

Tables for the algorithm **ReducedTableOfMarks**, with improvements (Case $G = S_{12}$)

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
D[2], 5, II	6, [20, 144, 252, 11, 12]	D[1], 4, II	-1	1	[1]	[0]
D[2], 5, II	6, [20, 144, 252, 11, 12]	D[2], 5, II	80	129	[1, 2, 42, 43, 23]	[3, 1, 9, 4, 1]
D[2], 5, II	6, [20, 144, 252, 11, 12]	D[3], 3, II	-1	0	[0]	[0]
D[3], 3, II	9, [12, 20, 7, 8, 9, 10, 11, 12]	D[1], 4, II	-1	0	[0]	[0]
D[3], 3, II	9, [12, 20, 7, 8, 9, 10, 11, 12]	D[2], 5, II	-1	0	[0]	[0]
D[3], 3, II	9, [12, 20, 7, 8, 9, 10, 11, 12]	D[3], 3, II	8640	2936	[1, 9, 19, 80, 198, 347, 1052, 1213]	[3, 2, 1, 1, 1, 2, 3, 4]
D[3], 3, II	9, [12, 20, 7, 8, 9, 10, 11, 12]	D[4], 2, II	-1	0	[0]	[0]
D[4], 2, II	9, [8, 6, 15, 28, 9, 10, 11, 12]	D[1], 4, II	-1	0	[0]	[0]
D[4], 2, II	9, [8, 6, 15, 28, 9, 10, 11, 12]	D[2], 5, II	-1	0	[0]	[0]
D[4], 2, II	9, [8, 6, 15, 28, 9, 10, 11, 12]	D[3], 3, II	-1	0	[0]	[0]

D[4], 2, II	9, [8, 6, 15, 28, 9, 10, 11, 12]	D[6], 4, II	-1	0	[0]	[0]
D[5], 1, Pr	12, [2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]	D[1], 4, II	-1	0	[0]	[0]
D[5], 1, Pr	12, [2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]	D[2], 5, II	-1	0	[0]	[0]
D[6], 4, II	7, [64, 3, 3, 70, 45, 66]	D[2], 5, II	-1	0	[0]	[0]
D[6], 4, II	7, [64, 3, 3, 70, 45, 66]	D[3], 3, II	-1	0	[0]	[0]
D[6], 4, II	7, [64, 3, 3, 70, 45, 66]	D[20], 108, IT	-1	0	[0]	[0]
D[7], 3, II	9, [12, 20, 7, 8, 9, 10, 11, 12]	D[1], 4, II	-1	0	[0]	[0]
D[7], 3, II	9, [12, 20, 7, 8, 9, 10, 11, 12]	D[6], 4, II	-1	0	[0]	[0]
D[12], 12, II	6, [192, 15, 15, 2, 462]	D[2], 5, II	-1	0	[0]	[0]
D[12], 12, II	6, [192, 15, 15, 2, 462]	D[6], 4, II	0	141	[37, 2, 5, 4, 58]	[26, 1, 1, 1, 6]
D[12], 12, II	6, [192, 15, 15, 2, 462]	D[7], 3, II	0	1419	[38, 3, 47, 21, 1291]	[11, 0, 0, 1, 7]
D[12], 12, II	6, [192, 15, 15, 2, 462]	D[8], 16, II	-1	0	[0]	[0]
D[12], 12, II	6, [192, 15, 15, 2, 462]	D[20], 108, IT	-1	0	[0]	[0]
D[12], 12, II	6, [192, 15, 15, 2, 462]	D[30], 30240, II	-1	0	[0]	[0]

D[15], 384, II	6, [2, 15, 3, 210, 66]	D[1], 4, II	0	57	[4, 25, 1, 4, 0]	[3, 17, 1, 1, 1]
D[15], 384, II	6, [2, 15, 3, 210, 66]	D[2], 5, II	-1	0	[0]	[0]
D[15], 384, II	6, [2, 15, 3, 210, 66]	D[9], 12, II	-2	0	[0]	[0]
D[15], 384, II	6, [2, 15, 3, 210, 66]	D[10], 36, II	-1	0	[0]	[0]
D[15], 384, II	6, [2, 15, 3, 210, 66]	D[11], 16, II	-2	3	[3]	[0]
D[15], 384, II	6, [2, 15, 3, 210, 66]	D[12], 12, II	-2	2	[2]	[0]
D[15], 384, II	6, [2, 15, 3, 210, 66]	D[13], 192, IT	0	0	[0]	[0]
D[15], 384, II	6, [2, 15, 3, 210, 66]	D[16], 576, II	-1	0	[0]	[0]
D[15], 384, II	6, [2, 15, 3, 210, 66]	D[25], 80640, II	-1	0	[0]	[0]
D[15], 384, II	6, [2, 15, 3, 210, 66]	D[30], 30240, II	-1	0	[0]	[0]
D[20], 108, IT	4, [12, 800, 462]	D[1], 4, II	0	663	[36, 587, 0]	[15, 25, 0]
D[20], 108, IT	4, [12, 800, 462]	D[2], 5, II	-1	0	[0]	[0]

D[20], 108, IT	4, [12, 800, 462]	D[9], 12, II	-3	6	[6]	[0]
D[20], 108, IT	4, [12, 800, 462]	D[10], 36, II	0	678	[44, 613, 0]	[8, 13, 0]
D[20], 108, IT	4, [12, 800, 462]	D[11], 16, II	-1	0	[0]	[0]
D[20], 108, IT	4, [12, 800, 462]	D[12], 12, II	-3	13	[13]	[0]
D[20], 108, IT	4, [12, 800, 462]	D[15], 384, II	-1	0	[0]	[0]
D[20], 108, IT	4, [12, 800, 462]	D[16], 576, II	-1	0	[0]	[0]
D[20], 108, IT	4, [12, 800, 462]	D[19], 192, IT	-1	0	[0]	[0]
D[31], 46080, IT	2, [10395]	D[2], 5, II	5	1133	[758]	[375]
D[31], 46080, IT	2, [10395]	D[10], 36, II	0	1160	[931]	[229]
D[31], 46080, IT	2, [10395]	D[14], 108, IT	-1	0	[0]	[0]
D[31], 46080, IT	2, [10395]	D[16], 576, II	-3	6	[6]	[0]
D[31], 46080, IT	2, [10395]	D[18], 576, II	-3	9	[9]	[0]

D[31], 46080, IT	2, [10395]	D[20], 108, IT	-1	0	[0]	[0]
D[31], 46080, IT	2, [10395]	D[23], 7560, II	-1	0	[0]	[0]
D[31], 46080, IT	2, [10395]	D[28], 15552, IT	-1	0	[0]	[0]
D[13], 192, IT	3, [432, 5775]	D[6], 4, II	0	1053	[546, 336]	[161, 10]
D[13], 192, IT	3, [432, 5775]	D[7], 3, II	0	1463	[409, 930]	[110, 14]
D[13], 192, IT	3, [432, 5775]	D[8], 16, II	-3	18	[18]	[0]
D[13], 192, IT	3, [432, 5775]	D[11], 16, II	-3	6	[6]	[0]
D[21], 1320, Pr	2, [362880]	D[13], 192, IT	-1	0	[0]	[0]
D[30], 30240, II	4, [2, 120, 66]	D[2], 5, II	-2	3	[3]	[0]
D[30], 30240, II	4, [2, 120, 66]	D[4], 2, II	224	128	[7, 90, 19]	[4, 6, 2]
D[30], 30240, II	4, [2, 120, 66]	D[6], 4, II	-2	4	[4]	[0]
D[30], 30240, II	4, [2, 120, 66]	D[8], 16, II	-2	0	[0]	[0]

D[30], 30240, II	4, [2, 120, 66]	D[13], 192, IT	-1	0	[0]	[0]
D[30], 30240, II	4, [2, 120, 66]	D[15], 384, II	-1	0	[0]	[0]
D[30], 30240, II	4, [2, 120, 66]	D[17], 384, II	-1	0	[0]	[0]
D[30], 30240, II	4, [2, 120, 66]	D[19], 192, IT	-1	0	[0]	[0]
D[30], 30240, II	4, [2, 120, 66]	D[21], 1320, Pr	-1	0	[0]	[0]
D[30], 30240, II	4, [2, 120, 66]	D[29], 80640, II	-1	0	[0]	[0]
D[30], 30240, II	4, [2, 120, 66]	D[35], 518400, IT	-1	0	[0]	[0]
D[30], 30240, II	4, [2, 120, 66]	D[40], 7257600, II	-1	0	[0]	[0]
D[40], 7257600, II	2, [66]	D[35], 518400, IT	0	0	[0]	[0]
D[40], 7257600, II	2, [66]	D[38], 518400, IT	0	0	[0]	[0]
D[40], 7257600, II	2, [66]	D[39], 2177280, II	-1	0	[0]	[0]