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

1.	R F U' F U' R U2 F' R U2 R'	
2.	FRUF'U'RUR'U2RU	
3.	RU'FRU'R'U2FU'FR	
4.	U'RU'R'UR'F'RU2RF'	
5.	U2 R' U' R F' U R U2 R' F' U'	

	D I		D.O.			110	D. (2	
	Rw'	В	D2	R	В	U2	Rw2	
	U	R	Fw'	L'	F	FW	D2	
1.	Fw'	L	F'	Fw'	В'	R	L	
	U'	В	Fw'	Rw2	D	F2	FW	
	R2	U'	F'	U'	B2	L2	Uw'	
	F'	Rw	Uw2	F'	L			
	В	L	R'	F2	Rw	L'	В'	
	D'	B2	Uw2	F2	Uw2	U2	D'	
2.	В'	Rw'	F'	L	U'	F2	L'	
2.	Fw	L	D2	F	D'	Uw2	B2	
	F'	D'	L	R'	U	R	Rw2	
	B2	U'	L2	Rw	F			<b></b>
	R	B2	R	L2	F	Rw'	U2	
	В	D	Uw2	L'	В	L	D'	
	Uw2	L2	F'	Fw'	Rw	В	F2	
3.	L	Uw	Fw	Rw	D2	B2	Uw'	
	D	L'	R2	U2	L2	Uw2	R'	
	Uw2	Rw	Uw2	D2	F'			
	Fw2	В	Rw	В	U'	Uw'	Rw2	
	L'	Uw2	Rw'	Ū'	D'	F2	Fw	
	D2	Uw2	R	В'	D'	Rw'	D	
4.	Fw2	U'	L2	B2	L2	Rw'	D'	
	Uw2	R2	L	Fw	Uw	F2	Fw2	
	U	B2	D	R'	Rw			
	F	U2	B2	Uw2	R	D	U2	
	Uw'	F2	В	Fw'	D'	B2	D'	
	Uw	F2	Fw	U2	В	L2	Uw2	
5.	Fw2	L	D	Uw2	F'	R2	Fw'	
	Rw	R	Uw2	L'	B2	R2	U2	
	F2	В	U'	Fw	L			
	-							

1.	D' D2 R2 F F2 R FW'	Fw2 Fw Dw2 U U' U2 D	R2 Rw' F' Fw D2 D Fw2	Dw'Uw B2 U F Dw2 B	R2 B2 Uw2 Dw' Bw2 Uw2 Lw'	B Dw Rw2 D2 L2 L' F2	D'Uw2 B2 B Bw2 U2	Uw' Rw L' Lw R2 F2	Bw F2 Rw2 Uw' B' Uw2	
2.	Lw' Dw2 D Uw' R L2 R'	Uw2 Rw' Dw D F2 U Lw'	U2 U' Lw' Dw2 Fw2 B' Fw2	L2 F2 R' Lw' Uw Bw D	Uw2 Uw Uw D2 L Lw	F Rw2 Dw2 R2 Uw2 Rw	Fw2 D' D' Uw2 Dw' Uw2	R' R2 F' D' D'	Uw2 L2 Rw2 F U	
3.	B' FW UW RW' FW2 R UW'	Rw2 U' Fw Bw' Uw Lw2 F	R B Bw2 L U U' Uw2	B2 L2 Dw' Uw' B B' F2	D2 U' Rw' L' Uw Bw' Dw2	FW Lw2 Dw2 Rw B L2 B2	Bw R D Bw Fw' D'	U' U Fw' Uw' R' B2	DW R2 DW' R2 DW BW	
4.	FW U' B' RW2 BW L' FW2	B2 D LW FW2 L' BW	Bw F2 B2 Dw Rw2 B' Lw2	Dw Rw' Dw Bw' R' R	D'UW'F2B2UFW'B	Bw' U2 L2 Uw' L2 F2 R2	B Lw2 Uw' Lw2 R' Lw2	Rw' L' F2 Uw' Rw Bw2	R' U Lw2 F' Fw2 Lw2	
5.	R R2 B' B Bw' Lw' Bw2	Dw'	B2 B' U' D' Fw2 D' R	D Fw2 F Fw2 D Rw2 Bw	Fw'DwR'Dw2R2BDw2	Dw' Bw' U' Lw Bw' L	Lw' Fw2 Fw2 R R B'	Rw'	B2 Lw2 D2 F' Rw2 Rw'	

666 Scrambles for 2019-05-17

1.	Bw2 R' Rw' Fw2 D D2 Dw2 Lw L' Rw' Bw2 3Uw2 L' U'	Lw' Fw2 R2 D2 B Fw Rw 3Fw' F2 Fw' Fw2 Dw2 3Uw2 Uw2	FW2 DW L U RW' 3FW UW D' FW' R' B2 D LW	L2 Rw' 3Rw2 3Uw Lw2 Uw' 3Uw2 Lw U' 3Fw2 3Fw2 Rw2 L'	D2 Lw2 Uw2 F2 Uw L2 Bw' Uw2 Dw2 F' R 3Fw2 Dw'	Rw2 F' R2 Rw' Dw Rw' 3Fw2 3Uw Lw Uw2 Rw' B
	3Uw' 3Fw' D2 L	Uw2 Uw U' R' B	B2 Fw 3Uw 3Uw'	3Rw2 F Bw2 3Fw2	D' Lw2 Uw Fw	3Uw 3Fw R' Bw2
2.	RW UW FW2 B' U'	Lw' R' F2 Rw' R'	3Uw 3Rw U 3Fw 3Uw	3Rw2 Uw2 3Uw2 L2 U'	F2 U' Bw2 3Rw R	Fw2 L' U2 Uw' L2
	Bw' 3Uw Rw Fw' Uw2	L2 3Fw Fw2 Dw' B'	Lw Dw 3Uw Lw2	Fw' 3Uw2 F' 3Rw2	Dw2 Lw Bw 3Fw'	U' 3Uw2 Uw Rw
	U2 R2 D' R' R'	Lw B U2 D2 Fw	U2 Dw Rw' Lw Uw	B' 3Uw U2 Fw2 Lw	3Uw2 L2 Bw 3Rw' L'	3Rw' F2
3.	Fw2 Uw2 Fw 3Rw2 3Fw2	D2 B F' F'	F' 3Rw Rw' Dw2 D'	RW DW' UW2 L' F2	3Uw' Rw2 3Fw' Lw2 L2	F Lw B2 R' Rw'
	3Uw' Fw' B2 R	Lw' F' Fw Uw	Bw' R2 F2	3Uw B2 R'	R Fw Bw'	B2 Dw 3Fw2

777 Scrambles for 2019-05-17

1.	3Uw2 F' Dw' FW 3FW Fw2 D' D2 R' Fw2 R' 3Dw'	D2 B R2 Uw' 3Lw' 3Lw RW 3Uw' RW 3Uw' U' 3Uw2	B2 Rw' U Bw Rw' U' 3Fw' Bw' 3Bw2 3Rw 3Bw' 3Lw'	F2 Uw 3Rw Lw2 L2 Fw' B2 Lw2 3Rw 3Uw2 3Fw' D	R D2 D Rw' Bw2 U' R' R' Lw 3Rw' F' Rw	3Dw2 L2 3Fw2 Uw2 3Fw' B2 F 3Dw' 3Uw2 3Lw2 Bw' B'	3Rw2 3Dw' D2 Lw2 Uw2 Lw' L2 Bw'	
	Lw' L2 3Lw'	B Lw F2	Lw 3Lw	Rw2 B2	F2 Bw'	Fw' Uw	R U	
2.	3RW U' 3BW2 3BW R2 R R2 U 3RW DW DW' 3FW2 FW F2 UW	F' Fw2 Uw2 U2 Fw2 3Bw' 3Lw2 L2 F R' 3Bw' F B D 3Fw'	3Fw' 3Bw' 3Rw' D' U' Dw' F2 Rw' U' D 3Bw 3Fw'	U2 U2 R Lw2 3Rw2 3Rw' 3Dw2 D' B2 3Dw2 U L' 3Uw' 3Lw'	Rw' 3Rw' Lw' 3Dw' 3Fw' Bw' L' 3Dw2 3Bw' Uw' Rw2 Bw B 3Uw	Uw' F2 Dw2 B Dw' R 3Uw L2 Rw2 Lw' Fw2 B' U	L B 3Lw2 3Rw Bw' Fw2 Bw Uw' Uw2 R2 D' D 3Dw2 3Bw	
3.	B2 3Bw' Dw2 Bw' R2 U' FW 3BW B BW 3DW 3Uw2 L Uw2 F'	3LW' L BW2 B BW' 3RW 3UW' L 3FW' R' LW2 3LW D' DW DW2		D 3Dw2 3Uw2 R' B 3Rw' 3Dw2 3Lw'	B2 Bw' 3Bw B Uw' 3Rw2 Fw2 Dw' 3Lw2 3Bw'	D2 R2 D' B'	3Rw' F2 3Dw2 B' B L2 Dw2 L' U2 Dw2 Rw Lw2 Rw2 Bw'	

## 333bf Scrambles for 2019-05-17

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

## 333oh Scrambles for 2019-05-17

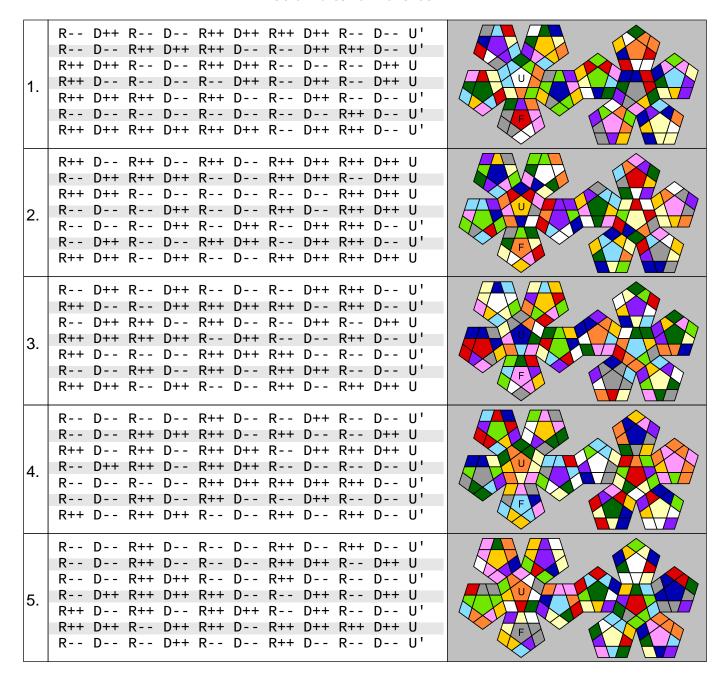
1.		F	R2 U' B2		L2 D	U2 F	
2.	F' R L'		D B2 R				
3.	L'	B2	L2 U' F2	D2			
4.		F	L2 L2 L2				
5.	R'		B2 U F				

1.	LURL'BR'BRUR'L'ul'b'	
2.	B' U' R L' B' R' B' R' B' R' U r' b'	
3.	R' L B' U B' U' R' L U B' L' u' r' b	
4.	BU'LBULULR'U'Bu'lr'b	
5.	R' B L R' B' L' R' U' R' L U b	

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

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

### minx Scrambles for 2019-05-17



1.	UR4+ UL4+ D2+ y2 D6+	DR5+ U1+ L0+ U4- L4+	DL4+ R4+ ALL6+ R5+ ALL0+	
2.	UR6+ UL4+ D4+ y2 D3-	DR1- U2- L6+ U1- L1+	DL1- R2+ ALL3+ R2- ALL3+	
3.	UR5+ UL5+ D5- y2 D1+ UR	DR3+ U1+ L6+ U4+ L6+	DL3- R3- ALL5+ R4+ ALL1-	
4.	UR3+ UL2- D4- y2 D4+ UR	DR2- U1+ L3- U1+ L1+ DL	DL4+ R4+ ALL4+ R1- ALL4-	
5.	UR6+ UL4+ D5+ y2 D3- DR	DR2+ U1+ L3- U2+ L2- DL	DL5- R2+ ALL2+ R2+ ALL3- 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 U D Counter-clockwise F' U' B' D' Double F2 R2 U2 B2 L2 D2 **Rotations** Clockwise [f] [1] [d] [r] [u] [b] Counter-clockwise [f'] [r'] [u'] [b'] [l'] [d'] Double [f2] [r2] [u2] [b2] [l2] [d2]

## Scrambles for 2019-05-17 333fm

Competitor:	
WCA ID:	
DO NOT FILL IF YOU ARE THE COMPETITO	OR.
Graded by: Result:	_

Scramble: R' U' F R2 U2 B D2 B' F2 L2 B D2 L2 D2 L' B D L U' R2 D B2 D2 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 U D Counter-clockwise F' U' B' D' Double F2 R2 U2 B2 L2 D2 **Rotations** Clockwise [f] [1] [d] [r] [u] [b] Counter-clockwise [f'] [r'] [u'] [b'] [l'] [d'] Double [f2] [r2] [u2] [b2] [l2] [d2]

## Scrambles for 2019-05-17 333fm

Competitor:	
WCA ID:	
DO NOT FILL IF YOU ARE THE COMPETITO	OR.
Graded by: Result:	_

Scramble: R' U' F R2 U2 B D2 B' F2 L2 B D2 L2 D2 L' B D L U' R2 D B2 D2 R' U' F


## 333ft Scrambles for 2019-05-17

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

444bf Scrambles for 2019-05-17

	R'	L2	U2	F2	D2	
	B2	L'	F'	L'	U'	
	L'	F'	U'	R'	D2	
	R2	U	L	Rw2	Fw2	
1.	Uw2	Rw2	F	Rw2	D2	
	F'	L'	Uw2	R2	U2	
	В'	Uw	L'	Uw2	В'	
	L'	Uw'	R'	Fw	Uw'	
	F2	Uw	L2	x2		
	U'	В'	U'	B'	R	
	L'	D'	B'	F'	L	
	U	R2	D	R2	U2	
	L2	B2	D2	F2	D	
	Rw2	F	U'	Rw2	Fw2	
2.	U'	F'	D'	F'	B	
	U'	D.	L'	D2	RW	
	F	L'	_ Uw'	FW	Uw2	
	Fw	L	Uw'	Fw	R2	
	L2	y2				
				<b>-</b> 0	1.0	
	F	D2	L2	F2	L2	
	F	L2	F	U2	F	
	U'	В	D		R2	
	D2	U'	R	F'	L	
3.	Fw2	Rw2		L'	F	
	В	Rw2			Rw2	
	F2	L2	Uw'	Rw2		
	U'	F		F	RW	
	Uw	F2	UWZ	B2	у'	

555bf Scrambles for 2019-05-17

Т	1		Div	Lw	В'
	L D'	D R	Dw Fw	Lw Rw'	Lw'
	R'	U'		Rw '	Lw B
	FW	D'	Lw Lw2	RW R2	FW'
			Bw'	U	
	R	F2			UW
	Bw2	В	Fw'	Uw2	Dw2
1.	D2	Rw2	D'	Dw'	Uw2
	R'	В	D	R2	D
	Lw'	D2	Bw2	F'	R2
	F2	R'	DW	Bw'	U
	B'	R	Rw2	L	U'
	Uw'	F2	B2	R	Uw'
	3Fw'				
	Rw	D2	R2	L'	D'
	Dw2	Rw	R'	Uw2	U2
	L'	Rw'	Bw'	Uw'	F
	L2	Lw2	Fw'	U2	Bw
	Dw'	R'	D'	B2	U
	B2	F'	R2	Uw'	Rw
2.	B2	Bw'	F'	Rw	D
T	B2	U	R'	L	U'
	F'	D	Dw	Uw'	Rw2
	Dw	Lw2	Uw	В	Dw
	B2	Uw2	B2	Bw	L2
	B2	Bw2	Rw2	Fw2	D
	3Uw'				
	Fw2	Uw2 I	B2 U	Lw	R2
			Fw' Dw		
	F'	Dw2		ı' B'	R
	L2		Lw' Rw		D'
	U2		U2 B'		U
3.			Rw2 Dw		F'
3.	Rw2		B Bw		L2
	FW	_	U2 R2		Bw2
	F'		Dw U2		RW
	D2		Rw2 Lw		LW
	3Fw	J 1	1 X V V L V \	O VV	L VV
1 1	J1 W				

1.	U2 U2 B Uw2		F2 U' D2	U2 B F'	L' R2 U	F2 D2 F'	R2 L2 Rw'	
2.	F F		2 D'	F2 U	L2 R2 F R'		B2 F'	
3.	В'[	32 D 02 L2 R			R2 U' F' U'		U' R2	
4.	R2 L2 B' Fw	U' D2 U Uw'	L2 U' F	F2 L' D'	D U2 F	L2 R R'	D' U2 U	
5.	D2 R2 B Uw2	F2 D' L2	L2 B' D	D' F2 L		U F2 D2	F2 D FW	

## 333mbf Scrambles for 2019-05-17

6.	D L2 D' Uw	B2 F2 R		B2 B L'	U D2 R	F2 U B'	D L' Rw2	
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