

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

We have a chain of groups $H \leq U \leq G := S_{14}$. 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. U	Chain length/Indices	Prop. H	# Fix	Σ ti- me	time Fix	time Split
F[20], 3, II	13, [2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14]	F[10], 3, II	0	55475	[1, 10, 48, 252, 1142, 4260, 11146, 21205, 16592, 0, 0, 0]	[2, 2, 2, 1, 119, 10, 175, 207, 301, 0, 0, 0]
F[20], 3, II	13, [2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14]	F[11], 4, II	-1	0	[0]	[0]
F[20], 3, II	13, [2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14]	F[12], 8, II	-1	0	[0]	[0]
F[34], 192, II	5, [288, 35, 15, 3003]	F[4], 8, II	0	1778	[243, 22, 99, 1336]	[64, 2, 2, 10]
F[60], 17280, II	5, [2, 126, 220, 91]	F[4], 8, II	0	397	[9, 99, 247, 8]	[10, 8, 10, 6]
F[60], 17280, II	5, [2, 126, 220, 91]	F[6], 5, II	0	123	[8, 109, 0, 0]	[2, 4, 0, 0]
F[65], 60480, II	5, [4, 3, 330, 364]	F[23], 18, II	-2	2	[2]	[0]
F[65], 60480, II	5, [4, 3, 330, 364]	F[31], 64, II	-2	3	[3]	[0]

F[65], 60480, II	5, [4, 3, 330, 364]	F[34], 192, II	-2	0	[0]	[0]
F[65], 60480, II	5, [4, 3, 330, 364]	F[37], 504, II	0	121	[41, 37, 1, 1]	[23, 11, 6, 1]
F[65], 60480, II	5, [4, 3, 330, 364]	F[41], 504, II	-2	3	[3]	[0]
F[65], 60480, II	5, [4, 3, 330, 364]	F[46], 144, II	-2	6	[6]	[0]
F[65], 60480, II	5, [4, 3, 330, 364]	F[49], 120, II	0	368	[41, 297, 7, 4]	[9, 10, 0, 0]
F[65], 60480, II	5, [4, 3, 330, 364]	F[53], 2592, II	-1	0	[0]	[0]
F[65], 60480, II	5, [4, 3, 330, 364]	F[56], 1440, II	-2	5	[5]	[0]
F[65], 60480, II	5, [4, 3, 330, 364]	F[62], 60480, II	-2	5	[5]	[0]
F[65], 60480, II	5, [4, 3, 330, 364]	F[3], 8, II	-2	4	[4]	[0]
F[48], 360, II	8, [4, 56, 45, 11, 12, 13, 14]	F[5], 8, II	0	9	[1, 2, 2, 0, 0, 0, 0]	[2, 1, 1, 0, 0, 0, 0]
F[48], 360, II	8, [4, 56, 45, 11, 12, 13, 14]	F[9], 2, II	-2	2	[2]	[0]
F[48], 360, II	8, [4, 56, 45, 11, 12, 13, 14]	F[27], 12, II	0	18	[1, 4, 6, 5, 0, 0, 0]	[1, 0, 1, 0, 0, 0, 0]

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

F[68], 645120, IT	2, [135135]	F[46], 144, II	-3	14	[14]	[0]
F[68], 645120, IT	2, [135135]	F[47], 720, II	-3	10	[10]	[0]
F[68], 645120, IT	2, [135135]	F[49], 120, II	-3	12	[12]	[0]
F[68], 645120, IT	2, [135135]	F[50], 384, II	0	19317	[13794]	[5523]
F[68], 645120, IT	2, [135135]	F[52], 3840, II	-3	6	[6]	[0]
F[68], 645120, IT	2, [135135]	F[53], 2592, II	-1	0	[0]	[0]
F[68], 645120, IT	2, [135135]	F[56], 1440, II	-3	14	[14]	[0]
F[24], 14, IT	5, [6, 64, 120, 135135]	F[3], 8, II	-1	0	[0]	[0]
F[24], 14, IT	5, [6, 64, 120, 135135]	F[5], 8, II	-1	0	[0]	[0]
F[24], 14, IT	5, [6, 64, 120, 135135]	F[8], 4, II	-1	0	[0]	[0]
F[24], 14, IT	5, [6, 64, 120, 135135]	F[9], 2, II	-3	15	[15]	[0]
F[24], 14, IT	5, [6, 64, 120, 135135]	F[10], 3, II	-1	0	[0]	[0]

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

F[43], 112, IT	5, [3, 8, 240, 135135]	F[28], 12, II	-1	0	[0]	[0]
F[43], 112, IT	5, [3, 8, 240, 135135]	F[29], 36, II	-1	0	[0]	[0]
F[43], 112, IT	5, [3, 8, 240, 135135]	F[34], 192, II	-1	0	[0]	[0]
F[43], 112, IT	5, [3, 8, 240, 135135]	F[40], 120, II	-1	0	[0]	[0]
F[40], 120, II	7, [48, 15, 462, 12, 13, 14]	F[3], 8, II	-2	3	[3]	[0]
F[40], 120, II	7, [48, 15, 462, 12, 13, 14]	F[5], 8, II	0	15	[1, 2, 1, 0, 0, 0]	[3, 6, 2, 0, 0, 0]
F[40], 120, II	7, [48, 15, 462, 12, 13, 14]	F[8], 4, II	-2	0	[0]	[0]
F[40], 120, II	7, [48, 15, 462, 12, 13, 14]	F[12], 8, II	0	51157	[1, 9, 57, 12512, 6449, 31667]	[1, 0, 1, 53, 23, 384]
F[40], 120, II	7, [48, 15, 462, 12, 13, 14]	F[22], 42, II	-1	0	[0]	[0]
F[40], 120, II	7, [48, 15, 462, 12, 13, 14]	F[23], 18, II	-1	0	[0]	[0]
F[40], 120, II	7, [48, 15, 462, 12, 13, 14]	F[24], 14, IT	-1	0	[0]	[0]
F[40], 120, II	7, [48, 15, 462, 12, 13, 14]	F[25], 12, II	0	392	[2, 22, 5, 212, 13, 128]	[0, 1, 1, 7, 0, 1]

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

F[62], 60480, II	5, [4, 330, 78, 14]	F[3], 8, II	-2	3	[3]	[0]
F[62], 60480, II	5, [4, 330, 78, 14]	F[5], 8, II	0	145	[1, 13, 108, 2]	[3, 5, 11, 2]
F[62], 60480, II	5, [4, 330, 78, 14]	F[6], 5, II	0	345	[2, 41, 292, 0]	[0, 3, 7, 0]
F[62], 60480, II	5, [4, 330, 78, 14]	F[8], 4, II	-2	4	[4]	[0]
F[62], 60480, II	5, [4, 330, 78, 14]	F[9], 2, II	-2	4	[4]	[0]
F[62], 60480, II	5, [4, 330, 78, 14]	F[11], 4, II	0	1977	[2, 34, 1727, 200]	[1, 2, 11, 0]
F[62], 60480, II	5, [4, 330, 78, 14]	F[31], 64, II	-2	4	[4]	[0]
F[62], 60480, II	5, [4, 330, 78, 14]	F[34], 192, II	-2	4	[4]	[0]
F[62], 60480, II	5, [4, 330, 78, 14]	F[35], 192, II	-2	3	[3]	[0]
F[62], 60480, II	5, [4, 330, 78, 14]	F[36], 384, II	-1	0	[0]	[0]
F[62], 60480, II	5, [4, 330, 78, 14]	F[37], 504, II	-2	0	[0]	[0]
F[62], 60480, II	5, [4, 330, 78, 14]	F[40], 120, II	-2	2	[2]	[0]

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