

ML and discriminant degrees of copious graphs for $n=7$

	Non-edges	ML deg	Number of edges	Log disc deg
1	{12, 14, 23, 34, 36, 45}	1	15	
2	{12, 13, 14, 23, 24, 34}	1	15	
3	{12, 13, 23, 24, 34, 45}	1	15	
4	{12, 13, 23, 25, 34, 45}	1	15	
5	{12, 13, 16, 23, 25, 34}	1	15	
6	{12, 14, 23, 26, 34, 37, 45}	1	14	
7	{12, 14, 23, 34, 36, 45, 67}	1	14	
8	{12, 14, 23, 34, 36, 45, 56}	1	14	
9	{12, 13, 14, 23, 24, 34, 56}	1	14	
10	{12, 13, 23, 24, 34, 45, 56}	1	14	
11	{12, 13, 16, 23, 24, 34, 45}	1	14	
12	{12, 13, 23, 24, 34, 47, 56}	1	14	
13	{12, 13, 23, 25, 34, 45, 56}	1	14	
14	{12, 13, 16, 23, 25, 34, 45}	1	14	
15	{12, 13, 16, 23, 25, 34, 67}	1	14	
16	{12, 14, 23, 34, 36, 45, 56, 67}	1	13	
17	{12, 14, 23, 26, 34, 37, 45, 56}	1	13	
18	{12, 14, 23, 34, 37, 45, 56, 67}	1	13	
19	{12, 13, 16, 23, 24, 34, 45, 56}	1	13	
20	{12, 13, 23, 24, 34, 45, 56, 57}	1	13	
21	{12, 13, 17, 23, 24, 34, 45, 56}	1	13	
22	{12, 13, 23, 25, 34, 45, 46, 56}	1	13	
23	{12, 13, 16, 23, 25, 34, 45, 56}	1	13	
24	{12, 13, 23, 25, 34, 45, 56, 67}	1	13	
25	{12, 13, 23, 25, 34, 45, 47, 56}	1	13	
26	{12, 13, 17, 23, 25, 34, 45, 56}	1	13	
27	{12, 13, 16, 23, 25, 34, 45, 67}	1	13	
28	{12, 13, 17, 23, 25, 34, 46, 56}	1	13	
29	{12, 13, 23, 24, 34, 45, 56, 67}	1	13	
30	{12, 14, 23, 27, 34, 36, 45, 56, 67}	1	12	
31	{12, 14, 23, 26, 34, 37, 45, 56, 67}	1	12	
32	{12, 13, 14, 23, 24, 34, 56, 57, 67}	1	12	

33	{12, 13, 16, 23, 24, 34, 45, 56, 67}	1	12	
34	{12, 13, 17, 23, 24, 34, 45, 56, 67}	1	12	
35	{12, 13, 16, 23, 25, 34, 45, 46, 56}	1	12	
36	{12, 13, 17, 23, 25, 34, 46, 56, 67}	1	12	
37	{12, 13, 17, 23, 25, 34, 46, 56, 57}	1	12	
38	{12, 13, 16, 23, 25, 34, 45, 56, 67}	1	12	
39	{12, 13, 23, 25, 34, 45, 46, 56, 67}	1	12	
40	{12, 14, 23, 34, 36, 45, 56, 57, 67}	1	12	
41	{12, 13, 17, 23, 25, 34, 45, 46, 56, 67}	1	11	
42	{12, 13, 16, 23, 25, 34, 45, 47, 56, 67}	1	11	
43	{12, 14, 23, 34, 45}	2	16	4
44	{12, 23, 24, 45, 46}	2	16	4
45	{12, 13, 23, 25, 34}	2	16	4
46	{12, 13, 23, 24, 34}	2	16	4
47	{12, 14, 23, 34, 45, 56}	2	15	4
48	{12, 14, 23, 26, 34, 45}	2	15	4
49	{12, 14, 23, 34, 47, 56}	2	15	
50	{12, 23, 34, 36, 45, 67}	2	15	
51	{12, 23, 24, 45, 47, 56}	2	15	
52	{12, 13, 23, 27, 34, 56}	2	15	
53	{12, 13, 23, 24, 34, 56}	2	15	
54	{12, 13, 23, 34, 45, 46}	2	15	
55	{12, 13, 23, 25, 34, 56}	2	15	4
56	{12, 14, 23, 26, 34, 45, 56}	2	14	4
57	{12, 14, 23, 34, 45, 56, 67}	2	14	
58	{12, 14, 23, 34, 45, 56, 57}	2	14	
59	{12, 14, 23, 26, 34, 45, 67}	2	14	
60	{12, 15, 23, 34, 45, 56, 67}	2	14	
61	{12, 15, 23, 34, 45, 47, 56}	2	14	
62	{12, 13, 23, 24, 34, 56, 67}	2	14	
63	{12, 13, 23, 25, 34, 56, 57}	2	14	
64	{12, 13, 23, 34, 45, 46, 56}	2	14	4
65	{12, 13, 23, 34, 45, 46, 67}	2	14	
66	{12, 13, 23, 25, 34, 46, 56}	2	14	4

67	{12, 13, 23, 25, 34, 47, 56}	2	14	
68	{12, 16, 23, 34, 45, 47, 56, 67}	2	13	
69	{12, 16, 23, 34, 37, 45, 56, 67}	2	13	
70	{12, 13, 23, 25, 34, 46, 56, 67}	2	13	
71	{12, 13, 23, 34, 45, 46, 56, 67}	2	13	
72	{12, 16, 23, 34, 45, 56, 57, 67}	2	13	
73	{12, 13, 23, 34, 45, 47, 56, 67}	2	13	
74	{12, 13, 23, 25, 34, 46, 56, 57}	2	13	
75	{12, 14, 23, 26, 34, 45, 56, 57, 67}	2	12	
76	{12, 13, 23, 25, 34, 46, 56, 57, 67}	2	12	
77	{12, 23, 34, 36, 45}	3	16	10
78	{12, 13, 23, 34, 45}	3	16	10
79	{12, 15, 23, 34, 45, 56}	3	15	10
80	{12, 15, 23, 34, 45, 67}	3	15	
81	{12, 23, 34, 45, 47, 56}	3	15	
82	{12, 13, 23, 34, 45, 56}	3	15	10
83	{12, 13, 23, 34, 47, 56}	3	15	
84	{12, 15, 23, 34, 37, 45, 56}	3	14	
85	{12, 16, 23, 34, 45, 56, 67}	3	14	
86	{12, 17, 23, 34, 45, 56, 67}	3	14	
87	{12, 13, 23, 34, 45, 56, 67}	3	14	
88	{12, 13, 23, 34, 45, 56, 57}	3	14	
89	{12, 13, 23, 37, 45, 46, 56, 67}	3	13	
90	{12, 14, 23, 34}	4	17	8
91	{12, 23, 24, 45}	4	17	16
92	{12, 13, 23, 34}	4	17	16
93	{12, 14, 23, 34, 56}	4	16	8
94	{12, 15, 23, 34, 45}	4	16	18
95	{12, 23, 24, 45, 56}	4	16	16
96	{12, 34, 45, 46, 67}	4	16	
97	{12, 13, 23, 34, 56}	4	16	32
98	{12, 14, 23, 34, 56, 67}	4	15	
99	{12, 16, 23, 34, 45, 56}	4	15	16
100	{12, 23, 34, 45, 56, 67}	4	15	

101	{12, 23, 24, 45, 56, 67}	4	15	
102	{12, 23, 24, 45, 56, 57}	4	15	
103	{12, 13, 23, 34, 56, 67}	4	15	
104	{12, 13, 23, 45, 47, 56, 67}	4	14	
105	{12, 13, 23, 45, 46, 56, 67}	4	14	
106	{12, 23, 34, 45, 56}	5	16	24
107	{12, 23, 34, 47, 56}	5	16	
108	{12, 13, 23, 45, 56, 67}	5	15	
109	{12, 13, 23, 45, 56, 57}	5	15	
110	{12, 13, 23, 45, 46, 56}	5	15	24
111	{12, 23, 24}	6	18	30
112	{12, 23, 34, 45}	6	17	32
113	{12, 34, 45, 46}	6	17	30
114	{12, 23, 34, 56, 67}	6	16	
115	{12, 27, 34, 45, 46}	6	16	
116	{12, 13, 23, 45, 56}	6	16	32
117	{12, 13, 23, 45, 67}	6	16	
118	{12, 23, 34, 56}	7	17	40
119	{12, 13, 23, 45}	7	17	40
120	{12, 23, 34}	8	18	48
121	{12, 13, 23}	8	18	44
122	{12, 26, 34, 45}	8	17	48
123	{12, 34, 56, 67}	8	17	
124	{12, 34, 45}	10	18	66
125	{12, 34, 56}	11	18	76
126	{12, 23}	12	19	84
127	{12, 34}	14	19	104
128	{12}	18	20	144
129	{}	24	21	208