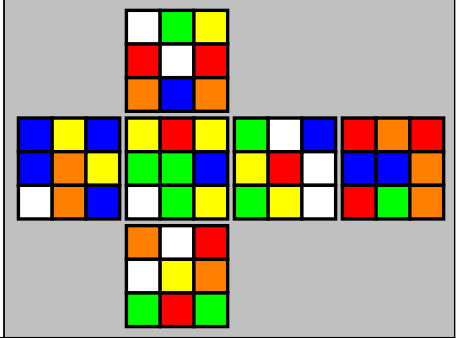
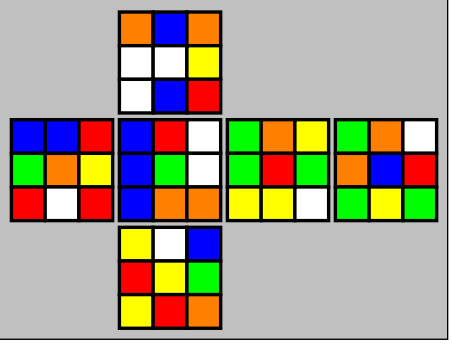
____	____	____	____	____	____	____	____	____	____

2019-05-29

333ft
Scrambles for 2019-05-29

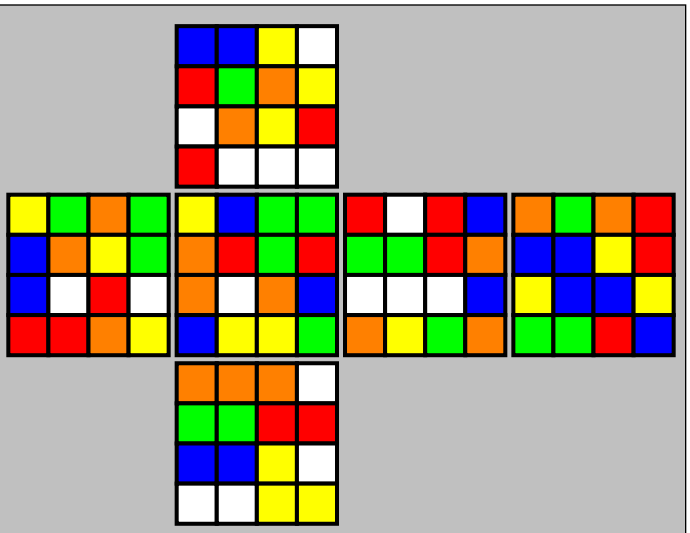
1.	F2 D2 R' F2 D2 U2 L2 R' U2 L' F U2 F2 D R U' F' R U2 B2	
2.	R B2 D2 U2 R U2 R2 U2 F2 L' F' L U' B U' B2 U R	
3.	D U2 L2 F2 R2 U' R2 B' R2 D' R' B L2 R D F2 D L2	
4.	L F2 R F2 D' F' D' B U' F U D R2 F2 U B2 D2	
5.	B' U2 L2 F L2 F' U2 F D2 R' F U L D R U2 B F2 L R2	

2019-05-29

444bf
Scrambles for 2019-05-29

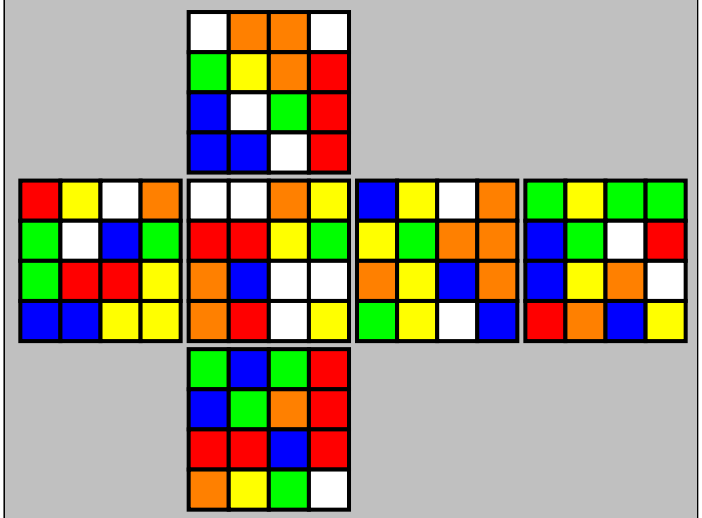
1.

R2 B2 U2 B' R2
D2 R2 F2 D2 L'
B L2 U2 R2 D
L' D R' D B
Uw2 L2 F' Rw2 F
Rw2 D B' Rw2 U2
D' F Rw U' B
U' Fw' Uw' Fw2 Rw'
B2 R' Uw L' x2
y'



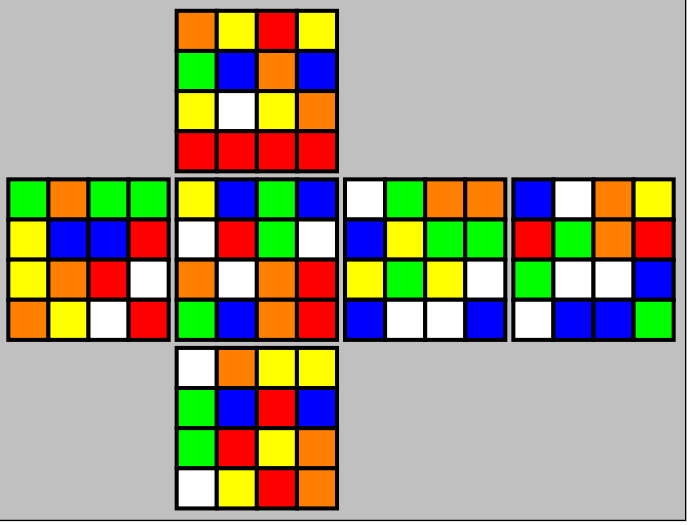
2.

B2 R' F2 L B2
L' U2 L D B'
L2 U F2 D' R2
B L' F2 R Fw2
R' B L Fw2 R
F' Uw2 Rw2 L2 B2
Uw2 F' Uw F R2
U2 L2 Rw Fw2 F2
R2 Uw Fw' Uw' U
x' y2



3.

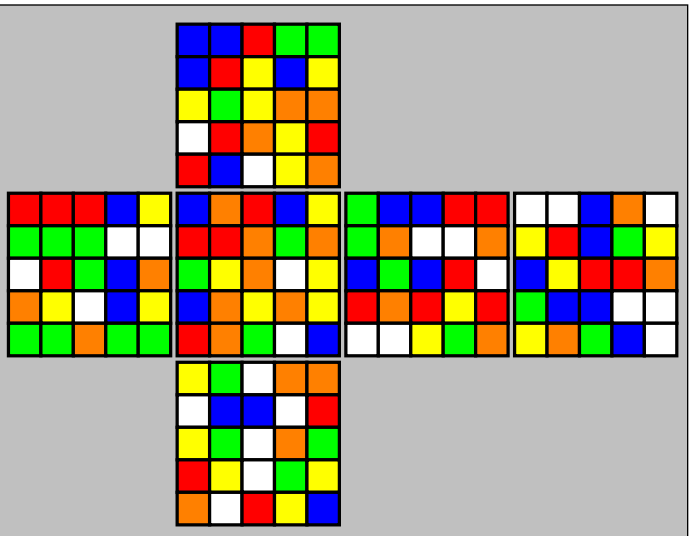
R' F2 D' R2 B
D' F L F R
D' U' F2 D U
L2 F2 U L2 Rw2
Fw2 D' F' R2 D
U' F L2 Fw2 Rw
Uw2 Rw D' F' Uw2
Fw' Uw R' F Uw'
Rw' F' x



555bf
Scrambles for 2019-05-29

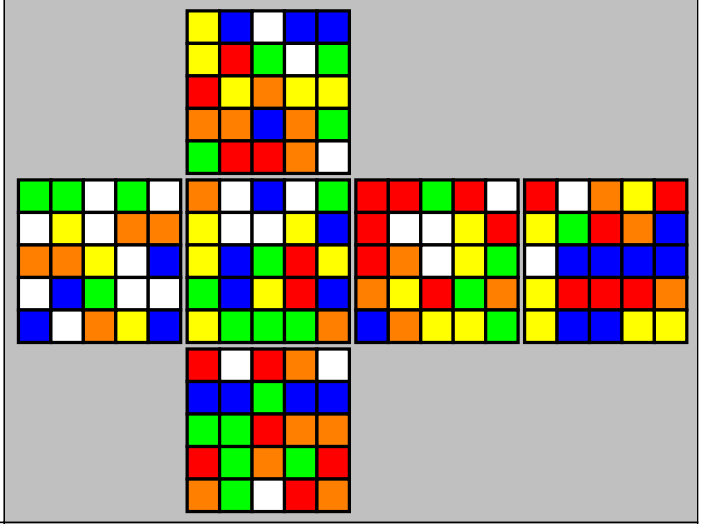
1.

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



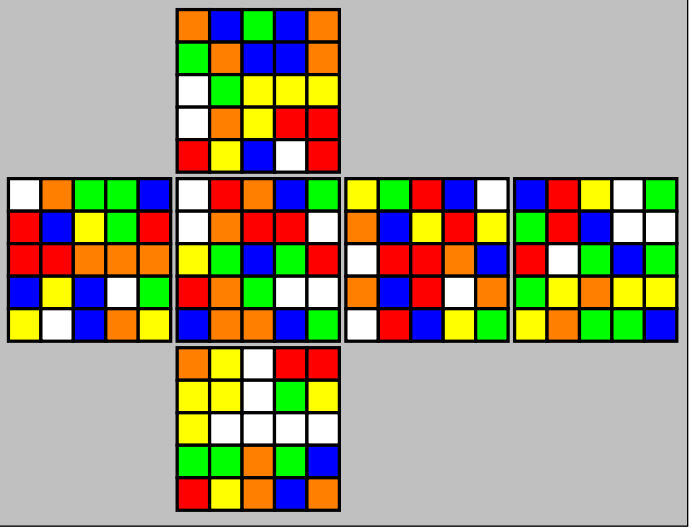
2.

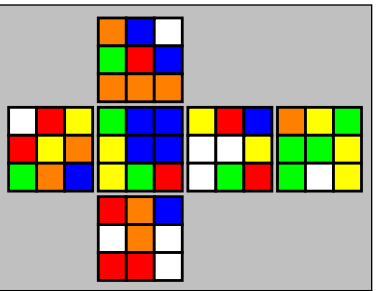
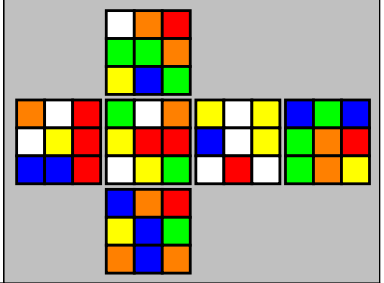
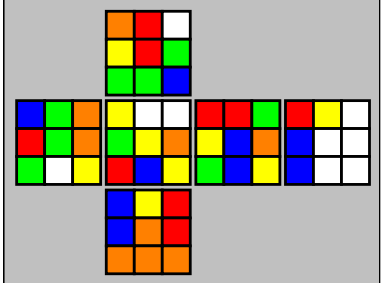
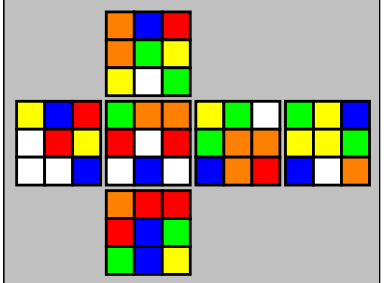
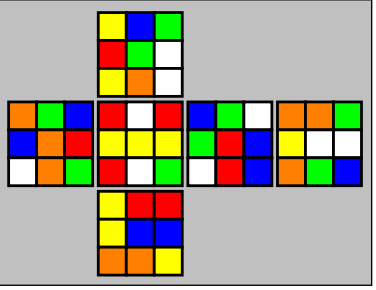
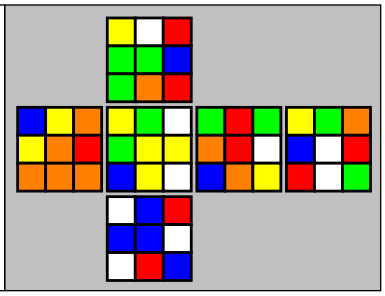
Fw Bw F' L' B Uw2
F' U2 R2 U Bw2 Rw'
Uw2 Lw' Uw' F' Dw Bw
U' Fw' U B' F' L
F R2 D L2 Fw2 Dw
Lw' Rw Bw' Lw R' Rw2
F' R2 Fw2 Uw2 Bw Fw2
D' Fw D' Rw B' Rw'
Uw Fw' Rw U Dw2 D'
Bw' Rw2 D Bw Uw2 U2
3Fw



3.

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



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

6.	L2 R' B2 L U2 L F2 D2 U L' F2 L2 R' F L2 U R F2 Rw