## Tables for the algorithm ReducedTableOfMarks, with improvements (Case $G=S_{14}$ )

We have a chain of groups  $H \le U \le G := S_{14}$ . The runtimes are that of **ReducedTableOfMarks** with **IFP-Order**, **IFP-Intransitive** and **IFP-Transitive**. The style of the tables is described in the bachelor thesis.

Prop.	Chain	Prop.	#	Σ	time Fix	time Split
U	length/Indices	H	Fix	ti-		
				me		
F[20],	13, [ 2, 4, 5,	F[10],	0	55475	[ 1, 10, 48,	[ 2, 2, 2, 1,
3, II	6, 7, 8, 9, 10,	3, II			252, 1142,	119, 10, 175,
	11, 12, 13, 14				4260, 11146,	207, 301, 0,
	]				21205,	0, 0]
					16592, 0, 0,	
					0]	
F[20],	13, [ 2, 4, 5,	F[11],	-1	0	[0]	[0]
3, II	6, 7, 8, 9, 10,	4, II				
	11, 12, 13, 14					
	]					
F[20],	13, [ 2, 4, 5,	F[12],	-1	0	[0]	[0]
3, II	6, 7, 8, 9, 10,	8, II				
	11, 12, 13, 14					
	]					
F[34],	5, [ 288, 35,	F[4],	0	1778	[ 243, 22, 99,	[ 64, 2, 2, 10
192,	15, 3003 ]	8, II			1336]	]
II						
F[60],	5, [ 2, 126,	F[4],	0	397	[9, 99, 247, 8]	[ 10, 8, 10, 6
17280,	220, 91]	8, II			]	]
II		77.03		100		504007
F[60],	5, [ 2, 126,	F[6],	0	123	[ 8, 109, 0, 0	[2, 4, 0, 0]
17280,	220, 91]	5, II			]	
II						5.0.7
F[65],	5, [ 4, 3, 330,	F[23],	-2	2	[2]	[0]
60480,	364]	18, II				
II	F 5 4 9 999	DIO11			F 0 1	
F[65],	5, [ 4, 3, 330,	F[31],	-2	3	[3]	[0]
60480,	364]	64, II				
II						

DIOFI	F [ 4 0 000	T3[0.4]	0	_	F 0 1	[0]
F[65],	5, [ 4, 3, 330,	F[34],	-2	0	[0]	[0]
60480,	364]	192,				
II		II				
F[65],	5, [ 4, 3, 330,	F[37],	0	121	[ 41, 37, 1, 1	[ 23, 11, 6, 1
60480,	364]	504,			]	]
II		II				
F[65],	5, [ 4, 3, 330,	F[41],	-2	3	[3]	[0]
60480,	364]	504,				
II		II				
F[65],	5, [ 4, 3, 330,	F[46],	-2	6	[6]	[0]
60480,	364]	144,				
II		II .				
F[65],	5, [ 4, 3, 330,	F[49],	0	368	[41, 297, 7, 4	[ 9, 10, 0, 0 ]
60480,	364 ]	120,			]	
l II	-	l II			-	
F[65],	5, [ 4, 3, 330,	F[53],	-1	0	[0]	[0]
60480,	364 ]	2592,				
II II		II II				
F[65],	5, [ 4, 3, 330,	F[56],	-2	5	[5]	[0]
60480,	364 ]	1440,	_		[0]	[0]
II	501)	II II				
F[65],	5, [ 4, 3, 330,	F[62],	-2	5	[5]	[0]
60480,	364 ]	60480,	-2	"	[0]	[0]
II	304 ]	II				
F[65],	5, [ 4, 3, 330,	F[3],	-2	4	[4]	[0]
	364 ]	1	-2	4	[4]	[0]
60480, II	304]	8, II				
	0 [ 4 [ 6 4 [	TOTE 1	0	9	[10000	FO 1 1 0 0
F[48],	8, [4, 56, 45,	F[5],	U	9	[ 1, 2, 2, 0, 0,	[2, 1, 1, 0, 0,
360,	11, 12, 13, 14	8, II			0, 0]	0, 0]
II	]	TITOI	0		F 0 1	503
F[48],	8, [4, 56, 45,	F[9],	-2	2	[2]	[0]
360,	11, 12, 13, 14	2, II				
II	]					
F[48],	8, [ 4, 56, 45,	F[27],	0	18	[1, 4, 6, 5, 0,	[ 1, 0, 1, 0, 0,
360,	11, 12, 13, 14	12, II			0, 0]	0, 0]
II	]					

775 4 0 7	0.5.4.20.42	TI COL			F 0 4 0 4 F	F 0 d 0 0 0
F[48],	8, [ 4, 56, 45,	F[28],	0	28	[ 2, 4, 6, 15,	[0, 1, 0, 0, 0,
360,	11, 12, 13, 14	12, II			0, 0, 0]	0, 0]
II	]					
F[48],	8, [4, 56, 45,	F[3],	-2	3	[3]	[0]
360,	11, 12, 13, 14	8, II				
II	]					
F[48],	8, [ 4, 56, 45,	F[33],	0	19	[ 2, 4, 6, 5, 0,	[ 1, 1, 0, 0, 0,
360,	11, 12, 13, 14	12, II			0, 0]	0, 0]
II	1	,			.,	.,
F[48],	8, [ 4, 56, 45,	F[35],	-1	0	[0]	[0]
360,	11, 12, 13, 14	192,	-1	"	[0]	[0]
II		II II				
	]		-		F 0 1	F 0 1
F[48],	8, [ 4, 56, 45,	F[39],	-1	0	[0]	[0]
360,	11, 12, 13, 14	384,				
II	]	II				
F[48],	8, [ 4, 56, 45,	F[41],	-1	0	[0]	[0]
360,	11, 12, 13, 14	504,				
II	]	II				
F[48],	8, [ 4, 56, 45,	F[44],	-1	0	[0]	[0]
360,	11, 12, 13, 14	504,				
II ,	1	Pr				
F[48],	8, [ 4, 56, 45,	F[60],	-1	0	[0]	[0]
360,	11, 12, 13, 14	17280,	_	-		
II	11, 12, 10, 11	II				
F[48],	,	F[70],	-1	0	[0]	[0]
	8, [4, 56, 45,	1		0	[0]	[0]
360,	11, 12, 13, 14	1451520	,			
II	]	II	_			
F[68],	2, [ 135135 ]	F[29],	-3	8	[8]	[0]
645120,		36, II				
IT						
F[68],	2, [ 135135 ]	F[30],	-3	13	[ 13 ]	[0]
645120,		18, II				
IT						
F[68],	2, [ 135135 ]	F[41],	-3	10	[ 10 ]	[0]
645120,		504,			_	_
IT		II				
				I	1	1

F[68],	2, [ 135135 ]	F[46],	-3	14	[ 14 ]	[0]
645120,		144,				
IT		II				
F[68],	2, [ 135135 ]	F[47],	-3	10	[ 10 ]	[0]
645120,	, -	720,				
IT		II É				
F[68],	2, [ 135135 ]	F[49],	-3	12	[ 12 ]	[0]
645120,	2,[100100]	120,			[ 12 ]	[0]
IT		II II				
	0 [107107]		0	10017	[ 19704 ]	[ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [
F[68],	2, [ 135135 ]	F[50],	0	19317	[ 13794 ]	[ 5523 ]
645120,		384,				
IT		II				
F[68],	2, [ 135135 ]	F[52],	-3	6	[6]	[0]
645120,		3840,				
IT		II				
F[68],	2, [ 135135 ]	F[53],	-1	0	[0]	[0]
645120,		2592,				
IT		II .				
F[68],	2, [ 135135 ]	F[56],	-3	14	[ 14 ]	[0]
645120,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1440,				
IT		II				
F[24],	5, [ 6, 64,	F[3],	-1	0	[0]	[0]
14, IT	120, 135135	8, II	1		[0]	[0]
14, 11	120, 133133	0, 11				
EFO.43		THE	1		F 0 1	F 0 1
F[24],	5, [ 6, 64,	F[5],	-1	0	[0]	[0]
14, IT	120, 135135	8, II				
	]					
F[24],	5, [ 6, 64,	F[8],	-1	0	[0]	[0]
14, IT	120, 135135	4, II				
	]					
F[24],	5, [ 6, 64,	F[9],	-3	15	[ 15 ]	[0]
14, IT	120, 135135	2, II				
	]					
F[24],	5, [ 6, 64,	F[10],	-1	0	[0]	[0]
14, IT	120, 135135	3, II				
,	]	-,				
	-					1

F[24],	5, [ 6, 64,	F[13],	-1	0	[0]	[0]
14, IT	120, 135135	4, II				
	]					
F[24],	5, [ 6, 64,	F[17],	-1	1	[1]	[0]
14, IT	120, 135135	4, II				
,	1	,				
F[24],	5, [ 6, 64,	F[20],	-1	0	[0]	[0]
14, IT	120, 135135	3, Pr				
	1	,				
F[24],	5, [ 6, 64,	F[11],	-1	0	[0]	[0]
14, IT	120, 135135	4, II				
	]	,				
F[24],	5, [ 6, 64,	F[12],	-1	0	[0]	[0]
14, IT	120, 135135	8, II				
	]					
F[24],	5, [ 6, 64,	F[6],	-1	0	[0]	[0]
14, IT	120, 135135	5, II				
	]					
F[43],	5, [ 3, 8, 240,	F[6],	-1	0	[0]	[0]
112,	135135]	5, II				
IT						
F[43],	5, [ 3, 8, 240,	F[7],	-3	17	[ 17 ]	[0]
112,	135135]	8, II				
IT						
F[43],	5, [ 3, 8, 240,	F[10],	-1	0	[0]	[0]
112,	135135]	3, II				
IT						
F[43],	5, [ 3, 8, 240,	F[12],	-3	9	[9]	[0]
112,	135135]	8, II				
IT						
F[43],	5, [ 3, 8, 240,	F[19],	-3	13	[ 13 ]	[0]
112,	135135]	4, IT				
IT						
F[43],	5, [ 3, 8, 240,	F[20],	-1	0	[0]	[0]
112,	135135]	3, Pr				
IT						

F[43],	5, [ 3, 8, 240,	F[28],	-1	0	[0]	[0]
112, IT	135135]	12, II				
F[43],	5, [ 3, 8, 240,	F[29],	-1	0	[0]	[0]
112,	135135]	36, II				
IT						
F[43],	5, [ 3, 8, 240,	F[34],	-1	0	[0]	[0]
112,	135135]	192,				
IT		II				
F[43],	5, [ 3, 8, 240,	F[40],	-1	0	[0]	[0]
112,	135135]	120,				
IT		II				
F[40],	7, [ 48, 15,	F[3],	-2	3	[3]	[0]
120,	462, 12, 13,	8, II				
II	14]					
F[40],	7, [ 48, 15,	F[5],	0	15	[1, 2, 1, 0, 0,	[3, 6, 2, 0, 0,
120,	462, 12, 13,	8, II			0]	0]
II	14]					
F[40],	7, [ 48, 15,	F[8],	-2	0	[0]	[0]
120,	462, 12, 13,	4, II				
II	14]					
F[40],	7, [ 48, 15,	F[12],	0	51157	- , , ,	[ 1, 0, 1, 53,
120,	462, 12, 13,	8, II			12512, 6449,	23, 384]
II	14]				31667 ]	
F[40],	7, [ 48, 15,	F[22],	-1	0	[0]	[0]
120,	462, 12, 13,	42, II				
II	14]					
F[40],	7, [ 48, 15,	F[23],	-1	0	[0]	[0]
120,	462, 12, 13,	18, II				
II	14]					
F[40],	7, [ 48, 15,	F[24],	-1	0	[0]	[0]
120,	462, 12, 13,	14, IT				
II	14]					
F[40],	7, [ 48, 15,	F[25],	0	392	[2, 22, 5,	[ 0, 1, 1, 7, 0,
120,	462, 12, 13,	12, II			212, 13, 128]	1]
II	14]					

F[40],	7, [ 48, 15,	F[26],	-1	0	[0]	[0]
120,	462, 12, 13,	96, II				
II	14]					
F[40],	7, [ 48, 15,	F[27],	0	414	[ 1, 4, 6, 243,	[ 1, 0, 1, 8, 1,
120,	462, 12, 13,	12, II			13, 135 ]	1]
II	14]					
F[40],	7, [ 48, 15,	F[28],	0	398	[ 2, 4, 27,	[ 0, 0, 1, 8, 0,
120,	462, 12, 13,	12, II			212, 13, 130]	1]
II	14]					
F[40],	7, [ 48, 15,	F[29],	-1	1	[1]	[0]
120,	462, 12, 13,	36, II				
II	14]					
F[40],	7, [ 48, 15,	F[30],	-1	0	[0]	[0]
120,	462, 12, 13,	18, II				
II	14]					
F[40],	7, [ 48, 15,	F[31],	-1	0	[0]	[0]
120,	462, 12, 13,	64, II				
II	14]					
F[40],	7, [ 48, 15,	F[32],	0	678	[ 1, 4, 6, 226,	[ 1, 1, 0, 25,
120,	462, 12, 13,	12, II			27, 385 ]	1, 1]
II	14]					
F[40],	7, [ 48, 15,	F[33],	0	429	[ 2, 4, 7, 226,	[ 1, 1, 1, 23,
120,	462, 12, 13,	12, II			14, 149 ]	0, 1]
II	14]					
F[40],	7, [ 48, 15,	F[34],	-1	0	[0]	[0]
120,	462, 12, 13,	192,				
II	14]	II				
F[40],	7, [ 48, 15,	F[35],	-1	0	[0]	[0]
120,	462, 12, 13,	192,				
II	14]	II				
F[40],	7, [ 48, 15,	F[36],	-1	0	[0]	[0]
120,	462, 12, 13,	384,				
II	14]	II				
F[40],	7, [ 48, 15,	F[37],	-1	0	[0]	[0]
120,	462, 12, 13,	504,				
II	14]	II				

F[62], 60480,	5, [ 4, 330, 78, 14]	F[3], 8, II	-2	3	[3]	[0]
II	F F 4 222	DIE.		- 1-	F.1. 10. 100. 0	50 5 44 01
F[62],	5, [ 4, 330,	F[5],	0	145	[ 1, 13, 108, 2	[3, 5, 11, 2]
60480, II	78, 14]	8, II			]	
F[62],	5, [ 4, 330,	F[6],	0	345	[2, 41, 292, 0	[0,3,7,0]
60480,	78, 14 ]	5, II	0	345	[2,41,292,0	[ [ 0, 5, 7, 0 ]
II	76, 14 ]	0, 11			1	
F[62],	5, [ 4, 330,	F[8],	-2	4	[4]	[0]
60480,	78, 14]	4, II	-2	<b>T</b>	[4]	[0]
II	10, 11 ]	1, 11				
F[62],	5, [ 4, 330,	F[9],	-2	4	[4]	[0]
60480,	78, 14]	2, II				
l II	, -	,				
F[62],	5, [ 4, 330,	F[11],	0	1977	[ 2, 34, 1727,	[1, 2, 11, 0]
60480,	78, 14]	4, II			200 ]	
II						
F[62],	5, [ 4, 330,	F[31],	-2	4	[4]	[0]
60480,	78, 14]	64, II				
II						
F[62],	5, [ 4, 330,	F[34],	-2	4	[4]	[0]
60480,	78, 14]	192,				
II		II				
F[62],	5, [ 4, 330,	F[35],	-2	3	[3]	[0]
60480,	78, 14 ]	192,				
II	F F 4 999	II	-		F 0 1	F 0 1
F[62],	5, [ 4, 330,	F[36],	-1	0	[0]	[0]
60480, II	78, 14]	384, II				
F[62],	5, [ 4, 330,	F[37],	-2	0	[0]	[0]
60480,	78, 14]	504,	-2	0	[0]	[ [ ]
II	10, 14]	104, II				
F[62],	5, [ 4, 330,	F[40],	-2	2	[2]	[0]
60480,	78, 14]	120,	-2	-	[ 4 ]	[ [
II	, , , , , ,	II II				
			l			

F[62],	5, [ 4, 330,	F[41],	-2	0	[0]	[0]
60480,	78, 14]	504,				
II		II				
F[62],	5, [ 4, 330,	F[42],	-2	2	[2]	[0]
60480,	78, 14]	960,				
II		II				
F[62],	5, [ 4, 330,	F[43],	0	0	[0]	[0]
60480,	78, 14]	112,				
II		IT				
F[62],	5, [ 4, 330,	F[44],	-2	3	[3]	[0]
60480,	78, 14]	504,				
II		Pr				
F[62],	5, [ 4, 330,	F[45],	0	108	[ 2, 19, 67, 1	[0, 2, 17, 0]
60480,	78, 14]	288,			]	
II		II				
F[62],	5, [ 4, 330,	F[46],	0	242	[2, 15, 212, 2	[0, 4, 7, 0]
60480,	78, 14]	144,			]	
II		II				
F[62],	5, [ 4, 330,	F[50],	-1	0	[0]	[0]
60480,	78, 14]	384,				
II		II				
F[62],	5, [ 4, 330,	F[51],	-1	0	[0]	[0]
60480,	78, 14]	1536,				
II		II				
F[62],	5, [ 4, 330,	F[52],	-1	0	[0]	[0]
60480,	78, 14 ]	3840,				
II		II				
F[62],	5, [ 4, 330,	F[55],	-1	0	[0]	[0]
60480,	78, 14 ]	1536,				
II		II				