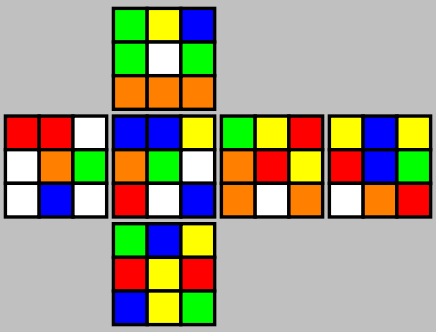
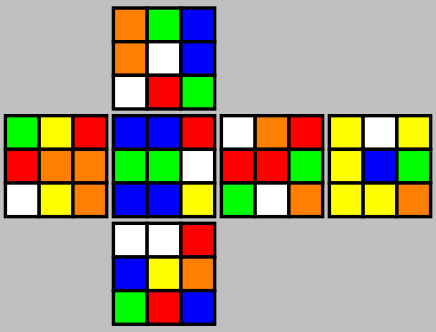
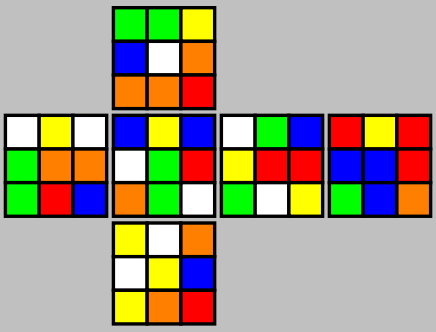
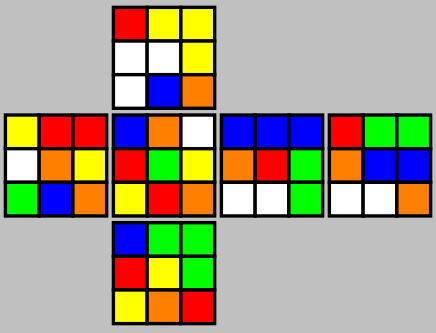
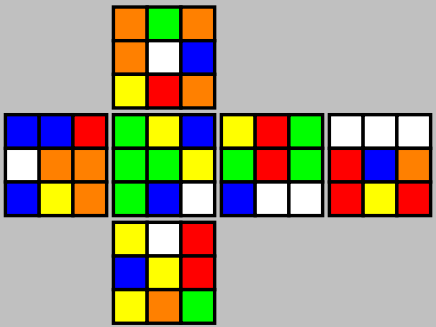
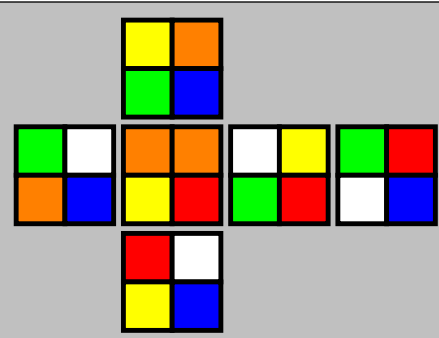
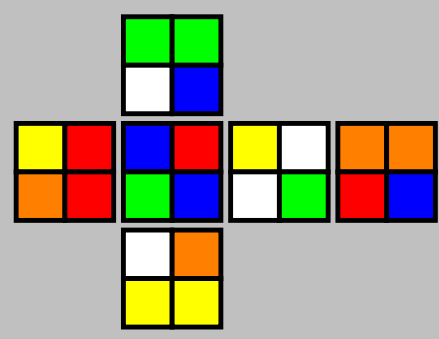
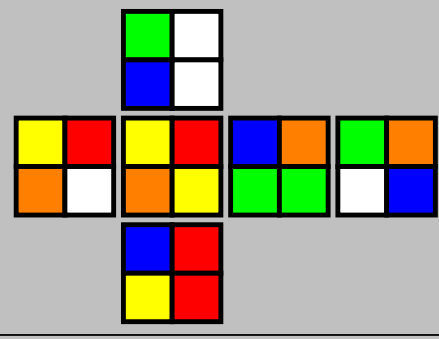
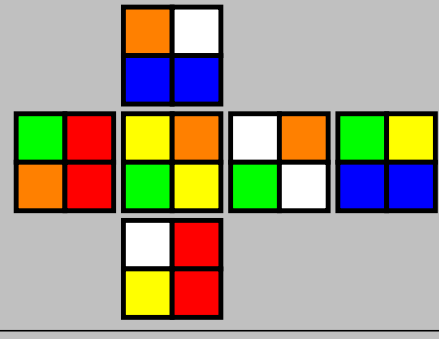
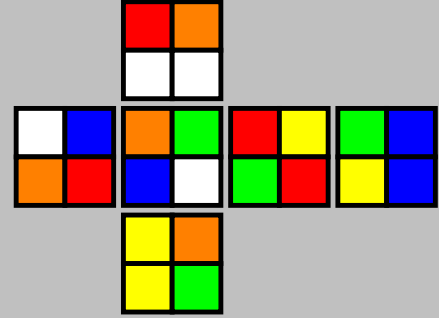
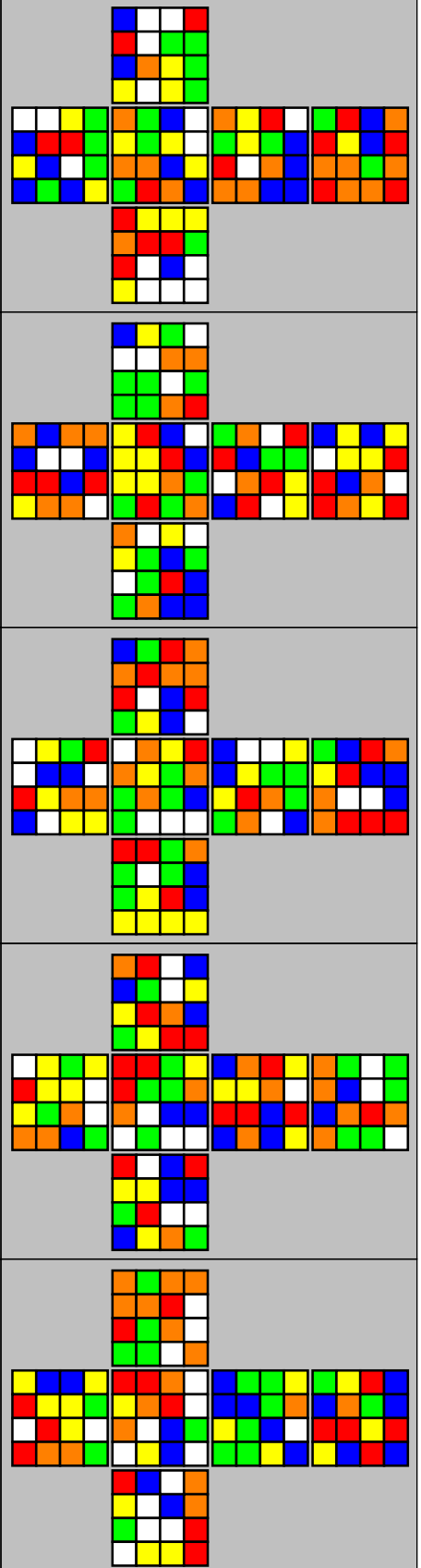
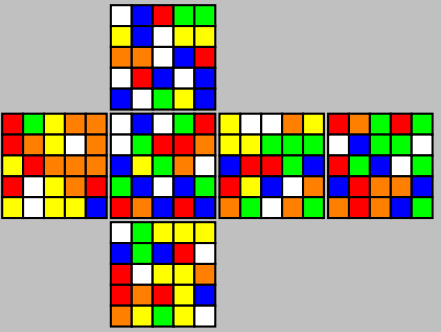
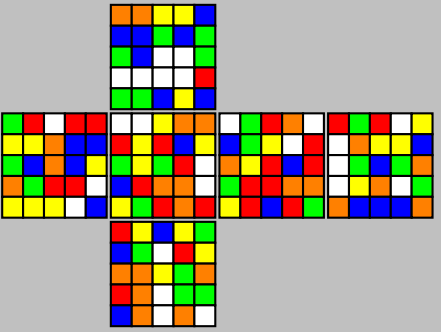
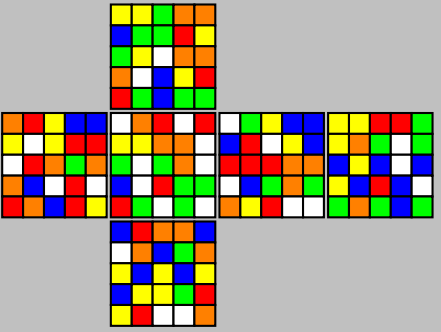
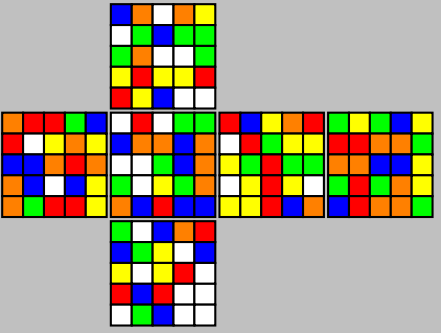
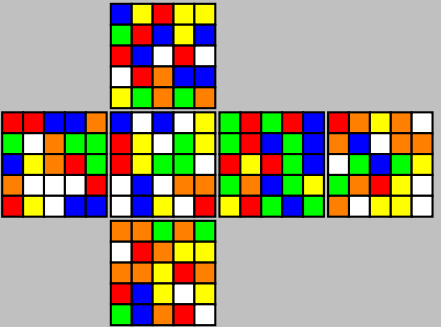


1.	D2 R2 B2 L' U2 L2 F2 U2 R2 B2 R2 B U' F' U' B2 R' B' R2 D'	
2.	L2 B2 U B2 D2 U' R2 B2 U R F' D2 B F2 L2 R' F' L B'	
3.	R L2 U2 F' R B' U R2 L F D2 R2 D2 F2 D2 F B D2 F R2	
4.	R D2 L R2 D2 B2 U2 B2 R B R' D L2 B L B2 R2 B2 U' L	
5.	D2 B' L2 U2 B' L2 F' L2 B2 D' F L' U2 B F D' L U' B2 F	

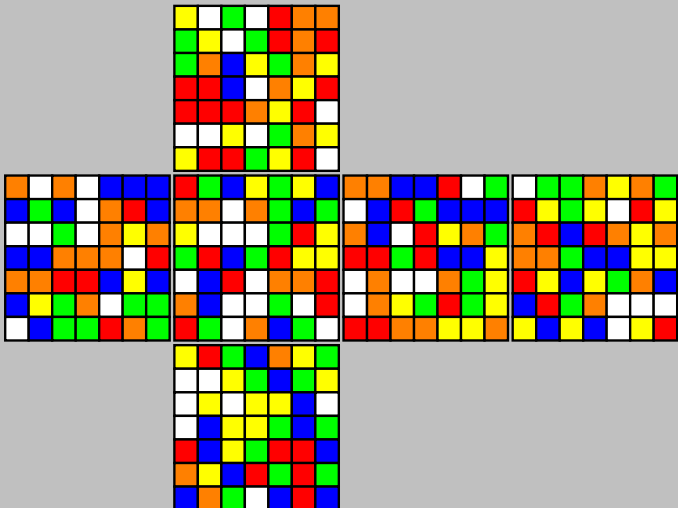
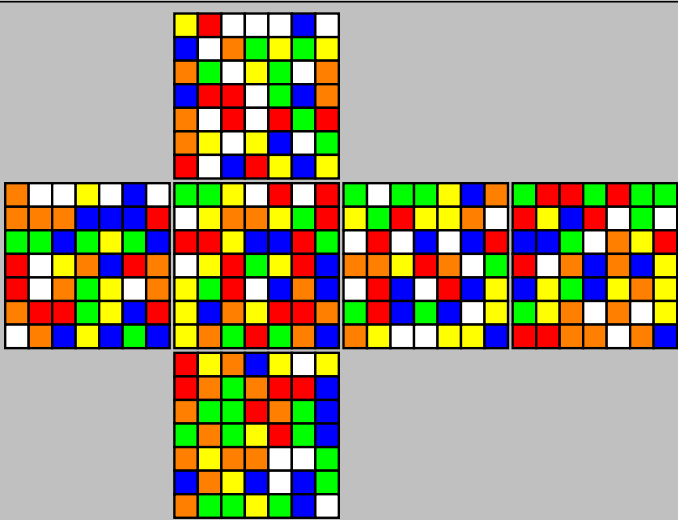
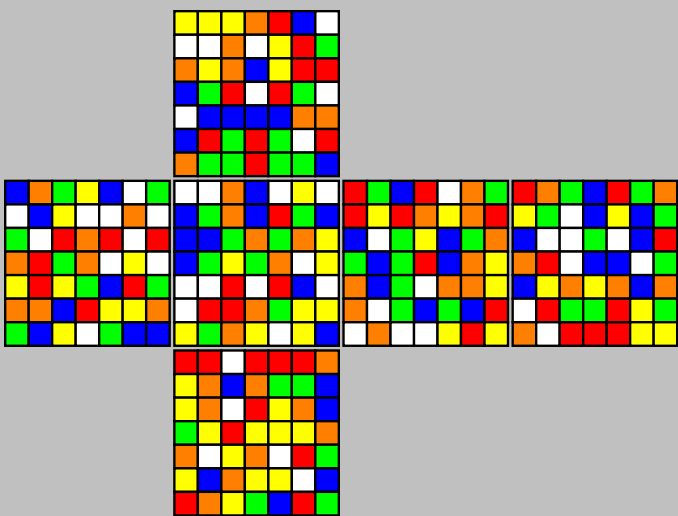
1.	$U' R U^2 R^2 U' R U' R F' U' R^2$	
2.	$U^2 R' U^2 R^2 U^2 R^2 F U' F R^2 U'$	
3.	$U' R F R^2 U^2 R' U R' U F R^2$	
4.	$R' U' R^2 U R' F U^2 R U^2 R' U'$	
5.	$R' F U' F U^2 F' U' F^2 R U R'$	

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

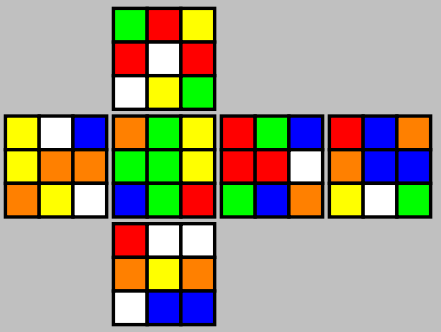
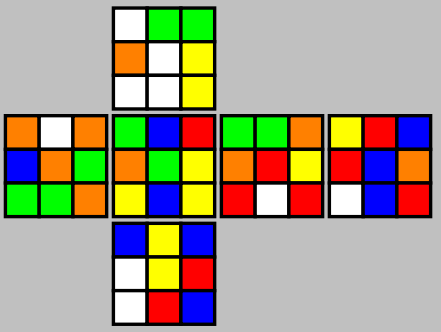
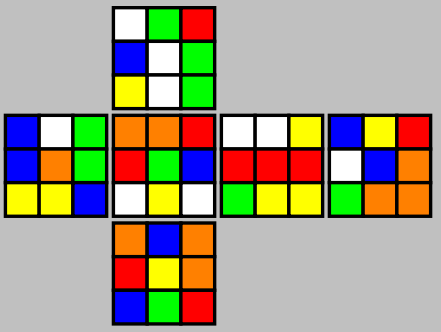
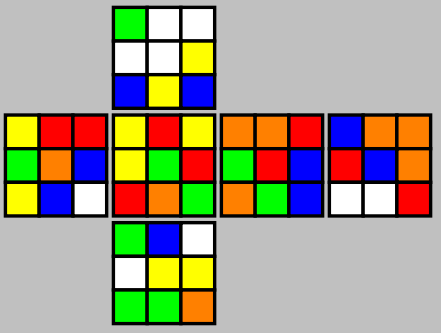
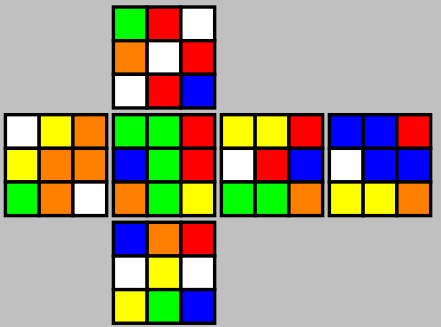


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2.	F2 D Bw' Fw Uw' B Rw' Dw F2 Fw Bw L2 Rw2 B2 D R' Rw Dw2 B' F2 R' Uw2 Dw D2 L2 Fw2 Rw R' Uw' D2 F' R2 B' Lw R2 U2 Dw' Bw2 L2 U Fw Dw Fw' L2 Bw B Rw' D2 Uw U2 Fw2 U2 L Bw2 R L Bw' Dw U Fw2	
3.	Dw' R' U' Dw2 Bw' L2 Rw2 Lw2 F Fw U' Fw2 Lw' L2 Fw2 Dw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

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

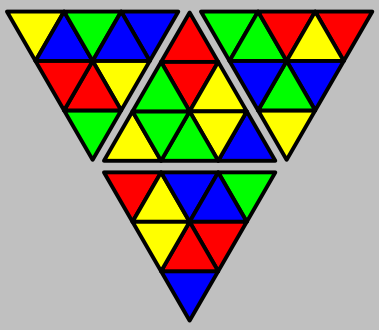
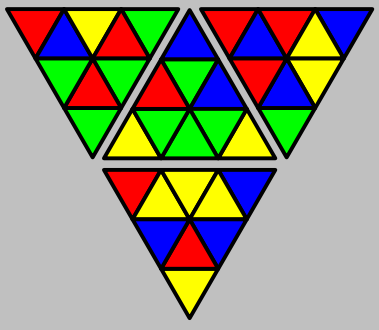
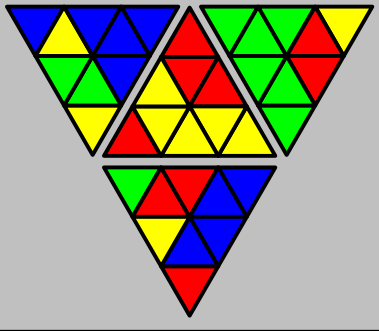
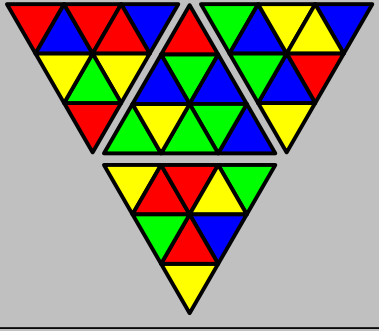
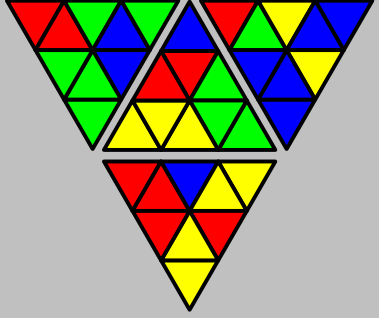
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2.	<div>3Fw' 3Rw2 D B2 F Dw2 3Dw2</div> <div>B Dw2 3Uw 3Bw' F2 Rw Lw'</div> <div>3Dw2 Dw' D 3Rw2 D2 3Dw' Rw2</div> <div>3Uw2 U2 D2 3Lw' R2 F2 3Rw'</div> <div>3Dw' U Dw2 3Fw Fw F L2</div> <div>3Rw2 Dw Uw L Dw2 L' F'</div> <div>3Dw2 R2 3Lw' 3Fw Fw Dw2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

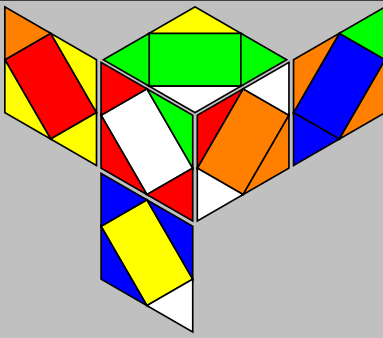
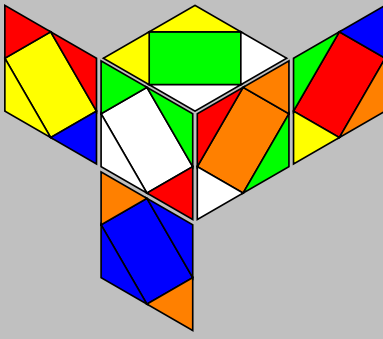
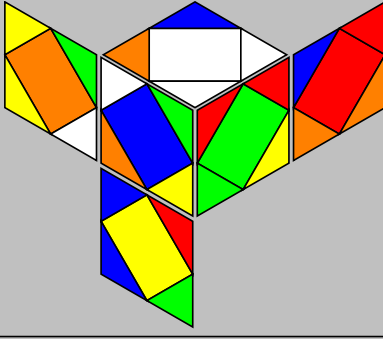
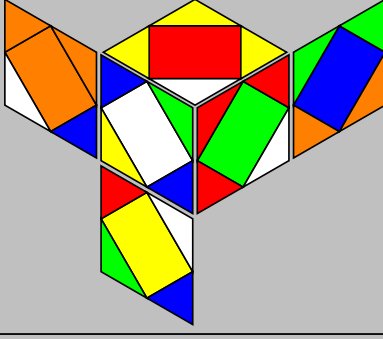
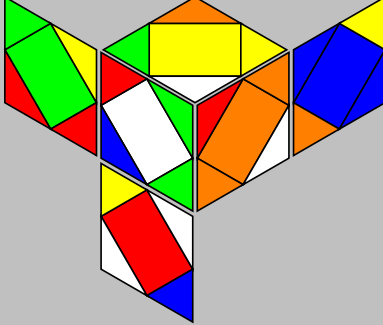
1.	<div> <div>U2</div> <div>R'</div> <div>D2</div> <div>R</div> </div> <div> <div>D2</div> <div>U2</div> <div>L</div> <div>B2</div> </div> <div> <div>R</div> <div>D</div> <div>B'</div> <div>F2</div> </div> <div> <div>L'</div> <div>B'</div> <div>U2</div> <div>F</div> </div> <div> <div>L'</div> <div>B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

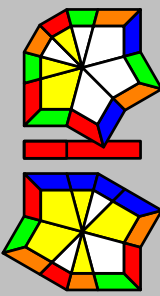
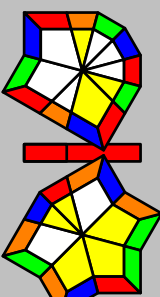
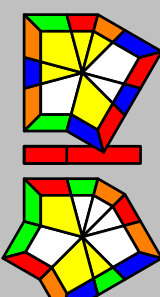
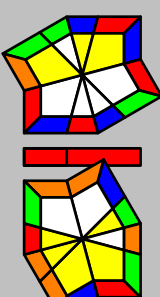
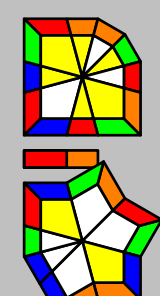
1.	<p>F2 R2 U' R2 D B2 F2 R'</p> <p>D' U L F' L' U R B2</p> <p>D' B</p>	
2.	<p>B2 U2 B2 L B2 D2 R F2</p> <p>R' F D' U L2 F' R2 B2</p> <p>L' B' D2</p>	
3.	<p>B2 U' R2 D' R2 U' B2 U'</p> <p>R F L' U' B R D2 U'</p> <p>L2 D B'</p>	
4.	<p>U B2 D F2 D R2 U' F2</p> <p>D L2 U' R B U' B' L'</p> <p>D R2 U B'</p>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

2019-06-21

pyram
Scrambles for 2019-06-21

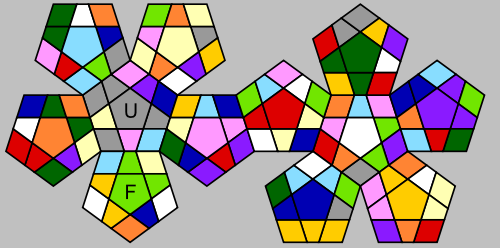
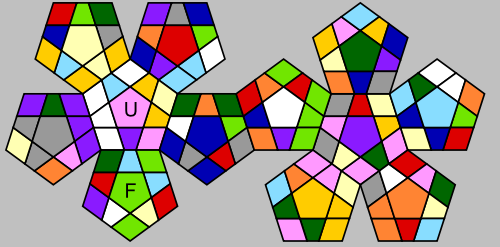
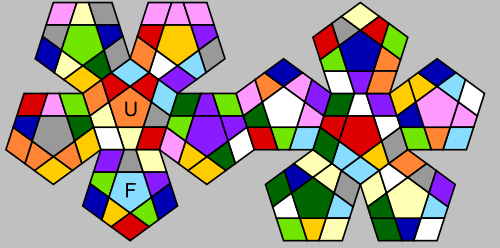
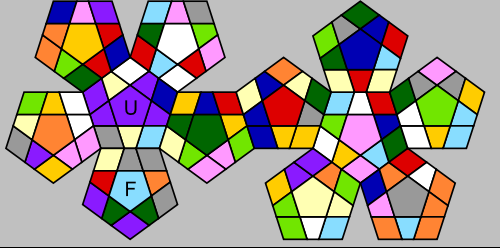
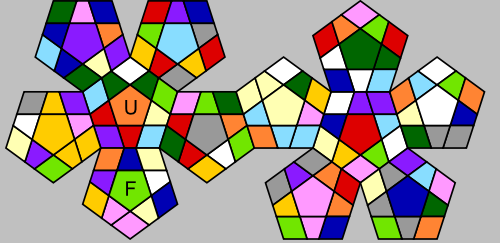
1.	U R' U' L' B' L' U' L' R B' R l' r b	
2.	L B U' B' L' U' R B' R' B' U' u l' r b'	
3.	L B L U' B L R' U' R' L' U l' b'	
4.	B L' U B' U L B U' L U' L u' l r' b'	
5.	R' L' B U L' U' L B' R' U' R' u'	

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

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

2019-06-21

minx
Scrambles for 2019-06-21

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	

2019-06-21

 clock
 Scrambles for 2019-06-21

1.	UR6+ DR1- DL5- UL2- U1- R1- D2+ L2+ ALL4+ y2 U2- R4- D4+ L3- ALL3+ DL UL	
2.	UR6+ DR2+ DL4- UL5- U2- R1+ D5+ L5- ALL3- y2 U1+ R4- D4+ L3- ALL3+ UR DR DL UL	
3.	UR0+ DR5- DL4- UL3- U2+ R3+ D2+ L1- ALL4+ y2 U2+ R5+ D1- L1- ALL6+ UR DL	
4.	UR3- DR3+ DL6+ UL4- U5- R1- D1+ L2+ ALL5- y2 U3+ R5+ D1- L1- ALL2- UR DR DL UL	
5.	UR4+ DR5- DL5+ UL1+ U2- R0+ D2+ L6+ ALL2- y2 U3- R4- D2- L4+ ALL5- UR DR	

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]

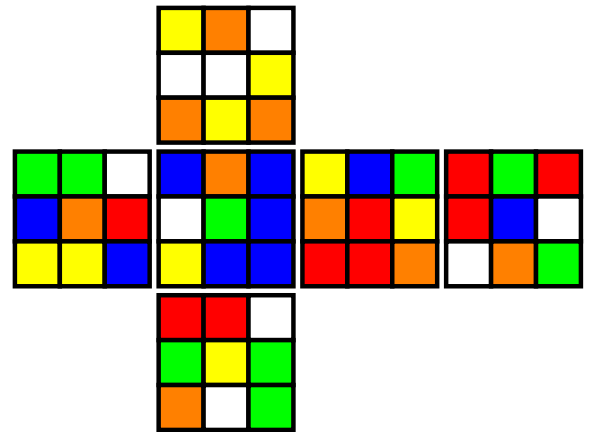
Scrambles for 2019-06-21
333fm

Competitor: _____

WCA ID: _____

DO NOT FILL IF YOU ARE THE COMPETITOR.

Graded by: _____ Result: ____



Scramble: R' U' F D' F2 D B2 U F2 D2 L2 U' L2 U B L B2 U L2 D B' L2 R2 B' R' U' F

This image shows a full page of blank graph paper. The grid consists of evenly spaced horizontal and vertical lines forming small squares across the entire surface. There are no margins, text, or other markings present.

Fewest Moves

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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]

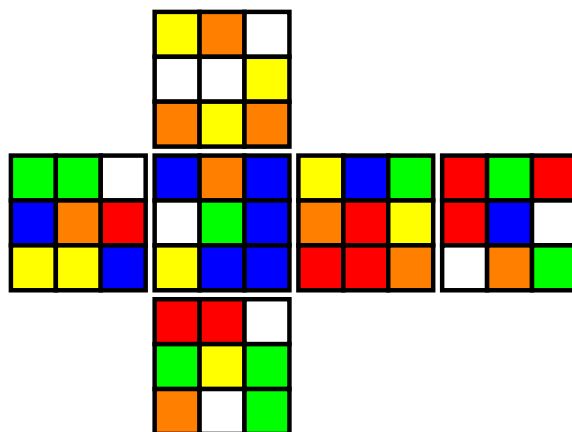
Scrambles for 2019-06-21
333fm

Competitor: _____

WCA ID: _____

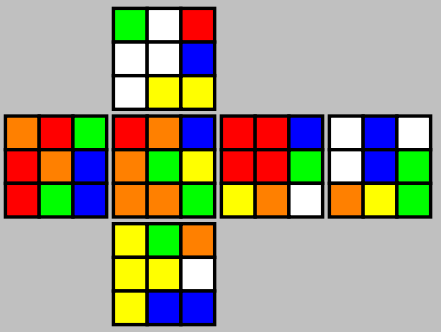
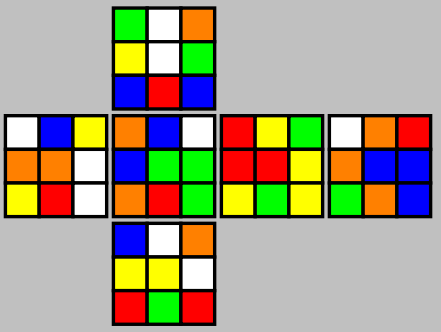
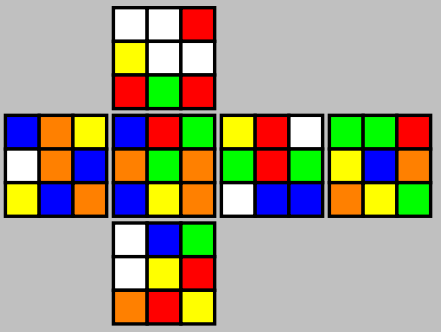
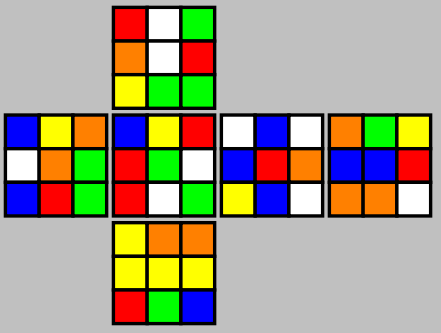
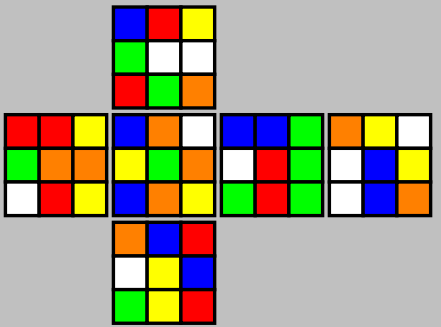
DO NOT FILL IF YOU ARE THE COMPETITOR.

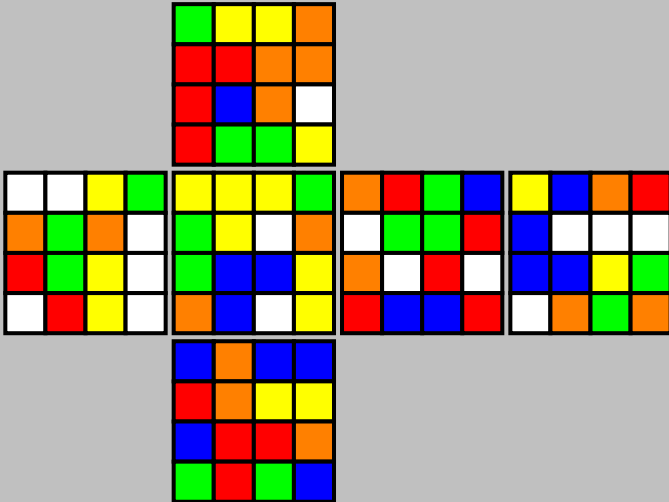
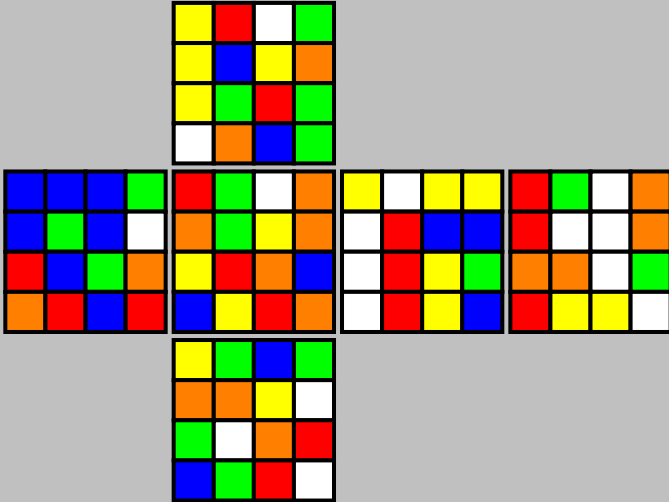
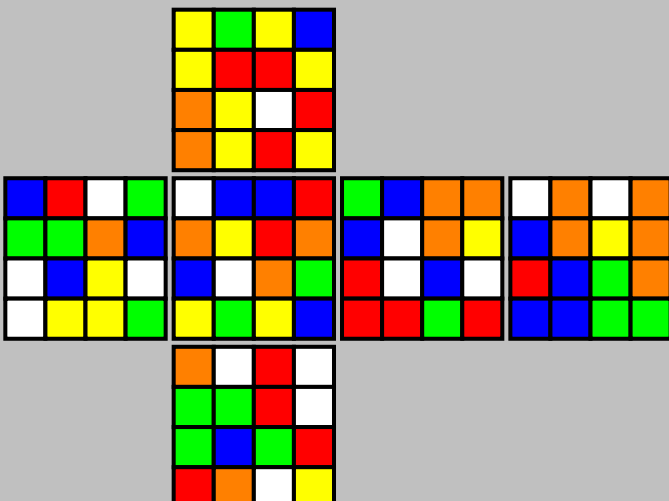
Graded by: _____ Result: _____



Scramble: R' U' F D' F2 D B2 U F2 D2 L2 U' L2 U B L B2 U L2 D B' L2 R2 B' R' U' F

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

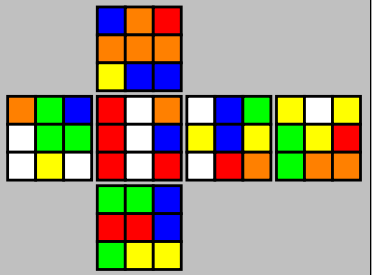
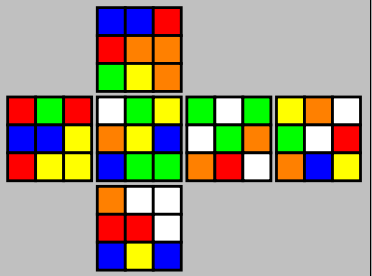
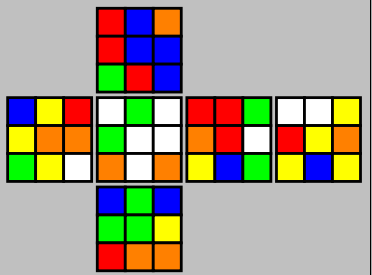
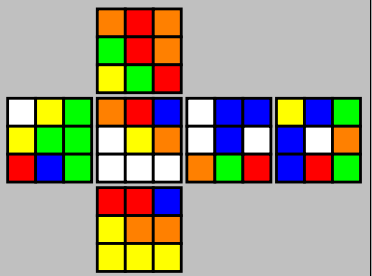
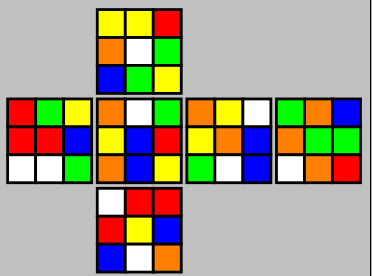
1.	R' F^2 L D^2 U^2 B^2 R^2 F^2 L F^2 D U B R' B' R' U F^2 R'	
2.	B^2 U R^2 U^2 L^2 D^2 R^2 F^2 L^2 B' D^2 B' D' F' D R^2 D^2 R B' R'	
3.	U F' B' R F^2 U F R' D^2 L B^2 U' R^2 L^2 U' B^2 D^2 R^2 D' L^2	
4.	B^2 D^2 L^2 B^2 U^2 R^2 F^2 L F^2 U' R D' U^2 F D^2 U B R D^2 U^2	
5.	R^2 L^2 F^2 D^2 F^2 D B^2 R L D B' R^2 B U^2 F' B^2 L^2 F U^2	

1.	<table><tr><td>B'</td><td>R2</td><td>F'</td><td>L'</td><td>D</td></tr><tr><td>R'</td><td>F</td><td>U'</td><td>R'</td><td>B'</td></tr><tr><td>L'</td><td>D2</td><td>B2</td><td>R2</td><td>F2</td></tr><tr><td>R'</td><td>F2</td><td>D2</td><td>L'</td><td>B2</td></tr><tr><td>D2</td><td>Uw2</td><td>B</td><td>Uw2</td><td>L</td></tr><tr><td>R</td><td>F</td><td>Rw2</td><td>L'</td><td>Fw2</td></tr><tr><td>L</td><td>B2</td><td>Uw2</td><td>F</td><td>U'</td></tr><tr><td>Rw2</td><td>Uw</td><td>F2</td><td>Uw</td><td>B2</td></tr><tr><td>L2</td><td>Fw'</td><td>Uw</td><td>Rw'</td><td>L</td></tr><tr><td>y2</td><td></td><td></td><td></td><td></td></tr></table>	B'	R2	F'	L'	D	R'	F	U'	R'	B'	L'	D2	B2	R2	F2	R'	F2	D2	L'	B2	D2	Uw2	B	Uw2	L	R	F	Rw2	L'	Fw2	L	B2	Uw2	F	U'	Rw2	Uw	F2	Uw	B2	L2	Fw'	Uw	Rw'	L	y2					
B'	R2	F'	L'	D																																																
R'	F	U'	R'	B'																																																
L'	D2	B2	R2	F2																																																
R'	F2	D2	L'	B2																																																
D2	Uw2	B	Uw2	L																																																
R	F	Rw2	L'	Fw2																																																
L	B2	Uw2	F	U'																																																
Rw2	Uw	F2	Uw	B2																																																
L2	Fw'	Uw	Rw'	L																																																
y2																																																				
2.	<table><tr><td>R2</td><td>L</td><td>F2</td><td>R</td><td>B2</td></tr><tr><td>D2</td><td>L2</td><td>F</td><td>R</td><td>F'</td></tr><tr><td>L2</td><td>U2</td><td>F</td><td>D'</td><td>F</td></tr><tr><td>L2</td><td>D</td><td>B'</td><td>Rw2</td><td>Fw2</td></tr><tr><td>U</td><td>R2</td><td>D'</td><td>Rw2</td><td>L</td></tr><tr><td>D2</td><td>Fw2</td><td>L</td><td>Uw2</td><td>Fw2</td></tr><tr><td>L2</td><td>B'</td><td>D'</td><td>F2</td><td>Rw2</td></tr><tr><td>Fw'</td><td>R2</td><td>Uw</td><td>B'</td><td>L'</td></tr><tr><td>Fw'</td><td>Rw</td><td>Fw'</td><td>U'</td><td>x'</td></tr></table>	R2	L	F2	R	B2	D2	L2	F	R	F'	L2	U2	F	D'	F	L2	D	B'	Rw2	Fw2	U	R2	D'	Rw2	L	D2	Fw2	L	Uw2	Fw2	L2	B'	D'	F2	Rw2	Fw'	R2	Uw	B'	L'	Fw'	Rw	Fw'	U'	x'						
R2	L	F2	R	B2																																																
D2	L2	F	R	F'																																																
L2	U2	F	D'	F																																																
L2	D	B'	Rw2	Fw2																																																
U	R2	D'	Rw2	L																																																
D2	Fw2	L	Uw2	Fw2																																																
L2	B'	D'	F2	Rw2																																																
Fw'	R2	Uw	B'	L'																																																
Fw'	Rw	Fw'	U'	x'																																																
3.	<table><tr><td>D</td><td>L'</td><td>U'</td><td>L2</td><td>B'</td></tr><tr><td>L</td><td>F'</td><td>D'</td><td>B2</td><td>U2</td></tr><tr><td>L</td><td>U</td><td>B2</td><td>U</td><td>L2</td></tr><tr><td>R2</td><td>U'</td><td>R2</td><td>D</td><td>R2</td></tr><tr><td>Uw2</td><td>Rw2</td><td>B</td><td>U</td><td>D'</td></tr><tr><td>Fw2</td><td>B'</td><td>Rw2</td><td>D'</td><td>B</td></tr><tr><td>U2</td><td>B2</td><td>D2</td><td>Rw</td><td>F2</td></tr><tr><td>Rw</td><td>B</td><td>D'</td><td>Uw'</td><td>F'</td></tr><tr><td>B2</td><td>Uw'</td><td>Fw</td><td>Rw</td><td>D2</td></tr><tr><td>F'</td><td>x2</td><td>y2</td><td></td><td></td></tr></table>	D	L'	U'	L2	B'	L	F'	D'	B2	U2	L	U	B2	U	L2	R2	U'	R2	D	R2	Uw2	Rw2	B	U	D'	Fw2	B'	Rw2	D'	B	U2	B2	D2	Rw	F2	Rw	B	D'	Uw'	F'	B2	Uw'	Fw	Rw	D2	F'	x2	y2			
D	L'	U'	L2	B'																																																
L	F'	D'	B2	U2																																																
L	U	B2	U	L2																																																
R2	U'	R2	D	R2																																																
Uw2	Rw2	B	U	D'																																																
Fw2	B'	Rw2	D'	B																																																
U2	B2	D2	Rw	F2																																																
Rw	B	D'	Uw'	F'																																																
B2	Uw'	Fw	Rw	D2																																																
F'	x2	y2																																																		

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

--

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

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

6.

L2	R2	D'	U'	B2	U	R2
D'	B2	U2	L'	D2	U'	B
F	D	F	R2	D2	L'	D'
Rw'	Uw2					

