

Supplement to POLYNOMIALS WITH SMALL MAHLER MEASURE

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TABLE 1. Mahler measures less than 1.24

d	Measure	ν	Half of coefficients
10	1.176280818260	1	1 1 0 -1 -1 -1
18	1.188368147508	1	1 1 1 1 0 0 -1 -1 -1 -1
14	1.200026523987	1	1 0 0 1 -1 0 0 -1
18	1.201396186235	2	1 1 1 0 0 -1 0 -1 0 -1
14	1.202616743689	1	1 0 -1 0 0 0 0 1
22	1.205019854225	2	1 0 1 0 0 1 -1 1 0 0 1 -1
28	1.207950028412	2	1 1 1 1 0 0 0 -1 -1 -1 -1 0 0 0 1
20	1.212824180989	2	1 1 0 0 1 1 0 -1 -1 -1 -1
20	1.214995700776	2	1 1 1 1 0 -1 -1 -1 -1 -1
10	1.216391661138	1	1 0 0 0 -1 1
20	1.218396362520	2	1 1 0 -1 0 0 0 -1 0 0 1
24	1.218855150304	2	1 0 0 0 0 1 0 -1 0 0 0 0 -1
24	1.219057507826	2	1 1 0 -1 -1 -1 -1 -1 0 1 1 1 1
18	1.219446875941	3	1 1 1 0 -1 -1 -1 0 0 1
18	1.219720859040	1	1 1 0 0 0 0 0 0 -1 -1
34	1.220287441693	3	1 0 1 0 0 1 -1 1 -1 0 0 -1 1 -1 0 0 -1 1
38	1.223447381419	3	1 1 0 -1 -1 0 0 -1 -1 0 1 1 0 0 1 1 0 -1 -1 -1
26	1.223777454948	3	1 1 1 0 0 -1 -1 -1 -1 0 0 1 0 1
16	1.224278907222	2	1 1 0 -1 -1 0 1 1 1
18	1.225503424104	2	1 1 0 0 1 0 -1 0 0 -1
30	1.225619851977	2	1 0 1 0 0 0 0 0 0 0 0 0 0 0 1 0 1
30	1.225810532354	3	1 0 1 0 0 0 -1 1 -1 1 -1 0 0 -1 1 -1
26	1.226092894512	2	1 0 0 1 0 0 0 0 0 0 1 0 0 1
36	1.226493301473	2	1 1 0 0 0 0 0 0 0 0 0 0 0 0 -1 -1
20	1.226993758166	2	1 1 -1 -2 0 2 1 -1 -1 0 1
12	1.227785558695	2	1 1 1 0 -1 -1 -1
30	1.228140772740	3	1 1 0 0 0 -1 -1 -1 -1 0 0 0 1 0 0 1
36	1.229482810173	4	1 1 1 0 0 -1 -1 -1 0 1 1 1 0 -1 -2 -1 0 1 1
22	1.229566456617	3	1 1 0 -1 -1 -1 -1 -1 0 1 1 1
34	1.22999039697	3	1 0 0 0 0 0 -1 0 0 0 1 0 0 0 0 -1
38	1.230263271363	3	1 0 0 0 -1 0 0 0 0 0 0 0 0 0 1 0 0 -1
42	1.230295468643	4	1 0 1 0 0 0 -1 1 -1 1 0 0 1 -1 -1 1 0 0 1 -1 1
10	1.230391434407	1	1 0 0 1 0 1
46	1.230743300976	3	1 0 0 1 0 1 0 0 1 0 0 0 0 0 -1 0 0 -1 0 -1 0 -1
18	1.231342769993	3	1 0 0 0 -1 1 0 0 0 -1
48	1.232202952743	4	1 1 0 0 1 1 0 -1 -1 0 0 -1 -1 0 1 1 0 0 1 1 0 -1 -1 -1 -1
20	1.232613548593	1	1 1 0 0 0 1 1 0 0 1 1
28	1.232628775929	2	1 2 2 1 1 1 0 -1 -1 -1 -1 -1 -1 -1 -1
38	1.233672001767	3	1 1 0 -1 -1 -1 -1 0 1 1 0 0 0 0 0 1 1 0 -1 -1
52	1.234348374876	4	1 1 0 -1 -1 0 0 -1 -1 0 1 1 0 0 1 1 0 -1 -1 0 0 -1 -1 0 1 1 1
24	1.234443834873	2	1 0 0 0 -1 0 -1 1 0 0 1 -1 1
26	1.234500336789	3	1 0 -1 1 0 -1 1 0 -1 1 0 -1 0 1
16	1.235256705642	2	1 1 0 0 0 -1 0 0 -1
46	1.235496042193	3	1 0 -1 0 0 0 0 1 0 -1 0 0 0 0 1 0 -1 0 0 0 0 1 0 -1
22	1.235664580390	1	1 0 -1 1 0 0 0 -1 1 0 -1 1
42	1.235761099712	4	1 0 0 0 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 1
32	1.236083368052	4	1 1 1 1 0 -1 -1 -2 -1 0 0 1 1 0 0 0 -1
32	1.236198469859	3	1 0 0 0 0 0 0 1 0 1 0 0 0 0 0 0 1
32	1.236227922245	4	1 2 2 1 0 -1 -1 -1 -1 -1 -1 -1 -1 0 2 3
40	1.236249557349	3	1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 1
16	1.236317931803	1	1 1 0 0 0 0 0 -1
54	1.236566917569	5	1 0 1 0 0 0 -1 -1 -1 1 0 0 1 -1 -1 0 0 -1 1 -1 1 -1 0 0 -1 1 -1
34	1.236579223637	3	1 0 0 0 1 0 0 0 0 0 0 -1 0 0 0 -1
44	1.236674812187	4	1 0 0 0 0 0 0 1 0 0 0 0 0 0 -1 0 0 0 0 0 0 -1
28	1.236808305865	2	1 1 0 -1 0 0 0 0 -1 0 0 0 -1
26	1.237504821217	1	1 1 0 -1 0 0 1 0 0 -1 0 1 0 -1
46	1.237634830280	5	1 1 0 0 0 0 -1 -1 0 0 -1 -1 0 1 0 -1 0 1 1 0 -1 0 1
58	1.237684127894	5	1 1 0 0 0 0 -1 -1 -1 0 0 0 1 1 1 1 0 0 0 -1 -1 -1 -1 0 0 0 1 0 0 1
48	1.238040100176	4	1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 -1 0 0 0 0 -1
56	1.238431627359	4	1 1 1 1 0 0 0 -1 -1 -1 -1 0 0 0 1 1 1 1 0 0 0 -1 -1 -1 1 0 0 0 1
56	1.238708978554	4	1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 -1 0 0 -1
42	1.239505770490	4	1 0 0 0 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 1
54	1.239747974875	6	1 1 1 0 0 -1 -1 -1 0 0 0 0 1 1 1 1 1 0 -1 -2 -2 -2 -1 0 1 1 1 1
48	1.239861326360	4	1 2 3 3 2 0 -2 -3 -3 -2 -1 0 0 -1 -2 -2 -1 0 1 1 1 1 1 1 1

TABLE 3. Number of primitive, irreducible polynomials found with measure < 1.3 classified by degree and the number of roots outside the unit disk

d	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
8	1																			1
10	1	2																		7
12	1	4																		5
14	1	4																		11
16	1	8	2																	14
18	7	8	8																	23
20	4	22	3	6																35
22	4	12	27	4	1															48
24	2	29	11	11		1														61
26	7	14	21	28																50
28	1	15	14	20																80
30	4	10	36	8	8	2														69
32	2	12	24	10	7	7														90
34	2	15	24	30	4	8	2													88
36	1	15	11	36	10	30														87
38	4	1	18	18	29	8	12	1												77
40	1	9	17	32	10	23	2	3												105
42	1	2	11	54	19	9	8	7												79
44	1	2	4	29	3	25	4	7												65
46	1	1	10	13	36	11	23	7												66
48	1	2	4	24	4	24	1	19	1											99
50	4	4	4	10	15	14	16	16	3											65
52	2	2	7	8	21	14	16	3	1											68
54	4	6	4	14	15	14	16	4	8											69
56	6	15	16	6	15	16	7	11	4	6										122
58	1	15	12	21	9	9	9	25	1											57
60	2	5	4	19	4	13	13	19	18	4										66
62	1	1	10	12	20	7	7	19	13	5										65
64	7	2	8	8	6	17	5	16	7	6										91
66	1	1	5	5	11	11	11	7	5	10										69
68	1	1	2	11	11	12	3	12	7	5										46
70	1	1	7	7	9	24	16	21	8	10										68
72	1	1	1	1	10	2	18	18	8	17										57
74	1	1	1	1	3	4	15	12	15	6										92
76	1	1	1	1	2	7	9	13	8	17										80
78	3	2	4	10	2	4	10	12	15	11										72
80	3	2	6	4	6	4	16	4	11	12										75
82	2	1	11	11	11	11	11	21	11	12										126
84	2	1	5	2	1	5	3	10	4	12										61
86	2	2	11	11	2	11	7	22	11	10										117
88	1	2	4	6	2	4	6	13	4	16										81
90	1	1	1	2	1	1	2	3	13	11										70
92	4	2	9	14	9	14	9	14	14	9										71
94	2	11	6	11	3	16	2	10	25	10										147
96	3	4	3	3	4	3	3	16	10	18										73
98	1	1	1	1	1	1	1	10	18	10										110
100	1	1	1	1	1	1	1	7	10	9										101
102	1	1	1	1	1	1	1	6	8	5										87
104	1	3	5	3	5	3	5	8	5	17										77
106	1	2	4	2	4	2	4	3	8	19										140
Total	47	177	225	349	264	1	2	4	11	8	8	19	12	18	5	14	8	28	8	2

TABLE 3. (Continued)

<i>d</i>	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
108	1	1	2	1	11	2	13	4	11	8	8	22	10	18												76
110		2	2	10	4	15	14	16	4	13	7	21	10	18	4											136
112			4	3	11	9	14	5	10	5	1	6	19	4	4											94
114		1	2	7	5	9	10	17	6	2	1	7	2	13	2											87
116	1		4	2	4	5	10	7	11	3	7	3	13	8	8											86
118				6	6	18	10	27	11	17	7	16	9	34	13	8										182
120			4	1	10	2	10	3	14	11	11	13	10	19	26		1									95
122			1	4	4	4	4	9	15	7	10	4	10	4	22	6	2									134
124				4	4	4	4	11	13	13	6	6	8	8												103
126			1	4	5	8	4	11	13	6	9	2	7	6	12	12										85
128				1	2	3	9	4	14	6	9	14	10	36	10	14	3									98
130		1		6	2	13	10	17	14	20	6	14	6	15	10	36	12	3								184
132				4	4	3	8	2	14	5	10	10	8	15	14	23	20									93
134				1	4	7	6	14	9	24	10	8	5	15	7	22	14	20								166
136				1	4	3	10	4	10	6	18	4	4	3	7	6	19	5	1							106
138				1	1	3	8	10	7	17	7	7	2	5	2	9	1	15	3							99
140				2	1	4	1	7	4	8	7	12	3	8	3	3	15	6	14							104
142				2	2	9	7	13	9	24	19	23	8	14	7	19	13	41	12	5						220
144				3	1	8	1	8	1	3	17	2	9	8	8	12	12	22	22		1					96
146				1	4	2	14	2	14	8	12	16	21	5	9	11	7	18	15	14						162
148				2	3	2	3	6	8	6	12	10	6	3	11	3	13	6	27	6	4					126
150				3	5	2	11	4	10	4	8	19	6	3	7	8	1	11	2	19	2					115
152				1	2	5	2	2	8	4	8	6	14	3	7	3	5	5	11	8	13					105
154				5	5	1	4	2	7	16	10	23	15	11	4	14	7	14	8	35	12	4				201
156				1	3	3	9	9	6	13	10	22	14	17	5	13	5	14	9	14	24					204
158				3	3	3	4	1	13	3	10	6	20	5	9	1	10	4	9	25	14	22				204
160				1	4	1	4	1	6	8	4	13	13	14	2	4	1	8	2	4	27	6	4			137
162				3	3	3	4	3	2	4	9	6	14	7	10	3	6	3	9	5	13	9	12			116
164				1	2	10	6	6	15	7	18	14	30	8	14	5	12	6	18	11	39	10	5			118
166				1	5	1	5	1	7	2	11	2	17	4	14	10	10	7	7	14	14	29	10			231
168				1	3	4	4	3	5	10	6	13	10	20	7	7	5	7	5	12	8	21	14	15	1	125
170				1	1	1	1	1	6	5	9	6	8	12	15	3	8	4	10	3	13	6	29	7	3	173
172				1	3	3	3	3	10	6	11	7	17	12	11	1	8	1	9	2	9	2	9	2	3	150
174				2	2	1	2	2	1	3	6	3	6	4	10	6	4	2	3	3	6	6	10	8	8	138
176				1	4	1	4	5	5	8	6	12	9	17	14	16	3	9	6	10	6	18	11	34	11	93
178				1	4	1	4	1	2	1	2	2	5	3	7	2	2	2	2	3	3	5	5	7	7	200
180				1	1	1	1	1	2	1	2	2	2	3	7	2	2	2	2	3	3	18	11	34	11	45
Total	329	287	345	337	355	388	416	431	439	442	426	403	383	351	309	259	228	215	198	186	175	156	129	92	33	8374